



# Brighton City Council Meeting

Contact Information: City Hall • 200 N First St. • Brighton, Michigan 48116  
(810) 227-1911 • [www.brightoncity.org](http://www.brightoncity.org) • [info@brightoncity.org](mailto:info@brightoncity.org)

This meeting will be conducted electronically.  
Please visit the City website or the notice posted at City Hall for Zoom Meeting login instructions.

**Regular Meeting**  
**May 6, 2021 – 7:30 p.m.**

## **AGENDA**

1. Call to Order
2. Pledge of Allegiance
3. Roll Call
4. Consider Approval of the Agenda
5. Consider Approval of Consent Agenda Items

### **Consent Agenda Items**

- a. Approval of Minutes: [Special Budget Work Sessions of April 13 and 14, 2021](#)
- b. Approval of Minutes: [Study Session of April 15, 2021](#)
- c. Approval of Minutes: [Regular Session of April 15, 2021](#)
- d. [Approval of Resolution #2021-08 for the Category "F" Grant Funding Contract for the Rickett Road Phase II Street Project, as Accepted by the City Attorney](#)
- e. [Approval of a Resolution #2021-09 to Enter into a Facility Encroachment Agreement with CSX Transportation, Inc. for the Crossing on North Fourth Street, Including Payment of \\$4,325, as Accepted by the City Attorney](#)
- f. [Approval of Resolution #2021-10 to allow staff to apply for a \\$250,000 Category B Program Grant funded by the Michigan Department of Transportation Economic Development Fund for the Second Phase of the Northwest Neighborhood Street Reconstruction Project with a Grant Matching Fund Requirement of Fifty Percent.](#)
- g. Approval of Engagement Letter for General Legal Counsel
- h. [Approval of Flagstar Deposit Placement Agreement, as Accepted by the City Attorney](#)
- i. [Approval of Site Plan #20-19: Northpond Office Complex, 1112 Rickett Road, as Recommended by the Planning Commission](#)

### **Correspondence**

6. Call to the Public
7. Staff Updates
8. Updates from Councilmember Liaisons to Various Boards and Commissions

### **Public Hearing**

9. [Conduct a Public Hearing and Consider Adoption of the Fiscal Year 2021/2022 Budget, Resolution #2021-11](#)

### **New Business**

10. [Consider Approval of the Proposed Fiscal Year 2020/2021 Fee Schedule, Resolution #2021-12](#)

11. Consider Approval of Resolution #2021-13 Setting Fiscal Year 2021/2022 Millage Rates to Set the Levy and Authorize the Collection of Taxes, Penalties and Fees.
12. Consider Awarding Engineering RFP for “Engineer of Record” Services and Prequalified “Project Engineers”
13. Consider Approval of Bids Relating to the Council Chambers Rehabilitation in the Amount of \$130,625.83 per Subcommittee Recommendation

**Other Business**

14. Call to the Public
15. Adjournment



# City Council Special Meeting

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## MINUTES OF THE SPECIAL BUDGET WORK SESSION OF THE BRIGHTON CITY COUNCIL HELD ON APRIL 13, 2021

### 1. Call to Order

Mayor Pipoly called the meeting to order at 6:30 p.m.

### 2. Roll Call

Present were Mayor Pipoly (City of Brighton, MI) and Mayor Pro Tem Gardner (City of Brighton, MI), Councilmembers: Bohn (City of Brighton, MI), Muzzin (City of Brighton, MI), and Pettengill (City of Brighton, MI).

Staff Present: City Manager Nate Geinzer, City Clerk Tara Brown, Human Resources Manager Michelle Miller, Finance Director Gretchen Gomolka, Public Services Director Marcel Goch, Assistant to the City Manager Henry Outlaw, Deputy DPS Director Corey Brooks, DPW Superintendent Daren Collins, Regulatory Compliance Officer Josh Bradley, Assistant to the DPS Director Patty Thomas, and Sgt. Brent Pirochta. There were five persons in the audience.

**Motion** by Councilmember Pettengill, seconded by Mayor Pro Tem Gardner to excuse Councilmembers Emaus and Tobbe for personal reasons. **The motion carried without objection by roll call vote.**

### 2a. Approval of the Agenda

**Motion** by Mayor Pro Tem Gardner, seconded by Councilmember Muzzin to approve the amended agenda, adding item 2a. **The motion carried without objection by roll call vote.**

### 3. Call to the Public

Mayor Pipoly opened the Call to the Public at 6:33 p.m.

Susan Bakhaus addressed City Council.

Mayor Pipoly closed the Call to the Public at 6:34 p.m.

### 4. Budget Discussion

City Council discussed General Fund revenue and expenditures; City Council; legal services; administrative services; finance department; community development; miscellaneous transfers; and the police department.

**Motion** by Councilmember Pettengill, seconded by Mayor Pro Tem Gardner to break for five minutes and to return at 8:10 p.m. **The motion carried without objection by roll call vote.**

### 5. Call to the Public

Mayor Pipoly opened the Call to the Public at 8:46 p.m.

Susan Bakhaus spoke regarding a 425 agreement.

Mayor Pipoly closed the Call to the Public at 8:47 p.m.

### 6. Adjournment

**Motion** by Councilmember Muzzin, seconded by Mayor Pro Tem Gardner to adjourn the meeting at 8:47 p.m. **The motion carried without objection by roll call vote.**

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Tara Brown, City Clerk

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Shawn Pipoly, Mayor



# City Council Special Meeting

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## MINUTES OF THE SPECIAL BUDGET WORK SESSION OF THE BRIGHTON CITY COUNCIL HELD ON APRIL 14, 2021

### 1. Call to Order

Mayor Pipoly called the meeting to order at 6:30 p.m.

### 2. Roll Call

Present were Mayor Pipoly (City of Brighton, MI) and Mayor Pro Tem Gardner (City of Brighton, MI), Councilmembers: Bohn (City of Brighton, MI), Emaus (City of Brighton, MI), Muzzin (City of Brighton, MI), Pettengill (City of Brighton, MI), and Tobbe (City of Brighton, MI).

Staff Present: City Manager Nate Geinzer, City Clerk Tara Brown, Human Resources Manager Michelle Miller, Finance Director Gretchen Gomolka, Public Services Director Marcel Goch, Deputy DPS Director Corey Brooks, DPW Superintendent Daren Collins, Regulatory Compliance Officer Josh Bradley, and Chief Rob Bradford. There were five persons in the audience.

### 2a. Approval of the Agenda

**Motion** by Mayor Pro Tem Gardner, seconded by Councilmember Pettengill to approve the amended agenda, adding item 2a. **The motion carried without objection by roll call vote.**

### 3. Call to the Public

Mayor Pipoly opened the Call to the Public at 6:34 p.m.

Susan Bakhaus spoke regarding assessed value.

Mayor Pipoly closed the Call to the Public at 6:36 p.m.

### 4. Budget Discussion

City Council discussed public services, including streets, imagination station, and bond funding; utilities; and other budget items that have been discussed over the past fiscal year such as additional funding considerations and projects.

**Motion** by Councilmember Pettengill, seconded by Mayor Pro Tem Gardner to break for five minutes and to return at 8:10 p.m. **The motion carried without objection by roll call vote.**

### 5. Call to the Public

Mayor Pipoly opened the Call to the Public at 8:46 p.m.

Susan Bakhaus spoke regarding the department of public works.

Mayor Pipoly closed the Call to the Public at 8:47 p.m.

### 6. Adjournment

**Motion** by Mayor Pro Tem Gardner, seconded by Councilmember Muzzin to adjourn the meeting at 8:48 p.m. **The motion carried without objection by roll call vote.**

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Tara Brown, City Clerk

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Shawn Pipoly, Mayor



# City Council Study Session

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## MINUTES OF THE STUDY SESSION OF THE BRIGHTON CITY COUNCIL HELD ON APRIL 15, 2021

### Call to Order

Mayor Pipoly called the meeting to order at 5:30 p.m.

### Roll Call

Present were Mayor Pipoly (City of Brighton, MI) and Mayor Pro Tem Gardner (City of Brighton, MI), Councilmembers: Bohn (City of Brighton, MI), Emaus (City of Brighton, MI) arrived at 5:41 p.m., Muzzin (City of Brighton, MI), Pettengill (City of Brighton, MI), Tobbe (City of Brighton, MI).

Staff Present: City Manager Nate Geinzer, City Clerk Tara Brown, Human Resources Manager Michelle Miller, Finance Director Gretchen Gomolka, Public Services Director Marcel Goch, Assistant to the City Manager Henry Outlaw, and Chief Rob Bradford. There were twelve persons in the audience.

### Call to the Public

Mayor Pipoly opened the Call to the Public at 5:31 p.m. Hearing and seeing no comment, the Call to Public was closed.

### Discussion and Interview of General Legal Counsel Finalists per Task Force Recommendation

City Council conducted interviews for City of Brighton General Legal Counsel. The finalists were Fahey, Schultz, Burzych, Rhodes; Foster Swift; and Rosati, Schultz, Joppich, and Amtsbuechler.

### Call to the Public

Mayor Pipoly opened the Call to the Public at 7:06 p.m.

Susan Bakhaus addressed City Council.

Mayor Pipoly closed the Call to the Public at 7:07 p.m.

### Adjournment

**Motion** by Councilmember Pettengill, seconded by Councilmember Emaus to adjourn the meeting at 7:08 p.m. **The motion carried without objection by roll call vote.**

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Tara Brown, City Clerk

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Shawn Pipoly, Mayor



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## MINUTES OF THE REGULAR MEETING OF THE BRIGHTON CITY COUNCIL HELD ON APRIL 15, 2021

### 1. Call to Order

Mayor Pipoly called the meeting to order at 7:30 p.m.

### 2. Pledge of Allegiance

Mayor Pro Tem Gardner led the Pledge of Allegiance.

### 3. Roll Call

Present were Mayor Pipoly (City of Brighton, MI) and Mayor Pro Tem Gardner (City of Brighton, MI), Councilmembers: Bohn (City of Brighton, MI), Emaus (City of Brighton, MI), Muzzin (City of Brighton, MI), Pettengill (City of Brighton, MI), and Tobbe (City of Brighton, MI).

Staff Present: City Manager Nate Geinzer, City Clerk Tara Brown, Human Resources Manager Michelle Miller, Finance Director Gretchen Gomolka, Public Services Director Marcel Goch, Community Development Manager Mike Caruso, Assistant to the DPS Director Patty Thomas, Assistant to the City Manager Henry Outlaw, Deputy DPS Director Corey Brooks, DPW Superintendent Daren Collins, Regulatory Compliance Officer Josh Bradley, and Chief Rob Bradford. There were fourteen persons in the audience.

### 4. Consider Approval of the Agenda

**Motion** by Councilmember Emaus, seconded by Mayor Pro Tem Gardner to approve the agenda, adding item 8a to New Business. **The motion carried without objection by roll call vote.**

### 5. Consider Approval of Consent Agenda Items

**Motion** by Councilmember Emaus, seconded by Councilmember Muzzin to approve the Consent Agenda as presented. **The motion carried without objection by roll call vote.**

#### Consent Agenda Items

- a. Approval of Minutes: Special Meeting of March 25, 2021
- b. Approval of Minutes: Regular Session of April 1, 2021
- c. Approval of Minutes: Special Meeting of April 8, 2021
- d. Approval of Bray Electric Proposal to Replace Parking Lot Lights at the PD/DPS Complex in the Amount of \$19,915.79
- e. Approval of Traffic Control Order (TCO) 176 for 25 MPH Speed Limit Signs on N. 1<sup>st</sup> Street Between W. Main Street and Chestnut Street
- f. Approval of Retention Letter for MTT/Tax Special Counsel

#### Correspondence

### 6. Call to the Public

Mayor Pipoly opened the Call to the Public at 7:34 p.m.

Brighton High School Principal Gavin Johnson spoke in support of the BAS civic event.

Mayor Pipoly closed the Call to the Public at 7:37 p.m.

### 7. Staff Updates

Director Goch noted the waste oxidation ditch screw pump has been pulled and is in need of repair. The Nelson Street booster station bid was held on April 15, 2021 but no bids were submitted. Director Goch stated phone calls will be made to determine the reason for no bids.

Director Gomolka noted that she collaborated with reporter Sara Kellner on an article in the Livingston Daily that features information about residential assessed value and taxable value of homes.

Human Resources Manager Miller stated the City is accepting applications for seasonal DPW employees. For more information, please contact Ms. Miller or visit the City's website.

## **8. Updates from Councilmember Liaisons to Various Boards and Commissions**

Mayor Pro Tem Gardner and the Brighton Arts and Culture Commission met on April 12, 2021 and discussed artist stipends and the Brighton Garden Club gnome project. More details to come soon.

Councilmember Muzzin and the Brighton Area Fire Authority met on April 8, 2021 to discuss healthcare, 457 options, MERS changes, and budget review.

Councilmember Pettengill attended the City Council Budget Work Shop and therefore asked Community Development Manager Caruso to relay the Zoning Board of Appeal proceedings. Mr. Caruso stated there were two variance requests that were approved. One for a garage setback and the other for a business sign.

Councilmember Emaus and the Brighton Veterans Memorial Committee have been planning, optimistically, for a Memorial Day parade but will adhere to all regulations.

### **New Business**

#### **8a. Consider Approval of Letter of Support to Representative Slotkin for BAFA Fund Request for Capital Funding for a New Fire Authority Head Quarters**

**Motion** by Councilmember Muzzin, seconded by Councilmember Emaus to approve the letter of support to Representative Slotkin for BAFA fund request for Capital funding as presented and to be expedited by 10:00 a.m. April 16, 2021. **The motion carried by roll call vote with Councilmember Bohn voting no.**

#### **9. Consider Authorizing a Purchase Order in the Amount of \$124,495.50 to Rotondo Construction for Sidewalk Maintenance and Fire Hall Entrance Pad Replacement with a Budget Amendment of \$124,495.50 From the General Fund Fund Balance**

**Motion** by Councilmember Emaus, seconded by Councilmember Muzzin to authorize a purchase order in the amount of \$121,495.50 to Rotondo Construction for sidewalk maintenance and fire hall entrance pad replacement with a budget amendment of \$121,495.50 from the general fund fund balance. **The motion carried by roll call vote with Councilmember Pettengill voting no.**

#### **10. Consider Award of Bid for the Northwest Neighborhood Street and Utility Improvements Project to Dunigan Bros. Inc. for \$6,656,722.37, Including a 15% Contingency, for a Total of \$7,655,230.**

**Motion** by Councilmember Emaus, seconded by Councilmember Pettengill to award the bid for the Northwest Neighborhood Street and Utility Improvements Project to Dunigan Bros. Inc. for \$6,656,722.37, including a 15% contingency, for a total of \$7,655,230 subject to legal review and approval. **The motion carried without objection by roll call vote.**

#### **11. Consider Approval of Civic Event Applications**

**Motion** by Mayor Pro Tem Gardner, seconded by Councilmember Emaus to approve of the Civic Event Applications as listed. **The motion carried without objection by roll call vote.**

#### **12. Discussion and Possible Action to Consider the Selection of General Legal Counsel**

**Motion** by Councilmember Bohn, seconded by Councilmember Tobbe to contract with Foster Swift for the City of Brighton General Legal Counsel. **The motion carried by roll call vote with Mayor Pro Tem Gardner and Councilmember Muzzin voting no.**

**13. Consider Entering into Closed Session to Receive Written Attorney-Client Privileged Communication Pursuant to MCL 15.268(h)**

**Motion** by Councilmember Pettengill, seconded by Mayor Pro Tem Gardner to enter into closed session to receive written attorney-client privileged communication pursuant to MCL 15.268(h). **The motion failed, 2-5. Mayor Pipoly, Mayor Pro Tem Gardner, and Councilmembers Emaus, Muzzin, and Pettengill voted no.**

**Motion** by Councilmember Muzzin, seconded by Councilmember Bohn to enter into closed session to receive written attorney-client privileged communication pursuant to MCL 15.268(h). **The motion failed, 3-4. Mayor Pipoly, Mayor Pro Tem Gardner, and Councilmembers Emaus and Muzzin voted no.**

**Motion** by Councilmember Muzzin, seconded by Councilmember Emaus to release the attorney-client privilege communication written by Keller Thoma dated April 13, 2021 to the public. **The motion failed, 2-5. Mayor Pipoly, Mayor Pro Tem Gardner, and Councilmembers Bohn, Pettengill, and Tobbe voted no.**

**Motion** by Councilmember Bohn, seconded by Councilmember Muzzin to enter into closed session to receive written attorney-client privileged communication pursuant to MCL 15.268(h) and to include the City Manager Geinzer and Clerk Brown in closed session. **The motion failed, 4-3. Mayor Pro Tem Gardner and Councilmembers Emaus and Tobbe voted no.**

**Motion** by Councilmember Bohn, seconded by Councilmember Muzzin to move on with the agenda. **The motion carried by roll call vote with Mayor Pipoly, Mayor Pro Tem Gardner, and Councilmember Emaus voting no.**

**Other Business**

**14. Call to the Public**

Mayor Pipoly opened the Call to the Public at 9:40 p.m.

Susan Bakhaus spoke regarding crack fill on Brighton Lake Road.

Councilmember Muzzin asked Councilmember Tobbe if he had independent discussion with Attorney Burns after his resignation.

Mayor Pipoly closed the Call to the Public at 9:43 p.m.

**15. Adjournment**

**Motion** by Councilmember Pettengill, seconded by Councilmember Muzzin to adjourn the meeting at 9:43 p.m. **The motion carried by roll call vote with Mayor Pipoly and Councilmember Emaus voting no.**

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Tara Brown, City Clerk

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Shawn Pipoly, Mayor



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

**SUBJECT: CONSIDER APPROVING A RESOLUTION FOR CATEGORY "F" GRANT FUNDING CONTRACT FOR THE RICKETT ROAD PHASE II STREET PROJECT**

### **BACKGROUND**

- If the anticipated schedule continues, the Rickett Road Phase II Street Project is set to begin in May. Planning for this project started approximately two years ago when Council approved the design engineering for Phases I and II of Rickett Road at the March 21, 2019 meeting. That fall Phase I began and was completed in the spring of 2020. Later, the decision was made to move forward with Phase II construction in the spring of 2021. Around the same time, the decision was made to schedule Phase II construction, the Michigan Department of Transportation (MDOT) authorized a Category "F" grant opportunity for communities with populations under 400,000. Staff knew that this grant could help reduce the cost of the project by \$375,000 so the application was promptly submitted to the State. Earlier this spring, the City was notified that it had received the grant, but would have to complete some additional steps in order to receive the funding.

### **ADMINISTRATIVE SUMMARY**

- As part of the grant requirements, a contract was provided with instructions that a Council resolution was needed. At the time the contract was provided by MDOT, the City was without attorney services so the contract was not able to be reviewed by legal counsel until a new legal firm was obtained. Now that a new City Attorney has been enlisted, the contract agreement between MDOT and the City of Brighton has been reviewed and approved.
- If the resolution is approved this evening, the contract will be signed and sent back to MDOT right away to keep the bidding on schedule for the opening date of May 4. Staff anticipates the bid submittals to be reviewed and vetted with a contractor recommendation coming to the May 20 Council meeting.

### **RECOMMENDATION**

Approve Resolution #2021-08 for the Category "F" Grant Funding contract for the Rickett Road Phase II Street Project.

Prepared by: Marcel Goch, Public Services Director

Reviewed &  
Approved by: Nate Geinzer, City Manager

Attachment: Resolution

TED (F)  
NON FED

COM  
Control Section EDF 47000  
Job Number 212231CON  
Contract No. 21-5100

THIS CONTRACT is made by and between the MICHIGAN DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the "DEPARTMENT;" and the CITY OF BRIGHTON, a Michigan municipal corporation, hereinafter referred to as the "REQUESTING PARTY;" for the purpose of fixing the rights and obligations of the parties in agreeing to the following improvements, in the City of Brighton, Michigan, hereinafter referred to as the "PROJECT" and estimated in detail on EXHIBIT "I," dated February 18, 2021, attached hereto and made a part hereof:

Hot mix asphalt cold milling and resurfacing work along Rickett Road from 200 feet north of Sisu Knoll Drive to 600 feet south of Oak Ridge Drive, including removal of center median and minor curb replacement work; and all together with necessary related work.

WITNESSETH:

WHEREAS, the State of Michigan is hereinafter referred to as the "State;" and

WHEREAS, the PROJECT has been approved for financing in part with funds from the State appropriated to the Transportation Economic Development Fund, hereinafter referred to as "TED FUNDS," qualifies for funding pursuant to PA 231, Section 11(2)(b); Public Act of 1987, as amended, and is categorized as:

#### CATEGORY "F" FUNDED PROJECT

WHEREAS, the parties hereto have reached an understanding with each other regarding the performance of the PROJECT work and desire to set forth this understanding in the form of a written contract.

NOW, THEREFORE, in consideration of the premises and of the mutual undertakings of the parties and in conformity with applicable law, it is agreed:

1. The parties hereto shall undertake and complete the PROJECT in accordance with the terms of this contract.

2. The term "PROJECT COST," as herein used, is hereby defined as the cost of the physical construction necessary for the completion of the PROJECT.

The costs incurred by the REQUESTING PARTY for preliminary engineering, construction engineering and inspection, and right-of-way are excluded from the PROJECT COST as defined by this contract.

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has informed the DEPARTMENT that it adopted new administrative rules (R 325.10101, et. seq.) which prohibit any governmental agency from connecting and/or reconnecting lead and/or galvanized service lines to existing and/or new water main. Questions regarding these administrative rules should be directed to EGLE. The cost associated with replacement of any lead and/or galvanized service lines, including but not limited to contractor claims, will be the sole responsibility of the REQUESTING PARTY.

3. The DEPARTMENT is authorized by the REQUESTING PARTY to perform, at no cost to the PROJECT, such administration of the PROJECT covered by this contract as is necessary to assist the REQUESTING PARTY to qualify for funding. Such administration may include performing such review, legal, financing, any other PROJECT related activities as are necessary to assist the REQUESTING PARTY in meeting applicable State requirements.

The DEPARTMENT shall provide the REQUESTING PARTY with a notice to proceed with the award of the construction contract for the PROJECT.

The DEPARTMENT shall make a final acceptance inspection of the PROJECT as necessary to ensure the PROJECT meets State requirements. Failure to comply with State requirements may result in forfeiture of future distributions of the Michigan Transportation Fund as described in Section 5. No charges will be made by the DEPARTMENT to the PROJECT for any inspection work or construction engineering.

4. The REQUESTING PARTY, under the terms of this contract, shall advertise and award the PROJECT work in accordance with the following:

- A. The REQUESTING PARTY will, at no cost to the DEPARTMENT or the PROJECT, design, or cause to be designed, the PROJECT, and shall accept full responsibility for that design. Any review undertaken by the DEPARTMENT is for its own purposes and is not to nor does it relieve the REQUESTING PARTY of liability for any claims, causes of action or judgments arising out of the design of the PROJECT.
- B. The REQUESTING PARTY, hereby, certifies to the DEPARTMENT that the plans, specifications, and estimates for the PROJECT have been prepared in compliance with applicable State laws, local ordinances, and State and local standards and regulations.
- C. The REQUESTING PARTY, hereby, certifies to the DEPARTMENT that

the contracting procedures to be followed by the REQUESTING PARTY in connection with the solicitation of the construction contract for the PROJECT shall be based on an open competitive bid process. It is understood that the proposal for the PROJECT shall be publicly advertised and the contract awarded on the basis of the lowest responsive and responsible bid in accordance with applicable State statutes, local ordinances, and State and local regulations.

- (1) The REQUESTING PARTY shall not award the construction contract prior to receipt of a notice to proceed from the DEPARTMENT.
- (2) Upon verification that contractor selection by the REQUESTING PARTY was made in accordance with the terms of this contract and upon receipt of the "Request for Payment" form from the REQUESTING PARTY, the DEPARTMENT will authorize payment to the REQUESTING PARTY for the eligible amount in accordance with Section 5.

D. The REQUESTING PARTY will, at no cost to the PROJECT or the DEPARTMENT, comply with all applicable State statutes, local ordinances, and State and local regulations, including, but not limited to, those specifically relating to construction contract administration and obtain all permits and approvals with railway companies, utilities, concerned State, Federal, and local agencies, etc., and give appropriate notifications as may be necessary for the performance of work required for the PROJECT.

The REQUESTING PARTY agrees to comply with all applicable requirements of Part 91, Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended by 1995 PA 60 and 1996 PA 173, MCL 324.9101 et. seq., for all PROJECT work performed under this contract, and the REQUESTING PARTY shall require its contractors and subcontractors to comply with the same.

E. All work in connection with the PROJECT shall be performed in conformance with the DEPARTMENT'S current Standard Specifications for Construction, special provisions, and the supplemental specifications and plans pertaining to the PROJECT. All materials furnished and used in the construction of the PROJECT shall conform to the aforesaid specifications. Any changes in the scope of work for the PROJECT will require approval by the DEPARTMENT.

- F. The REQUESTING PARTY shall, at no cost to the PROJECT or to the DEPARTMENT, appoint a project engineer who shall administer the PROJECT and ensure that the plans and specifications are followed, and shall perform or cause to be performed the construction engineering and inspection services necessary for the completion of the PROJECT.

Should the REQUESTING PARTY elect to use consultants for construction engineering and inspection, the REQUESTING PARTY shall provide a full-time project manager employed by the REQUESTING PARTY who shall ensure that the plans and specifications are followed.

- G. The REQUESTING PARTY shall require the contractor who is awarded the contract for the construction of the PROJECT to provide, as a minimum, insurance in the amounts specified in and in accordance with the DEPARTMENT'S current Standard Specifications for Construction, and to:

- (1) Maintain bodily injury and property damage insurance for the duration of the PROJECT.
- (2) Provide owner's protective liability insurance naming as insureds the State of Michigan, the Michigan State Transportation Commission, the DEPARTMENT and its officials, agents and employees, the REQUESTING PARTY and any other party with jurisdiction for the roadway being constructed as the PROJECT, and their employees, for the duration of the PROJECT and to provide copies of certificates of insurance to the insureds. It is understood that the DEPARTMENT does not assume either ownership of any portion of the PROJECT or jurisdiction of any REQUESTING PARTY highway as a result of being named as an insured on the owner's protective liability insurance policy.
- (3) Comply with the requirements of notice of cancellation and reduction of insurance set forth in the current Standard Specifications for Construction and to provide copies of notices and reports prepared to those insured.

5. The PROJECT COST shall be met in part by contributions by TED FUNDS. TED FUNDS Category F shall be applied to the eligible items of the PROJECT COST up to an amount not to exceed the lesser of: (1) 58 percent of the approved and responsible low bid amount, or (2) \$375,000, the grant amount. The balance, if any, of the PROJECT COST, after deduction of TED FUNDS, is the sole responsibility of the REQUESTING PARTY.

The REQUESTING PARTY shall be responsible for the payment of all costs and expenses incurred in the performance of PROJECT work.

Based upon the final cost of the PROJECT and/or a request by the REQUESTING PARTY, a payment adjustment may be initiated and/or authorized by the DEPARTMENT for eligible items of the PROJECT COST such that the total amount of TED FUNDS does not exceed the grant amount. The REQUESTING PARTY shall certify all actual costs incurred for work performed under this contract that are eligible for payment with TED FUNDS and will be required to repay any TED FUNDS it received in excess of 58 percent of the total of such costs.

6. The REQUESTING PARTY shall establish and maintain adequate records and accounts relative to the cost of the PROJECT. Said records shall be retained for a period of three (3) years after completion of construction of the PROJECT and shall be available for audit by the DEPARTMENT. In the event of a dispute with regard to allowable expenses or any other issue under this contract, the REQUESTING PARTY shall continue to maintain the records at least until that dispute has been finally decided and the time after all available challenges or appeals of that decision has expired.

The DEPARTMENT, or its representative, may inspect, copy, or audit the records at any reasonable time after giving reasonable notice.

The REQUESTING PARTY, within six (6) months of completion of the PROJECT and payment of all items of PROJECT COST related thereto, shall make a final reporting of construction costs to the DEPARTMENT and certify that the PROJECT has been constructed in accordance with the PROJECT plans, specifications, and construction contract.

In the event that an audit performed by or on behalf of the DEPARTMENT indicates an adjustment to the costs reported under this contract or questions the allowability of an item of expense, the DEPARTMENT shall promptly submit to the REQUESTING PARTY a Notice of Audit Results and a copy of the audit report which may supplement or modify any tentative findings verbally communicated to the REQUESTING PARTY at the completion of an audit.

Within sixty (60) days after the date of the Notice of Audit Results, the REQUESTING PARTY shall: (a) respond in writing to the responsible Bureau or the DEPARTMENT indicating whether or not it concurs with the audit report, (b) clearly explain the nature and basis for any disagreement as to a disallowed item of expense, and (c) submit to the DEPARTMENT a written explanation as to any questioned or no opinion expressed item of expense, hereinafter referred to as the "RESPONSE". The RESPONSE shall be clearly stated and provide any supporting documentation necessary to resolve any disagreement or questioned or no opinion expressed item of expense. Where the documentation is voluminous, the REQUESTING PARTY may supply appropriate excerpts and make alternate arrangements to conveniently and reasonably make that documentation available for review by the DEPARTMENT. The RESPONSE shall refer to and apply the language of the contract. The REQUESTING PARTY agrees that failure to submit a RESPONSE within the sixty (60) day period constitutes agreement with any

disallowance of an item of expense and authorizes the DEPARTMENT to finally disallow any items of questioned or no opinion expressed cost.

The DEPARTMENT shall make its decision with regard to any Notice of Audit Results and RESPONSE within one hundred twenty (120) days after the date of the Notice of Audit Results. If the DEPARTMENT determines that an overpayment has been made to the REQUESTING PARTY, the REQUESTING PARTY shall repay that amount to the DEPARTMENT or reach agreement with the DEPARTMENT on a repayment schedule within thirty (30) days after the date of an invoice from the DEPARTMENT. If the REQUESTING PARTY fails to repay the overpayment or reach agreement with the DEPARTMENT on a repayment schedule within the thirty (30) day period, the REQUESTING PARTY agrees that the DEPARTMENT shall deduct all or a portion of the overpayment from any funds then or thereafter payable by the DEPARTMENT to the REQUESTING PARTY under this contract or any other agreement, or payable to the REQUESTING PARTY under the terms of 1951 PA 51, as applicable. Interest will be assessed on any partial payments or repayment schedules based on the unpaid balance at the end of each month until the balance is paid in full. The rate of interest will be based on the Michigan Department of Treasury common cash funds interest earnings. The rate of interest will be reviewed annually by the DEPARTMENT and adjusted as necessary based on the Michigan Department of Treasury common cash funds interest earnings. The REQUESTING PARTY expressly consents to this withholding or offsetting of funds under those circumstances, reserving the right to file a lawsuit in the Court of Claims to contest the DEPARTMENT'S decision only as to any item of expense the disallowance of which was disputed by the REQUESTING PARTY in a timely filed RESPONSE.

The REQUESTING PARTY shall comply with the Single Audit Act of 1984, P.L. 998-502 and applicable State laws and regulations relative to audit requirements.

7. Upon completion of construction of the PROJECT, the REQUESTING PARTY will cause to be enacted and enforced such ordinances or regulations as may be necessary to prohibit parking in the roadway right-of-way throughout the limits of the PROJECT.

8. The REQUESTING PARTY certifies that it is not aware if and has no reason to believe that the property on which the work is to be performed under this agreement is a facility, as defined by the Michigan Natural Resources and Environmental Protection Act [(NREPA), PA 451, 1994, as amended 2012]; MCL 324.20101(1)(s). The REQUESTING PARTY also certifies that it is not a liable party pursuant to either Part 201 or Part 213 of NREPA, MCL 324.20126 et seq. and MCL 324.21323a et seq. The REQUESTING PARTY is a local unit of government that has acquired or will acquire property for the use of either a transportation corridor or public right-of-way and was not responsible for any activities causing a release or threat of release of any hazardous materials at or on the property. The REQUESTING PARTY is not a person who is liable for response activity costs, pursuant to MCL 324.20101 (vv) and (ww).

9. If, subsequent to execution of this contract, previously unknown hazardous substances are discovered within the PROJECT limits, which require environmental remediation pursuant to either State or federal law, the REQUESTING PARTY, in addition to reporting that fact to the Department of Environmental Quality, shall immediately notify the DEPARTMENT, both orally and in writing of such discovery. The DEPARTMENT shall consult with the REQUESTING PARTY to determine if it is willing to pay for the cost of remediation and to determine the eligibility, for reimbursement, of the remediation costs. The REQUESTING PARTY shall pay all costs associated with such remediation, including all delay costs of the contractor for the PROJECT. If the REQUESTING PARTY refuses to participate in the cost of remediation, the amount of TED FUNDS the REQUESTING PARTY received from Grant 945 shall be forfeited back to the DEPARTMENT.

10. If State funds administered by the DEPARTMENT are used to pay the cost of remediating any hazardous substances discovered after the execution of this contract and if there is a reasonable likelihood of recovery, the REQUESTING PARTY, in cooperation with the Department of Environmental Quality and the DEPARTMENT, shall make a diligent effort to recover such costs from all other possible entities. If recovery is made, the DEPARTMENT shall be reimbursed from such recovery for the proportionate share of the amount paid by the DEPARTMENT and the DEPARTMENT shall credit such sums to the appropriate funding source.

11. The DEPARTMENT'S sole reason for entering into this contract is to enable the REQUESTING PARTY to obtain and use funds provided by the State.

Any and all approvals of, reviews of, and recommendations regarding contracts, agreements, permits, plans, specifications, or documents, of any nature, or any inspections of work by the DEPARTMENT pursuant to the terms of this contract are done to assist the REQUESTING PARTY in meeting program guidelines in order to qualify for available funds. Such approvals, reviews, inspections and recommendations by the DEPARTMENT shall not relieve the REQUESTING PARTY and the local agencies, as applicable, of their ultimate control and shall not be construed as a warranty of their propriety or that the DEPARTMENT is assuming any liability, control or jurisdiction.

The providing of recommendations or advice by the DEPARTMENT does not relieve the REQUESTING PARTY and the local agencies, as applicable, of their exclusive jurisdiction of the highway and responsibility under MCL 691.1402 et seq., as amended.

When providing approvals, reviews and recommendations under this contract, the DEPARTMENT is performing a governmental function, as that term is defined in MCL 691.1401 et seq. as amended, which is incidental to the completion of the PROJECT.

12. The DEPARTMENT, by executing this contract, and rendering services pursuant to this contract, has not and does not assume jurisdiction of the highway, described as the PROJECT for purposes of MCL 691.1402 et seq., as amended. Exclusive jurisdiction of such

highway for the purposes of MCL 691.1402 et seq., as amended, rest with the REQUESTING PARTY and other local agencies having respective jurisdiction.

13. The REQUESTING PARTY shall approve all of the plans and specifications to be used on the PROJECT and shall be deemed to have approved all changes to the plans and specifications when put into effect. It is agreed that ultimate responsibility and control over the PROJECT rests with the REQUESTING PARTY and local agencies, as applicable.

14. The REQUESTING PARTY agrees that the costs reported to the DEPARTMENT for this contract will represent only those items that are properly chargeable in accordance with this contract. The REQUESTING PARTY also certifies that it has read the contract terms and has made itself aware of the applicable laws, regulations, and terms of this contract that apply to the reporting of costs incurred under the terms of this contract.

15. Each party to this contract will remain responsible for any and all claims arising out of its own acts and/or omissions during the performance of the contract, as provided by this contract or by law. In addition, this is not intended to increase or decrease either party's liability for or immunity from tort claims. This contract is also not intended to nor will it be interpreted as giving either party a right of indemnification, either by contract or by law, for claims arising out of the performance of this contract.

16. In connection with the performance of PROJECT work under this contract the parties hereto (hereinafter in Appendix "A" referred to as the "contractor") agree to comply with the State of Michigan provisions for "Prohibition of Discrimination in State Contracts," as set forth in Appendix A, attached hereto and made a part hereof. The parties further covenant that they will comply with the Civil Rights Acts of 1964 being P.L. 88-352, 78 Stat. 241, as amended, being Title 42 U.S.C. Sections 1971, 1975a-1975d, and 2000a-2000h-6, and will require similar covenants on the part of any contractor or subcontractor employed in the performance of this contract.

17. The REQUESTING PARTY and other local agencies, as applicable parties, understand and agree that the highway(s) or street(s) being improved under the terms of this agreement and funded with Transportation Economic Development Funds, shall not be subject to any restriction by local authorities in using certain commercial vehicles on such highway(s) or street(s). Such restrictions are in conflict with the basic concept of the Transportation Economic Development Program and Funding. The REQUESTING PARTY, by signing this agreement, agrees to obtain concurrence from other local governmental agencies within whose jurisdiction or control the highway(s) or street(s) are being improved.

18. This contract shall become binding on the parties hereto and of full force and effect upon the signing thereof by the duly authorized officials for the parties hereto and upon the adoption of the necessary resolution approving said contract and authorizing the signatures thereto of the respective officials of the REQUESTING PARTY, a certified copy of which resolution shall be attached to this contract.

IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed as written below.

CITY OF BRIGHTON

MICHIGAN DEPARTMENT  
OF TRANSPORTATION

By \_\_\_\_\_  
Title:

By \_\_\_\_\_  
Department Director MDOT

By \_\_\_\_\_  
Title:



**APPENDIX A**  
**PROHIBITION OF DISCRIMINATION IN STATE CONTRACTS**

In connection with the performance of work under this contract, the contractor agrees as follows:

1. In accordance with Public Act 453 of 1976 (Elliott-Larsen Civil Rights Act), the contractor shall not discriminate against an employee or applicant for employment with respect to hire, tenure, treatment, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, height, weight, or marital status. A breach of this covenant will be regarded as a material breach of this contract. Further, in accordance with Public Act 220 of 1976 (Persons with Disabilities Civil Rights Act), as amended by Public Act 478 of 1980, the contractor shall not discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment or a matter directly or indirectly related to employment because of a disability that is unrelated to the individual's ability to perform the duties of a particular job or position. A breach of the above covenants will be regarded as a material breach of this contract.
2. The contractor hereby agrees that any and all subcontracts to this contract, whereby a portion of the work set forth in this contract is to be performed, shall contain a covenant the same as hereinabove set forth in Section 1 of this Appendix.
3. The contractor will take affirmative action to ensure that applicants for employment and employees are treated without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or any disability that is unrelated to the individual's ability to perform the duties of a particular job or position. Such action shall include, but not be limited to, the following: employment; treatment; upgrading; demotion or transfer; recruitment; advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
4. The contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.
5. The contractor or its collective bargaining representative shall send to each labor union or representative of workers with which the contractor has a collective bargaining agreement or other contract or understanding a notice advising such labor union or workers' representative of the contractor's commitments under this Appendix.
6. The contractor shall comply with all relevant published rules, regulations, directives, and orders of the Michigan Civil Rights Commission that may be in effect prior to the taking of bids for any individual state project.

7. The contractor shall furnish and file compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of each subcontractor, as well as the contractor itself, and said contractor shall permit access to the contractor's books, records, and accounts by the Michigan Civil Rights Commission and/or its agent for the purposes of investigation to ascertain compliance under this contract and relevant rules, regulations, and orders of the Michigan Civil Rights Commission.
8. In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that a contractor has not complied with the contractual obligations under this contract, the Michigan Civil Rights Commission may, as a part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which State Administrative Board may order the cancellation of the contract found to have been violated and/or declare the contractor ineligible for future contracts with the state and its political and civil subdivisions, departments, and officers, including the governing boards of institutions of higher education, until the contractor complies with said order of the Michigan Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the contractor is declared ineligible to contract as a contracting party in future contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing contract is a possibility, the contracting agency shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.
9. The contractor shall include or incorporate by reference, the provisions of the foregoing paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Michigan Civil Rights Commission; all subcontracts and purchase orders will also state that said provisions will be binding upon each subcontractor or supplier.

Revised June 2011

**RESOLUTION APPROVING RECEIVING CATEGORY F GRANT FUNDS FROM THE  
MICHIGAN DEPARTMENT OF TRANSPORTATION  
CONTRACT #21-5100  
CITY OF BRIGHTON  
COUNTY OF LIVINGSTON, STATE OF MICHIGAN**

**WHEREAS**, The City of Brighton applied for a Category F Grant from the State of Michigan Department of Transportation (MDOT) for the Rickett Road Phase II Construction Project.

**WHEREAS**, The City of Brighton was advised by MDOT that it was approved for grant funding in the amount of \$375,000 for the Rickett Road Phase II Construction Project.

**WHEREAS**, the grant contract requires the City of Brighton to provide matching funds in the amount of \$269,045.

**WHEREAS**, The City of Brighton has budgeted the necessary funding to meet the match requirements of the MDOT Category F Grant for the Rickett Road Phase II Construction Project.

**NOW, THEREFORE**, the City Council of the City of Brighton, Livingston County, Michigan, resolves to enter into a contract with the State of Michigan Department of Transportation to receive funds from their Category F Grant Program in the amount of \$375,000 to fund the Rickett Road Phase II Reconstruction Project to occur in 2021.

**BE IT FURTHER RESOLVED**, to authorize the City Manager to sign all contract documents between the City of Brighton and the State of Michigan Department of Transportation.

**IT IS HEREBY CERTIFIED** that the City Council of the City of Brighton adopted the foregoing resolution at its regular meeting held on the 6th day of May 2021 by roll call vote:

PRESENT:

NAYS:

ABSENT:

RESOLUTION DECLARED ADOPTED.

**Dated:** \_\_\_\_\_

**CERTIFICATION**

I, Tara Brown, City Clerk for the City of Brighton, do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the City Council at its regular meeting held on May 6, 2021.

\_\_\_\_\_  
Tara Brown, City Clerk  
City of Brighton  
200 N. First Street  
Brighton, MI 48116



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: CONSIDER APPROVAL OF A RESOLUTION TO ENTER INTO A FACILITY ENCROACHMENT AGREEMENT WITH CSX TRANSPORTATION, INC. FOR THE CROSSING ON NORTH FOURTH STREET, INCLUDING PAYMENT OF \$4,325**

### ADMINISTRATIVE SUMMARY

- The Northwest Neighborhood Reconstruction Project includes the need for underground utility and road reconstruction work to occur within CSX Transportation, Inc.'s right-of-way property on North Fourth Street.
- In order to perform this work, the City is required to enter into a Facility Encroachment Agreement with CSX as well as pay a fee of \$4,325.
- The City's general council has reviewed and approved the Agreement.

### BUDGET INFORMATION

- The funding for this agreement will be paid from the Local Street Millage Fund as appropriated for the Northwest Neighborhood Reconstruction Project.

### RECOMMENDATION

Approval of a Resolution #2021-09 to Enter into a Facility Encroachment Agreement with CSX Transportation, Inc. for the Crossing on North First Street, Including Payment of \$4,325.

Prepared by: Patty Thomas, Asst. to the DPS Director

Reviewed by: Marcel Goch, DPS Director

Approved by: Nate Geinzer, City Manager

Attachment: CSX Agreement & Invoice  
Resolution

## FACILITY ENCROACHMENT AGREEMENT

THIS AGREEMENT, Made and effective as of April 20, 2021, by and between CSX TRANSPORTATION, INC., a Virginia corporation, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Licensor," and CITY OF BRIGHTON, a municipal corporation, political subdivision or state agency, under the laws of the State of Michigan, whose mailing address is 420 South Third Street, Brighton, Michigan 48116, hereinafter called "Licensee," WITNESSETH:

WHEREAS, Licensee desires to construct (unless previously constructed and designated as existing herein), use and maintain the below described facility(ies), hereinafter called "Facilities," over, under or across property owned or controlled by Licensor, at the below described location(s):

1. One (1) eight inch (8") diameter sub-grade pipeline crossing, solely for the conveyance of potable water, located at or near Brighton, Livingston County, Michigan, Great Lakes Zone Division, Plymouth Subdivision, Valuation Station 2164+80, Milepost CH-45.38, Latitude N42:31:56.10, Longitude W83:47:20.00;

hereinafter, called the "Encroachment," as shown on print(s) labeled Exhibit "A," attached hereto and made a part hereof;

NOW, THEREFORE, in consideration of the mutual covenants, conditions, terms and agreements herein contained, the parties hereto agree and covenant as follows:

### 1. LICENSE:

1.1 Subject to Article 17, Licensor, insofar as it has the legal right, power and authority to do so, and its present title permits, and subject to:

(A) Licensor's present and future right to occupy, possess and use its property within the area of the Encroachment for any and all purposes;

(B) All encumbrances, conditions, covenants, easements, and limitations applicable to Licensor's title to or rights in the subject property; and

(C) Compliance by Licensee and its agent or contractor ("Licensee's Contractor") with the terms and conditions herein contained;

does hereby license and permit Licensee to construct, maintain, repair, renew, operate, use, alter or change the Facilities at the Encroachment above for the term herein stated, and to remove same upon termination.

1.2 The term Facilities, as used herein, shall include only those structures and ancillary facilities devoted exclusively to the transmission usage above within the Encroachment, and as shown on attached Exhibit A.

1.3 No additional structures or other facilities shall be placed, allowed, or maintained by Licensee in, upon or on the Encroachment except upon prior separate written consent of Licensor.

## **2. ENCROACHMENT FEE; TERM:**

2.1 Licensee shall pay Licensor a one-time nonrefundable Encroachment Fee of FIVE HUNDRED AND 00/100 U.S. DOLLARS (\$500.00) upon execution of this Agreement. Licensee agrees that the Encroachment Fee applies only to the original Licensee under this Agreement. In the event of a successor (by merger, consolidation, reorganization and/or assignment) or if the original Licensee changes its name, then Licensee shall be subject to payment of Licensor's current administrative and document preparation fees for the cost incurred by Licensor in preparing and maintaining this Agreement on a current basis.

2.2 However, Licensee assumes sole responsibility for, and shall pay directly (or reimburse Licensor), any additional annual taxes and/or periodic assessments levied against Licensor or Licensor's property solely on account of said Facilities or Encroachment.

2.3 This Agreement shall terminate as herein provided, but shall also terminate upon: (a) Licensee's cessation of use of the Facilities or Encroachment for the purpose(s) above; (b) removal of the Facilities; (c) subsequent mutual consent; and/or (d) failure of Licensee to complete installation within five (5) years from the effective date of this Agreement.

2.4 In further consideration for the license or right hereby granted, Licensee hereby agrees that Licensor shall not be charged or assessed, directly or indirectly, with any part of the cost of the installation of said Facilities and appurtenances, and/or maintenance thereof, or for any public works project of which said Facilities is a part.

## **3. CONSTRUCTION, MAINTENANCE AND REPAIRS:**

3.1 Licensee shall construct, maintain, relocate, repair, renew, alter, and/or remove the Facilities, in a prudent, workmanlike manner, using quality materials and complying with any applicable standard(s) or regulation(s) of Licensor (CSXT Specifications), or Licensee's particular industry, National Electrical Safety Code, or any governmental or regulatory body having jurisdiction over the Encroachment.

3.2 Location and construction of Facilities shall be made strictly in accordance with design(s) and specifications furnished to and approved by Licensor and of material(s) and size(s) appropriate for the purpose(s) above recited.

3.3 All of Licensee's work, and exercise of rights hereunder, shall be undertaken at time(s) satisfactory to Licensor, and so as to eliminate or minimize any impact on or interference with the safe use and operation of Licensor's property and appurtenances thereto.

3.4 In the installation, maintenance, repair and/or removal of said Facilities, Licensee shall not use explosives of any type or perform or cause any blasting without the

separate express written consent of Licensor. As a condition to such consent, a representative will be assigned by Licensor to monitor blasting, and Licensee shall reimburse Licensor for the entire cost and/or expense of furnishing said monitor.

3.5 Any repairs or maintenance to the Facilities, whether resulting from acts of Licensee, or natural or weather events, which are necessary to protect or facilitate Licensor's use of its property, shall be made by Licensee promptly, but in no event later than thirty (30) days after Licensee has notice as to the need for such repairs or maintenance.

3.6 Licensor, in order to protect or safeguard its property, rail operations, equipment and/or employees from damage or injury, may request immediate repair or renewal of the Facilities, and if the same is not performed, may make or contract to make such repairs or renewals, at the sole risk, cost and expense of Licensee.

3.7 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Encroachment, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

3.8 All work on the Encroachment shall be conducted in accordance with Licensor's safety rules and regulations.

3.9 Licensee hereby agrees to reimburse Licensor any loss, cost or expense (including losses resulting from train delays and/or inability to meet train schedules) arising from any failure of Licensee to make repairs or conduct maintenance as required by Section 3.5 above or from improper or incomplete repairs or maintenance to the Facilities or Encroachment.

3.10 In the event it becomes necessary for the Licensee to deviate from the approved Exhibit, Licensee shall seek prior approval from Licensor, or when applicable, an official field representative of Licensor permitted to approve changes, authorizing the necessary field changes and Licensee shall provide Licensor with complete As-Built Drawings of the completed work. As-Built Drawings shall be submitted to Licensor in either electronic or hard copy form upon the substantial completion of the project and upon Licensor's request.

3.11 In the event of large scale maintenance/construction work to railroad bridges Licensee is required to protect power lines with insulated covers or comparable safety devices at their costs during construction/maintenance for safety of railroad employees.

#### **4. PERMITS, LICENSES:**

4.1 Before any work hereunder is performed, or before use of the Encroachment for the contracted purpose, Licensee, at its sole cost and expense, shall obtain all necessary permit(s) (including but not limited to zoning, building, construction, health, safety or environmental matters), letter(s) or certificate(s) of approval. Licensee expressly agrees and warrants that it shall conform and limit its activities to the terms of such permit(s), approval(s)

and authorization(s), and shall comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (State, Federal or Local) having jurisdiction over Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act (OSHA) (29 CFR 1926.651(b)), et al., and State "One Call" - "Call Before You Dig" requirements.

4.2 Licensee assumes sole responsibility for failure to obtain such permit(s) or approval(s), for any violations thereof, or for costs or expenses of compliance or remedy.

## 5. MARKING AND SUPPORT:

5.1 With respect to any subsurface installation or maintenance upon Licensor's property, Licensee, at its sole cost and expense, shall:

- (A) support track(s) and roadbed in a manner satisfactory to Licensor;
- (B) backfill with satisfactory material and thoroughly tamp all trenches to prevent settling of surface of land and roadbed of Licensor; and
- (C) either remove any surplus earth or material from Licensor's property or cause said surplus earth or material to be placed and distributed at location(s) and in such manner Licensor may approve.

5.2 After construction or maintenance of the Facilities, Licensee shall:

- (A) Restore any track(s), roadbed and other disturbed property; and
- (B) Erect, maintain and periodically verify the accuracy of aboveground markers, in a form approved by Licensor, indicating the location, depth and ownership of any underground Facilities or related facilities.

5.3 Licensee shall be solely responsible for any subsidence or failure of lateral or subjacent support in the Encroachment area for a period of three (3) years after completion of installation.

## 6. TRACK CHANGES:

6.1 In the event that rail operations and/or track maintenance result in changes in grade or alignment of, additions to, or relocation of track(s) or other facilities, or in the event future use of Licensor's rail corridor or property necessitate any change of location, height or depth in the Facilities or Encroachment, Licensee, at its sole cost and expense and within thirty (30) days after notice in writing from Licensor, shall make changes in the Facilities or Encroachment to accommodate such track(s) or operations.

6.2 If Licensee fails to do so, Licensor may make or contract to make such changes at Licensee's cost.

**7. FACILITY CHANGES:**

7.1 Licensee shall periodically monitor and verify the depth or height of the Facilities or Encroachment in relation to the existing tracks and facilities, and shall relocate the Facilities or change the Encroachment, at Licensee's expense, should such relocation or change be necessary to comply with the minimum clearance requirements of Licensor.

7.2 If Licensee undertakes to revise, renew, relocate or change in any manner whatsoever all or any part of the Facilities (including any change in voltage or gauge of wire or any change in circumference, diameter or radius of pipe or change in materials transmitted in and through said pipe), or is required by any public agency or court order to do so, plans therefor shall be submitted to Licensor for approval before such change. After approval, the terms and conditions of this Agreement shall apply thereto.

**8. INTERFERENCE WITH RAIL FACILITIES:**

8.1 Although the Facilities/Encroachment herein permitted may not presently interfere with Licensor's railroad or facilities, in the event that the operation, existence or maintenance of said Facilities, in the sole judgment of Licensor, causes: (a) interference (including, but not limited to, physical or interference from an electromagnetic induction, or interference from stray or other currents) with Licensor's power lines, communication, signal or other wires, train control system, or electrical or electronic apparatus; or (b) interference in any manner, with the operation, maintenance or use of the rail corridor, track(s), structures, pole line(s), devices, other property, or any appurtenances thereto; then and in either event, Licensee, upon receipt of written notice from Licensor of any such interference, and at Licensee's sole risk, cost and expense, shall promptly make such changes in its Facilities or installation, as may be required in the reasonable judgment of the Licensor to eliminate all such interference. Upon Licensee's failure to remedy or change, Licensor may do so or contract to do so at Licensee's sole cost.

8.2 Without assuming any duty hereunder to inspect the Facilities, Licensor hereby reserves the right to inspect same and to require Licensee to undertake repairs, maintenance or adjustments to the Facilities, which Licensee hereby agrees to make promptly, at Licensee's sole cost and expense.

**9. RISK, LIABILITY, INDEMNITY:**

With respect to the relative risk and liabilities of the parties, it is hereby agreed that:

9.1 To the fullest extent permitted by State law (constitutional or statutory, as amended), Licensee hereby agrees to, defend, indemnify, and hold Licensor harmless from and against any and all liability, loss, claim, suit, damage, charge or expense which Licensor may suffer, sustain, incur or in any way be subjected to, on account of death of or injury to any person whomsoever (including officers, agents, employees or invitees of Licensor), and for damage to or loss of or destruction of any property whatsoever, arising out of, resulting from, or in any way connected with the construction, repair, maintenance, replacement, presence, existence,

operations, use or removal of the Facilities or any structure in connection therewith, or restoration of premises of Licensor to good order or condition after removal, EXCEPT when proven to have been caused solely by the willful misconduct or gross negligence of Licensor. HOWEVER, to the fullest extent permitted by State law, during any period of actual construction, repair, maintenance, replacement or removal of the Facilities, wherein agents, equipment or personnel of Licensee are on the railroad rail corridor, Licensee's liability hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

9.2 Licensee's Contractor shall hereby agree to, defend, indemnify, and hold Licensor harmless from and against any and all liability, loss, claim, suit, damage, charge or expense which Licensor may suffer, sustain, incur or in any way be subjected to, on account of death of or injury to any person whomsoever (including officers, agents, employees or invitees of Licensor), and for damage to or loss of or destruction of any property whosoever, arising out of resulting from, or in any way connected with the construction, repair, maintenance, replacement, presence, existence, operations, use or removal of the Facilities or any structure in connection therewith, or restoration of premises of Licensor to good order or condition after removal, EXCEPT when proven to have been caused solely by the willful misconduct or gross negligence of Licensor. HOWEVER, to the fullest extent permitted by State law, during any period of actual construction, repair, maintenance, replacement or removal of the Facilities, wherein agents, equipment or personnel of Licensee are on the railroad rail corridor, Licensee's liability hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

9.3 Use of Licensor's rail corridor involves certain risks of loss or damage as a result of the rail operations. Notwithstanding Section 9.1, Licensee expressly assumes all risk of loss and damage to Licensee's Property or the Facilities in, on, over or under the Encroachment, including loss of or any interference with use or service thereof, regardless of cause, including electrical field creation, fire or derailment resulting from rail operations. For this Section, the term "Licensee's Property" shall include property of third parties situated or placed upon Licensor's rail corridor by Licensee or by such third parties at request of or for benefit of Licensee.

9.4 To the fullest extent permitted by State law, as above, Licensee assumes all responsibility for, and agrees to defend, indemnify and hold Licensor harmless from: (a) all claims, costs and expenses, including reasonable attorneys' fees, as a consequence of any sudden or nonsudden pollution of air, water, land and/or ground water on or off the Encroachment area, arising from or in connection with the use of this Encroachment or resulting from leaking, bursting, spilling, or any escape of the material transmitted in or through the Facilities; (b) any claim or liability arising under federal or state law dealing with either such sudden or nonsudden pollution of air, water, land and/or ground water arising therefrom or the remedy thereof; and (c) any subsidence or failure of lateral or subjacent support of the tracks arising from such Facilities leakage.

9.5 Notwithstanding Section 9.1, Licensee also expressly assumes all risk of loss which in any way may result from Licensee's failure to maintain either required clearances for

any overhead Facilities or the required depth and encasement for any underground Facilities, whether or not such loss(es) result(s) in whole or part from Licensor's contributory negligence or joint fault.

9.6 Obligations of Licensee hereunder to release, indemnify and hold Licensor harmless shall also extend to companies and other legal entities that control, are controlled by, subsidiaries of, or are affiliated with Licensor, as well as any railroad that operates over the rail corridor on which the Encroachment is located, and the officers, employees and agents of each.

9.7 If a claim is made or action is brought against Licensor, and/or its operating lessee, for which Licensee may be responsible hereunder, in whole or in part, Licensee shall be notified to assume the handling or defense of such claim or action; but Licensor may participate in such handling or defense.

9.8 Notwithstanding anything contained in this Agreement, the limitation of liability contained in the state statutes, as amended from time to time, shall not limit Licensor's ability to collect under the insurance policies required to be maintained under this Agreement.

## 10. INSURANCE:

10.1 Prior to commencement of surveys, installation or occupation of premises pursuant to this Agreement, Licensee shall procure and shall maintain during the continuance of this Agreement, at its sole cost and expense, a policy of

- (i) Statutory Worker's Compensation and Employers Liability Insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00).
- (ii) Commercial General Liability coverage (inclusive of contractual liability) with available limits of not less than FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) in combined single limits for bodily injury and property damage and covering the contractual liabilities assumed under this Agreement and naming Licensor, and/or its designee, as additional insured. The evidence of insurance coverage shall be endorsed to provide for thirty (30) days' notice to Licensor, or its designee, prior to cancellation or modification of any policy. Mail CGL certificate, along with agreement, to CSX Transportation, Inc., Speed Code J180, 500 Water Street, Jacksonville, FL 32202. On each successive year, send certificate to [RenewalCOI@csx.com](mailto:RenewalCOI@csx.com).
- (iii) Business automobile liability insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00) combined single limit for bodily injury and/or property damage per occurrence naming Licensor, and/or its designee, as additional insured.

- (iv) The insurance policies must contain a waiver of subrogation against CSXT and its Affiliates, except where prohibited by law. All insurance companies must be A. M. Best rated A- and Class VII or better.
- (v) Such other insurance as Licensor may reasonably require.
- (vi) Licensee shall require its contractors to meet minimum insurance requirements above when performing work in relation to this agreement. Licensee will procure and review contractor's insurance certificates to confirm requirements are met. Licensor may request a copy of the insurance certificate.

10.2 If Licensee's Contractor's existing CGL policy(ies) do(es) not automatically cover Licensee's contractual liability during periods of survey, installation, maintenance and continued occupation, a specific endorsement adding such coverage shall be purchased by Licensee's Contractor. If said CGL policy is written on a "claims made" basis instead of a "per occurrence" basis, Licensee shall arrange for adequate time for reporting losses. Failure to do so shall be at Licensee's sole risk.

10.3 Licensor, or its designee, may at any time request evidence of insurance purchased by Licensee to comply with this Agreement. Failure of Licensee to comply with Licensor's request shall be considered a default by Licensee.

10.4 To the extent permitted by law and without waiver of the sovereign immunity of Licensee, securing such insurance shall not limit Licensee's liability under this Agreement, but shall be security therefor.

10.5 (A) In the event Licensee finds it necessary to perform construction or demolition operations within fifty feet (50') of any operated railroad track(s) or affecting any railroad bridge, trestle, tunnel, track(s), roadbed, overpass or underpass, Licensee shall: (a) notify Licensor; and (b) require Licensee's Contractor(s) performing such operations to procure and maintain during the period of construction or demolition operations, at no cost to Licensor,

i) Railroad Protective Liability (RPL) Insurance, naming Licensor, and/or its designee, as Named Insured, written on the current ISO/RIMA Form (ISO Form No. CG 00 35 04 13) with limits of FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence for bodily injury and property damage, with at least TEN MILLION AND 00/100 U.S. DOLLARS (\$10,000,000.00) aggregate limit per annual policy period. The original of such RPL policy shall be sent to and approved by Licensor prior to commencement of such construction or demolition. Licensor reserves the right to demand higher limits.

OR

ii) The CGL policy shall include endorsement ISO CG 24 17 and the Auto Liability Policy shall include endorsement ISO CA 20 70 evidencing that coverage is provided for work within 50 feet of a railroad. If such endorsements are not included, RPL insurance must be provided.

(B) At Licensor's option, in lieu of purchasing RPL insurance or the 50 foot endorsements from an insurance company (but not CGL insurance), Licensee may pay Licensor, at Licensor's current rate at time of request, the cost of adding this Encroachment, or additional construction and/or demolition activities, to Licensor's Railroad Protective Liability (RPL) Policy for the period of actual construction. This coverage is offered at Licensor's discretion and may not be available under all circumstances.

10.6 Notwithstanding the provisions of Sections 10.1 and 10.2, Licensee, pursuant to State Statute(s), may self-insure or self-assume, in any amount(s), any contracted liability arising under this Agreement, under a funded program of self-insurance, which fund will respond to liability of Licensee imposed by and in accordance with the procedures established by law.

## **11. GRADE CROSSINGS; PROTECTION SERVICES:**

11.1 Nothing herein contained shall be construed to permit Licensee or Licensee's contractor to move any vehicles or equipment over the track(s), except at public road crossing(s), without separate prior written approval of Licensor.

11.2 If Licensor deems it advisable, during any construction, maintenance, repair, renewal, alteration, change or removal of said Facilities, to place watchmen, flagmen, or field construction managers for protection of operations of Licensor or others on Licensor's rail corridor at the Encroachment, and to keep persons, equipment or materials away from the track(s), Licensor shall have the right to do so at the expense of Licensee, but Licensor shall not be liable for failure to do so.

## **12. LICENSOR'S COSTS:**

12.1 Any additional or alternative costs or expenses incurred by Licensor to accommodate Licensee's continued use of Licensor's property as a result of track changes or wire changes shall also be paid by Licensee.

12.2 Licensor's expense for wages ("force account" charges) and materials for any work performed at the expense of Licensee pursuant hereto shall be paid by Licensee within thirty (30) days after receipt of Licensor's bill therefor. Licensor may, at its discretion, request an advance deposit for estimated Licensor costs and expenses.

12.3 Such expense shall include, but not be limited to, cost of railroad labor and supervision under "force account" rules, plus current applicable overhead percentages, the actual cost of materials, and insurance, freight and handling charges on all material used. Equipment rentals shall be in accordance with Licensor's applicable fixed rate. Licensor may, at its discretion, require advance deposits for estimated costs of such expenses and costs.

## **13. DEFAULT, BREACH, WAIVER:**

13.1 The proper and complete performance of each covenant of this Agreement shall be deemed of the essence thereof, and in the event Licensee fails or refuses to fully and

completely perform any of said covenants or remedy any breach within thirty (30) days after receiving written notice from Licensor to do so (or within forty-eight (48) hours in the event of notice of a railroad emergency), Licensor shall have the option of immediately revoking this Agreement and the privileges and powers hereby conferred, regardless of encroachment fee(s) having been paid in advance for any annual or other period. Upon such revocation, Licensee shall make removal in accordance with Article 14.

13.2 No waiver by Licensor of its rights as to any breach of covenant or condition herein contained shall be construed as a permanent waiver of such covenant or condition, or any subsequent breach thereof, unless such covenant or condition is permanently waived in writing by Licensor.

13.3 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Encroachment, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

#### **14. TERMINATION, REMOVAL:**

14.1 All rights which Licensee may have hereunder shall cease upon the date of (a) termination, (b) revocation, or (c) subsequent agreement, or (d) Licensee's removal of the Facility from the Encroachment. However, neither termination nor revocation of this Agreement shall affect any claims and liabilities which have arisen or accrued hereunder, and which at the time of termination or revocation have not been satisfied; neither party, however, waiving any third party defenses or actions.

14.2 Within thirty (30) days after revocation or termination, Licensee, at its sole risk and expense, shall (a) remove the Facilities from the rail corridor of Licensor, unless the parties hereto agree otherwise, (b) restore the rail corridor of Licensor in a manner satisfactory to Licensor, and (c) reimburse Licensor any loss, cost or expense of Licensor resulting from such removal.

#### **15. NOTICE:**

15.1 Licensee shall give Licensor at least thirty (30) days written notice before doing any work on Licensor's rail corridor, except that in cases of emergency shorter notice may be given. Licensee shall provide proper notification as follows:

a. For non-emergencies, Licensee shall submit online via the CSX Property Portal from Licensor's web site, via web link:  
[https://propertyportal.csx.com/pub\\_ps\\_res/ps\\_res/jsf/public/index.faces](https://propertyportal.csx.com/pub_ps_res/ps_res/jsf/public/index.faces)

b. For emergencies, Licensee shall complete all of the steps outlined in Section 15.1 a. above, and shall also include detailed information of the emergency. Licensee shall also call and report details of the emergency to Licensor's Rail Operations Emergency

Telephone Number: 1-800-232-0144. In the event Licensor needs to contact Licensee concerning an emergency involving Licensee's Facility(ies), the emergency phone number for Licensee is: 810-227-8968.

15.2 All other notices and communications concerning this Agreement shall be addressed to Licensee at the address above, and to Licensor at the address shown on Page 1, c/o CSXT Contract Management, J180; or at such other address as either party may designate in writing to the other.

15.3 Unless otherwise expressly stated herein, all such notices shall be in writing and sent via Certified or Registered Mail, Return Receipt Requested, or by courier, and shall be considered delivered upon: (a) actual receipt, or (b) date of refusal of such delivery.

## **16. ASSIGNMENT:**

16.1 The rights herein conferred are the privileges of Licensee only, and Licensee shall obtain Licensor's prior written consent to any assignment of Licensee's interest herein; said consent shall not be unreasonably withheld.

16.2 Subject to Sections 2 and 16.1, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors or assigns.

16.3 Licensee shall give Licensor written notice of any legal succession (by merger, consolidation, reorganization, etc.) or other change of legal existence or status of Licensee, with a copy of all documents attesting to such change or legal succession, within thirty (30) days thereof.

16.4 Licensor expressly reserves the right to assign this Agreement, in whole or in part, to any grantee, lessee, or vendee of Licensor's underlying property interests in the Encroachment, upon written notice thereof to Licensee.

16.5 In the event of any unauthorized sale, transfer, assignment, sublicense or encumbrance of this Agreement, or any of the rights and privileges hereunder, Licensor, at its option, may revoke this Agreement by giving Licensee or any such assignee written notice of such revocation; and Licensee shall reimburse Licensor for any loss, cost or expense Licensor may incur as a result of Licensee's failure to obtain said consent.

## **17. TITLE:**

17.1 Licensee understands that Licensor occupies, uses and possesses lands, rights-of-way and rail corridors under all forms and qualities of ownership rights or facts, from full fee simple absolute to bare occupation. Accordingly, nothing in this Agreement shall act as or be deemed to act as any warranty, guaranty or representation of the quality of Licensor's title for any particular Encroachment or segment of Rail Corridor occupied, used or enjoyed in any manner by Licensee under any rights created in this Agreement. It is expressly understood that Licensor does not warrant title to any Rail Corridor and Licensee will accept the grants and

privileges contained herein, subject to all lawful outstanding existing liens, mortgages and superior rights in and to the Rail Corridor, and all leases, licenses and easements or other interests previously granted to others therein.

17.2 The term "license," as used herein, shall mean with regard to any portion of the Rail Corridor which is owned by Licensor in fee simple absolute, or where the applicable law of the State where the Encroachment is located otherwise permits Licensor to make such grants to Licensee, a "permission to use" the Rail Corridor, with dominion and control over such portion of the Rail Corridor remaining with Licensor, and no interest in or exclusive right to possess being otherwise granted to Licensee. With regard to any other portion of Rail Corridor occupied, used or controlled by Licensor under any other facts or rights, Licensor merely waives its exclusive right to occupy the Rail Corridor and grants no other rights whatsoever under this Agreement, such waiver continuing only so long as Licensor continues its own occupation, use or control. Licensor does not warrant or guarantee that the license granted hereunder provides Licensee with all of the rights necessary to occupy any portion of the Rail Corridor. Licensee further acknowledges that it does not have the right to occupy any portion of the Rail Corridor held by Licensor in less than fee simple absolute without also receiving the consent of the owner(s) of the fee simple absolute estate. Further, Licensee shall not obtain, exercise or claim any interest in the Rail Corridor that would impair Licensor's existing rights therein.

17.3 Licensee agrees it shall not have nor shall it make, and hereby completely and absolutely waives its right to, any claim against Licensor for damages on account of any deficiencies in title to the Rail Corridor in the event of failure or insufficiency of Licensor's title to any portion thereof arising from Licensee's use or occupancy thereof.

17.4 To the extent provided by law, Licensee agrees to fully and completely indemnify and defend all claims or litigation for slander of title, overburden of easement, or similar claims arising out of or based upon the Facilities placement, or the presence of the Facilities in, on or along any Encroachment(s), including claims for punitive or special damages.

17.5 Licensee shall not at any time own or claim any right, title or interest in or to Licensor's property occupied by the Encroachments, nor shall the exercise of this Agreement for any length of time give rise to any right, title or interest in Licensee to said property other than the license herein created.

17.6 Nothing in this Agreement shall be deemed to give, and Licensor hereby expressly waives, any claim of ownership in and to any part of the Facilities.

17.7 Licensee shall not create or permit any mortgage, pledge, security, interest, lien or encumbrances, including without limitation, tax liens and liens or encumbrances with respect to work performed or equipment furnished in connection with the construction, installation, repair, maintenance or operation of the Facilities in or on any portion of the Encroachment (collectively, "Liens or Encumbrances"), to be established or remain against the Encroachment or any portion thereof or any other Licensor property.

17.8 In the event that any property of Licensor becomes subject to such Liens or Encumbrances, Licensee agrees to pay, discharge or remove the same promptly upon Licensee's receipt of notice that such Liens or Encumbrances have been filed or docketed against the Encroachment or any other property of Licensor; however, Licensee reserves the right to challenge, at its sole expense, the validity and/or enforceability of any such Liens or Encumbrances.

**18. GENERAL PROVISIONS:**

18.1 This Agreement, and the attached specifications, contains the entire understanding between the parties hereto.

18.2 Neither this Agreement, any provision hereof, nor any agreement or provision included herein by reference, shall operate or be construed as being for the benefit of any third person.

18.3 Except as otherwise provided herein, or in any Rider attached hereto, neither the form of this Agreement, nor any language herein, shall be interpreted or construed in favor of or against either party hereto as the sole drafter thereof.

18.4 This Agreement is executed under current interpretation of applicable Federal, State, County, Municipal or other local statute, ordinance or law(s). However, each separate division (paragraph, clause, item, term, condition, covenant or agreement) herein shall have independent and severable status for the determination of legality, so that if any separate division is determined to be void or unenforceable for any reason, such determination shall have no effect upon the validity or enforceability of each other separate division, or any combination thereof.

18.5 This Agreement shall be construed and governed by the laws of the state in which the Facilities and Encroachment are located.

18.6 If any amount due pursuant to the terms of this Agreement is not paid by the due date, it will be subject to Licensor's standard late charge and will also accrue interest at eighteen percent (18%) per annum, unless limited by local law, and then at the highest rate so permitted.

18.7 Licensee agrees to reimburse Licensor for all reasonable costs (including attorney's fees) incurred by Licensor for collecting any amount due under the Agreement.

18.8 The provisions of this License are considered confidential and may not be disclosed to a third party without the consent of the other party(s), except: (a) as required by statute, regulation or court order, (b) to a parent, affiliate or subsidiary company, (c) to an auditing firm or legal counsel that are agreeable to the confidentiality provisions, or (d) to Lessees of Licensor's land and/or track who are affected by the terms and conditions of this Agreement and will maintain the confidentiality of this Agreement.

18.9 Within thirty (30) days of an overpayment in a cumulative total amount of One Hundred Dollars (\$100.00) or more by Licensee to Licensor, Licensee shall notify Licensor in writing with documentation evidencing such overpayment. Licensor shall refund the actual amount of Licensee's overpayment within 120 days of Licensor's verification of such overpayment.

18.10 This Agreement may be executed in any number of counterparts, and such counterparts may be exchanged by electronic transmission. Upon execution by the parties hereto, each counterpart shall be deemed an original and together shall constitute one and the same instrument. A fully executed copy of this Agreement by electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Agreement for all purposes.

**19. CONTRACTOR'S ACCEPTANCE:**

19.1 Licensee shall observe and abide by, and shall require Licensee's Contractors to observe and abide by the terms, conditions and provisions set forth in this Agreement. Prior to any commencement of work under this Agreement by Licensee's Contractor, Licensee shall require Licensee's Contractor to execute and deliver to Licensor the Contractor Acceptance form attached hereto as Schedule A to acknowledge Licensee's Contractor's agreement to observe and abide by terms and conditions of the Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate (each of which shall constitute an original) as of the effective date of this Agreement.

**Witness for Licensor:**

**CSX TRANSPORTATION, INC.**

\_\_\_\_\_

By: \_\_\_\_\_

Print/Type Name: \_\_\_\_\_

Print/Type Title: \_\_\_\_\_

**Witness for Licensee:**

**CITY OF BRIGHTON**

\_\_\_\_\_

By: \_\_\_\_\_

Who, by the execution hereof, affirms that he/she has the authority to do so and to bind the Licensee to the terms and conditions of this Agreement.

Print/Type Name: \_\_\_\_\_

Print/Type Title: \_\_\_\_\_

Tax ID No.: \_\_\_\_\_

Authority under Ordinance or

Resolution No. \_\_\_\_\_

Dated \_\_\_\_\_

**Schedule "A"**

**CONTRACTOR'S ACCEPTANCE**

This Amendment is and shall be a part of Agreement No. CSX907895, and is incorporated therein.

To and for the benefit of CSX TRANSPORTATION, Inc. (Licensor") and to induce Licensor to permit Contractor on or about Licensor's property for the purpose of performing work in accordance with the Agreement dated April 20, 2021, between Licensee and Licensor, Contractor hereby agrees to abide by and perform all applicable terms of the Agreement, including, but not limited to Sections 3, 9, 10 of the Agreement.

Witness for Licensor:

\_\_\_\_\_

CSX TRANSPORTATION INC.

By: \_\_\_\_\_

Print/Type Name: \_\_\_\_\_

Print/Type Title: \_\_\_\_\_

Witness for Licensee's Contractor

\_\_\_\_\_

\_\_\_\_\_  
LICENSEE'S CONTRACTOR

By: \_\_\_\_\_  
Who, by the execution hereof, affirms that he/she has the authority to do so and to bind the Licensee has the authority to do so and to bind the Licensee to the terms and conditions of this Agreement

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**RESOLUTION APPROVING ENTERING INTO A FACILITY ENCROACHMENT AGREEMENT  
WITH CSX TRANSPORTATION, INC.  
AGREEMENT #CSX907895  
CITY OF BRIGHTON  
COUNTY OF LIVINGSTON, STATE OF MICHIGAN**

**WHEREAS**, The City of Brighton will be completing the Northwest Neighborhood Reconstruction Project in the spring of 2021.

**WHEREAS**, part of the project will include the reconstruction of underground utilities and road reconstruction within the CSX Right-of Way on North Fourth Street.

**WHEREAS**, The City must enter into a Facility Encroachment Agreement with CSX Transportation, Inc. to perform this work within their Right-of-Way and pay a fee of \$4,325.

**NOW, THEREFORE**, the City Council of the City of Brighton, Livingston County, Michigan, resolves to enter into Facility Encroachment Agreement #CSX907895 with CSX Transportation, Inc.

**BE IT FURTHER RESOLVED**, to authorize the payment of \$4,325 to CSX Transportation, Inc. for Agreement #CSX907895.

**BE IT FURTHER RESOLVED**, to authorize the City Manager to sign all contract documents between the City of Brighton and CSX Transportation, Inc.

**IT IS HEREBY CERTIFIED** that the City Council of the City of Brighton adopted the foregoing resolution at its regular meeting held on the 6th day of May 2021 by roll call vote:

PRESENT:

NAYS:

ABSENT:

RESOLUTION DECLARED ADOPTED.

**Dated:** \_\_\_\_\_

**CERTIFICATION**

I, Tara Brown, City Clerk for the City of Brighton, do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the City Council at its regular meeting held on May 6, 2021.

\_\_\_\_\_  
Tara Brown, City Clerk  
City of Brighton  
200 N. First Street  
Brighton, MI 48116



Page 1 of 1  
Account/Contract No. CSX907895  
Customer Project No. 200-12766-16002  
Date 4/8/2020

## Invoice

### Customer

City of Brighton  
420 South Third Street  
Brighton, MI 48116

Please submit a copy of this statement with payment submission to the "Remit To" address shown below.

### Fees-At-A-Glance

Amount Due U.S. Dollars \$ 4325.00

### Fees Summary

Application Review Fee	\$	1,950.00
Railroad Protective Liability	\$	1,875.00
License Fee	\$	500.00
Sales Tax*		
Money on File		

\* Florida Sales tax applies to the license fee

**Total Current Fees in U.S. dollars \$ 4,325.00**

CSX Federal ID No. 54-6000720  
CSX Canadian ID No. 105203095 RC 0001  
CSX Quebec ID No. 1022434469 IC 0001

**Please remit payment to: CSX Transportation, Inc.**

**Legal Address:**  
500 Water Street, J180  
Jacksonville, FL 32202

**Mailing Address:**  
500 Water Street, J180  
Jacksonville, FL 32202

Questions? Contact:

[Anne.Jackson@csx.com](mailto:Anne.Jackson@csx.com)  
904.279.3953



**CITY OF BRIGHTON  
REPORT FROM THE CITY MANAGER TO CITY COUNCIL  
May 6, 2021**

**SUBJECT: CONSIDER APPROVING RESOLUTION #2021-10 TO ALLOW STAFF TO APPLY FOR A \$250,000 CATEGORY B PROGRAM GRANT FUNDED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION ECONOMIC DEVELOPMENT FUND FOR THE SECOND PHASE OF THE NORTHWEST NEIGHBORHOOD STREET CONSTRUCTION PROJECT WITH A GRANT MATCHING FUND REQUIREMENT OF 50 PERCENT.**

**ADMINISTRATIVE SUMMARY**

- In April of 2020, City Council passed a resolution to allow staff to apply for a State of Michigan Transportation Economic Development Fund Category B Program Grant to assist with the cost of Phase 1 of the Northwest Neighborhood Reconstruction Project. This grant is for reconstruction, replacement, rehabilitation or capital preventative maintenance for cities or villages with populations under 10,000. Additionally, special consideration will be given to a municipality's capacity to raise other funding for street repairs, roadwork associated with other utility improvements, and roadways that are not eligible for funding through the Federal Highway Administration Category D Program.
- We were not awarded that grant; however, municipalities are able to apply for the grant again so Staff would like to reapply with hopes of using the funding toward the second phase of the Northwest Neighborhood project scheduled to begin in the spring of 2022.
- The maximum grant award amount is \$250,000 with a 50/50 match requirement by the municipal applicant. Funds are for street-related rehabilitation only and are not to be used for engineering or utility improvements. Additionally, costs for utility improvements are not to be used for the City's match portion. The contract estimate for the road reconstruction portion of Phase 2 is \$1,755,000.

**RECOMMENDATION**

Approve Resolution #2021-13 to allow staff to apply for a \$250,000 Category B Program Grant funded by the Michigan Department of Transportation Economic Development Fund for the second phase of the Northwest Neighborhood Street Reconstruction Project with a grant matching fund requirement of 50 percent.

Prepared by: Patty Thomas, Asst. to the DPS Director

Reviewed by: Marcel Goch, DPS Director

Approved by: Nate Geinzer, City Manager

Attachment: Resolution #2021-13

**CITY OF BRIGHTON  
RESOLUTION #2021-10**

A RESOLUTION TO ESTABLISH A REQUEST FOR FUNDING, DESIGNATE AN AGENT, ATTEST TO THE EXISTENCE OF FUNDS AND COMMIT TO IMPLEMENTING A MAINTENANCE PROGRAM FOR THE ROADWAY RECONSTRUCTION, REPLACEMENT OF UTILITIES AND THE INSTALLATION OF CURB, GUTTER AND A STORMWATER COLLECTION SYSTEM FOR THE SECOND PHASE OF THE NORTHWEST NEIGHBORHOOD FUNDED BY THE TRANSPORTATION ECONOMIC DEVELOPMENT FUND CATEGORY B PROGRAM.

Minutes of a regular meeting of the City Council of the City of Brighton, Livingston County, Michigan, held in the City Council Chambers at 200 N. First Street, in said City, on Thursday, May 6, 2021 at 7:30 pm.

PRESENT:           COUNCIL MEMBERS:    [Names]

ABSENT:           COUNCIL MEMBERS:    [Names]

The following preamble and resolution were offered by Commissioner [Name] and supported by Commissioner [Name].

WHEREAS, the City of Brighton is applying for \$250,000 in funding through MDOT from the Transportation Economic Development Category B Program to perform roadway reconstruction, replacement of utilities and the installation of curb, gutter and a stormwater collection system for the Northwest Neighborhood.

WHEREAS, MDOT requires a formal commitment from the public agency that will be receiving these funds and will be implementing and maintaining these infrastructure projects.

NOW, THEREFORE, BE IT RESOLVED THAT, the City has authorized Nate Geinzer, City Manager, to act as agent on behalf of the City to request Transportation Economic Development Fund Category B Program funding, to act as the applicant's agent during the project development, and to sign a project agreement upon receipt of a funding award.

BE IT FURTHER RESOLVED THAT, the City attests to the existence of, and commits to, providing at least \$250,000 toward the construction costs of the project(s), and all costs for design, permit fees, administration costs, and cost overruns.

BE IT FURTHER RESOLVED THAT, the City commits to owning operating, funding and implementing a maintenance program over the design life of the facilities constructed with Transportation Economic Development Fund Category B Program funding.

PRESENT:           COUNCIL MEMBERS:    [Names]

NAYS:             COUNCIL MEMBERS:    [Names]

ABSENT:           COUNCIL MEMBERS:    [Names]

RESOLUTION DECLARED ADOPTED.

[name]

[title]

**CERTIFICATION**

The forgoing resolution was certified at a regular meeting of the City Council of the City of Brighton held on May 6, 2021.

---

Tara Brown, City Clerk



# City of Brighton

REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: AUTHORIZATION OF FLAGSTAR DEPOSIT PLACEMENT AGREEMENT**

## **ADMINISTRATIVE SUMMARY**

- The city received in excess of \$17 million in bond proceeds at the end of February 2021. The City's Treasurer worked with the City's bank, Flagstar to find a way to get these funds fully covered by FDIC insurance through an insured cash sweep account.
- This account works by Flagstar depositing cash through different banks in the network using a reciprocal network. In other words, the city's funds are placed at other banks, and matching amount of money are deposited in Flagstar from other users of the network. This spreads our money across many institutions for FDIC coverage purposes yet Flagstar still has matching deposits from these other institutions to cover our withdrawals.
- Foster Swift has reviewed the contract pointing out one change. The bank has made the requested change
- Staff recommends City Council authorize the Finance Director to execute the attached agreement.

Prepared by: Gretchen Gomolka, Finance Director

Approved by: Nate Geinzer, City Manager



Formerly  
CDARS<sup>®</sup> and ICS<sup>®</sup>  
deposit products



## IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement

You, the undersigned, enter into this IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement (“*Agreement*”) with the following financial institution (“*we*” or “*us*”):

This Agreement states the terms and conditions on which we will endeavor to place deposits for you at other financial institutions through the DDA-MMDA Option of IntraFi<sup>SM</sup> Network Deposits<sup>SM</sup>. IntraFi Network Deposits is a product of IntraFi Network LLC (“*IntraFi*”) that encompasses services for placing deposits at depository institutions.

This Agreement is an amended version of the ICS Deposit Placement Agreement (“*ICS DPA*”). The DDA-MMDA Option of IntraFi Network Deposits (“*DDA-MMDA Option*”) is the deposit placement functionality formerly known as part of ICS<sup>®</sup>, the Insured Cash Sweep<sup>®</sup> service. IntraFi is the entity formerly known as Promontory Interfinancial Network, LLC.

During a branding transition period, you may see references to ICS on statements or other documents. These references are to the DDA-MMDA Option of IntraFi Network Deposits.

### 1. Deposit Placement

#### 1.1. IntraFi Network Deposits DDA-MMDA Option

(a) **Schedule 1** describes the procedure by which we will place deposits for you through the DDA-MMDA Option. **Schedule 2** includes descriptions of the account type and placement feature that we will use.

(b) Each depository institution at which we place deposits for you through the DDA-MMDA Option (“*Destination Institution*”) will be one at which deposit accounts are insured by the Federal Deposit Insurance Corporation (“*FDIC*”) up to the FDIC standard maximum deposit insurance amount (“*SMDIA*”) of \$250,000.

(c) Subject to the terms and conditions of this Agreement, when we place deposits in a deposit account at a Destination Institution for your funds placed through the DDA-MMDA Option (“*Deposit Account*”), the amount of our outstanding placements for you at the Destination Institution through the DDA-MMDA Option and through the CD Option of IntraFi Network Deposits, which is the deposit placement functionality formerly known as part of CDARS<sup>®</sup>, the Certificate of Deposit Account Registry Service<sup>®</sup>, will not exceed \$250,000.

(d) The Bank of New York Mellon (“*BNY Mellon*”) provides services that support deposit placement through the DDA-MMDA Option. BNY Mellon’s services include acting as our sub-custodian and settlement agent.

(e) You must be capable of using, and you agree to use, the Depositor Control Panel (“*DCP*”), an online tool, to review provisional allocations of deposits and for other purposes. You also agree to receive notices that may be posted on the DCP or sent to you by email.

### 1.2. Deposit Accounts

(a) Deposits that we place for you in Deposit Accounts will be “deposits,” as defined by federal law, at the Destination Institutions.

(b) Each Deposit Account, including the principal balance and the accrued interest, will be a deposit obligation solely of the Destination Institution at which it is held. It will not be a deposit obligation of us or of IntraFi, BNY Mellon, or any other person or entity.

### 2. Your Relationship With Us

#### 2.1. Agency and Custodial Relationship

(a) We will act as your agent in placing deposits for you through the DDA-MMDA Option. Under a separate agreement with you that grants us custodial powers (“*Custodial Agreement*”), we will also act as your custodian for the Deposit Accounts.

(b) Each Deposit Account will be recorded (i) on the records of the Destination Institution in the name of BNY Mellon, as our sub-custodian, (ii) on the records of BNY Mellon in our name, as your custodian, and (iii) on our records in your name. The recording will occur in a manner that permits the Deposit Account to be FDIC-insured to the same extent as if it were recorded on the records of Destination Institution in your name.

(c) For purposes of Article 8 of the Uniform Commercial Code, we will act as your securities intermediary for, and will treat as financial assets, the Deposit Accounts and all your security entitlements and



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other related interests and assets with respect to the Deposit Accounts, and we will treat you as entitled to exercise the rights that constitute the Deposit Accounts.

(d) All interests that we hold for the Deposit Accounts will be held by us only as your securities intermediary and will not be our property. You will be the owner of the funds in the Deposit Accounts and any interest on those funds.

## 2.2. Termination of Custodial Relationship

(a) Either you or we may terminate the custodial relationship between you and us at any time. You may not transfer the Deposit Accounts to another custodian, but you may dismiss us as your custodian for a Deposit Account and request that it be recorded on the records of the Destination Institution in your name.

(b) We will endeavor to cause any request from you pursuant to Section 2.2(a) to be promptly forwarded to the Destination Institution. Each Destination Institution has agreed that it will promptly fulfill any such request, subject to its customer identification policies and other account opening terms and conditions.

(c) If a Deposit Account has been recorded on the records of a Destination Institution in your name pursuant to this Section 2, you will be able to enforce your rights in the Deposit Account directly against the Destination Institution, but we will no longer have any custodial responsibility for it and you will not be able to enforce any rights against the Destination Institution through us.

(d) If we were to become insolvent, our receiver or other successor in interest could transfer custody of the Deposit Accounts, and our rights and obligations under this Agreement, to a new custodian. Alternatively, you could exercise your right to have the Deposit Accounts recorded on the records of the Destination Institutions in your name pursuant to this Section 2.

## 3. Custodial Account and Interest Rate

### 3.1. Custodial Account

(a) As your custodian, we will open on our records, either directly or with the assistance of BNY Mellon, a custodial account in which we will hold your interests in the Deposit Accounts ("*Custodial Account*"). We may permit you to have multiple Custodial Accounts.

(b) On the signature page of this Agreement, you will enter a unique alphanumeric identifier for you ("*Depositor Identifier*"), which will be associated with the Custodial Account. You will enter as your Depositor

Identifier your federal taxpayer identification number ("*TIN*"), unless you do not have a TIN, in which case you will enter an alternate identifier that we approve.

(c) If you use an alternate identifier, you must use the same alternate identifier for all placements of deposits for you, by us or by any other financial institution, through the DDA-MMDA Option or through the CD Option of IntraFi Network Deposits. If you later obtain a TIN, you must promptly report it to us and to any such other institutions, and we may use it as your Depositor Identifier.

### 3.2. Interest Rate

(a) The interest rate for the Deposit Accounts at Destination Institutions on any day will be the then-current rate that we specify, which may be any rate (including zero) and which we may modify at any time ("*Interest Rate*"). Through your continued participation in the DDA-MMDA Option, you accept each applicable Interest Rate.

(b) If we permit you to have more than one Custodial Account, we may specify a different Interest Rate for each Custodial Account.

(c) Payment of the full amount of all accrued interest on a Deposit Account at a Destination Institution will be solely the responsibility of the Destination Institution. Neither we nor any other person or entity will be indebted to you for such payment.

## 4. Placement Procedures

### 4.1. Account Type, DDA-MMDA Option Settlement, and Statements

(a) Settlement of payments to and from participating institutions in the DDA-MMDA Option through BNY Mellon that includes the type of deposits we place for you ("*DDA-MMDA Option Settlement*") will occur each day that is not a Saturday, a Sunday, or another day on which banks in New York, New York, are authorized or required by law or regulation to close ("*Business Day*").

(b) You may confirm through the DCP (i) the aggregate principal balance in the Deposit Accounts ("*Program Balance*") and (ii) the principal balance and accrued interest at each Destination Institution as of the preceding Business Day or, after DDA-MMDA Option Settlement-related processing, as of that Business Day.

(c) We will provide you with periodic account statements that include, as of the end of the statement period, your Program Balance, your principal balance at



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each Destination Institution, the total interest you have earned on the Deposit Accounts during the period, and the rate of return you have earned on the daily average closing principal balance for the period (“*Statement Period Yield*”).

(d) The account information available on the DCP as described in Section 4.1(b), and the periodic statements described in Section 4.1(c), will be the only evidence that you receive of your ownership of the funds. You should retain the account statements.

#### 4.2. Triggering Events

(a) Schedule 1 sets forth events for triggering a transfer of funds from a root account with us that contains your funds (“*Root Account*”) to the Deposit Accounts at DDA-MMDA Option Settlement (“*Program Deposit*”) or a transfer of funds from the Deposit Accounts to the Root Account at DDA-MMDA Option Settlement (“*Program Withdrawal*”).

(b) An event for triggering a Program Deposit or a Program Withdrawal (“*Triggering Event*”) will be any such event described in Schedule 1.

(c) If you signed a previous version of this Agreement identified as an ICS DPA and became a party to this amended version of the Agreement after you were given notice of amendment, the content of Schedule 1 to this Agreement is the same as the content of Schedule 1 to the version you signed, subject to the following changes:

(i) “ICS” is changed to “the DDA-MMDA Option of IntraFi Network Deposits.”

(ii) “Transaction Account,” if it appears, is changed to “Root Account.”

#### 4.3. Program Deposits

(a) Subject to the terms and conditions of this Agreement, and except as provided in Section 4.3(b), a Triggering Event for a Program Deposit will result in a transfer of funds to the Deposit Accounts at DDA-MMDA Option Settlement the *next* Business Day (“*Regular Program Deposit*”).

(b) Schedule 1 states whether a transfer of funds to the Deposit Accounts at DDA-MMDA Option Settlement on the *same* Business Day (“*Same-Day Program Deposit*”) is available and, if so, the cutoff time for you to request a Same-Day Program Deposit (“*Same-Day Deposit Cutoff Time*”). If so stated, a request that we receive and accept before the Same-

Day Deposit Cutoff Time will be a Triggering Event for a Same-Day Program Deposit.

(c) We may impose a maximum Program Balance amount for deposits that we place for you through the DDA-MMDA Option and will inform you of any such amount we impose. Even if a Triggering Event for a Program Deposit occurs, we may choose not to transfer the amount to the Deposit Accounts if it would cause the Program Balance to exceed the maximum. In addition, we may choose not to transfer to the Deposit Accounts an amount that we have credited to the Root Account, but have not yet collected from a third party.

#### 4.4. Program Withdrawals

(a) Subject to the terms and conditions of this Agreement, and except as provided in Section 4.4(b), a Triggering Event for a Program Withdrawal will result in a transfer of funds from the Deposit Accounts at DDA-MMDA Option Settlement the *next* Business Day (“*Regular Program Withdrawal*”).

(b) Schedule 1 states whether the transfer of funds from your Deposit Accounts at DDA-MMDA Option Settlement on the *same* Business Day (“*Same-Day Program Withdrawal*”) is available and, if so, the cutoff time for you to request a Same-Day Program Withdrawal (“*Same-Day Withdrawal Cutoff Time*”). If Section 1 so states, a request that we receive and accept before the Same-Day Withdrawal Cutoff Time will be a Triggering Event for a Same-Day Program Withdrawal.

#### 4.5. Withdrawal Advances; Security Interest

(a) If Schedule 1 states that we will advance funds to you in anticipation of a Program Withdrawal, or if we otherwise decide in our discretion to advance funds to you in anticipation of a Program Withdrawal, you will owe the amount of these funds to us and we will retain from the funds we receive at DDA-MMDA Option Settlement the amount we have advanced to you.

(b) With respect to any amount that you owe to us pursuant to Section 4.5(a):

(i) you grant us, and acknowledge that we have, a security interest in, and a lien on, the Deposit Accounts, related security entitlements, and other related interests and assets that we may hold for you as custodian and securities intermediary pursuant to the Custodial Agreement for the amount that you owe to us,



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(ii) if a Destination Institution fails before a Program Withdrawal is completed, we may retain the amount of the Program Withdrawal from the proceeds of your FDIC insurance claim to satisfy the amount that you owe to us, and

(iii) to the extent that the amount that you owe to us is not satisfied from the interests and assets we are holding for you pursuant to the Custodial Agreement, or from the proceeds of any FDIC insurance claim, the amount remains owed by you to us and is payable on demand.

(c) If, in a separate agreement, you have granted us a security interest in the Deposit Accounts or in any security entitlements or other interests or assets relating to the Deposit Accounts as collateral for a loan to you or otherwise, we may decline to honor a request for a Program Withdrawal, or decline to honor a debit transaction in the Root Account that would trigger a Program Withdrawal or be funded by a Program Withdrawal, to the extent the Program Withdrawal would cause your Program Balance to fall below the loan amount or other amount that you have agreed to maintain in the Deposit Accounts or to which the security interest applies. If, in a separate agreement, you have granted us a security interest in the Root Account, we also may decline to honor transactions in the Root Account in accordance with the separate agreement.

#### 4.6. Account Type and Withdrawal Limit, If Any

(a) Deposits that we place for you through the DDA-MMDA Option at a Destination Institution will be placed in a Deposit Account that is a demand deposit account (“DDA”) or a Deposit Account that is a money market deposit account (“MMDA”), as provided in Section 1 of Schedule 2.

(b) Section 1 of Schedule 2 provides (i) that we will place deposits for you in DDAs, (ii) that we will place deposits for you in MMDAs, or (iii) that we may place deposits for you in DDAs or MMDAs.

(c) If you signed a previous version of this Agreement identified as an ICS DPA and became a party to this amended version of the Agreement as a result of having been given notice of amendment, the following applies:

(i) If the version you signed provided that we would place deposits for you in DDAs, Section 1 of Schedule 2 is deemed to state: “We will place deposits for you in DDAs.”

(ii) If the version you signed provided that we would place deposits for you in MMDAs, Section 1 of Schedule 2 is deemed to state: “We will place deposits for you in MMDAs.”

(iii) If the version you signed provided that we might place deposits for you in DDAs or MMDAs, Section 1 of Schedule 2 is deemed to state: “We may place deposits for you in DDAs or MMDAs.”

(d) Section 1 of Schedule 2 also provides, if MMDAs will or may be used, (i) that an MMDA Program Withdrawal limit of six per month applies or (ii) that no MMDA Program Withdrawal limit applies.

(e) If you signed a previous version of this Agreement identified as an ICS DPA and became a party to this amended version of the Agreement as a result of having been given notice of amendment, and if the version you provided that MMDAs would or might be used, the following applies:

(i) If the version you signed provided that an MMDA Program Withdrawal limit would apply and we have not informed you that we will not enforce such a limit, Section 1 of Schedule 2 is deemed to state, in addition to the statement given in Section 4.6(c), “You may use up to six MMDA Program Withdrawals per month.”

(ii) If the version you signed provided that an MMDA Program Withdrawal limit would not apply or we have informed you that we will not enforce such a limit, Section 1 of Schedule 2 is deemed to state, in addition to the statement given in Section 4.6(c), “No MMDA Program Withdrawal limit applies.”

(f) If a Program Withdrawal limit applies and you exceed the six permitted Program Withdrawals from MMDAs in a month:

(i) We may (A) transfer all the remaining funds in the MMDAs to the Root Account associated with the Custodial Account for the MMDAs or (B), if you also have a Custodial Account for DDA deposits, transfer all the remaining funds in the MMDAs to the Custodial Account for DDA deposits.

(ii) In subsequent months we may effect either such transfer at the time of your sixth Program Withdrawal.

(g) If you exceed the six permitted Program Withdrawals from MMDAs in multiple months, we may also make the Custodial Account for the MMDAs ineligible for Program Deposits.



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## 5. Placement Feature

### 5.1. Reciprocal and One-Way

(a) If we are an FDIC-insured depository institution, we are eligible to use a feature of the DDA-MMDA Option in which, when we place deposits, we receive matching deposits placed by other participating institutions in the DDA-MMDA Option and may pay a fee to IntraFi ("*Reciprocal Feature*").

(b) Whether or not we are eligible to use the Reciprocal Feature, we are eligible to use a feature of the DDA-MMDA Option in which, when we place deposits, we do not receive matching deposits, but we and IntraFi may receive fees from Destination Institutions ("*One-Way Feature*").

(c) Section 2 of Schedule 2 provides (i) that we may use either the Reciprocal Feature or the One-Way Feature, (ii) that we will use only the Reciprocal Feature, or (iii) that we will use only the One-Way Feature.

(d) If you signed a previous version of this Agreement identified as an ICS DPA and became a party to this amended version of the Agreement as a result of having been given notice of amendment, the following applies:

(i) Section 2 of Schedule 2 is deemed to provide that we may use either the Reciprocal Feature or the One-Way Feature if (A) Schedule 4 to the version that you signed contained two check boxes, one stating that we might use either ICS Reciprocal or ICS One-Way and the other stating that we would use only ICS Reciprocal, and (B) the box stating that we might use either ICS Reciprocal or ICS One-Way was checked.

(ii) Section 2 of Schedule 2 is deemed to provide that we will use only the Reciprocal Feature if (A) Schedule 4 to the version that you signed contained two check boxes, one stating that we might use either ICS Reciprocal or ICS One-Way and the other stating that we would use only ICS Reciprocal, and (B) the box stating that we would use only ICS Reciprocal was checked.

(iii) Section 2 of Schedule 2 is deemed to provide that we will use only the One-Way Feature if Schedule 4 to the version that you signed contained no check boxes regarding the use of ICS Reciprocal or ICS One-Way.

### 5.2. Placement Feature and Rate

(a) Interest on the Deposit Accounts will be earned at the specified Interest Rate regardless of whether the Reciprocal Feature or the One-Way Feature is used.

(b) When the Reciprocal Feature is used, the fee paid to IntraFi may affect rate determination. When the One-Way Feature is used, fees paid by Destination Institutions, or cost-of-funds rates for Destination Institutions, may affect rate determination.

(c) If we are eligible to use the Reciprocal Feature, and you authorize us to use either the Reciprocal Feature or the One-Way Feature, we may use a feature with greater benefits to you, to us, or both.

### 5.3. Placement Requirements

(a) Under the laws of some states, governmental units may submit deposits for placement through a deposit placement network only if the placing institution is located in the state and receives matching deposits of an equal maturity, if any, and an equal amount.

(b) If you are a state governmental unit, or if you are otherwise subject to restrictions on the placement of deposits for you, you are responsible for determining whether deposit placement in accordance with this Agreement satisfies any applicable restrictions.

## 6. Daily Allocation and Depositor Control

### 6.1. Daily Allocation; Review and Consent

(a) The DDA-MMDA Option process for allocating Program Deposits, Program Withdrawals, and funds already on deposit reflects various considerations, including the need for certain Destination Institutions to receive deposits in amounts that they have placed for their own customers and possible limits on the amounts that an institution is authorized to place or a Destination Institution has agreed to receive. Applicable deposit amounts may change from day to day. Accordingly, the allocation of funds takes place each Business Day.

(b) The set of Destination Institutions to which your funds on deposit are allocated on a Business Day, and the amount allocated to each Destination Institution, may differ from a previous Business Day's allocation. A different allocation may involve the movement of funds from one Destination Institution to another Destination Institution, even though you do not have a Program Deposit or a Program Withdrawal. Such movements of funds will not affect the Interest Rate.



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(c) You exercise control over the allocation of your funds through direct contact with us and through the DCP. You are responsible for reviewing the important information we provide you through the DCP, including information regarding proposed allocations that we provide each Business Day. In addition, on request at any time, we will provide you with a list of all Destination Institutions.

(d) Although we will not allocate your funds to Destination Institutions that you exclude or reject as set forth below, you authorize and consent to the allocation of your funds at Destination Institutions that you approve, or do not exclude or reject, as set forth below.

## 6.2. Destination Institution Exclusions

(a) You may enter the name of any depository institution on a list of exclusions from eligibility to receive deposits we place for you through the DDA-MMDA Option (“*Exclusions List*”).

(b) We may ask you to provide your initial Exclusions List by entering exclusions in Section 3(c) of Schedule 2 or by giving us notice of your Exclusions List in another manner we specify.

(c) If you signed a previous version of this Agreement identified as an ICS DPA and became a party to this amended version of the Agreement as a result of having been given notice of amendment, your Exclusions List will include any depository institutions you included in your List of Exclusions in the ICS DPA unless you have subsequently removed them.

(d) An Exclusions List will be effective within one Business Day after the first Business Day on which we have received the Exclusions List from you.

(e) You may add to or subtract from your Exclusions List by giving us notice in a manner we specify. If you add an exclusion in this manner, the new exclusion will be effective within one Business Day after the first Business Day on which we have received the notice from you.

## 6.3. Depositor Control Panel

(a) IntraFi will assist us in providing the DCP. The address of the Depositor Control Panel is <https://www.depositorcontrol.com>.

(b) You represent that you have a computer with Internet access, an e-mail address, the ability to download and print information from the DCP, and the knowledge and experience to use an online tool for DCP functionality. In addition, you acknowledge that you

must obtain and maintain all equipment and services necessary for access to the DCP.

(c) To access the DCP, you will be required to enter your login credentials. Your initial user name will be the account number for the Root Account or such other user name as we specify. Your initial password will be the last four characters of the Depositor Identifier entered for the sole or primary Depositor on the signature page of this Agreement.

(d) You will also be required to enter the email address you have provided to us. We will separately advise you of any additional steps required of you by security controls.

## 6.4. Depositor Placement Review

(a) Each Business Day, your aggregate principal balance that will be in Deposit Accounts after that day’s DDA-MMDA Option Settlement will be provisionally allocated to Destination Institutions. The amount allocated will reflect your Program Balance as of the last DDA-MMDA Option Settlement, plus any Program Deposit that will occur at the day’s DDA-MMDA Option Settlement, minus any Program Withdrawal that will occur at the day’s DDA-MMDA Option Settlement. The allocation may provide that previously-deposited funds will be removed from a Destination Institution and deposited in another Destination Institution.

(b) After the provisional allocation occurs on a Business Day, but before allocation becomes final at DDA-MMDA Option Settlement, Depositor Placement Review (“*DPR*”) will occur through the DCP. Even if a Destination Institution is not on your Exclusions List, the final allocation that day will not allocate your funds to the Destination Institution if you reject it during DPR through the DCP. Your rejection of a Destination Institution will be effective only if you submit it before DPR ends.

(c) The DPR period each Business Day will be as follows: 3:00 PM to 3:15 PM Eastern time. Daylight Saving Time applies when nationally in effect. We may change the DPR period by posting notice on the DCP in advance of the change.

(d) In DPR, you will see a list of Destination Institutions to which your funds are proposed to be allocated at DDA-MMDA Option Settlement later that day (“*Proposed Placement List*”), reflecting the provisional allocation of all your funds, including funds that will be moved from one Destination Institution to another Destination Institution. The Proposed Placement List will include the principal balance allocated to each Destination Institution. If you review



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the Proposed Placement List, and you click the approval button or you do not reject any of the Destination Institutions on the list, you will be approving the allocation and your funds will be allocated in accordance with the list.

(e) If you reject any of the Destination Institutions on the Proposed Placement List, you will be approving allocation to Destination Institutions on the list that you do not reject. After entering rejections, if sufficient time remains in DPR, you will have the opportunity to review a list of other Destination Institutions to which your funds could be allocated ("*Alternate Placement List*"). If you click the approval button for the Alternate Placement List, or you do not reject any of the Destination Institutions on it, you will be approving the allocation of your funds to any of the listed Destination Institutions. If you reject any of the Destination Institutions on the Alternate Placement List, you will be approving allocation to listed Destination Institutions that you do not reject. Your funds may be allocated to any combination of Destination Institutions on the Proposed Placement List and the Alternate Placement List that you do not reject.

(f) If the provisional allocation on a Business Day would result in funds of yours currently at a Destination Institution being moved to another Destination Institution and you reject the other Destination Institution in DPR that Business Day, the funds will not necessarily remain at the first Destination Institution. The funds will be allocated to a Destination Institution that you do not reject or returned to the Root Account.

(g) A Destination Institution that you reject in DPR will also be added to your Exclusions List, for purposes of future allocations, within one Business Day after the Business Day on which you submit the rejection.

(h) We do not guarantee that all your funds will be allocated to Destination Institutions on any particular day, even if they were allocated to Destination Institutions on a previous day. Exclusions and rejections of Destination Institutions may increase the chance that funds will not be allocated. If funds not yet transferred to the Deposit Accounts are not allocated to a Destination Institution on a Business Day, the funds will remain in the Root Account. If funds previously transferred to the Deposit Accounts are not allocated to a Destination Institution on a Business Day, the funds will be returned to the Root Account.

## 7. FDIC Insurance Considerations

### 7.1. Deposit Insurance Coverage

(a) You may obtain information about FDIC deposit insurance coverage by visiting the FDIC website at [www.fdic.gov](http://www.fdic.gov) or by contacting the FDIC by letter, email, or telephone.

(b) All of your deposits at a Destination Institution in the same insurable capacity (whether you are acting directly or through an intermediary) will be aggregated for the SMDIA. You should add to your Exclusions List any depository institution at which you have other deposits in the same insurable capacity. Insurable capacities include, among others, individual accounts and joint accounts.

(c) You are responsible for determining whether deposits we place for you are maintained in separate insurable capacities. Separate divisions within a corporate entity are not eligible for separate insurance coverage, and a separate TIN or other Depositor Identifier does not establish a separate insurable capacity.

(d) We will use the Depositor Identifier to identify you, and we will place deposits for you on the understanding that you are not submitting deposits for placement under more than one Depositor Identifier in the same insurable capacity.

(e) The requirements for FDIC deposit insurance coverage of the deposits of governmental units, including the United States government, state and local governments, the District of Columbia, and the Commonwealth of Puerto Rico, are set forth in FDIC regulations. If you are a governmental unit, you are responsible for determining whether the requirements for deposit insurance have been met. We are not responsible for losses resulting from the placement of deposits that are not eligible for FDIC deposit insurance.

(f) Records that we maintain, or that BNY Mellon maintains for us, reflecting ownership of the Deposit Accounts will be used to establish your eligibility for deposit insurance coverage. Accordingly, you must immediately report to us any changes in ownership information so that there will be accurate information to provide to the FDIC if a Destination Institution fails and the FDIC pays its insured deposits by cash payment. The FDIC could also require you to provide additional documentation.



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## 7.2. Responsibility to Monitor Deposits; Available Information

(a) You are responsible for monitoring the total amount of your funds at each Destination Institution in each insurable capacity to determine the extent of FDIC deposit insurance coverage available to you for deposits at that Destination Institution. You should confirm that each placement of your funds at Destination Institutions is consistent with your exclusions and rejections.

(b) You can obtain publicly available financial information on Destination Institutions from the National Information Center of the Federal Reserve System at [www.ffiec.gov/nicpubweb/nicweb/nichome.aspx](http://www.ffiec.gov/nicpubweb/nicweb/nichome.aspx).

## 7.3. Uninsured Deposits

(a) Although we will not place a deposit for you through the DDA-MMDA Option at any one Destination Institution in an amount that exceeds the SMDIA, a deposit that we place for you will not be eligible for FDIC insurance coverage at a Destination Institution before it becomes a deposit at the Destination Institution or after it is withdrawn from the Destination Institution.

(i) If we are an FDIC-insured depository institution and the Root Account is eligible for FDIC insurance coverage, a deposit in the Root Account will be aggregated with your other deposits with us in the same insurable capacity for application of the SMDIA of \$250,000.

(ii) If we are a credit union the share accounts of which are insured by the National Credit Union Administration (“NCUA”) and the Root Account is a share account with us that is eligible for NCUA insurance coverage, a deposit in the Root Account will be aggregated with your other deposits with us in the same insurable capacity for application of the NCUA standard maximum share insurance amount of \$250,000.

(iii) If we are not an FDIC-insured depository institution or the Root Account is not eligible for FDIC insurance coverage, a deposit in the Root Account will not be FDIC-insured. If we are not an NCUA-insured credit union or the Root Account is not eligible for NCUA insurance coverage, a deposit in the Root Account will not be NCUA-insured.

(b) If you cannot accept the risk of having a deposit with us that is not fully insured, you will be responsible for making arrangements with us, if we offer them, to have the deposits collateralized, protected by a properly-executed repurchase sweep arrangement, or

otherwise adequately protected, in a manner consistent with applicable law. You should consult your legal advisor to determine whether a collateralization arrangement is consistent with applicable law.

(c) If you cannot accept the risk of having a deposit with us that is not fully insured, and we do not offer arrangements of the kind described in Section 7.3(b) or we offer them but you do not make such arrangements with us, you should not submit deposits for placement through the DDA-MMDA Option.

## 7.4. Deposit Insurance Payments

(a) In case of the liquidation of, or other closing or winding up of the affairs of, an insured depository institution, the FDIC is generally required by law to pay each insured deposit “as soon as possible,” either by cash payment or by transferring the deposit to another insured depository institution. It is possible, however, that an insurance payment could be delayed. Neither we nor any other person or entity will be obligated to advance funds to you with respect to an insurance payment or to make any payment to you in satisfaction of a loss you might incur as a result of a delay in an insurance payment.

(b) If a Destination Institution at which we place deposits for you is closed and the FDIC does not transfer deposits that include your funds to another insured depository institution, but will make a deposit insurance cash payment, we will cause a deposit insurance claim for your funds to be filed with the FDIC, and we will credit to you the proceeds of the deposit insurance claim that we receive for your funds, subject to any valid security interest.

(c) If the FDIC makes a deposit insurance cash payment for a Deposit Account at a closed Destination Institution, the FDIC is required by law to pay the principal amount plus unpaid accrued interest to the date of the closing of the Destination Institution, as prescribed by law, subject to the SMDIA. No interest is earned on a Deposit Account at a Destination Institution after it closes.

(d) If the FDIC transfers the deposits of a closed Destination Institution to another insured depository institution, the acquiring institution may assume a Deposit Account. The acquiring institution may change the rate at which it pays interest on the assumed Deposit Account, subject to your right to withdraw the funds.



Formerly  
CDARS<sup>®</sup> and ICS<sup>®</sup>  
deposit products

## 8. Additional Considerations

### 8.1. Compare Rates

(a) We are not acting as your investment advisor, and we are not advising you about alternative investments. You are responsible for comparing the rates of return and other features of the Deposit Accounts to other available deposit accounts and other kinds of investments before choosing placement through the DDA-MMDA Option.

(b) The Interest Rate may be higher or lower than a cost-of-funds rate for a Destination Institution, an interest rate for another customer, or interest rates on comparable deposits available directly from us, from the Destination Institutions at which the Deposit Accounts are held, from other Destination Institutions, or from insured depository institutions that are not Destination Institutions.

### 8.2. Allocation Considerations

(a) The DDA-MMDA Option allocation process is subject to applicable law and may be affected by our objectives, IntraFi's objectives, or both, including administrative convenience, reduction of costs, and enhancement of profits.

(b) Participating institutions in the DDA-MMDA Option service may make compensatory payments resulting in payments to other participating institutions, or receive compensatory payments resulting from payments by other participating institutions, including compensatory payments that reflect the difference between an interest rate for deposits placed by an institution and a rate at which the receiving institution would otherwise pay interest.

### 8.3. Mutual Institution Rights

(a) Your funds may be placed in a Deposit Account at a Destination Institution that is in the mutual form of organization. Such a Deposit Account will be recorded on the records of the mutual institution in the name of the sub-custodian and not in your name. The sub-custodian will not attend or vote at any meeting of the depositor members of a mutual institution, or exercise any subscription rights in a mutual institution's mutual-to-stock conversion, either on its own behalf or on your behalf.

(b) If we receive from the sub-custodian notice of a meeting of depositor members of a mutual institution or other materials or information relating to a mutual institution's mutual-to-stock conversion, we may forward

such notice, materials, or information to you. If you wish to receive such notice, materials, or information directly from the mutual institution, or if you wish to attend or vote at any meeting of the depositor members of the mutual institution or receive subscription rights, you must, before the applicable record date (a date that is usually at least one year before the mutual institution's board of directors adopts a plan of conversion), dismiss us as your custodian and have the Deposit Account recorded on the records of the mutual institution in your name pursuant to Section 2.2.

## 9. Other Provisions

### 9.1. Release and Use of Identifying Information

(a) We may provide information that identifies you ("*Identifying Information*"), including your name, your TIN or other Depositor Identifier, and information on your deposits, to a party that provides services in connection with the DDA-MMDA Option ("*Service Provider*"), including IntraFi and BNY Mellon. A Service Provider may use Identifying Information in providing services in connection with the DDA-MMDA Option.

(b) We or a Service Provider may also provide Identifying Information to a Destination Institution, but will do so only to the extent necessary to comply with a request by you or your agent or to comply with applicable law. In addition, we or a Service Provider may provide Identifying Information to the FDIC in connection with a deposit insurance claim.

(c) Except as provided in Section 9.1(a) or Section 9.1(b), we will not provide Identifying Information to any party unless we determine that (i) we are required by applicable law to do so or (ii) we are permitted by applicable law to do so and have reasonable grounds to do so to protect our own legal or business interests or the legal or business interests of IntraFi or BNY Mellon.

(d) IntraFi may use and disclose any and all analyses, comparisons, indexes, or other data or information assembled, compiled, or otherwise developed by IntraFi, including information regarding aggregated activity of the DDA-MMDA Option depositors, as long as it does not individually identify you.

### 9.2. Tax Reporting and Withholding

(a) To the extent required by applicable law, we will file with the U.S. Internal Revenue Service ("IRS"), and furnish to you, IRS Form 1099-INT or its equivalent,



or IRS Form 1042-S or its equivalent, for interest paid on the Deposit Accounts by the Destination Institutions.

(b) If we are notified by the IRS that backup withholding is required for interest on the Deposit Accounts, or if we otherwise determine that we are required by applicable law to collect such backup withholding, we will collect it and pay it to the IRS.

### 9.3. Liability and Dispute Resolution

(a) We will maintain, directly or through a Service Provider, appropriate records of our placements for you. We will not place deposits for you through the DDA-MMDA Option at a Destination Institution that is the subject of a then-effective exclusion on your Exclusions List, at a Destination Institution that is the subject of a then-effective rejection by you, or at a Destination Institution under one Depositor Identifier in an amount that exceeds the SMDIA.

(b) If all or part of your deposit at a Destination Institution is uninsured because of our failure to comply with the requirements set forth in Section 9.3(a), and if the Destination Institution fails and you do not otherwise recover the uninsured portion, we will reimburse you for your documented loss of the uninsured portion that you do not otherwise recover.

(c) SUBJECT TO OUR REIMBURSEMENT OBLIGATION IN SECTION 9.3(b), AND EXCEPT AS MAY BE OTHERWISE REQUIRED BY APPLICABLE LAW, WE WILL NOT BE LIABLE, AND IN NO EVENT WILL INTRAFI OR BNY MELLON BE LIABLE, TO YOU OR TO ANY OTHER PERSON OR ENTITY FOR ANY LOSS OR DAMAGE INCURRED OR ALLEGEDLY INCURRED IN CONNECTION WITH THIS AGREEMENT. WITHOUT LIMITING THE FOREGOING, WE, INTRAFI, AND BNY MELLON WILL NOT HAVE ANY LIABILITY TO YOU OR ANY OTHER PERSON OR ENTITY FOR: (i) ANY LOSS ARISING OUT OF OR RELATING TO A CAUSE OVER WHICH WE DO NOT HAVE DIRECT CONTROL, INCLUDING THE FAILURE OF ELECTRONIC OR MECHANICAL EQUIPMENT OR COMMUNICATION LINES, TELEPHONE OR OTHER INTERCONNECT PROBLEMS, UNAUTHORIZED ACCESS, THEFT, OPERATOR ERRORS, GOVERNMENT RESTRICTIONS, OR FORCE MAJEURE (E.G., EARTHQUAKE, FLOOD, SEVERE OR EXTRAORDINARY WEATHER CONDITIONS, NATURAL DISASTERS OR OTHER ACT OF GOD, FIRE, ACTS OF WAR, TERRORIST ATTACKS, INSURRECTION, RIOT, STRIKES, LABOR DISPUTES OR SIMILAR PROBLEMS, ACCIDENT, ACTION OF GOVERNMENT, COMMUNICATIONS, SYSTEM OR POWER FAILURES, OR EQUIPMENT OR SOFTWARE MALFUNCTION), (ii) DELAY IN ANY FDIC INSURANCE PAYMENT, (iii) THE FINANCIAL CONDITION OF ANY DESTINATION INSTITUTION OR THE ACCURACY OF ANY FINANCIAL INFORMATION ABOUT ANY DESTINATION INSTITUTION, OR (iv) ANY SPECIAL, INDIRECT,

PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS).

(d) ANY DISPUTE ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT WILL BE GOVERNED BY THE DISPUTE RESOLUTION, ARBITRATION, CHOICE OF LAW, VENUE, WAIVER OF JURY TRIAL, AND COSTS RELATED TO DISPUTES PROVISIONS, IF ANY, CONTAINED IN THE CUSTODIAL AGREEMENT.

### 9.4. Miscellaneous

(a) This Agreement constitutes the entire agreement between you and us relating to the placement of deposits through the DDA-MMDA Option and any other matter herein, supersedes prior agreements, understandings, negotiations, representations, and proposals, whether written or oral, relating to any matter herein, and may not be amended by any oral representation or oral agreement. This Section 9.4(a) will not affect the validity of any addenda into which we have entered with you.

(b) Schedule 1 and Schedule 2 are incorporated into and made part of this Agreement. We may amend this Agreement, including any Schedule, prospectively by giving you written notice of the amendment at least fourteen (14) days before the effective date of the amendment, which will be specified in the amendment or, if no effective date is specified in the amendment, the date that is fourteen (14) days after we give you written notice of the amendment. We may provide written notice of the amendment by means of a posting on the DCP, an entry on your account statement, an email message, or a printed letter.

(c) Either party may terminate this Agreement on written notice to the other, but the obligations of both parties will survive with respect to any funds deposited at the time of termination. In addition, the provisions of this Section 9.4 will survive termination.

(d) Except as provided in Section 2.2(d), this Agreement may not be assigned, in whole or in part, by either party except by operation of law or as required by applicable law, and any purported assignment in violation hereof is void.

(e) The headings in this Agreement are not intended to describe, interpret, define, or limit the scope, meaning, or intent of this Agreement or any clause in it. Except as otherwise specified, a reference to a Section is a reference to a section of this Agreement. A reference to a Schedule is a reference to a schedule to this Agreement. The term "applicable law" refers to all applicable statutes, rules, regulations, and judicial



orders, whether federal, state, or local. The words “include,” “includes,” and “including” do not imply exclusion.

(f) This Agreement and, unless otherwise provided in the Custodial Agreement, the Custodial Agreement may be executed in counterparts, each of which shall be deemed to be an original, but such counterparts shall, together, constitute only one instrument. This Agreement and, unless otherwise provided in the Custodial Agreement, the Custodial Agreement will be valid, binding, and enforceable

against you and us when executed by one of the following means that we accept: (i) an original manual signature, (ii) a DocuSign® eSignature or another electronic signature that we accept, or (iii) a faxed, scanned (including in a Portable Document Format or PDF document), or photocopied signature that we accept. Each DocuSign® eSignature, other electronic signature, or faxed, scanned, or photocopied signature that we accept shall for all purposes have the same validity, legal effect, and admissibility in evidence as an original signature, and you and we waive any objection to the contrary.

The remainder of this page is intentionally left blank.

In Process



By signing below, you (“*Depositor*”) and we (“*Relationship Institution*”) agree to be legally bound by this IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement, effective when you and we have signed it. If the Custodial Account will be a joint account, each owner of the Custodial Account must sign this Agreement.

RELATIONSHIP INSTITUTION

Institution: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Name and title of authorized signatory:  
\_\_\_\_\_  
\_\_\_\_\_  
Date signed: \_\_\_\_\_

SOLE OR PRIMARY DEPOSITOR

**City of Brighton**  
Depositor: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Name and title of authorized signatory (if not individual):  
Gretchen Gomołka  
\_\_\_\_\_  
Finance Director  
\_\_\_\_\_  
Depositor TIN or approved alternate identifier (and type):  
38-6004526  
\_\_\_\_\_  
Email: GomołkaG@BrightonCity.org  
\_\_\_\_\_  
Date signed: \_\_\_\_\_

In Process

ADDITIONAL DEPOSITOR (FOR JOINT ACCOUNT)

Depositor: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Depositor TIN or approved alternate identifier (and type):  
\_\_\_\_\_  
Email: \_\_\_\_\_  
Date signed: \_\_\_\_\_

ADDITIONAL DEPOSITOR (FOR JOINT ACCOUNT)

Depositor: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Depositor TIN or approved alternate identifier (and type):  
\_\_\_\_\_  
Email: \_\_\_\_\_  
Date signed: \_\_\_\_\_

(Add signature lines as needed.)





(b) Subject to the terms and conditions of this Agreement, and subject to the rules and cutoff times that otherwise apply to root accounts with us, we will honor your debit transactions in the Root Account so long as the sum of your Root Account balance and your balance in the Deposit Accounts of the applicable type, after taking into account any pending Program Deposits and any pending Program Withdrawals, is not less than zero. We will do so even if the amount of the debit transaction exceeds your Root Account balance. You will owe us any amounts that we credit as advances in anticipation of a Program Deposit and we will retain those amounts from the funds we receive at DDA-MMDA Option Settlement.

(c) If a Triggering Event for a Program Withdrawal occurs, we may credit the Root Account and debit a holding account before the transfer of funds from the Deposit Accounts occurs at DDA-MMDA Option Settlement.

In Process



## Schedule 2 to IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement

### Account Type, Placement Feature, and Exclusions

This **Schedule 2** is part of the IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement (“*Agreement*”). Terms not defined in this Schedule 2 have the meanings, if any, assigned elsewhere in the Agreement.

#### 1. Account Type

We will place deposits for you in DDAs.

We will place deposits for you in MMDAs.

You may use up to six MMDA Program Withdrawals per month.

→

We may place deposits for you in DDAs or in MMDAs.

No per-month MMDA Program Withdrawal limit applies.

(Check one above.)

(If MMDAs will or may be used, check one above.)

#### 2. Placement Feature

We may use the Reciprocal Feature, the One-Way Feature, or both in placing deposits for you.

We will use only the Reciprocal Feature in placing deposits for you.

We will use only the One-Way Feature in placing deposits for you.

(Check one above.)

#### 3. Exclusions

(a) You may place depository institutions on your Exclusions List by identifying them in the list below, unless we specify another means by which you will provide your Exclusions List.

(b) The Exclusions List should include the city and state of the depository institution’s main office (rather than the city and state of a branch location). The Exclusions List may also include the institution’s FDIC certificate number or transit routing number. If you do not list any exclusions enter “none” under Name of Institution on the first line (but your signature after a blank list will constitute your acknowledgment that you have not listed any exclusions).



## (c) Exclusions List:

Name of Depository Institution	City and State	FDIC Certificate or Routing Number
First National of Howell	Howell, Michigan	14370
First National of America	East Lansing, Michigan	17438
<del>Horizon Bank</del>	<del>Michigan City, Indiana</del>	<del>4360</del>
Independent Bank	Grand Rapids, Michigan	27811
Level One	Farmington Hills, Michigan	58604
<del>Old National</del>	<del>Evansville, Indiana</del>	<del>3832</del>
The State Bank	Fenton, MI	11406
CIBC	Chicago, Illinois	33306
<del>Comercia</del>	<del>Dallas, TX</del>	<del>983</del>

(Add lines if necessary.)

In Process

\_\_\_\_\_  
Signature of sole or primary Depositor

## Custodial Agreement

You, the undersigned, enter into this Custodial Agreement (“*Agreement*”) with the following financial institution (“*we*” or “*us*”):

1. Pursuant to this Agreement, you authorize us to hold and act as your custodian with respect to all deposit accounts, including all time deposits, money market deposit accounts, and demand deposit accounts, issued or established pursuant to the IntraFi Network Deposits CD Deposit Placement Agreement, the IntraFi Network Deposits DDA-MMDA Deposit Placement Agreement, or a predecessor agreement (“*Deposit Accounts*”) for funds of yours placed as deposits through the IntraFi<sup>SM</sup> Network Deposits<sup>SM</sup> CD Option (“*CD Option*”), formerly known as CDARS<sup>®</sup>, or the IntraFi Network Deposits DDA-MMDA Option (“*DDA-MMDA Option*”), formerly known as ICS<sup>®</sup>, and all your security entitlements and other related interests and assets with respect to the Deposit Accounts (“*Related Entitlements*”). The custodial account in which we will hold the Deposit Accounts and Related Entitlements (“*Custodial Account*”) comprises all the CD Option and DDA-MMDA Option custodial accounts that we maintain for you.

2. As your custodian, we may (i) cause the Deposit Accounts to be titled in our name or in the name of our sub-custodian, (ii) collect for your account all interest and other payments of income or principal pertaining to the Deposit Accounts, (iii) endorse on your behalf any check or other instrument received for your account that requires endorsement, (iv) in accordance with your instructions, deposit your funds in, or withdraw your funds from, the Deposit Accounts, (v) in accordance with your instructions, deliver or transfer funds from another account with us to the Deposit Accounts or deliver or transfer funds from the Deposit Accounts to another account with us, (vi) for Deposit Accounts that are time deposits, surrender for payment for your account maturing CDs and those for which early withdrawal is requested, (vii) execute and deliver or file on your behalf all appropriate receipts and releases and other instruments, including whatever certificates may be required from custodians or may be necessary to obtain exemption from taxes and to name you when required for the purpose of the instrument, and (viii) take such other actions as are customary or necessary to effectuate the purposes of this Agreement.

3. For purposes of Article 8 of the Uniform Commercial Code in applicable state law (“*UCC*”), we will act as your securities intermediary for, and will treat as financial assets, any Deposit Accounts and Related Entitlements that we hold for you pursuant to this Agreement. The Custodial Account will be a securities account, as defined in the UCC.

4. We may comply with any writ of attachment, execution, garnishment, tax levy, restraining order, subpoena, warrant, or other legal process that we believe (correctly or otherwise) to be valid. We may notify you of such process by telephone, electronically, or in writing. If we are not fully reimbursed for records research, imaging, photocopying, and handling costs by the party that served the process, we may charge such costs to your account, in addition to any minimum fee we charge for complying with legal processes.

5. We may honor any legal process that is served personally, by mail, or by electronic mail or facsimile transmission at any of our offices or an office of our agent (including locations other than where the funds, records, or property sought is held), even if the law requires personal delivery at the office where your account or records are maintained.

6. We will have no liability to you for any good-faith act or omission by us in connection with this Agreement. You agree to indemnify us and our sub-custodian, and to hold us and our sub-custodian harmless from, all expenses (including counsel fees), liabilities, and claims arising out of any good-faith act or omission by us in connection with this Agreement or compliance with any legal process relating to the Custodial Account that we believe (correctly or otherwise) to be valid. You agree to pay any service charges that we impose on the Custodial Account.

7. You may be an individual in an individual capacity, more than one individual in a joint capacity, or a trust, partnership, corporation, or other legal entity. We may accept instructions on your behalf from any individual who signs this Agreement as or on behalf of a Depositor and from any of the following individuals:

Name	Title or Legal Capacity
Gretchen Gomolka	Finance Director

(Add lines if necessary.)

The remainder of this page is intentionally left blank.

In Process

By signing below, you ("*Depositor*") and we ("*Relationship Institution*") agree to be legally bound by this Custodial Agreement, effective when you and we have signed it. If the Custodial Account will be a joint account, each owner of the Custodial Account must sign this Agreement.

RELATIONSHIP INSTITUTION

Institution: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and title of authorized signatory:  
\_\_\_\_\_  
\_\_\_\_\_

Date signed: \_\_\_\_\_

SOLE OR PRIMARY DEPOSITOR

City of Brighton  
Depositor: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and title of authorized signatory (if not individual):  
Gretchen Gomołka  
\_\_\_\_\_  
Finance Director  
\_\_\_\_\_

Depositor TIN or approved alternate identifier (and type):  
38-6004526  
\_\_\_\_\_

Email: GomołkaG@BrightonCity.org  
\_\_\_\_\_

Date signed: \_\_\_\_\_

In Process

ADDITIONAL DEPOSITOR (FOR JOINT ACCOUNT)

Depositor: \_\_\_\_\_

Signature: \_\_\_\_\_

Depositor TIN or approved alternate identifier (and type):  
\_\_\_\_\_

Email: \_\_\_\_\_

Date signed: \_\_\_\_\_

ADDITIONAL DEPOSITOR (FOR JOINT ACCOUNT)

Depositor: \_\_\_\_\_

Signature: \_\_\_\_\_

Depositor TIN or approved alternate identifier (and type):  
\_\_\_\_\_

Email: \_\_\_\_\_

Date signed: \_\_\_\_\_

(Add signature lines as needed.)



## Customer Profile Form

Primary Customer Name: <sup>1</sup> City of Brighton	
Contact Name (for nonpersonal accounts): Gretchen Gomołka	
Customer Class: <input type="checkbox"/> Individual / Joint / Revocable Trust <input type="checkbox"/> Estate / Irrevocable Trust <input type="checkbox"/> Corporation / LLC <input type="checkbox"/> Partnership / Limited Liability Partnership <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Nonprofit Institution <input type="checkbox"/> Club or Association <input checked="" type="checkbox"/> Public Entity <input type="checkbox"/> Foreign Government <input type="checkbox"/> Savings Bank / Credit Union <input type="checkbox"/> Other Bank / Financial Institution	
Primary Mailing Address: 200 N. First St.	
City / State / Zip: Brighton, MI 48116	
Duplicate Statement Address (if applicable):	
City / State / Zip:	
Telephone Number: (810) 225-8023	U.S. Citizen: <input type="checkbox"/> Yes <input type="checkbox"/> No
Email Address: GomołkaG@BrightonCity.org	If No, Country of Citizenship: _____
Primary Owner Tax ID Number: 38-6004526	Type: <input type="checkbox"/> SSN <input checked="" type="checkbox"/> TIN <input type="checkbox"/> Non-Resident With SSN / TIN <input type="checkbox"/> Non-Resident Without SSN / TIN <input type="checkbox"/> Individual Tax ID Number
Primary Owner Other ID (required if no Tax ID): <sup>2</sup> (If you do not have a U.S. Tax ID, populate a checkbox to the right.)	Other ID Type: <input type="checkbox"/> Drivers License <input type="checkbox"/> Passport <input type="checkbox"/> Other
<sup>1</sup> For joint accounts, please set up separate customer profiles for both the primary and secondary owners. <sup>2</sup> If you do not have a U.S. Tax ID, you must use this same alternate ID for all CDARS and all ICS transactions with all institutions. If you subsequently obtain a U.S. Tax ID, you must promptly inform us and other institutions so that your correct information can be recorded for tax reporting, ICS document tracking, and FDIC insurance purposes.	

### Customer Exclusions:

There is no need to exclude institutions that currently hold your funds through the CDARS or ICS service. Providing the same Tax ID for each of your CDARS or ICS accounts will enable the location of your current placement(s) to be recognized. These institutions will automatically be excluded from future placements.

Bank:	TRN:	City, State:

### Signatures:

\_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Institution Signature

\_\_\_\_\_  
Date



## Insured Cash Sweep<sup>®</sup>, or ICS<sup>®</sup>, Account Setup Form <sup>1</sup>

ICS Deposit Option: <input type="checkbox"/> Savings <input checked="" type="checkbox"/> Demand	
Primary Customer Name: City of Brighton Primary Owner Tax ID Number: 38-6004526	Secondary Customer Name: <sup>2</sup> Secondary Owner Tax ID: <sup>2</sup>
Institution Transaction Account No.: 113297784 Shadow Account No. (for integrated institutions):	Legal Account Title: City of Brighton
Account Type: <input checked="" type="checkbox"/> Reciprocal <input type="checkbox"/> One-Way Sell <sup>®</sup>	Did these funds originate from an Individual Retirement Account (IRA)? (Personal Accounts Only) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For custom rates: Rate Type: <input checked="" type="checkbox"/> Fixed <input type="checkbox"/> Floating If fixed, rate %: If floating, select the Index and spread from the available options on the Portal.	For program rates: Program Name: Program ID - 1 (0.10% APY) Tiered: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Program rates and tiers must be created by a Bank Administrator in the Institution Profile on the Portal.
Would you like to identify an ICS demand option account you would like to use to place funds that return to your transaction account in the event you exceed the ICS savings option program withdrawal limit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide an Account No.:	
Notes:	

<sup>1</sup>Funds may be submitted for placement only after entering into an ICS Deposit Placement Agreement with us.

<sup>2</sup>For joint accounts, please set up separate customer profiles for both the primary and secondary owners.

### Signatures:

\_\_\_\_\_  
Customer Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Institution Signature

\_\_\_\_\_  
Date



**FEE ACKNOWLEDGEMENT**  
**Insured Cash Sweep Deposit Placement Agreement**

The undersigned customer and Flagstar Bank, FSB (the "Bank") have entered or will enter into an ICS Deposit Placement Agreement (the "DPA"). The undersigned hereby acknowledges that:

- (a) the Bank shall be entitled to charge fees as disclosed below for the services that Bank performs pursuant to the terms of the DPA;
- (b) such fees, which shall be debited from a Deposit Account (as defined in the DPA), may be changed at any time by the Bank in its sole discretion and such changes shall be deemed effective thirty (30) days after notification to the undersigned; and
- (c) the Bank's standard terms and conditions related to any Deposit Account shall remain in full force and effect.

Fee	Amount	Frequency
Maintenance Fee	/Per Account	Monthly

Acknowledged on the \_\_\_ day of \_\_\_\_\_, 20\_\_\_:

City of Brighton

Customer Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name: Gretchen Gomoika  
 \_\_\_\_\_

Title: Finance Director  
 \_\_\_\_\_



# ICS® Depositor Control Panel...Getting Started

With the ICS, or Insured Cash Sweep®, service, funds placed into demand deposit accounts (DDAs) are eligible for multi-million-dollar FDIC insurance.

The Depositor Control Panel (DCP) is a secure website specially created to help you manage your ICS account. Using the DCP, you can:

- ✓ Check current DDA balances
- ✓ View a list of Destination Institutions (where your DDA funds could be placed)
- ✓ Review and manage daily proposed fund placements
- ✓ View your transaction history



## Current Balances

Check your DDA balances, including principal and accrued interest, for funds placed through ICS.

## Destination Institutions

View the list of institutions where your ICS funds could be placed. This list does not contain Destination Institutions you have excluded through our bank (as identified in the ICS Deposit Placement Agreement).

## Depositor Placement Review (DPR)

Review the proposed placements of your funds for that business day. The Proposed Placement List includes the Destination Institutions at which your funds are proposed to be placed and the principal balance (but not accrued unpaid interest) proposed to be placed at each institution. DPR is available each business day from 3:00 PM to 3:15 PM ET.

## Transaction History

View the list of transactions for your account, including deposits, withdrawals, capitalizations, and taxes withheld over the last 45 days.

## How to Access the Depositor Control Panel

The DCP is available at [www.depositorcontrol.com](http://www.depositorcontrol.com). Upon first use, you will be prompted for your user name and password. Your initial user name and password are listed below. After you have logged in for the first time, you will be prompted to personalize your user name and password for future use.

User Name \_\_\_\_\_

Password \_\_\_\_\_

As always, you can contact us with any questions.

Flagstar Bank - Government Banking Group (888) 254-5417

Placement of funds through the ICS service is subject to the terms, conditions, and disclosures in the service agreements, including the Deposit Placement Agreement ("DPA"). Limits and customer eligibility criteria apply. Unlimited program withdrawals are only available using the ICS demand option. Although funds are placed at destination banks in amounts that do not exceed the FDIC standard maximum deposit insurance amount ("SMDIA"), a depositor's balances at the relationship institution that places the funds may exceed the SMDIA (e.g., before ICS settlement for a deposit or after ICS settlement for a withdrawal) or be ineligible for FDIC insurance (if the relationship institution is not a bank). As stated in the DPA, the depositor is responsible for making any necessary arrangements to protect such balances consistent with applicable law. If the depositor is subject to restrictions on placement of its funds, the depositor is responsible for determining whether its use of ICS satisfies those restrictions. ICS and Insured Cash Sweep are registered service marks of Promontory Interfinancial Network, LLC.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

**SUBJECT: SITE PLAN 20-19 – CONSIDER APPROVAL OF NORTHPOUND OFFICE COMPLEX – 1112 RICKETT RD.**

### ADMINISTRATIVE SUMMARY

An application for site plan review was submitted by Lindhout & Associates, representing Creative Construction Concepts Inc., for a new commercial office building to be located at 1112 Rickett. The vacant property is on the west side of Rickett, just south of Sisu Knoll. The applicant is proposing to construct a two-story commercial structure, to include approximately 43,000 square feet of office area and research and development space. The parcel is approximately 6-acres in size and zoned OS (Office Service), with the proposed office use being permitted within this zoning district.

- Planning Commission recommended approval of the proposed development at their meeting held on April 19, 2021, with the condition that all consultant review comments be satisfied, and granting a 10% parking deferment in accordance with Section 98-5.7(E)(2) of the City's zoning ordinance.
- The applicant has revised the site plan to satisfactorily meet all consultant review comments.
- The proposed development meets the intent of the Office Service zone and is compliant with all regulations within this district.
- The applicant also meets the use standards specified within the future land use map designation as described in the Comprehensive Master Plan.

### RECOMMENDATION

Staff recommends City Council approve site plan 20-19 as revised and submitted, to include the 10% parking deferment in accordance with Section 98-5.7(E)(2) of the City's zoning ordinance.

Prepared by: Michael Caruso, Community Development Manager

Approved by: Nate Geinzer, City Manager

Attachments: 1. Application  
2. Site Plan  
3. Planning Commission Minutes



**CITY OF BRIGHTON**  
Community Development/Planning Department

Date	7/9/20
Check #	9650
Amount	3,800
Site Plan #	20-19

**SITE PLAN REVIEW APPLICATION**

**Project:** Northpond Office Building

---

**Location:** Rickett Road between Sisu Knoll Dr. and Summit St.

---

**Petitioner:** David Richardson, Lindhout Associates

---

**Instructions:**

**A. Initial Submittal and Review Meeting:**

1. Submit the completed, original site plan review application, seven (7) signed and sealed sets of full size (24" x 36") drawings, an electronic version of the complete site plan, and applicable fees. All site plan submittal documents must be submitted to:  

Brighton City Hall  
200 N. First Street  
Brighton, Michigan 48116
2. Review fees, property delinquencies and penalties shall be paid at the time the site plan review documents are submitted. \* Initial review fees are the minimum fees required. Additional fees may be incurred. \*
3. The meeting at which the Planning Commission will consider the site plan review application, drawings and other submittals will be determined when the site plan application is deemed complete. A meeting schedule is included on the last page of this packet. Any site plan review application submitted after the monthly deadline will not be considered for that month's agenda.
4. The information required on the site plan review application and drawings is the **minimum amount of information** that generally applies to all site plan review applications. Additional project specific information may also be required. Failure to submit information and materials will delay consideration of the site plan review application until such time they are submitted and found to be in acceptable form.
5. Generally one (1) week after the site plan review application submittal deadline, a site plan review meeting will be scheduled to consider staff and consultant input. \* It will be determined by staff at this meeting whether the applicant will have an additional review meeting with staff and consultants. Additional meetings will be assessed applicable fees indicated on the planning and engineering fee schedules.



**CITY OF BRIGHTON**  
Community Development/Planning Department

**General Information:**

Development Property Address: 1112 Rickett Road

Parcel(s) tax ID number(s): 18-31-400-048

Lot Dimensions: N (survey) \_\_\_\_\_, E 607.3', S 763.9', W 539.5'

Net Acreage of site: 6 ac.

Current Site Zoning: O-S

Proposed Use of Development:

Office Building

Tenant(s) (if known):

Cre8tive Construction, Bluestone Group

Number of proposed employees and/or residents: 120+ employees

Adjacent Zoning of Surrounding Properties:

N IB / R4, E IB

S IB, W (Pond) / R3

Multiple Family Developments: Number of Units \_\_\_\_\_

Number of Buildings \_\_\_\_\_

Percentage of Open Space/Wetlands \_\_\_\_\_



**CITY OF BRIGHTON**  
Community Development/Planning Department

**Warranty of Petitioner (MUST BE COMPLETED BY PETITIONER):**

The site plan submitted with this application contains the minimum amount of information required by the City. I understand that the proposed site plan will not be considered by the Planning Commission until such time that the plan contains at least the minimum amount of information required by the City, per **Section 98-6.1 (D)** of the City of Brighton Zoning Ordinance.

I understand that if the Planning Commission and City Council approve the proposed site plan that I am bound to construct the project in strict compliance with the approved plan. The attached site plan represents my intentions to develop the proposed project.

**I (we) the undersigned, hereby make application for site plan approval for the following described property:**

Development Property Address: 1112 Rickett Road

Parcel(s) tax ID number(s): 18-31-400-048

Basis of representation of applicant (owner, architect, engineer, attorney, etc):  
Architect

It is expected that, if site plan approval is granted, the construction will proceed as follows:

Construction will Begin: Dec. 2020 Construction will be Completed: Oct. 2021

I warrant to the City that neither I (we) or the subject property are in default to the City and that if a search of City records indicates a default of any kind, that the deficiency will be resolved prior to the Planning Commission's consideration of the proposed site plan.

I understand the approval of this site plan will be effective for one (1) year following the date of final approval by City Council.

**David Richardson** Digitally signed by David Richardson  
DN: cn=David Richardson, o=K1ckstART  
Farmington, ou, email=d.richards@tu.edu, c=US  
Date: 2020.09.08 15:31:08 -04'00' **David Richardson**

Signature of Petitioner  
Date: 9-8-2020

Printed Name of Petitioner

Address: 10465 Citation  
Brighton, MI 48116

Phone: (o) 810-227-5668

Email: dar@lindhout.com

**I, the property owner, authorize the petitioner to submit this application for review by the Planning Commission.**

**Richard Thomas** Digitally signed by Richard Thomas  
Date: 2020.09.09 13:23:52  
-04'00' **Richard Thomas**

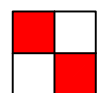
Signature of Property Owner  
Date: 09/07/2020

Printed Name of Property Owner

Address: 7960 Grand River, Ste 285  
Brighton, MI 48116

Phone: (248)346-3465

Email: r.thomas@creative-construction.us



LEGAL DESCRIPTION (AS PROVIDED)

(PER WARRANTY DEED AS RECORDED IN LIBER 2936, PAGE 215, LIVINGSTON COUNTY RECORDS)

PARCEL TAX NUMBER: 4718-31-400-048

THE FOLLOWING DESCRIBED PREMISES SITUATED IN THE CITY OF BRIGHTON, COUNTY OF LIVINGSTON, STATE OF MICHIGAN: BEGINNING AT A POINT IN THE (PLATTED) CENTERLINE OF RICKETT ROAD RIGHT OF WAY, SAID POINT BEING THE NORTHEAST CORNER OF RICKETT ROAD INDUSTRIAL PARK SUBDIVISION, (AS RECORDED IN LIBER 18 OF PLATS, PAGES 19-22, LIVINGSTON COUNTY RECORDS), SAID POINT BEING DESCRIBED ON SAID SUBDIVISION PLAT AS LYING "WEST, 540.63 FEET; NORTH 600.91 FEET; NORTHWESTERLY ALONG THE PLATTED CENTERLINE OF RICKETT ROAD RIGHT OF WAY ON THE FOLLOWING THREE COURSES: NORTH 32 DEGREES 21' 34" WEST 389.94 FEET; NORTH 33 DEGREES 02' 04" WEST 199.99 FEET; (CHORD), AND NORTH 33 DEGREES 42' 34" WEST 204.48 FEET" FROM THE SOUTHEAST CORNER OF SAID SECTION 31; THENCE NORTH 89 DEGREES 03' 34" WEST, ALONG THE NORTH LINE OF SAID RICKETT ROAD INDUSTRIAL PARK SUBDIVISION, 763.92 FEET; THENCE ALONG THE EASTERLY LINE OF A 7.30 ACRE (NORTH POND) PARCEL DEEDED TO THE CITY OF BRIGHTON PURSUANT TO A LIVINGSTON COUNTY COURT JUDGMENT (CASE NO. 95-14130-CZ) AS DESCRIBED IN A DEED DATED NOVEMBER 13, 1997, (RECORDED IN LIBER 2350, PAGES 816 AND 817, LIVINGSTON COUNTY RECORDS), NORTH 35 DEGREES 33' 25" EAST 539.54 FEET (RECORDED IN DEED AS NORTH 35 DEGREES 29' 00" EAST 539.01 FEET) TO A POINT DESCRIBED IN SAID "NORTH POND" DEED AS LYING "NORTH 89 DEGREES 41' 10" WEST 1433.45 FEET ALONG THE SOUTH LINE OF SAID SECTION 31, AND NORTH 00 DEGREES 18' 50" EAST 1711.87 FEET" FROM THE SOUTHEAST CORNER OF SAID SECTION 31; THENCE CONTINUING ALONG THE EASTERLY LINE OF SAID 7.30 ACRE "NORTH POND" PARCEL ON THE FOLLOWING THREE COURSES: NORTH 21 DEGREES 16' 32" WEST (RECORDED IN SAID DEED AS NORTH 21 DEGREES 20' 30" WEST) 354.66 FEET, NORTH 55 DEGREES 55' 36" EAST (RECORDED IN SAID DEED AS NORTH 55 DEGREES 46' 38" EAST) 16.39 FEET, AND NORTH 33 DEGREES 37' 00" WEST (RECORDED IN SAID DEED AS NORTH 33 DEGREES 41' 33" WEST) 50.00 FEET; THENCE NORTH 55 DEGREES 57' 01" EAST 48.10 FEET; THENCE SOUTH 49 DEGREES 03' 05" EAST ALONG THE MONUMENTED (FENCED) CSX RAILROAD, 287.57 FEET; THENCE SOUTH 00 DEGREES 01' 36" WEST 165.36 FEET TO THE CENTERLINE OF RICKETT ROAD (AS MONUMENTED); THENCE SOUTH 33 DEGREES 34' 43" EAST ALONG SAID MONUMENTED CENTERLINE OF RICKETT ROAD 607.35 FEET TO THE POINT OF BEGINNING.

BEARING REFERENCE

BEARINGS ARE BASED ON PROJECT COORDINATE SYSTEM: MICHIGAN STATE PLANE COORDINATE SYSTEM, NAD83 (CONUS) (MOL) (GRS80), SOUTH ZONE 2113, INTERNATIONAL FEET, GROUND (LAT: 42°31'8.77" N, LON: 83°46'26.80" W, ELEV: 955, SCALE FACTOR: 1.00011842).

TRAFFIC STUDY NOTE

THE PROPOSED SITE IS NOT PROJECTED TO EXCEED 100 TRIP ENDS. PER CITY OF BRIGHTON REQUIREMENTS A TRAFFIC STUDY WILL NOT BE NECESSARY.

DETERMINED USING THE ITE: TRIP GENERATION MANUAL, 10TH EDITION.

TRIP GENERATION NOTES:

- LAND USE: (710) GENERAL OFFICE BUILDING
• SETTING/LOCATION: GENERAL URBAN/SUBURBAN
• DATA PLOT: VEHICLE TRIP ENDS VS: 1,000 SF GROSS FLOOR AREA
• GROSS FLOOR AREA: 37,418 SF
• AM PEAK HOUR TRIP ENDS (AVG. RATE): 55
• PM PEAK HOUR TRIP ENDS (AVG. RATE): 53

- LAND USE: (150) WAREHOUSING (R&D)
• SETTING/LOCATION: GENERAL URBAN/SUBURBAN
• DATA PLOT: VEHICLE TRIP ENDS VS: EMPLOYEES
• NUMBER OF EMPLOYEES: 25
• AM PEAK HOUR TRIP ENDS(AVG. RATE): 17
• PM PEAK HOUR TRIP ENDS(AVG. RATE): 17

- TOTAL TRIP ENDS
• AM PEAK HOUR: 72 TRIP ENDS
• PM PEAK HOUR: 70 TRIP ENDS

DESIGN ENGINEER/SURVEYOR

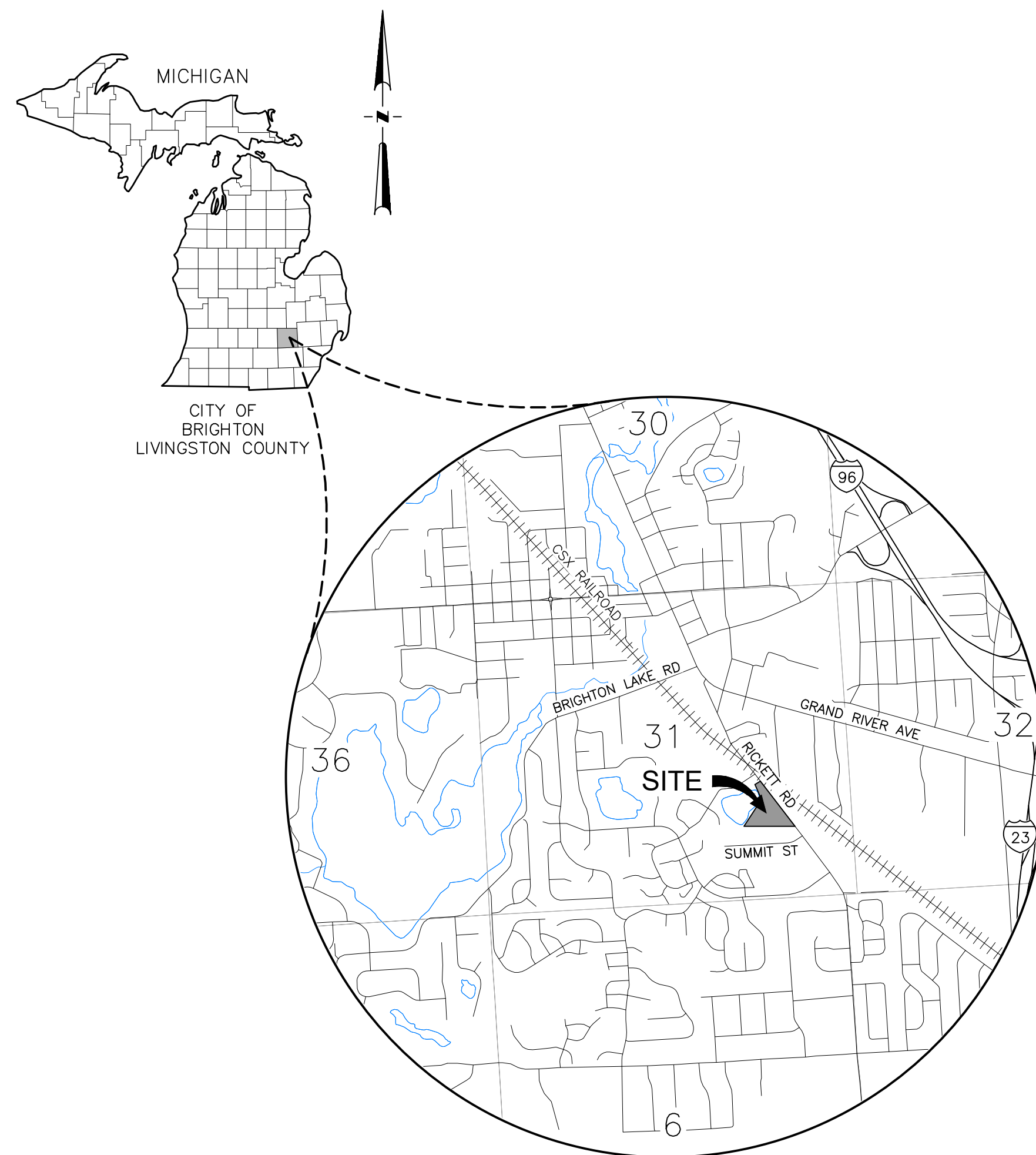
MONUMENT ENGINEERING GROUP ASSOCIATES, INC



INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS

298 VETERANS DRIVE, FOWLERVILLE, MI 48836
ALLAN W PRUSS, PE, PS
PHONE: 517-223-3512

SITE PLAN FOR NORTH POND OFFICE CENTER



LOCATION MAP

OWNER

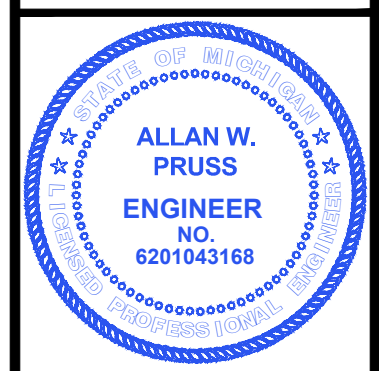
RICHARD C. THOMAS
7960 GRAND RIVER ROAD STE 285
BRIGHTON, MI 48114
OFFICE: (810) 588-6289

CLIENT/ARCHITECT



DAVE RICHARDSON, AIA, LEED AP
10465 CITATION DR.
BRIGHTON, MI 48116
(810) 227-5668

SHEET INDEX table with columns for PLAN SUBMITTALS (PRELIMINARY, FINAL, REV.) and INCLUDED SHEETS (GENERAL, SURVEY, SITE PLAN, VEHICLE CIRCULATION, UTILITY, GRADING AND SOIL EROSION & SEDIMENTATION CONTROL, STORM WATER MANAGEMENT, DETAILS, SPECIFICATIONS, LANDSCAPE).



Call MISS DIG 3 full working days before you dig. Michigan's One-Call Utility Notification Organization. 1-800-482-7171 www.missdig.org



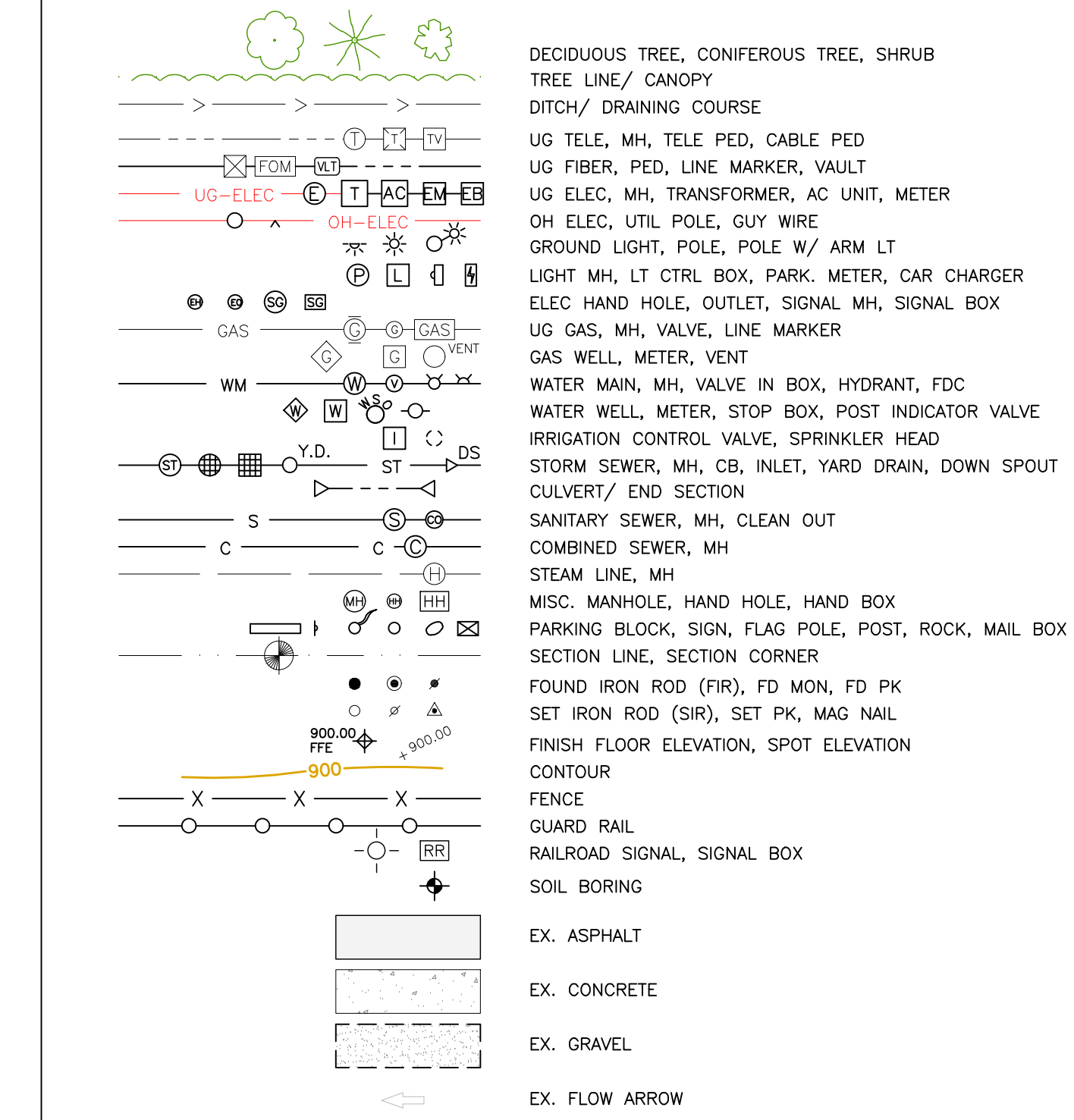
COVER NORTH POND OFFICE CENTER 1112 RICKETT ROAD PART OF SE 1/4, SEC 31, T2N-R6E CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

Table with columns for PLAN SUBMITTALS/REVISIONS (DATE, PRELIMINARY, FINAL, REV.) and PROJECT INFORMATION (ORIGINAL ISSUE DATE: 8/3/2020, PROJECT NO: 20-088, SCALE: N/A, FIELD: AJS, CW, JH).

G-10

NOT TO BE USED AS CONSTRUCTION DRAWINGS

**EXISTING LEGEND**



**EXISTING PARKING**

THERE ARE NO STRIPED PARKING SPACES ON THE SUBJECT PROPERTY.

**BENCHMARKS**

DATUM: NAVD88  
 CITY OF BRIGHTON BM: TBM HGV-12  
 ELEV = 934.62  
 BM C:  
 CHISELED "X" ON NORTH SIDE OF SANITARY MANHOLE RIM, 98'±  
 NORTH FROM SUBJECT'S SE PROPERTY CORNER & 44'± WEST OF  
 CENTERLINE OF RICKETT ROAD  
 ELEV = 949.36  
 BM D:  
 HYDRANT ARROW ON FLANGE, 628'± NORTH FROM SUBJECT'S SE  
 PROPERTY CORNER & 24'± WEST OF CENTERLINE OF RICKETT ROAD.  
 ELEV = 949.79

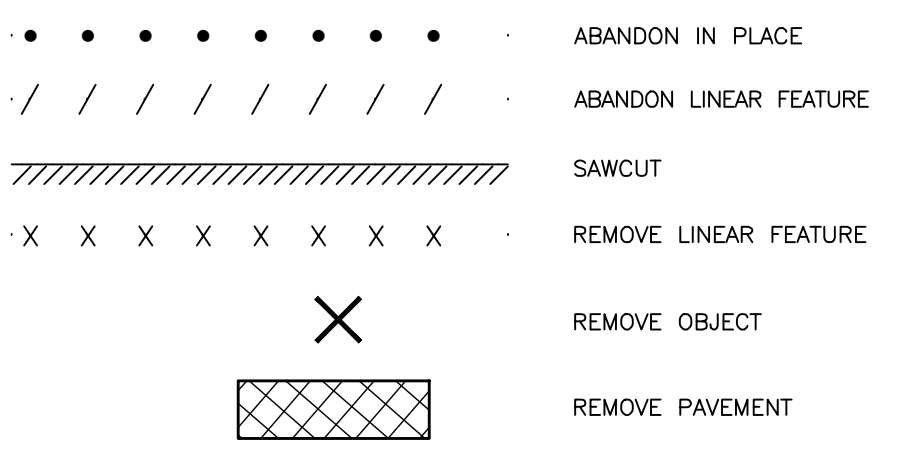
**SOILS INFO (FROM USGS SOIL SURVEY)**

- Hmb: HILLSDALE-MIAMI LOAMS, 2-6% SLOPES
- MoA: WAWASEE LOAM, 0-2% SLOPES
- MoC: WAWASEE LOAM, 2-6% SLOPES
- MoG: WAWASEE LOAM, 6-12% SLOPES
- Omb: OWOSSO-MIAMI SANDY LOAMS, 2-6% SLOPES
- W: WATER

**STRUCTURE SCHEDULE**

STRUCTURE	RIM ELEV.	PIPES
(15124) SAN	947.28	12" SE IE= 935.14
(15297) SAN	949.36	12" NW IE= 936.14 12" SE IE= 935.92
(15320) SAN	950.48	12" NW IE= 937.80 12" SE IE= 937.61
(15356) SAN	947.07	12" SE IE= 939.19

**DEMOLITION LEGEND**



**DEMOLITION NOTES**

- UTILITY OBJECTS SUCH AS GAS METER, TRANSFORMER, TELEPHONE PEDESTAL, UTILITY POLE & WIRES ARE TO BE REMOVED BY OTHERS.
- ANY TREES NOT MARKED PER PLAN ARE TO BE PROTECTED & PRESERVED DURING CONSTRUCTION.
- EXISTING SANITARY SEWER FORCE MAIN IS CAST IRON. CONTRACTOR WILL EXERCISE CAUTION WHEN WORKING NEAR THIS SEWER.

**FLOOD ZONE**

FEMA MAP SCALES DO NOT SUPPLY SUFFICIENT LEVEL OF DETAIL TO PLOT ACCURATELY. ZONES IF PLOTTED HEREIN ARE APPROXIMATE.  
 BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO LIE ENTIRELY IN ZONE (X) AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO THE FLOOD INSURANCE RATE MAP FOR THE COUNTY OF LIVINGSTON, COMMUNITY PANEL NO. (26093C0345D), EFFECTIVE DATE 9/17/2008.

**WETLAND NOTE**

ACCORDING TO THE NATIONAL WETLAND INVENTORY WEBSITE (HTTP://WWW.FWS.GOV/WETLANDSDATAMAPPER.HTML), THERE ARE NOTED WETLANDS ON THE SUBJECT PARCEL.

**SURVEY NOTE**

- INFORMATION DEPICTED BASED ON FIELD OBSERVATION AND GROUND DATA COLLECTED IN JULY 2020.

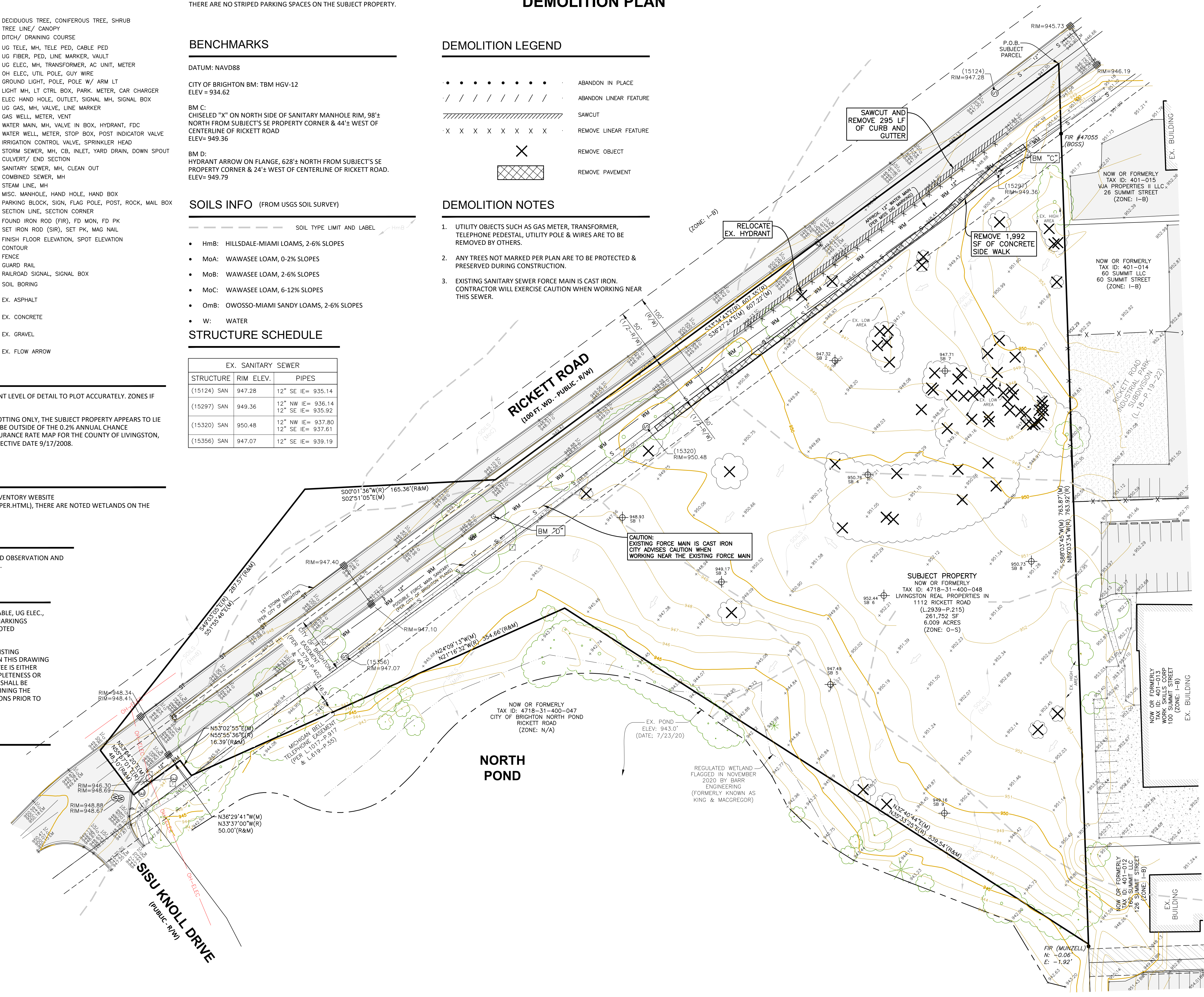
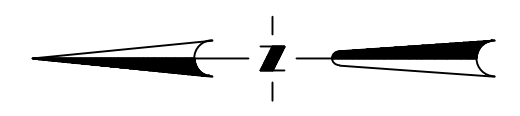
**UTILITY NOTES**

- ALL FRANCHISE UTILITIES (GAS, FIBER, CABLE, UG ELEC, TELE) SHOW ARE BASED ON MISS DIG MARKINGS LOCATED AT TIME OF SURVEY UNLESS NOTED OTHERWISE.
- THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

**UTILITY REFERENCES**

- WM: CITY OF BRIGHTON  
RECEIVED: 8/3/20
- SAN: CITY OF BRIGHTON  
RECEIVED: 8/3/20
- STORM: CITY OF BRIGHTON  
RECEIVED: 8/3/20
- GAS: N/A  
RECEIVED: N/A
- ELEC: DETROIT EDISON  
RECEIVED: 7/30/20
- PHONE/CABLE: AT&T  
RECEIVED: 7/9/20

**NORTH POND OFFICE CENTER  
TOPOGRAPHIC SURVEY &  
DEMOLITION PLAN**



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 (OFFICE) 517-223-3512  
 MONUMENTENGINEERING.COM  
 SERVICE DISABLED VETERAN OWNED  
 SMALL BUSINESS (SDVOSB)

**ALLAN W. PRUSS**  
 ENGINEER  
 NO. 6201043168

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

CLIENT:  
**Lighthouse Associates**  
 architects  
 10465 CITATION DR.  
 BRIGHTON, MI 48116  
 (810) 227-5668

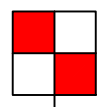
**TOPO SURVEY & DEMO PLAN**  
 NORTH POND OFFICE CENTER  
 1112 RICKETT ROAD  
 PART OF SE 1/4, SEC 31, T2N-R6E  
 CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

DATE	DESCRIPTION
9/9/2020	PRELIMINARY SITE PLAN SUBMITTAL
9/25/2020	FINAL SITE PLAN SUBMITTAL
3/7/2021	REV. FINAL SITE PLAN PER COMMENTS
4/7/2021	REV. FINAL SITE PLAN PER COMMENTS
4/27/2021	REV. FINAL SITE PLAN PER COMMENTS

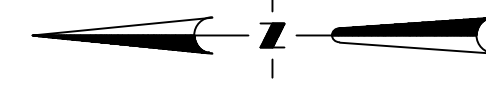
ORIGINAL ISSUE DATE: 8/3/2020  
 PROJECT NO: 20-088  
 SCALE: 1" = 40'  
 FIELD: AJS, CW, JH  
 DRAWN BY: DC  
 DESIGN BY: DD  
 CHECK BY: AP

**V-10**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

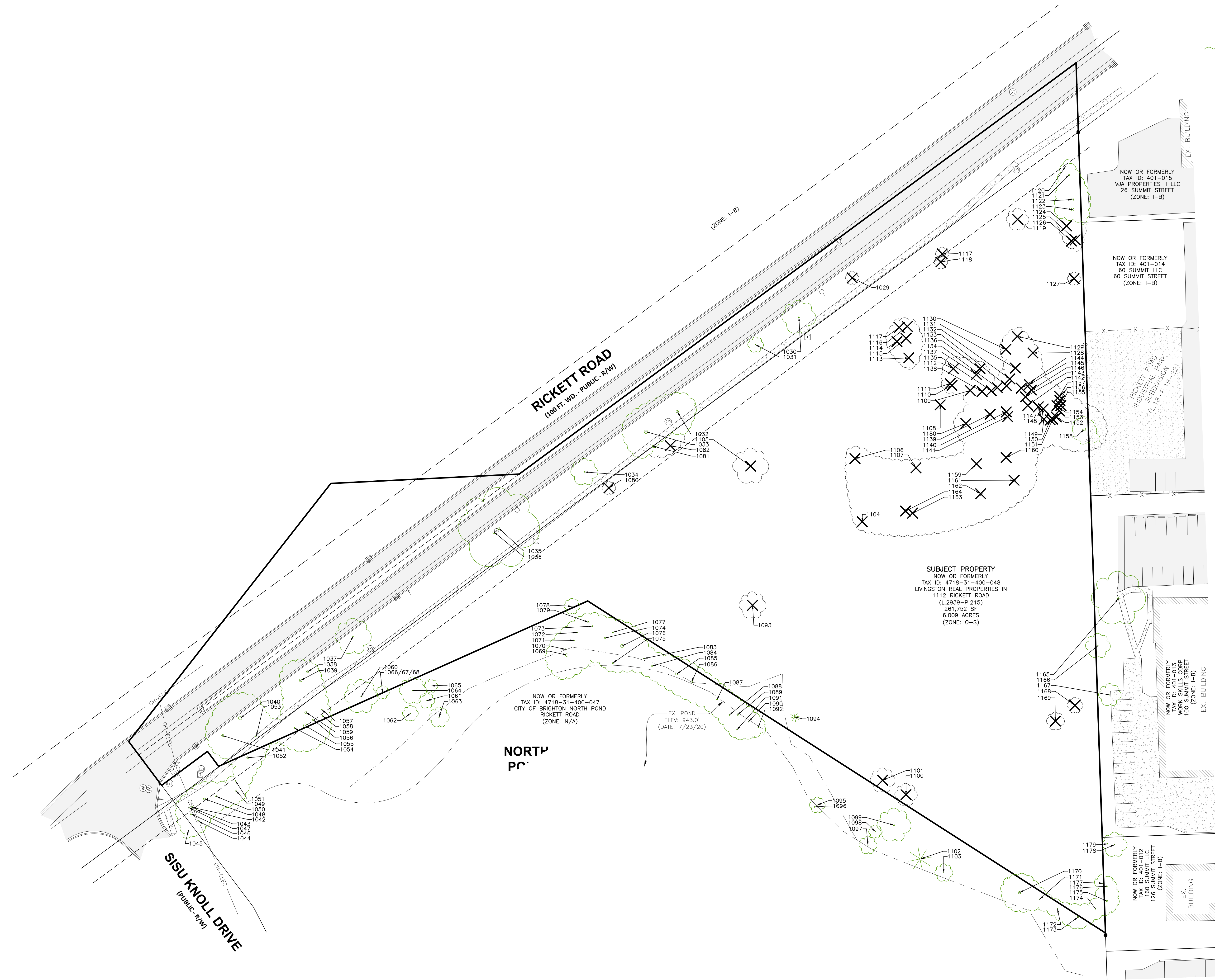


**NORTH POND OFFICE CENTER  
TREE SURVEY**



**TREE SURVEY LEGEND**

- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE/ CANOPY
- 1100 TREE TAG NUMBER (SEE TREE SCHEDULE)
- TREE TO BE REMOVED



INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS

**MEGA**  
MONUMENT ENGINEERING GROUP ASSOCIATES, INC.

298 VETERANS DRIVE  
FOWLERVILLE, MICHIGAN 48836  
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SERVICE DISABLED VETERAN OWNED  
SMALL BUSINESS (SDVOSSB)

**ALLAN W. PRUSS**  
ENGINEER  
NO. 6201043168

*Allan W. Pruss*

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

CLIENT :

**Lighthouse Associates**  
architects llc pc

10465 CITATION DR.  
BRIGHTON, MI 48116  
(810) 227-5668

**TREE SURVEY**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/8/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/14/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

ORIGINAL ISSUE DATE:  
8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 40'  
0 1/2" 1"

FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

**V-3.0**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

TREE INVENTORY



Monument Engineering Group Associates, Inc.  
298 Veterans Drive, Fowlerville, MI  
(517) 223-3512  
www.monumentengineering.com



Tree Survey

Project No./Name: 20-088 N. Pond Office Center Date: 9/4/2020

Tag No.	Common Name	D.B.H.	Condition	Notes
1029	CRABAPPLE	6	GOOD	TO BE REMOVED
1030	CRABAPPLE	8.7	GOOD	
1031	BLACK LOCUST	11	GOOD	MULTI
1032	BLACK LOCUST	17/8	GOOD	
1033	BLACK LOCUST	19.5	GOOD	
1034	PEAR	9.5	GOOD	
1035	COTTON WOOD	32.3	GOOD	
1036	COTTON WOOD	22.5	GOOD	
1037	P. HICKORY	14.2	GOOD	
1038	BLACK CHERRY	12.2	GOOD	
1039	RED OAK	18.2	GOOD	
1040	RED OAK	17.2	GOOD	
1041	BOX ELDER	17/12	GOOD	
1042	BLACK LOCUST	11.2	GOOD	
1043	BLACK LOCUST	6	GOOD	
1044	MULBERRY	9	GOOD	TWIN
1045	MULBERRY	6	GOOD	
1046	BLACK LOCUST	15.3	FAIR	
1047	BLACK LOCUST	10.5	GOOD	
1048	BLACK LOCUST	15.5	GOOD	
1049	BOX ELDER	11.1	FAIR	
1050	BOX ELDER	10.9	FAIR	
1051	MULBERRY	6.2	GOOD	
1052	BOX ELDER	15/13	POOR	TWIN
1053	BOX ELDER	12	FAIR	
1054	BOX ELDER	8.5	POOR	
1055	MULBERRY	25/16	POOR	
1056	BLACK LOCUST	12	GOOD	
1057	ASH	6.5	FAIR	
1058	ASH	7.5	FAIR	
1059	BOX ELDER	17	POOR	
1060	MULBERRY	15	POOR	MULTI
1061	BOX ELDER	7	FAIR	
1062	BOX ELDER	7	POOR	
1063	BOX ELDER	9.2	FAIR	
1064	BOX ELDER	12	POOR	TWIN
1065	BLACK WALNUT	6.5	FAIR	



Monument Engineering Group Associates, Inc.  
298 Veterans Drive, Fowlerville, MI  
(517) 223-3512  
www.monumentengineering.com



Tree Survey

Project No./Name: 20-088 N. Pond Office Center Date: 9/4/2020

Tag No.	Common Name	D.B.H.	Condition	Notes
1066	BOX ELDER	6.5	FAIR	
1067	BOX ELDER	8	FAIR	TWIN
1068	BOX ELDER	8	FAIR	
1069	MULBERRY	20	FAIR	TWIN
1070	BOX ELDER	10.2	POOR	
1071	BLACK LOCUST	7.9	GOOD	
1072	BLACK CHERRY	8.5	POOR	
1073	CHERRY	7.5	FAIR	
1074	BLACK CHERRY	11.4	POOR	TWIN
1075	WILLOW	8.4	FAIR	
1076	ELM	21	GOOD	
1077	BOX ELDER	8.8	FAIR	
1078	BOX ELDER	6.8	FAIR	
1079	CHERRY	11.2	POOR	
1080	BOX ELDER	6.2	GOOD	TO BE REMOVED
1081	BLACK LOCUST	9.5	GOOD	TWIN
1082	BLACK LOCUST	7.1	GOOD	TO BE REMOVED
1083	BOX ELDER	6.3	GOOD	
1084	WILLOW	8.2	GOOD	
1085	BLACK CHERRY	16	POOR	
1086	MULBERRY	15	POOR	
1087	ELM	7.6	FAIR	TWIN
1088	WILLOW	9	GOOD	
1089	WILLOW	12.2	GOOD	
1090	WILLOW	7.8	GOOD	
1091	WILLOW	6.2	GOOD	MULTI
1092	WILLOW	7.5	GOOD	TWIN
1093	BLACK CHERRY	12	FAIR	TO BE REMOVED
1094	RED PINE	6.4	GOOD	
1095	WILLOW	6.8	GOOD	
1096	WILLOW	6.2	GOOD	
1097	BLACK CHERRY	8.2	FAIR	
1098	RED OAK	6.4	GOOD	
1099	CHERRY	15	POOR	
1100	CHERRY	9.7	POOR	TO BE REMOVED
1101	BLACK CHERRY	11.5	POOR	TO BE REMOVED
1102	CEDAR	14.9	FAIR	



Monument Engineering Group Associates, Inc.  
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Tree Survey

Project No./Name: 20-088 N. Pond Office Center Date: 9/4/2020

Tag No.	Common Name	D.B.H.	Condition	Notes
1103	BLACK CHERRY	8.2	POOR	
1104	RED OAK	8.7	GOOD	TO BE REMOVED
1105	BLACK WALNUT	7.3	GOOD	TO BE REMOVED
1106	COTTON WOOD	11.3/8	FAIR	TO BE REMOVED
1107	BLACK WALNUT	7	GOOD	TO BE REMOVED
1108	BLACK WALNUT	9.2	GOOD	TO BE REMOVED
1109	COTTON WOOD	6.4	GOOD	TO BE REMOVED
1110	COTTON WOOD	6.4	GOOD	TO BE REMOVED
1111	COTTON WOOD	94	GOOD	TO BE REMOVED
1112	WILLOW	12	GOOD	TO BE REMOVED
1113	COTTON WOOD	9.9	GOOD	TO BE REMOVED
1114	BLACK WALNUT	9.6	GOOD	TO BE REMOVED
1115	MULBERRY	15.6	GOOD	TO BE REMOVED
1116	BLACK WALNUT	7.2	POOR	TO BE REMOVED
1117	BOX ELDER	7	GOOD	TO BE REMOVED
1118	BOX ELDER	6.5	GOOD	TO BE REMOVED
1119	RED MAPLE	16/12	POOR	TO BE REMOVED
1120	MULBERRY	6.6	GOOD	TWIN
1121	SPRUCE	13.5	GOOD	TWIN
1122	SPRUCE	11.3	GOOD	
1123	SPRUCE	18.5	GOOD	
1124	ALLANTHUS	6.8	GOOD	TO BE REMOVED
1125	ALLANTHUS	6.1	GOOD	TO BE REMOVED
1126	ALLANTHUS	6	GOOD	TO BE REMOVED
1127	BLACK WALNUT	6	GOOD	TO BE REMOVED
1128	BLACK WALNUT	7.5	FAIR	TO BE REMOVED
1129	BLACK WALNUT	6.8	FAIR	TO BE REMOVED
1130	BLACK WALNUT	6	GOOD	TO BE REMOVED
1131	BLACK WALNUT	6.9	GOOD	TO BE REMOVED
1132	COTTON WOOD	6.3	GOOD	TO BE REMOVED
1133	COTTON WOOD	6.4	GOOD	TO BE REMOVED
1134	COTTON WOOD	6	GOOD	TO BE REMOVED
1135	COTTON WOOD	6.3	GOOD	TO BE REMOVED
1136	BLACK WALNUT	7	GOOD	TO BE REMOVED
1137	COTTON WOOD	7	GOOD	TO BE REMOVED
1138	COTTON WOOD	7.4	GOOD	TO BE REMOVED
1139	BOX ELDER	16	POOR	TO BE REMOVED



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Tree Survey

Project No./Name: 20-088 N. Pond Office Center Date: 9/4/2020

Tag No.	Common Name	D.B.H.	Condition	Notes
1140	COTTON WOOD	8	GOOD	TO BE REMOVED
1141	COTTON WOOD	8.3	GOOD	TO BE REMOVED
1142	COTTON WOOD	6.4	GOOD	TO BE REMOVED
1143	COTTON WOOD	7.8	GOOD	TO BE REMOVED
1144	COTTON WOOD	7	GOOD	TO BE REMOVED
1145	COTTON WOOD	6	GOOD	TO BE REMOVED
1146	COTTON WOOD	6.7	GOOD	TO BE REMOVED
1147	COTTON WOOD	9.9	GOOD	TO BE REMOVED
1148	COTTON WOOD	11.3	GOOD	TO BE REMOVED
1149	COTTON WOOD	10.7	GOOD	TO BE REMOVED
1150	COTTON WOOD	10	GOOD	TO BE REMOVED
1151	COTTON WOOD	6.3	GOOD	TO BE REMOVED
1152	COTTON WOOD	6.2	GOOD	TO BE REMOVED
1153	COTTON WOOD	6.2	GOOD	TO BE REMOVED
1154	COTTON WOOD	6.3	GOOD	TO BE REMOVED
1155	COTTON WOOD	8.2	GOOD	TO BE REMOVED
1156	COTTON WOOD	8.1	GOOD	TO BE REMOVED
1157	COTTON WOOD	7.3	GOOD	TO BE REMOVED
1158	CHERRY	22	POOR	
1159	BOX ELDER	13	GOOD	TO BE REMOVED
1160	BLACK CHEERY	15.2	GOOD	TO BE REMOVED
1161	BOX ELDER	22/15	FAIR	TO BE REMOVED
1162	RED OAK	24.8	GOOD	TO BE REMOVED
1163	SASSAFRAS	14.1	GOOD	TO BE REMOVED
1164	RED OAK	25.1	GOOD	TO BE REMOVED
1165	RED OAK	23.7	GOOD	
1166	BLACK CHERRY	11	FAIR	
1167	BLACK CHERRY	10	FAIR	
1168	COTTON WOOD	6.7	GOOD	TO BE REMOVED
1169	COTTON WOOD	8.2	GOOD	TO BE REMOVED
1170	BOX ELDER	18	FAIR	
1171	RED PINE	7	GOOD	
1172	BLACK WALNUT	6.3	GOOD	
1173	ELM	11.5	FAIR	
1174	POPLAR	7.1	GOOD	
1175	CEDAR	10.7	GOOD	
1176	BOX ELDER	7.7	POOR	



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Tree Survey

Project No./Name: 20-088 N. Pond Office Center Date: 9/4/2020

Tag No.	Common Name	D.B.H.	Condition	Notes
1177	CHERRY	7.2	GOOD	
1178	CEDAR	11.2	GOOD	
1179	BLACK CHEERY	6	FAIR	
1180	BOX ELDER	10	GOOD	

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ENGINEER  
NO. 6201043168

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www.missdig.org

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CLIENT :

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**TREE INVENTORY LIST**

NORTH POND OFFICE CENTER  
1112 RICKET ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/9/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

ORIGINAL ISSUE DATE:  
8/3/2020

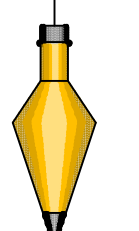
PROJECT NO: 20-088

SCALE: N/A

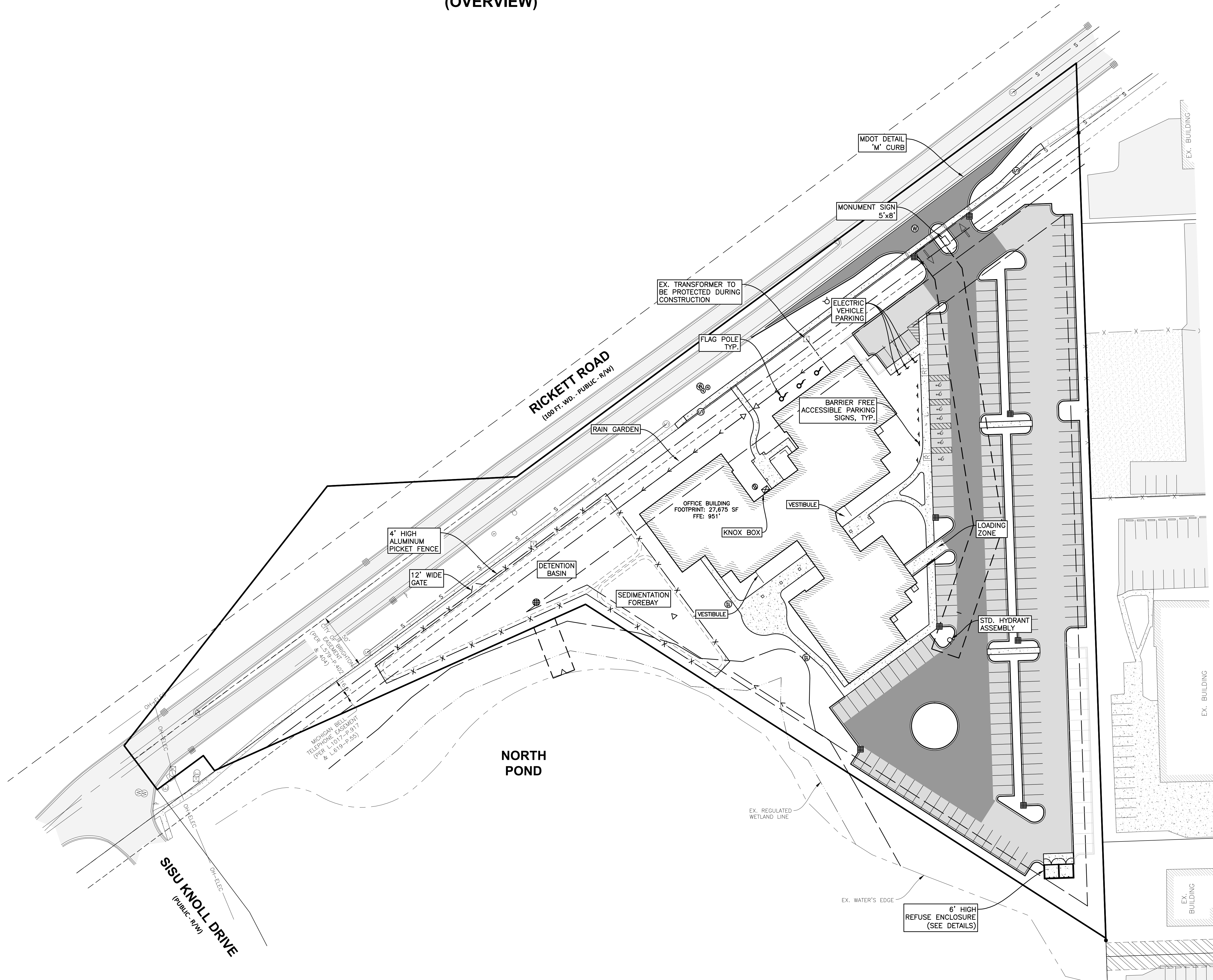
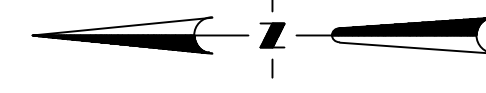
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DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

**V-3.1**

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NORTH POND OFFICE CENTER  
SITE PLAN  
(OVERVIEW)



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**SITE PLAN (OVERVIEW)**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/8/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/7/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

ORIGINAL ISSUE DATE:  
8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 40'

FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

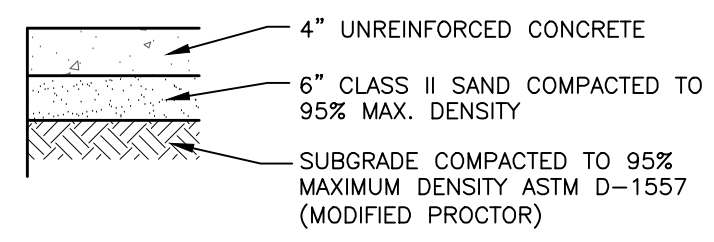
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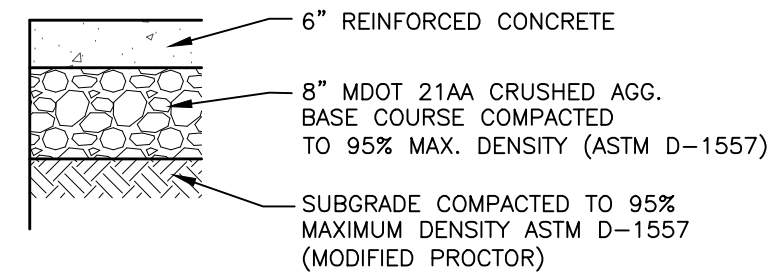
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[Pattern]	EX. GRAVEL
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[Pattern]	PR. HEAVY DUTY ASPHALT
[Pattern]	PR. CONCRETE
[Pattern]	PR. GRAVEL
[Pattern]	STANDARD CURB AND GUTTER
[Pattern]	REVERSE CURB AND GUTTER

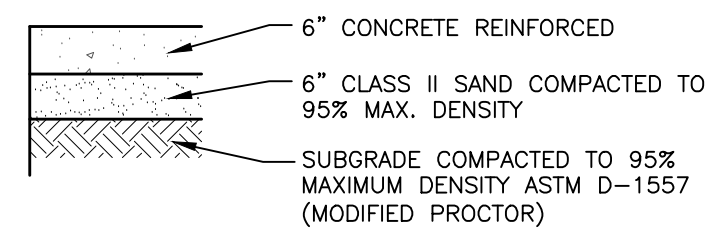
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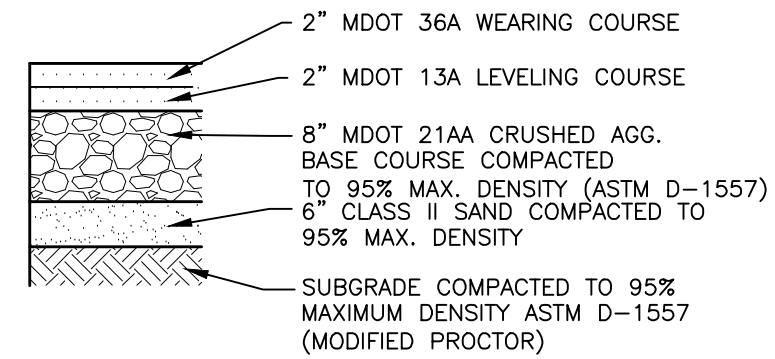
**CONCRETE SIDEWALK SECTION THROUGH DRIVEWAY ONLY**



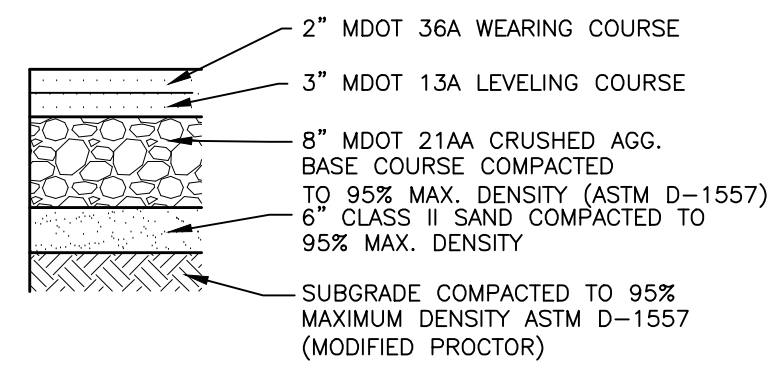
**DUMPSTER PAVEMENT SECTION**



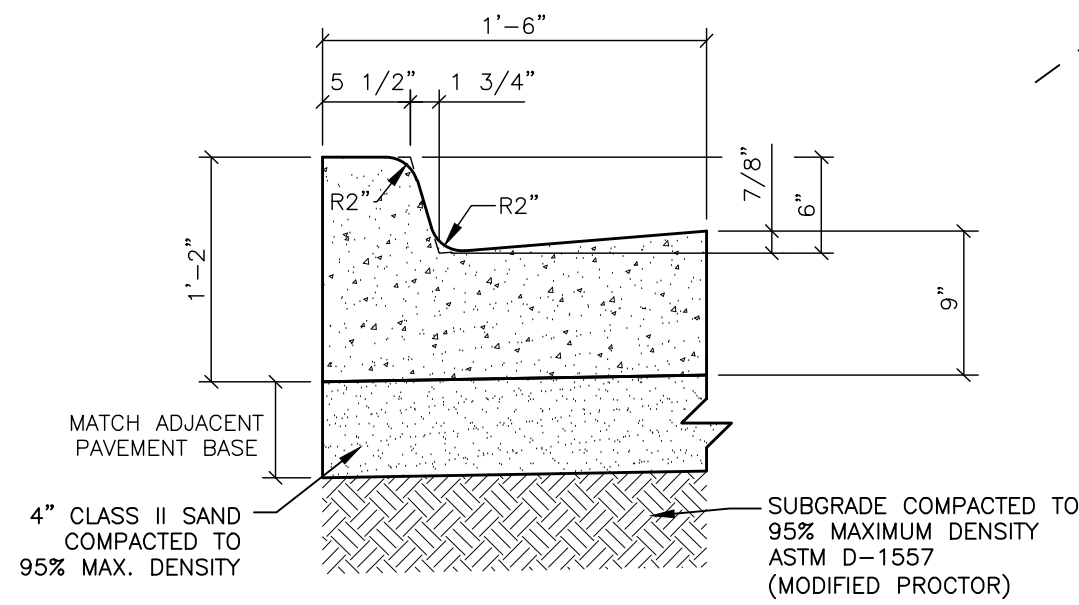
**LIGHT DUTY PAVEMENT SECTION**



**HEAVY DUTY PAVEMENT SECTION**



**CURB AND GUTTER DETAIL - MDOT - F2**



**ZONING INFORMATION**

THIS ZONING INFORMATION IS TAKEN FROM THE CITY OF BRIGHTON ZONING ORDINANCE DATED: OCTOBER 20, 2017

ZONE: O-S OFFICE SERVICE	MAXIMUM HEIGHT OF STRUCTURE		MINIMUM YARD SETBACKS (FT)			MAXIMUM LOT COVERAGE
	IN STORIES	IN FEET	FRONT (MIN/MAX)	SIDE	REAR	
ALLOWABLE/MIN	2	30	25/50	15	25	75%
PROVIDED	2	30	40	15	N/A	14.5%

SUBJECT PARCEL AREA: 6.009 ACRES/261,752 SF

PROPOSED BUILDING:  
BUILDING FOOTPRINT: 27,675 SF  
OFFICE GROSS FLOOR AREA: 37,418 SF  
WAREHOUSE (R&D): 8,098 SF

LOT COVERAGE:

CALCULATION:  
((BUILDING FOOTPRINT / (SUBJECT PARCEL AREA - ROW AREA)) x 100 = LOT COVERAGE%)  
((27,675 SF / (261,752 SF - 70,447 SF)) x 100 = 14.46%

PERCENT IMPERVIOUS:

CALCULATION:  
((BUILDING FOOTPRINT + PAVEMENT) / (SUBJECT PARCEL AREA - ROW AREA)) x 100 = % IMPERVIOUS  
((27,675 SF + 82,685 SF) / (261,752 SF - 70,447 SF)) = 58%

ADJACENT ZONING:

NORTH: I-B - INTERMEDIATE INDUSTRIAL  
SOUTH: I-B - INTERMEDIATE INDUSTRIAL  
EAST: I-B - INTERMEDIATE INDUSTRIAL  
WEST: NORTH POND

**PROPOSED PARKING**

PER THE CITY OF BRIGHTON ZONING ORDINANCE DATED OCTOBER 20, 2017

OFFICE, GENERAL BUSINESS: 1:200 SF GROSS FLOOR AREA (GFA)  
WAREHOUSE (RESEARCH & DEVELOPMENT): 1: EMPLOYEE LARGEST SHIFT + 1:200 SF GFA OFFICE

OFFICE, GENERAL BUSINESS GFA: 37,418 SF

RESEARCH & DEVELOPMENT EMPLOYEES: 25

37,418/200 = 188 + 25 = 213 SPACES MINIMUM

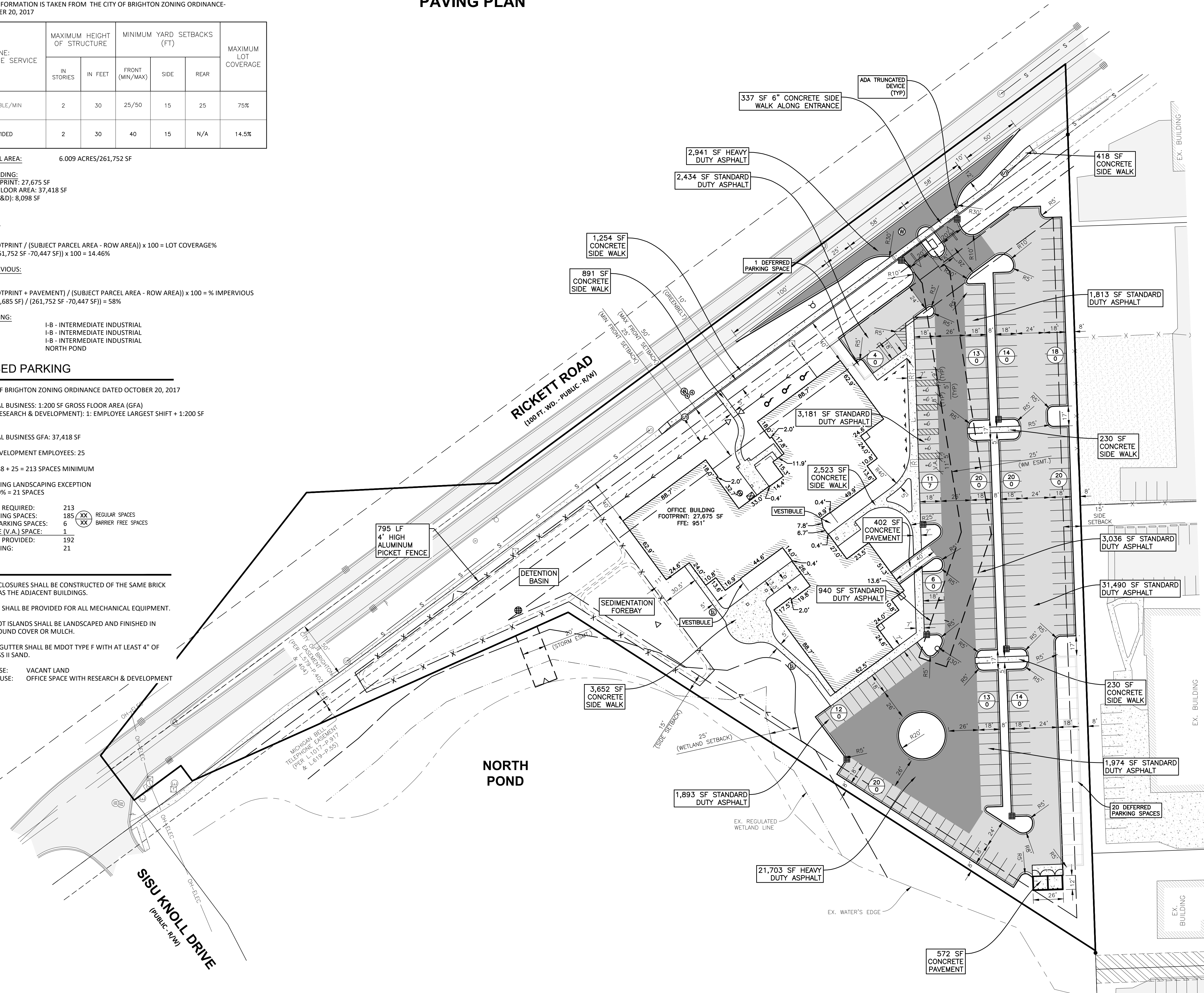
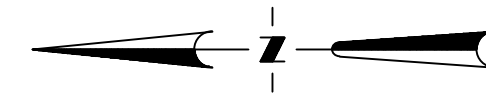
DEFERRED PARKING LANDSCAPING EXCEPTION  
213 SPACES x 10% = 21 SPACES

TOTAL PARKING REQUIRED:	213
PROVIDED PARKING SPACES:	185 XX REGULAR SPACES
BARRIER FREE PARKING SPACES:	6 XX BARRIER FREE SPACES
VAN ACCESSIBLE (V.A.) SPACE:	1
TOTAL PARKING PROVIDED:	192
DEFERRED PARKING:	21

**NOTES**

- REFUSE ENCLOSURES SHALL BE CONSTRUCTED OF THE SAME BRICK MATERIAL AS THE ADJACENT BUILDINGS.
- SCREENING SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT.
- PARKING LOT ISLANDS SHALL BE LANDSCAPED AND FINISHED IN GRASS, GROUND COVER OR MULCH.
- CURB AND GUTTER SHALL BE MDOT TYPE F WITH AT LEAST 4" OF MDOT CLASS II SAND.
- EXISTING USE: VACANT LAND  
PROPOSED USE: OFFICE SPACE WITH RESEARCH & DEVELOPMENT

**NORTH POND OFFICE CENTER  
DIMENSION & PAVING PLAN**



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**DIMENSION & PAVING PLAN**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

DATE	DESCRIPTION
9/9/2020	PRELIMINARY SITE PLAN SUBMITTAL
9/25/2020	FINAL SITE PLAN SUBMITTAL
3/19/2021	REV. FINAL SITE PLAN PER COMMENTS
4/14/2021	REV. FINAL SITE PLAN PER COMMENTS
4/27/2021	REV. FINAL SITE PLAN PER COMMENTS

ORIGINAL ISSUE DATE: 8/3/2020

PROJECT NO: 20-088

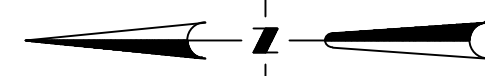
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DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

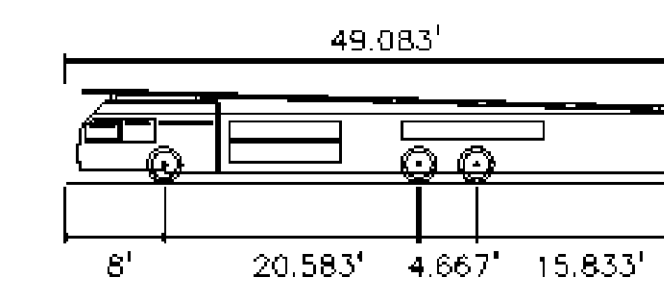
**C-11**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

NORTH POND OFFICE CENTER  
EMERGENCY VEHICLE  
CIRCULATION



EMERGENCY VEHICLE

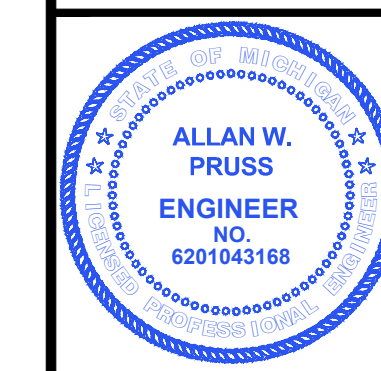


Brighton 49' Fire Truck  
Overall Length 49.083ft  
Overall Width 8.167ft  
Overall Body Height 7.500ft  
Min. Body Ground Clearance 0.750ft  
Track Width 6.167ft  
Lock-to-lock time 5.00s  
Max Steering Angle (Virtual) 45.00°

FIRE TRUCK DETAIL  
NOT TO SCALE



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**EMERGENCY VEHICLE CIRCULATION**  
NORTH POND OFFICE CENTER  
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PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/8/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/14/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

ORIGINAL ISSUE DATE:  
8/3/2020

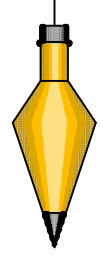
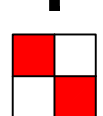
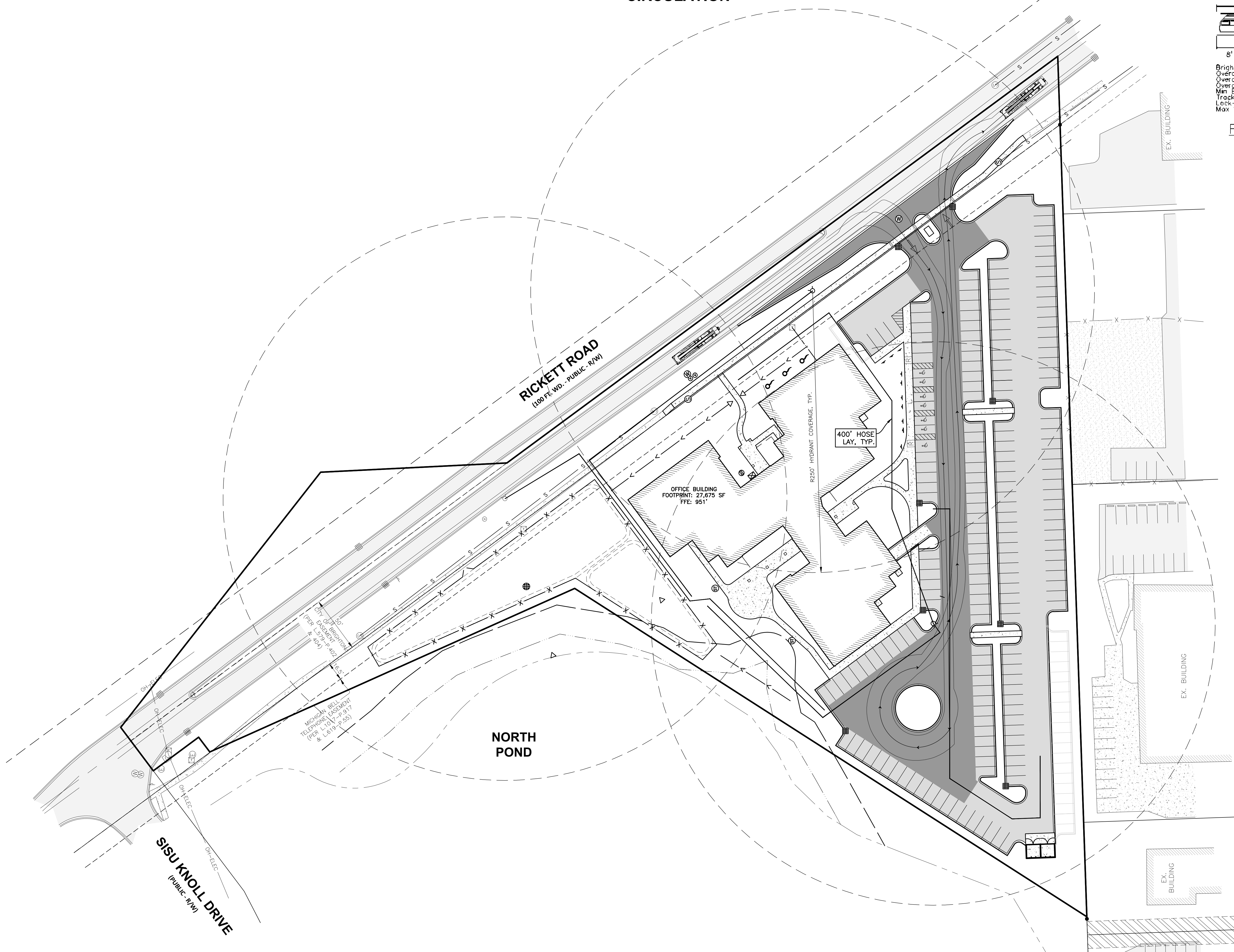
PROJECT NO: 20-088

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0 1/2" 1"

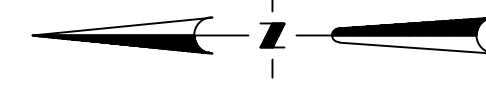
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**C-2.0**

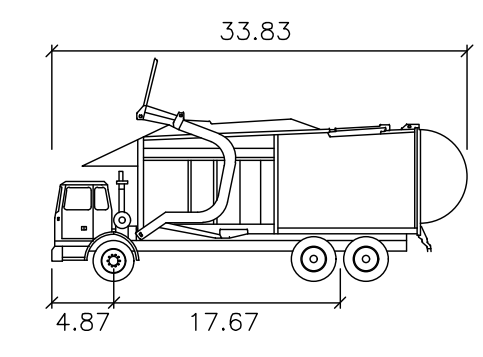
NOT TO BE USED AS CONSTRUCTION DRAWINGS



NORTH POND OFFICE CENTER  
REFUSE VEHICLE  
CIRCULATION



REFUSE VEHICLE



Wayne Titan  
FEET  
WIDTH : 8.46  
TRACK : 8.00  
LOCK TO LOCK TIME: 6.0  
STEERING ANGLE : 45.0

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*Allan W. Pruss*

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**REFUSE VEHICLE CIRCULATION**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

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ORIGINAL ISSUE DATE:  
8/3/2020

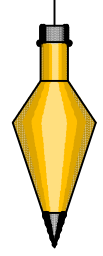
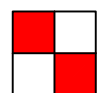
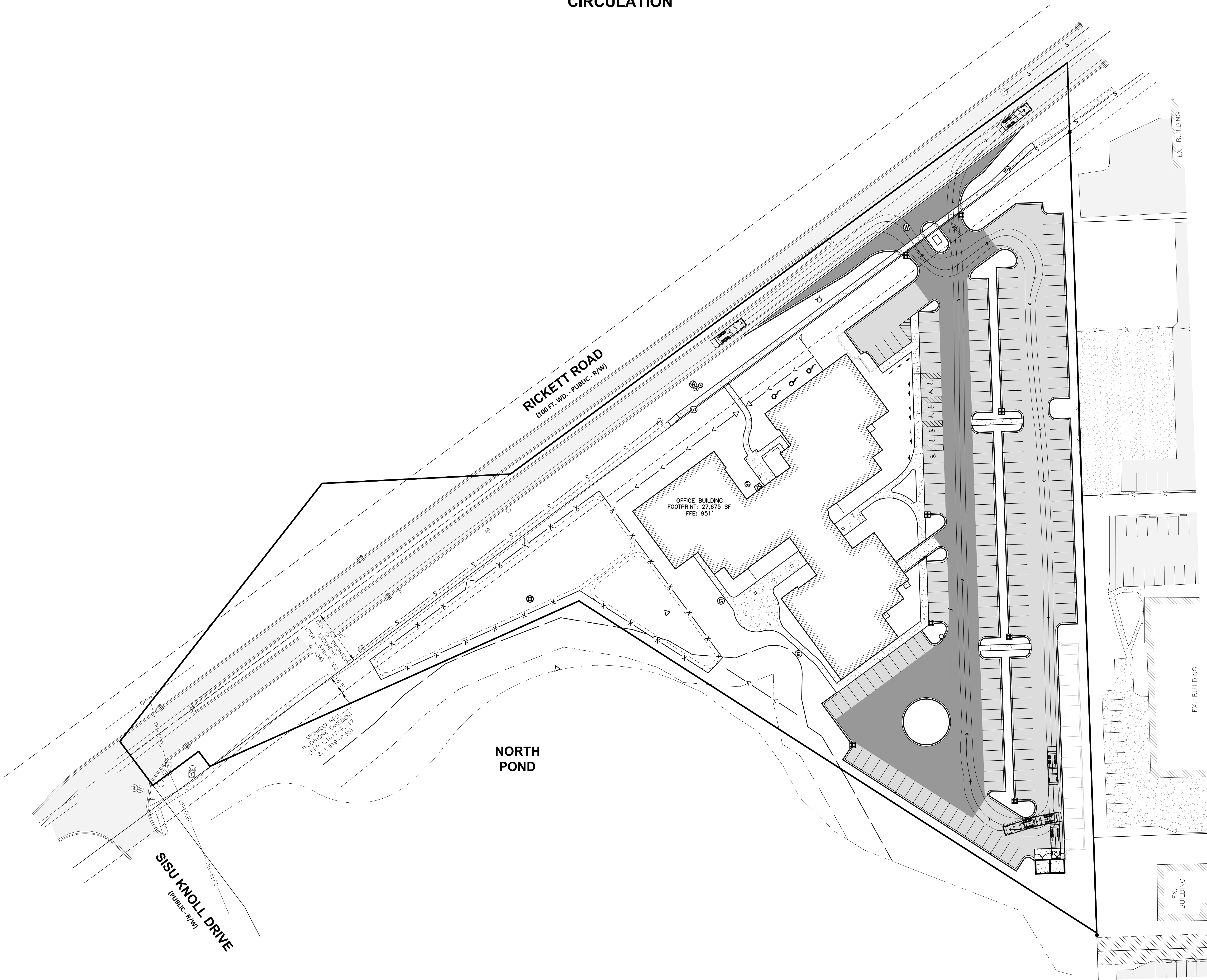
PROJECT NO: 20-088

SCALE: 1" = 40'

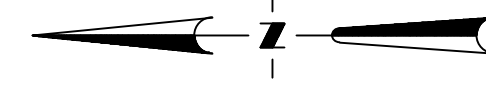
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DESIGN BY: DD  
CHECK BY: AP

**C-21**

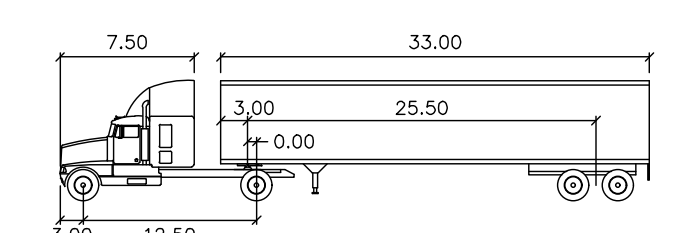
NOT TO BE USED AS CONSTRUCTION DRAWINGS



NORTH POND OFFICE CENTER  
DELIVERY VEHICLE  
CIRCULATION



DELIVERY VEHICLE



WB-40

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Tractor Wheel	: 8.00	Steering Angle	: 20.0
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		

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CLIENT :

Lighthouse Associates  
architects - llh - llc

10465 CITATION DR.  
BRIGHTON, MI 48116  
(810) 227-5668

**DELIVERY VEHICLE CIRCULATION**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/8/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/14/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

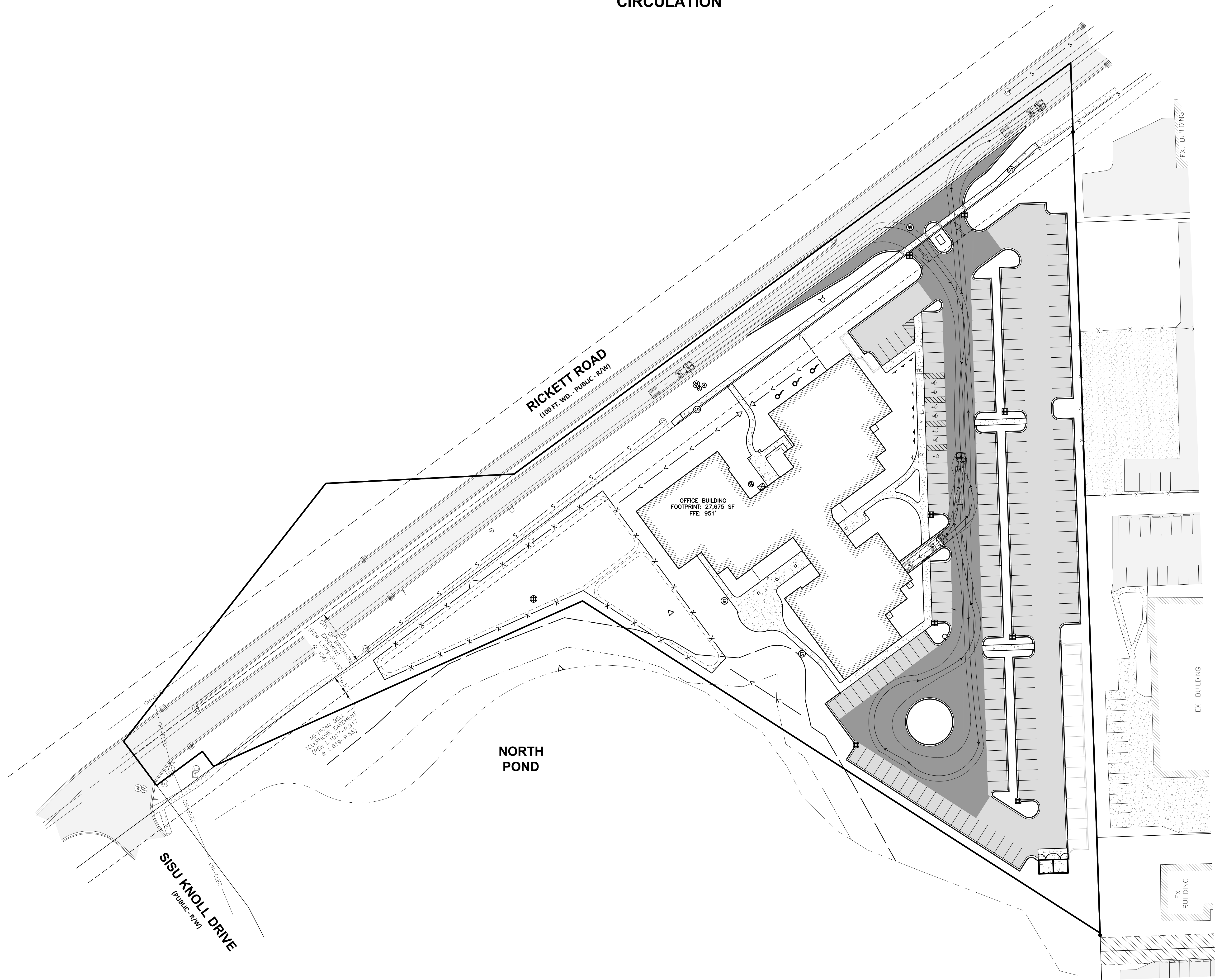
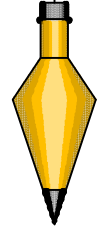
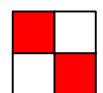
ORIGINAL ISSUE DATE:  
8/3/2020

PROJECT NO: 20-088

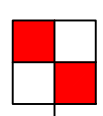
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DRAWN BY: DC  
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CHECK BY: AP

**C-2.2**



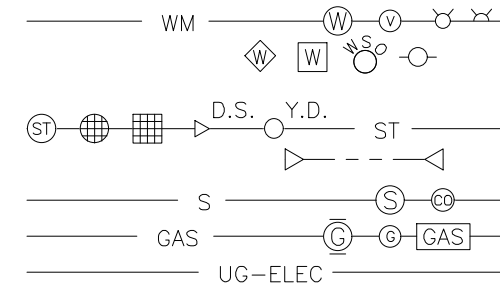
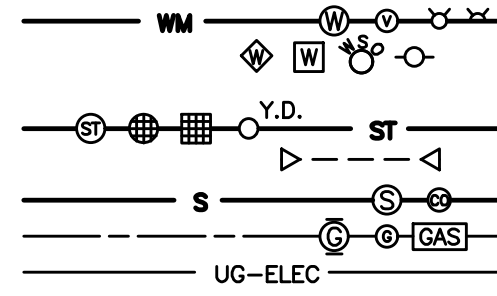
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# UTILITY LEGEND

## PROPOSED

## EXISTING



WATER MAIN, MH, VALVE IN BOX, HYDRANT  
WATER WELL, METER, STOP BOX, POST INDICATOR VALVE

STORM SEWER, MH, CB, INLET, DOWN SPOUT, YARD DRAIN  
CULVERT/ END SECTION

SANITARY SEWER, MH, CLEAN OUT

UG GAS, MH, VALVE, LINE MARKER

UG ELEC (ELEC, CABLE, FIBER)

## NOTES

1. WATER MAIN TO BE A MINIMUM OF 5.5' DEEP AND A MAXIMUM OF 8.5' DEEP PER CITY OF BRIGHTON DESIGN STANDARDS.
2. MAINTAIN MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL UTILITIES.
3. KNOX BOX SHOWN AT FRONT DOOR OF BUILDING. ADDITIONAL KNOX BOX WILL BE PROVIDED AT ANY EXTERIOR DOOR RELATED TO FIRE PROTECTION EQUIPMENT.

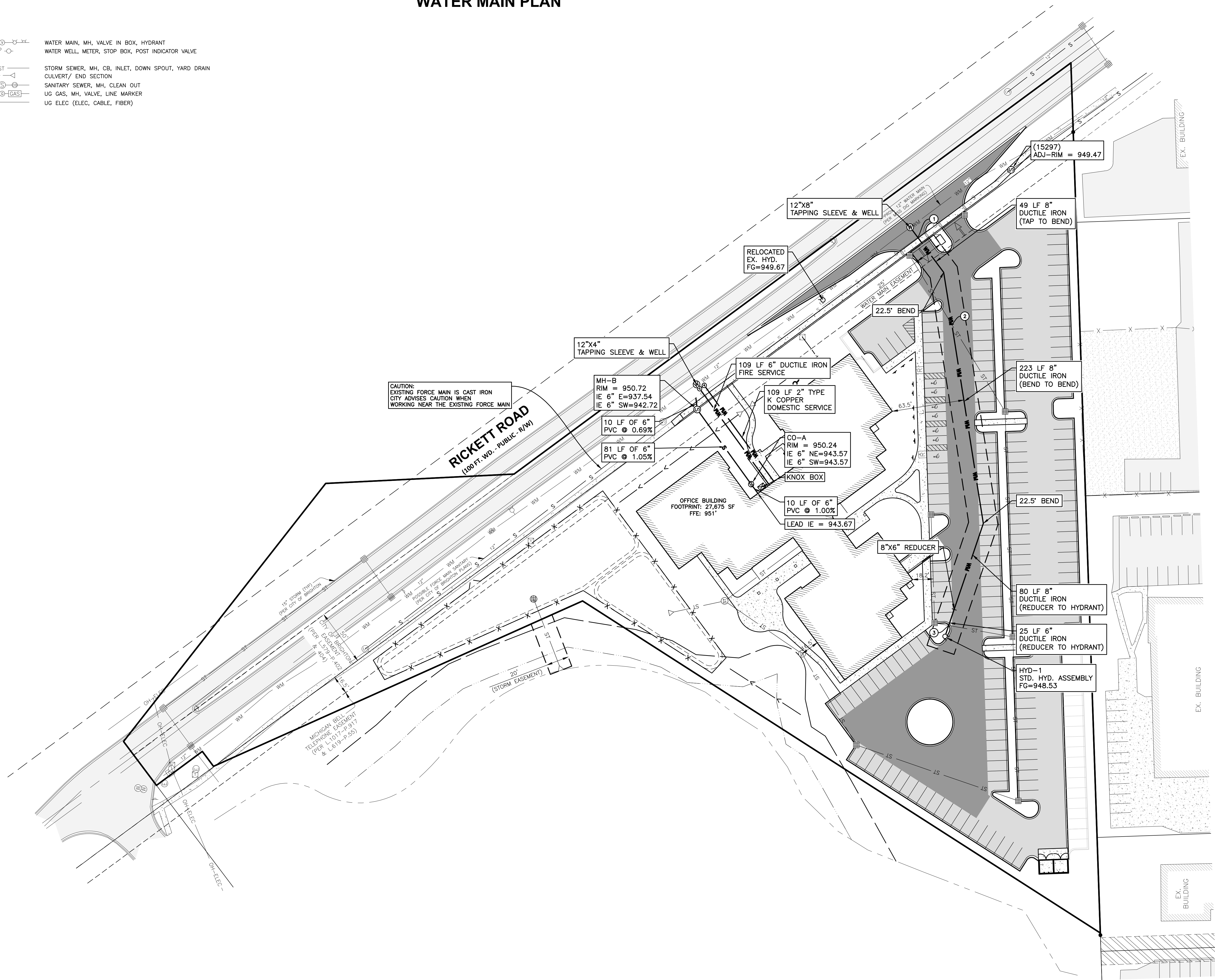
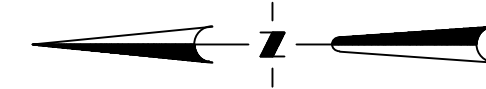
## CROSSING SCHEDULE

NOTE: MAINTAIN MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL UTILITIES.

ABBREVIATIONS:  
IE = INVERT ELEVATION  
TP = TOP OF PIPE  
BP = BOTTOM OF PIPE

①	EX 12" SANITARY TP	= 937.56
	PR 8" WATER MAIN TP	= 943.26
②	PR 12" STORM IE	= 944.74
	8" WATER MAIN TP	= 943.23

# NORTH POND OFFICE CENTER SANITARY SEWER AND WATER MAIN PLAN



CAUTION:  
EXISTING FORCE MAIN IS CAST IRON  
CITY ADVISES CAUTION WHEN  
WORKING NEAR THE EXISTING FORCE MAIN

OFFICE BUILDING  
FOOTPRINT: 27,675 SF  
FFE: 951'

MICHIGAN BELL  
TELEPHONE CABLE  
(PER L-1017-P-9-17  
& L-619-P-55)

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**ALLAN W. PRUSS**  
ENGINEER  
NO. 6201043168

*Allan W. Pruss*

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CLIENT :

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ARCHITECTS - PLLC

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**SANITARY SEWER AND WATER MAIN PLAN**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

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REV. FINAL SITE PLAN PER COMMENTS	3/19/2021
REV. FINAL SITE PLAN PER COMMENTS	4/14/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

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PROJECT NO: 20-088

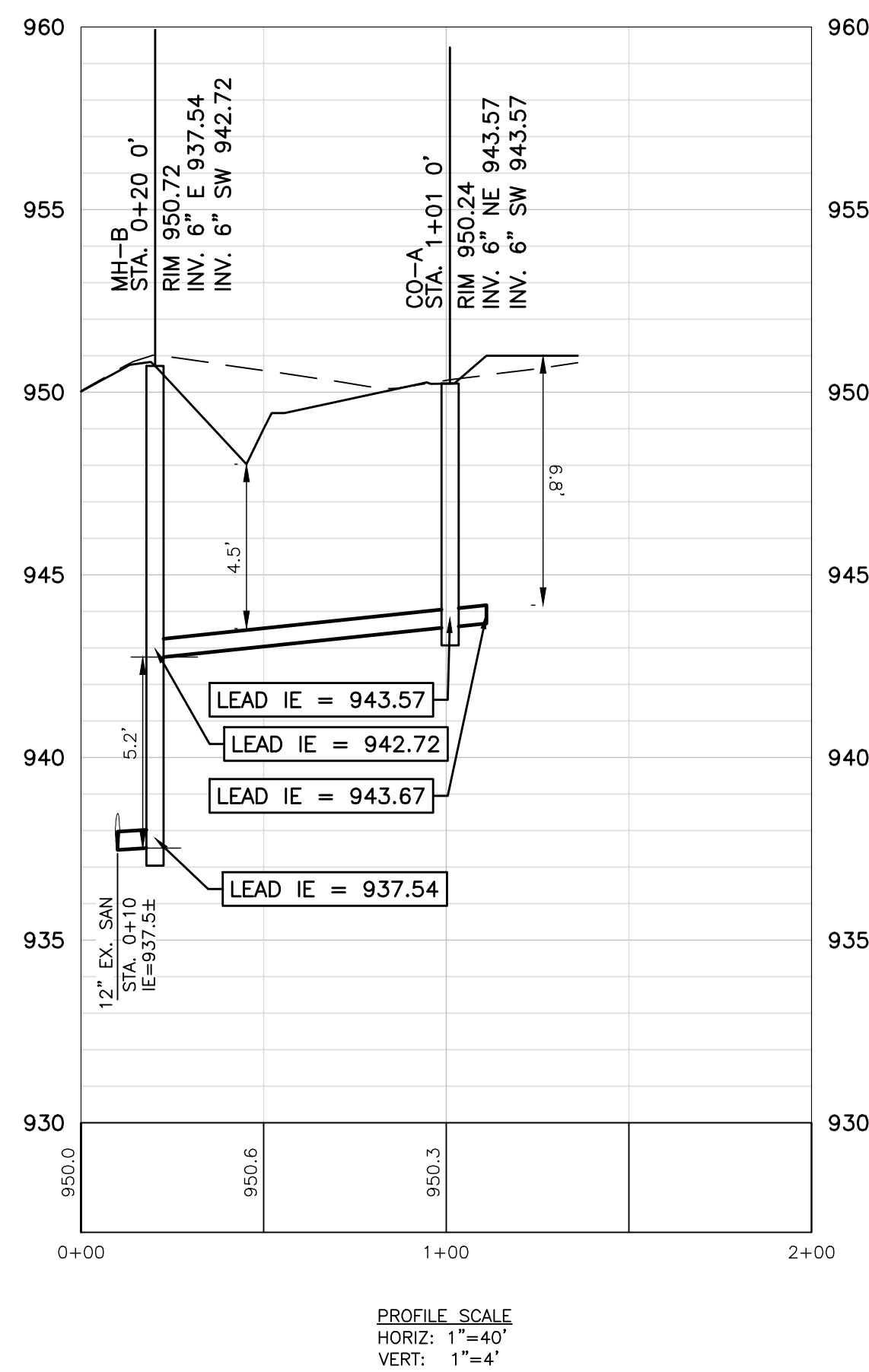
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CHECK BY: AP

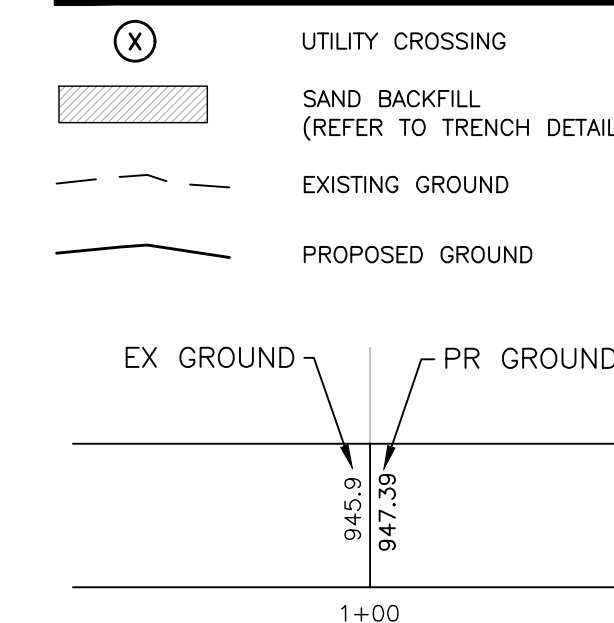
**C-3.0**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

NORTH POND OFFICE CENTER  
UTILITY  
PROFILES



LEGEND



NOTES

- SAND BACKFILL AND BEDDING TO BE MDOT CL II.
- MAINTAIN MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL UTILITIES.

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**UTILITY PROFILES**

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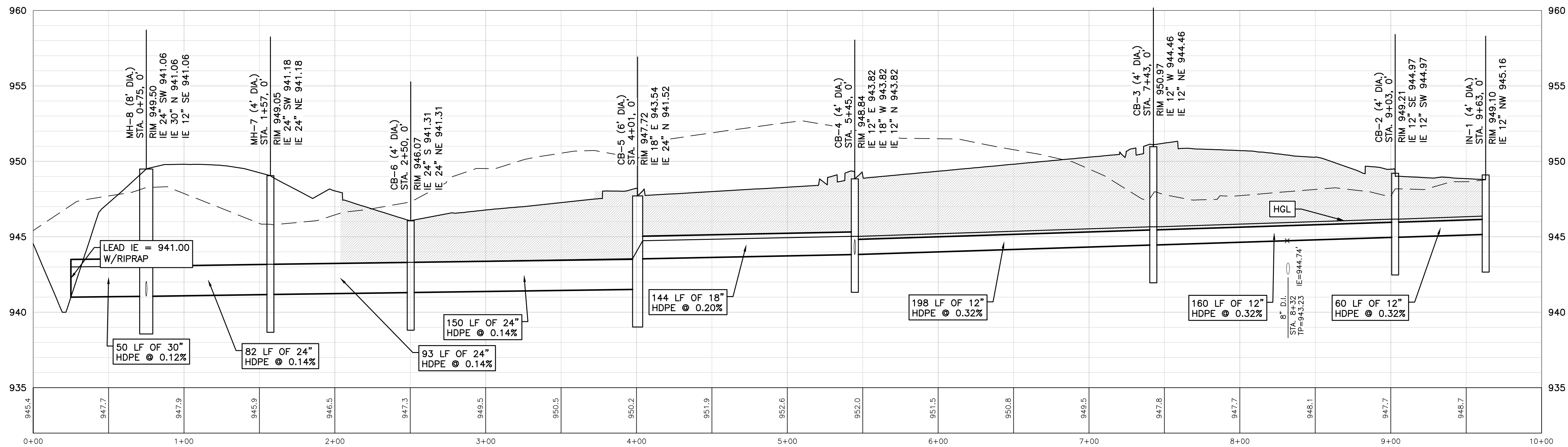
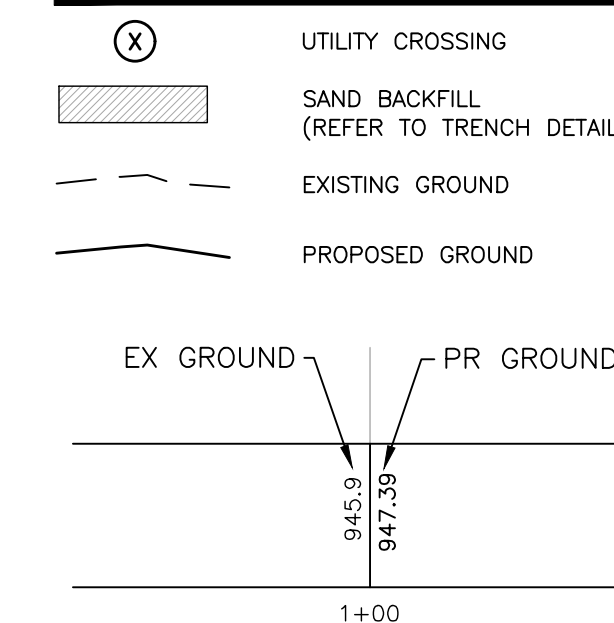
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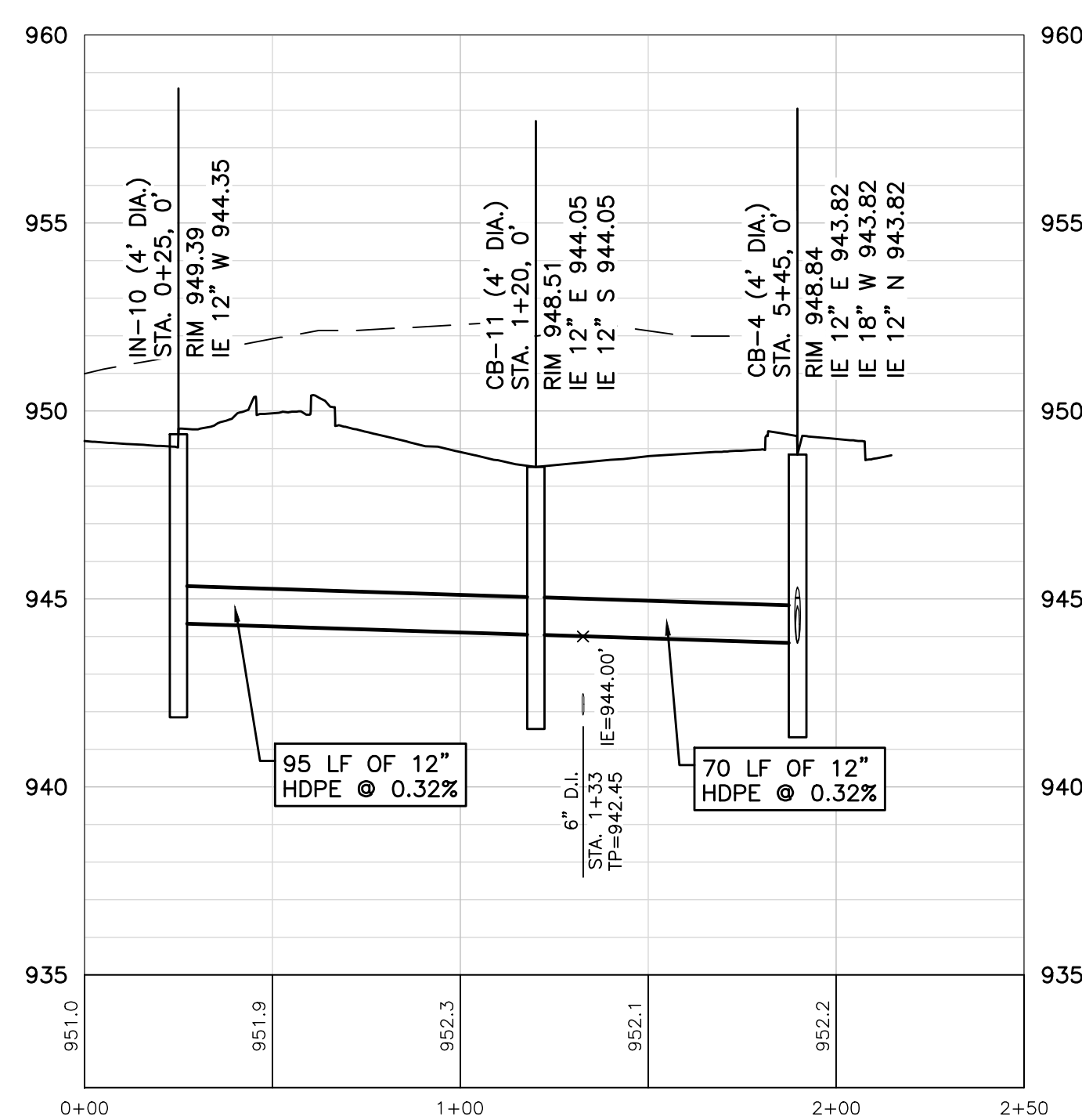


NORTH POND OFFICE CENTER  
STORM SEWER  
PROFILES

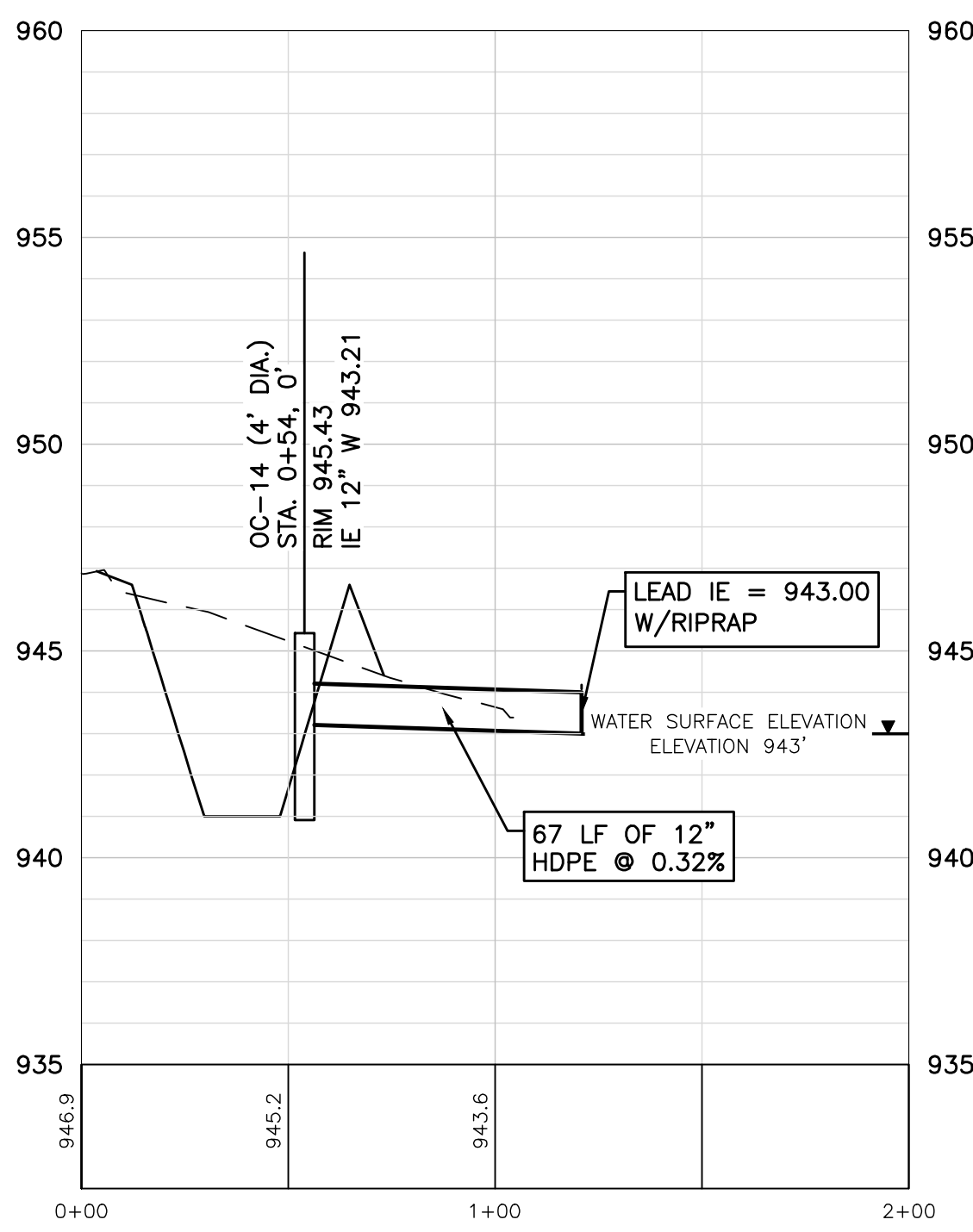
LEGEND



PROFILE SCALE  
HORIZ: 1"=40'  
VERT: 1"=4'



PROFILE SCALE  
HORIZ: 1"=40'  
VERT: 1"=4'



PROFILE SCALE  
HORIZ: 1"=40'  
VERT: 1"=4'

NOTES

- SAND BACKFILL AND BEDDING TO BE MDOT CL II.
- MAINTAIN MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL UTILITIES.

STORM SEWER NOTES

- "IN" and "CB" STRUCTURES SHALL HAVE EIJW 1020 FRAME WITH TYPE M1 GRATE.
- CURB "IN" and "CB" STRUCTURES SHALL HAVE EIJW 7010 FRAME WITH TYPE M1 GRATE.
- STORM "MH" STRUCTURES SHALL HAVE EIJW 1040 FRAME WITH A TYPE A PERFORATED COVER.

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**STORM SEWER PROFILES**

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REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

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8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 40'

FIELD: AJS, CW, JH  
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**C-6.1**

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# DTMB SOIL EROSION & SEDIMENTATION CONTROL MEASURES

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT, AND BUDGET (DTMB)

EROSION CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E6	MULCH		FOR USE IN AREAS SUBJECT TO EROSION SURFACE FLOWS OR SEVERE WIND OR ON NEWLY SEEDS AREAS.
E8	PERMANENT SEEDING		STABILIZATION METHOD UTILIZED ON SITES WHERE EARTH CHANGE HAS BEEN COMPLETED (FINAL GRADING ATTAINED).
SEDIMENT CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
S51	SILT FENCE		USE ADJACENT TO CRITICAL AREAS, TO PREVENT SEDIMENT LADEN SHEET FLOW FROM ENTERING THESE AREAS.
S53	STABILIZED CONSTRUCTION ACCESS		USED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE.
S55	SEDIMENT BASIN		AT THE OUTLET OF DISTURBED AREAS AND AT THE LOCATION OF A PERMANENT DETENTION BASIN.
S58	INLET PROTECTION FABRIC DROP		USE AT STORMWATER INLETS, ESPECIALLY AT CONSTRUCTION SITES.
EROSION & SEDIMENT CONTROLS			
KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
ES31	CHECK DAM		USED TO REDUCE SURFACE FLOW VELOCITIES WITHIN CONSTRUCTED AND EXISTING FLOW CORRIDORS.

XX T TEMPORARY XX P PERMANENT

## EROSION CONTROL STANDARDS

- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE.
- DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
- EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
- CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER CHANGES HAS BEEN ACCOMPLISHED.
- STAGING OF THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLACES AND AS REQUIRED TO INSURE PROGRESSIVE STABILIZATION OF DISTURBED AREAS.
- SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
- A CERTIFIED STORM WATER OPERATOR WILL BE NAMED ON THE MDEQ NOTICE OF COVERAGE FOR NPDES AS REQUIRED.
- ALL DISTURBED AREAS ARE TO BE TOP SOILED AND SEEDED WITH THE FOLLOWING MIN RATIO: TOP-SOIL 3" IN DEPTH, GRASS SEED 210 LBS PER ACRE, FERTILIZER 150 LBS PER ACRE, STRAW MULCH 3" DEPTH 1.5 TO 2 TONS PER ACRE.

## SOIL EROSION CONTROL MAINTENANCE SCHEDULE AND NOTES.

- CONTRACTOR MUST OBTAIN A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE PRIOR TO COMMENCING WORK.
- EARTHWORK SHALL BE LIMITED TO THE PROPOSED SITE AS SHOWN ON THE PLAN.
- CONTRACTOR SHALL INSPECT THE SOIL EROSION/SEDIMENTATION CONTROL DEVICES ONCE A WEEK AND/OR WITHIN 24 HOURS OF A RAINFALL EVENT WHICH RESULTS IN A STORM WATER DISCHARGE FROM THE SITE. ANY DAMAGE TO EROSION CONTROL MEASURES MUST BE REPAIRED IMMEDIATELY.
- ALL MUD OR DEBRIS TRACKED ONTO EXISTING PUBLIC ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
- SILT FENCE MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY BUILT-UP SEDIMENT WHEN THE SEDIMENT HEIGHT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. THE CONTRACTOR IS RESPONSIBLE TO REMOVE, REPLACE, RETRENCH OR RE-BACKFILL THE SILTATION FENCE SHOULD IT FAIL OR BE DAMAGED DURING CONSTRUCTION.
- PERMANENT STABILIZATION MUST BE COMPLETED WITHIN 30 DAYS OF FINAL GRADING.
- ACCESS ROADS MUST BE MAINTAINED AS NECESSARY, TO KEEP THEM EFFECTIVE, NEW LAYERS OF STONE MAY BE ADDED AS OLD LAYERS BECOME COMPACTED. STEPS SHOULD ALSO BE TAKEN TO REPAIR THE ACCESS ROADS IF RUTS OR PONDING WATER APPEARS.
- INLET FILTERS SHOULD BE INSPECTED FOR BUILDUP OF SILT AND OTHER DEBRIS. THIS IS EVIDENT IF GEOTEXTILE/SOD STRUCTURE IS CAUSING FLOODING. MAINTENANCE WOULD CONSIST OF REMOVING OF SEDIMENTS WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL. IF INLET FILTER IS BEYOND THIS LEVEL OF REPAIR, IT MAY BE NECESSARY TO REPLACE BOTH THE SOD AND GEOTEXTILE FILTER.
- IF SOIL EROSION/SEDIMENT CONTROL MEASURES ARE INADEQUATE FOR THE SITE, THE PROPER EROSION CONTROL AUTHORITY MUST BE NOTIFIED.

# SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION

- THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON APPROVED PLANS.
- DETENTION BASIN SHALL BE EXCAVATED, TOP SOILED, AND SEEDED IMMEDIATELY AFTER DEMOLITION WORK IS COMPLETED.
- REMOVE ALL TOPSOIL AND ORGANIC MATTER. TOPSOIL MAY BE STORED ON SITE IN DESIGNATED AREA TO BE USED FOR FUTURE PLANTING AND FILL AREAS. TRUCK REMAINING TOP SOIL OFFSITE AND PROPERLY DISPOSE.
- ROUGH GRADE AND INSTALL NEW UNDERGROUND UTILITIES. PLACE INLET FILTERS AT PROPOSED CATCH BASINS THROUGHOUT SITE.
- CONSTRUCT BUILDING.
- FINISH GRADE AROUND BUILDING AND STABILIZE AS SOON AS POSSIBLE. STABILIZE ALL DISTURBED AREAS WITH CLASS A SEED AND MULCH. IN AREAS OF SLOPES OF 1:4 OR STEEPER, CONTRACTOR TO SEED AND INSTALL PEGGED IN PLACE EROSION CONTROL BLANKETS.
- REPAIR/CLEAN INLET FILTERS AS REQUIRED.
- INSTALL FINAL LANDSCAPING PER SEPARATE LANDSCAPE PLAN.
- REMOVE TEMPORARY SOIL EROSION MEASURES ONCE SEEDED VEGETATION HAS ESTABLISHED. CLEAN ALL AFFECTED STORM STRUCTURES AS NECESSARY.

CONSTRUCTION SEQUENCE	OPERATION TIME SCHEDULE - BEGINNING MARCH 2021					
	MAR	APR	MAY	JUN	JUL	AUG
1 INSTALL SILT FENCE	■					
2 EXCAVATE, TOPSOIL, & SEED DETENTION BASIN	■					
3 REMOVE ALL TOPSOIL AND ORGANIC MATTER		■				
4 ROUGH GRADE, INSTALL UTILITIES & PLACE INLET FILTERS		■				
5 CONSTRUCT BUILDING			■			
6 FINISH GRADE AND STABILIZE			■			
7 REPAIR/CLEAN INLET FILTERS			■			
8 INSTALL LANDSCAPING				■		
9 REMOVE TEMPORARY SOIL EROSION MEASURES					■	

## GRADING LEGEND

	PROPOSED TOP OF PAVEMENT GRADE
	PROPOSED SIDEWALK GRADE
	PROPOSED FINISH GRADE
	PROPOSED TOP CURBED GRADE
	PROPOSED GUTTER PAN GRADE
	MATCH EXISTING
	PROPOSED FINISH FLOOR GRADE
	PROPOSED RIM GRADE
	ADJUSTED RIM GRADE
	EXISTING ELEVATION
	EXISTING CONTOUR
	PROPOSED CONTOUR
	LIMITS OF DISTURBANCE

# NORTH POND OFFICE CENTER GRADING AND SESC PLAN

## SESC LEGEND

	SILT FENCE
	MUD MAT

## EROSION CONTROL QUANTITIES

Disturbed Area: 4.64 Acres

QTY	UNIT	ITEM
1,089	LF	SILT FENCE
8	EA	INLET FILTER
1	EA	MUD MAT

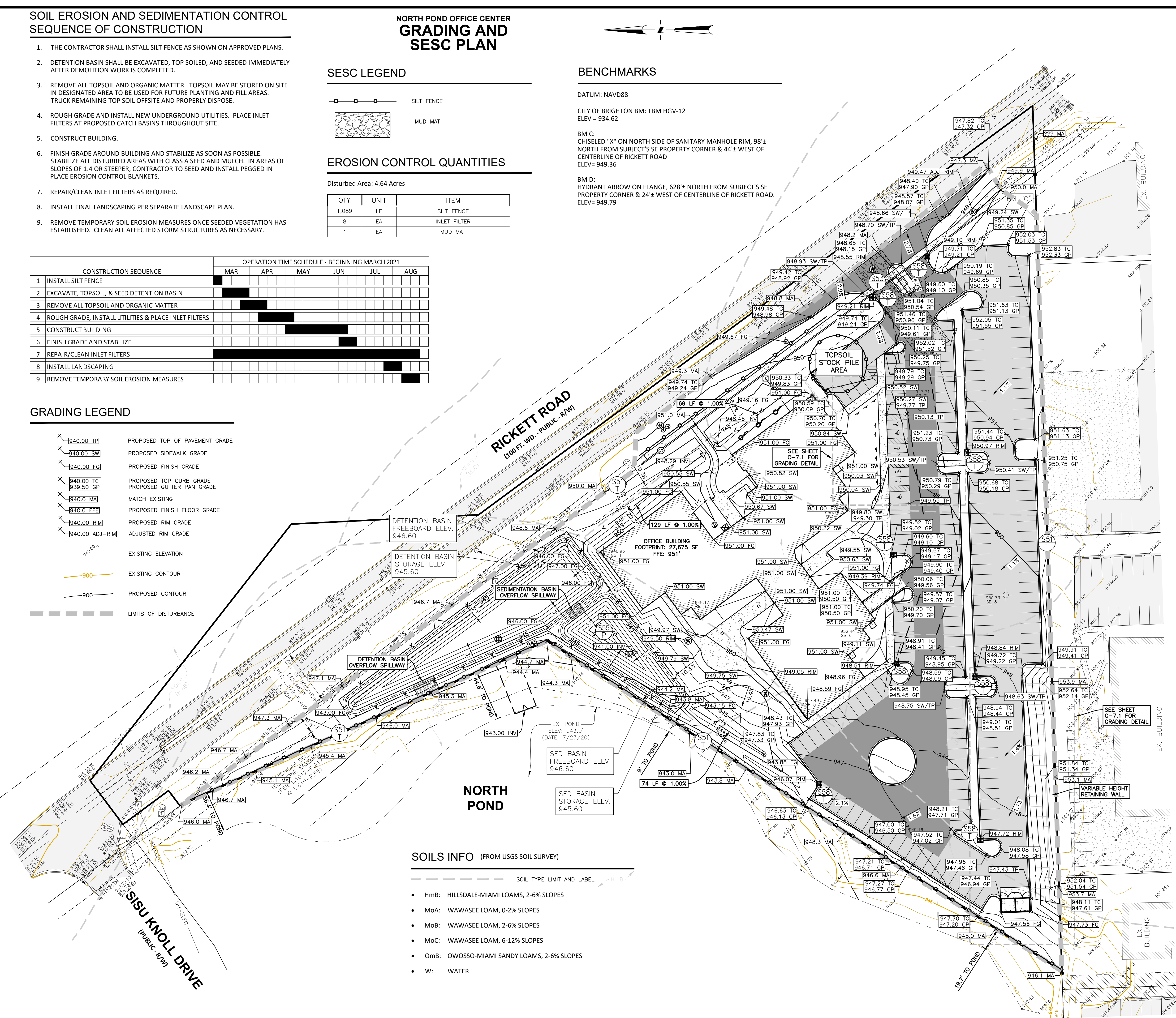
## BENCHMARKS

DATUM: NAVD88

CITY OF BRIGHTON BM: TBM HGV-12  
ELEV = 934.62

BM C: CHISELED "X" ON NORTH SIDE OF SANITARY MANHOLE RIM, 98'± NORTH FROM SUBJECT'S SE PROPERTY CORNER & 44'± WEST OF CENTERLINE OF RICKETT ROAD  
ELEV = 949.36

BM D: HYDRANT ARROW ON FLANGE, 628'± NORTH FROM SUBJECT'S SE PROPERTY CORNER & 24'± WEST OF CENTERLINE OF RICKETT ROAD.  
ELEV = 949.79



## SOILS INFO (FROM USGS SOIL SURVEY)

- HmB: HILLSDALE-MIAMI LOAMS, 2-6% SLOPES
- MoA: WAWASEE LOAM, 0-2% SLOPES
- MoB: WAWASEE LOAM, 2-6% SLOPES
- MoC: WAWASEE LOAM, 6-12% SLOPES
- OmB: OWOSSO-MIAMI SANDY LOAMS, 2-6% SLOPES
- W: WATER

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**GRADING AND SESC PLAN**  
NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

DATE	DESCRIPTION
9/9/2020	PRELIMINARY SITE PLAN SUBMITTAL
9/25/2020	FINAL SITE PLAN SUBMITTAL
3/19/2021	REV. FINAL SITE PLAN PER COMMENTS
4/14/2021	REV. FINAL SITE PLAN PER COMMENTS
4/27/2021	REV. FINAL SITE PLAN PER COMMENTS

ORIGINAL ISSUE DATE:  
8/3/2020

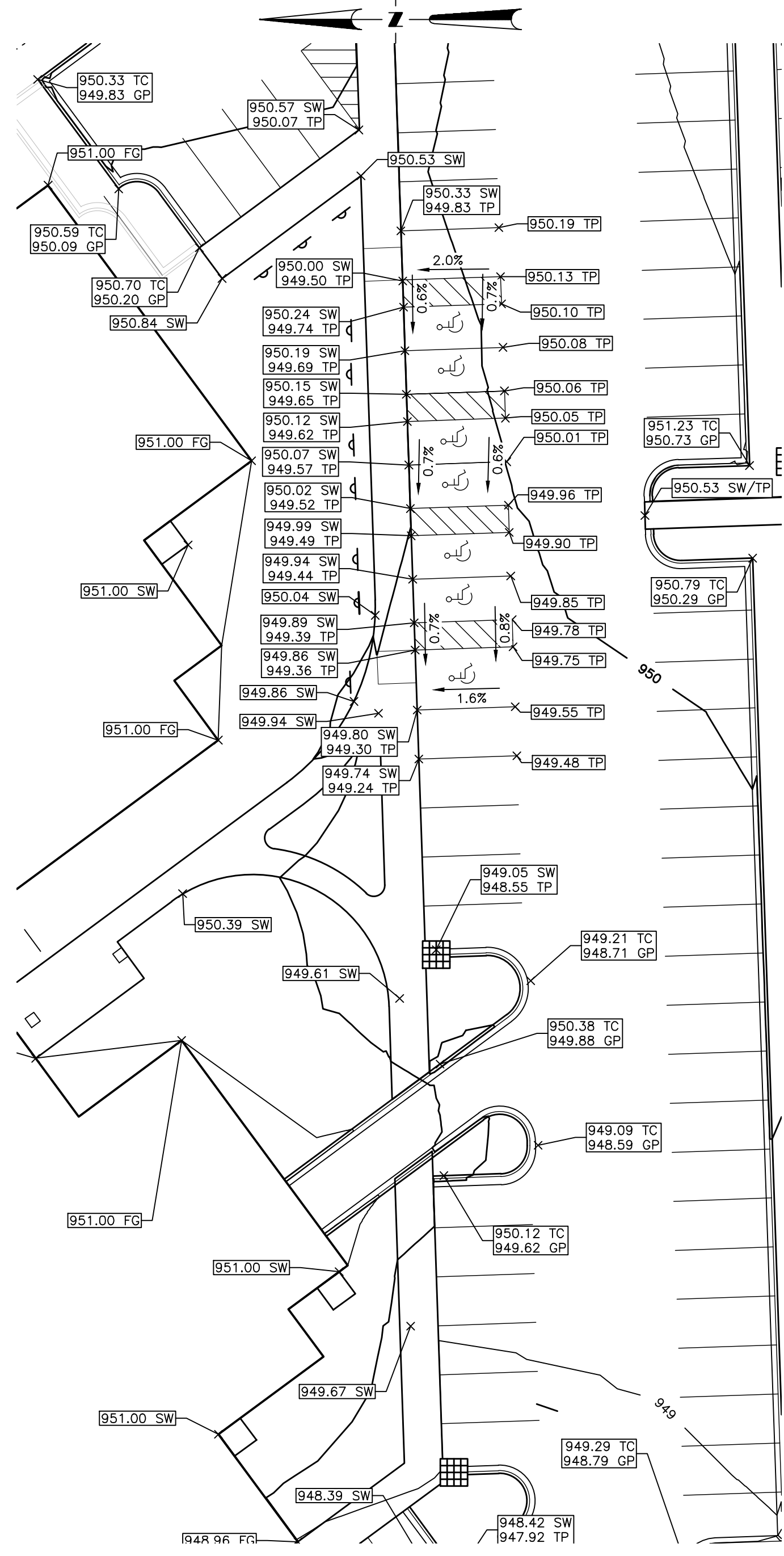
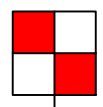
PROJECT NO: 20-088

SCALE: 1" = 40'  
0 1/2" 1"

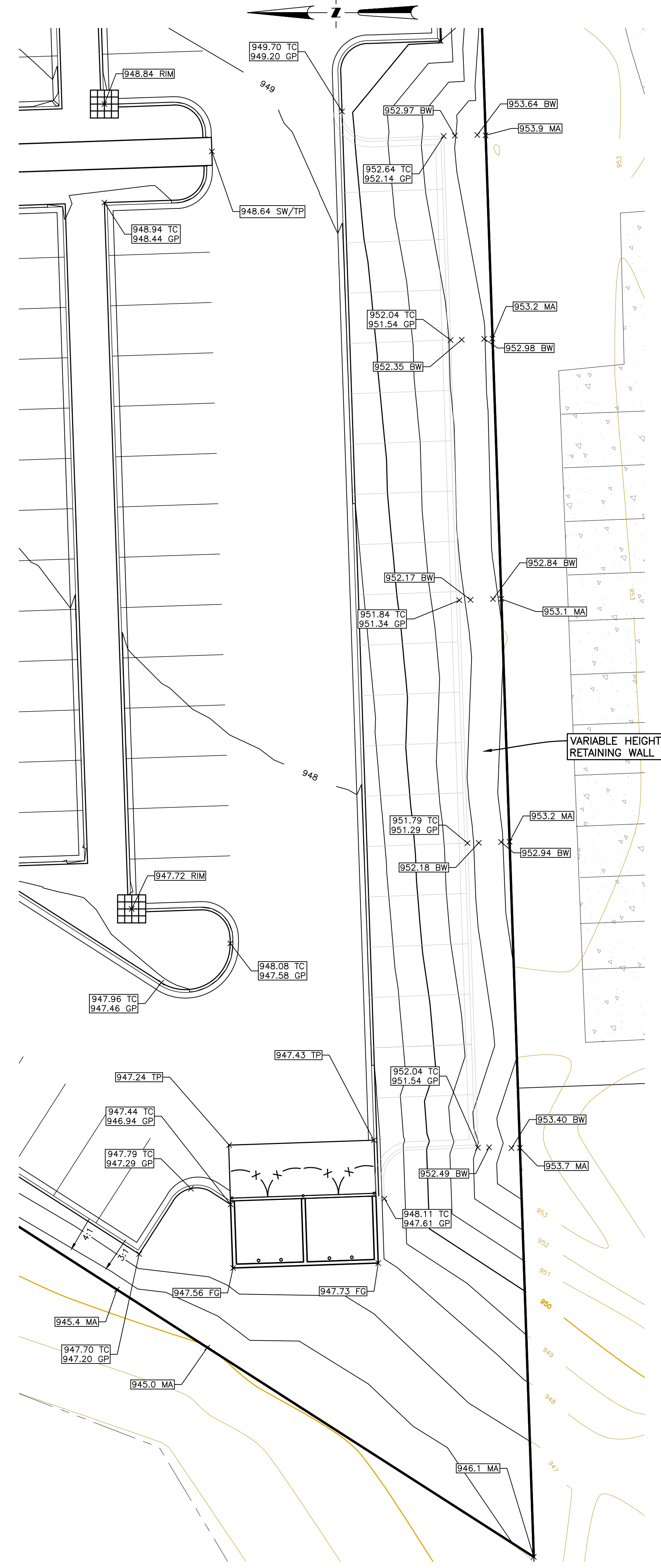
FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

**C-7.0**

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NORTH POND OFFICE CENTER  
**GRADING  
 DETAIL**



INNOVATIVE GEOSPATIAL & ENGINEERING SOLUTIONS

**MEGA**  
 ENGINEERING GROUP ASSOCIATES, INC.

298 VETERANS DRIVE  
 FOWLERVILLE, MICHIGAN 48836  
 (OFFICE) 517-223-3512  
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CLIENT :

**Lighthouse Associates**  
 architects - llc - pc

10465 CITATION DR.  
 BRIGHTON, MI 48116  
 (810) 227-5668

**GRADING DETAIL**

NORTH POND OFFICE CENTER  
 1112 RICKET ROAD  
 PART OF SE 1/4, SEC 31, T2N-R6E  
 CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN SUBMITTAL	9/9/2020
FINAL SITE PLAN SUBMITTAL	9/25/2020
REV. FINAL SITE PLAN PER COMMENTS	3/7/2021
REV. FINAL SITE PLAN PER COMMENTS	4/7/2021
REV. FINAL SITE PLAN PER COMMENTS	4/27/2021

ORIGINAL ISSUE DATE:  
 8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 20'

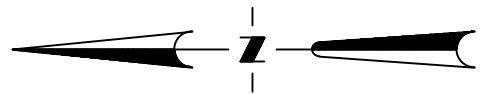
0 1/2" 1"

FIELD: AJS, CW, JH  
 DRAWN BY: DC  
 DESIGN BY: DD  
 CHECK BY: AP

**C-7.1**

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NORTH POND OFFICE CENTER  
DRAINAGE AREA  
PLAN

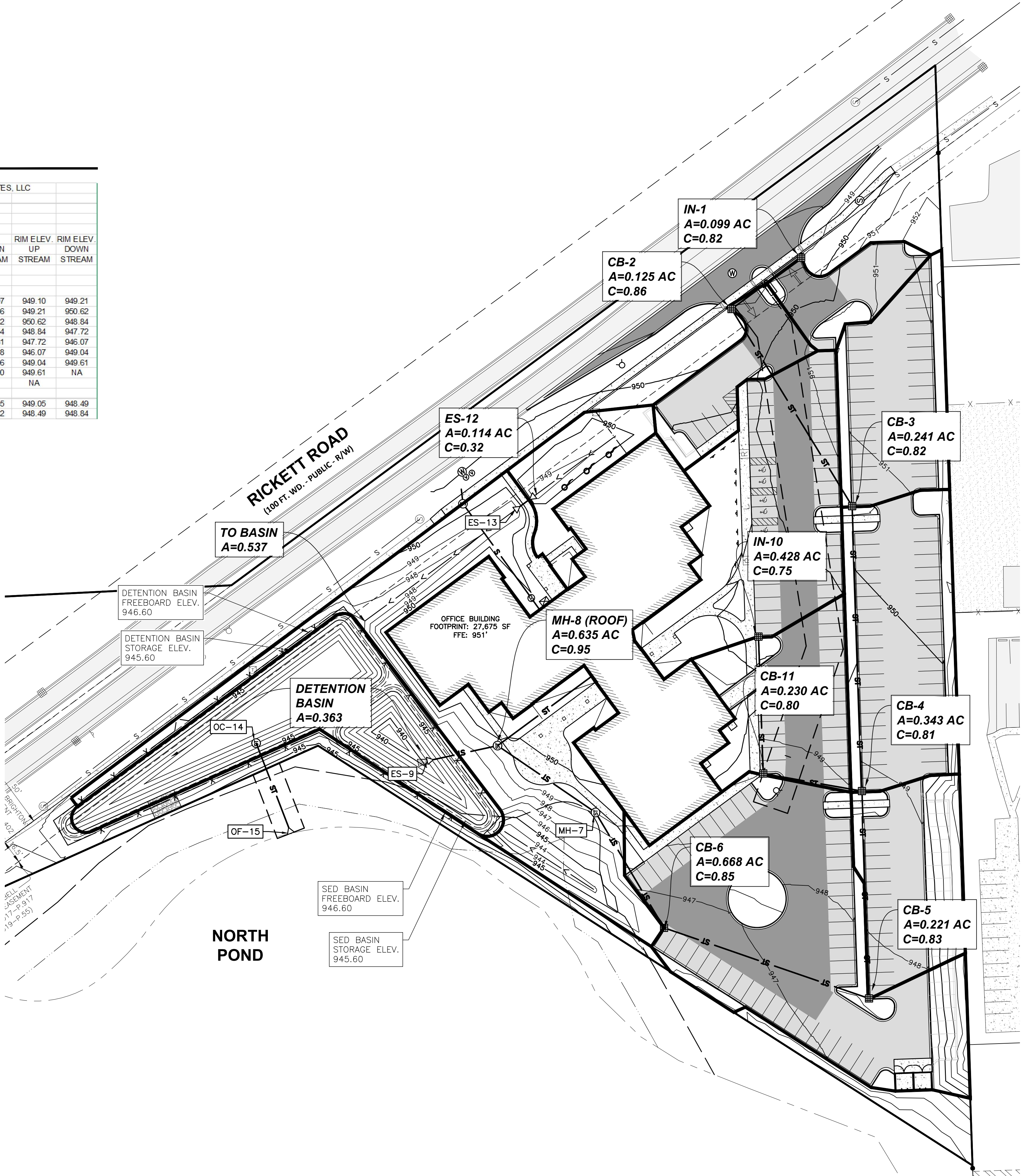


STORM SEWER PIPE CALCULATIONS

STORM SEWER DESIGN										MONUMENT ENGINEERING GROUP ASSOCIATES, LLC												
Q = C1 A					t = 20					298 VETERANS DRIVE					FOWLERVILLE, MI 48836							
Q = A x 1.486n x R <sup>2/3</sup> x S <sup>1/2</sup>					n1 = 0.01 HDPE & PVC					517-223-3512												
I = 175/(t+25)					n2 = 0.013 CONC.																	
FROM STR TO STR	AREA A	COEFF. C	A x C	AREA TOTAL At	TOTAL C x A	TIME t	INT. I	FLOW Q	PIPE CAP.	PIPE AREA	PIPE LENGTH	PIPE DIA.	PIPE SLOPE	MIN PIPE SLOPE	H.G. SLOPE	VEL. FULL	TIME FLOW	INVERT ELEV. UP STREAM	INVERT ELEV. DOWN STREAM	RIM ELEV. UP STREAM	RIM ELEV. DOWN STREAM	
	ac.			ac.		min.	in/hr	c.f.s.	c.f.s.	sq. ft.	ft.	in.	%	%	ft/sec	min.						
<b>MAIN RUN</b>	IN1-CB2	0.099	0.82	0.081	0.099	0.081	20.00	3.89	0.32	2.01	0.79	60	12	0.32	0.30	0.32	2.56	0.39	945.16	944.97	949.10	949.21
	CB2-CB3	0.125	0.86	0.108	0.224	0.189	20.39	3.86	0.73	2.01	0.79	160	12	0.32	0.30	0.32	2.56	1.04	944.97	944.46	949.21	950.62
	CB3-CB4	0.241	0.82	0.198	0.465	0.386	21.43	3.77	1.46	2.01	0.79	198	12	0.32	0.30	0.32	2.56	1.29	944.46	943.82	950.62	948.84
	CB4-CB5	0.343	0.81	0.278	1.466	1.169	22.72	3.67	4.29	4.69	1.77	144	18	0.20	0.18	0.20	2.66	0.90	943.82	943.54	948.84	947.72
	CB5-CB6	0.221	0.83	0.183	1.687	1.353	23.62	3.60	4.87	9.04	3.14	150	24	0.16	0.12	0.14	2.88	0.87	943.54	941.31	947.72	946.07
	CB6-MH7	0.668	0.85	0.568	2.355	1.920	24.49	3.54	6.79	8.46	3.14	93	24	0.14	0.12	0.14	2.69	0.58	941.31	941.18	946.07	949.04
	MH7-MH8	0.000	0.00	0.000	2.355	1.920	25.07	3.50	6.71	8.46	3.14	82	24	0.14	0.12	0.14	2.69	0.51	941.18	941.06	949.04	949.61
	MH8-ES9	0.635	0.95	0.603	2.990	2.524	25.58	3.46	8.73	14.20	4.91	50	30	0.12	0.09	0.12	2.89	0.29	941.06	941.00	N/A	N/A
<b>LATERAL</b>	IN10-CB11	0.428	0.75	0.321	0.428	0.321	20.00	3.89	1.25	2.01	0.79	95	12	0.32	0.30	0.32	2.56	0.62	944.35	944.05	949.05	948.49
	CB11-CB4	0.230	0.80	0.184	0.658	0.505	20.62	3.84	1.94	2.01	0.79	70	12	0.32	0.30	0.32	2.56	0.45	944.05	943.82	948.49	948.84

DRAINAGE AREA SPECIFIC RUNOFF COEFFICIENT CALCULATIONS

IN-1 COMPOUND RUNOFF COEFFICIENT				CB-4 COMPOUND RUNOFF COEFFICIENT				MH-8 COMPOUND RUNOFF COEFFICIENT			
OVERALL	AREA (SF)	AREA (AC)	C	OVERALL	AREA (SF)	AREA (AC)	C	OVERALL	AREA (SF)	AREA (AC)	C
CONTRIBUTING	4,329	0.10		CONTRIBUTING	14,945	0.34		CONTRIBUTING	27,675	0.64	
FLOWING OFF	0	0.00		FLOWING OFF	0	0.00		FLOWING OFF	0	0.00	
			A x C				A x C				A x C
EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0
EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0
PR BUILDING	0	0.95	0	PR BUILDING	0	0.95	0	PR BUILDING	27,675	0.95	26,291
PR PAVEMENT	3,459	0.95	3,286	PR PAVEMENT	11,611	0.95	11,031	PR PAVEMENT	0	0.95	0
NATURAL AREAS	870	0.30	261	NATURAL AREAS	3,334	0.30	1,000	NATURAL AREAS	0	0.30	0
TOTALS	4,329		3,547	TOTALS	14,945		12,031	TOTALS	27,675		26,291
COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{3547.27}{4329} = 0.82$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{12030.8}{14945.1} = 0.81$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{26290.9}{27674.6} = 0.95$
CB-2 COMPOUND RUNOFF COEFFICIENT				CB-5 COMPOUND RUNOFF COEFFICIENT				IN-9 COMPOUND RUNOFF COEFFICIENT			
OVERALL	5,428	0.12		OVERALL	9,614	0.22		OVERALL	18,649	0.43	
CONTRIBUTING	5,428	0.12		CONTRIBUTING	9,614	0.22		CONTRIBUTING	18,649	0.43	
FLOWING OFF	0	0.00		FLOWING OFF	0	0.00		FLOWING OFF	0	0.00	
			A x C				A x C				A x C
EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0
EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0
PR BUILDING	0	0.95	0	PR BUILDING	0	0.95	0	PR BUILDING	0	0.95	0
PR PAVEMENT	4,695	0.95	4,461	PR PAVEMENT	7,801	0.95	7,411	PR PAVEMENT	13,007	0.95	12,357
NATURAL AREAS	733	0.30	220	NATURAL AREAS	1,813	0.30	544	NATURAL AREAS	5,641	0.30	1,692
TOTALS	5,428		4,680	TOTALS	9,614		7,955	TOTALS	18,649		14,049
COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{4680.43}{5428.37} = 0.86$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{7954.69}{9613.78} = 0.83$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{14049.4}{18648.5} = 0.75$
CB-3 COMPOUND RUNOFF COEFFICIENT				CB-6 COMPOUND RUNOFF COEFFICIENT				CB-10 COMPOUND RUNOFF COEFFICIENT			
OVERALL	10,519	0.24		OVERALL	29,120	0.67		OVERALL	10,000	0.23	
CONTRIBUTING	10,519	0.24		CONTRIBUTING	29,120	0.67		CONTRIBUTING	10,000	0.23	
FLOWING OFF	0	0.00		FLOWING OFF	0	0.00		FLOWING OFF	0	0.00	
			A x C				A x C				A x C
EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0	EX BUILDING	0	0.95	0
EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0	EX PAVEMENT	0	0.95	0
PR BUILDING	0	0.95	0	PR BUILDING	0	0.95	0	PR BUILDING	0	0.95	0
PR PAVEMENT	8,458	0.95	8,035	PR PAVEMENT	24,525	0.95	23,299	PR PAVEMENT	7,700	0.95	7,315
NATURAL AREAS	2,061	0.30	618	NATURAL AREAS	4,595	0.30	1,378	NATURAL AREAS	2,299	0.30	690
TOTALS	10,519		8,653	TOTALS	29,120		24,677	TOTALS	10,000		8,005
COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{8653.27}{10518.9} = 0.82$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{24677.4}{29119.9} = 0.85$	COMPOUND C = $\frac{\text{TOTAL A} \times \text{C}}{\text{CONTRIBUTING AREA}}$			$\frac{8004.98}{9999.6} = 0.80$



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CLIENT :

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architects, llc, pc

10465 CITATION DR.  
BRIGHTON, MI 48116  
(810) 227-5668

**DRAINAGE AREA PLAN**

NORTH POND OFFICE CENTER  
1112 RICKETT ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

DATE	DESCRIPTION
9/8/2020	PRELIMINARY SITE PLAN SUBMITTAL
9/25/2020	FINAL SITE PLAN SUBMITTAL
3/19/2021	REV. FINAL SITE PLAN PER COMMENTS
4/14/2021	REV. FINAL SITE PLAN PER COMMENTS
4/27/2021	REV. FINAL SITE PLAN PER COMMENTS

ORIGINAL ISSUE DATE:  
8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 40'

0 1/2" 1"

FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

**C-9.0**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

NORTH POND OFFICE CENTER  
STORM WATER  
CALCULATIONS

STORM WATER CALCULATIONS

**SITE INFO**

OVERALL AREA	=	4.01 AC
CONTRIBUTING AREA (A)	=	4.01 AC
ALLOWABLE DISCHARGE RATE (Qa)	=	0.20 CFS/AC
COMPOUND RUNOFF COEFFICIENT (C)	=	0.67

**COMPOUND RUNOFF COEFFICIENT**

	AREA (SF)	AREA (AC)
OVERALL	174,502	4.01
CONTRIBUTING	174,502	4.01
FLOWING OFF	0	0.00

	C	A x C
EX BUILDING	0	0.90
EX PAVEMENT	0	0.90
PR BUILDING	27,675	0.90
PR PAVEMENT	88,728	0.90
GRASS	58,099	0.20
<b>TOTALS</b>	<b>174,502</b>	<b>116,383</b>

$$\text{COMPOUND } C = \frac{\text{TOTAL } A \times C}{\text{CONTRIBUTING AREA}} = \frac{116,383}{174,502} = 0.67$$

**LIVINGSTON COUNTY DETENTION METHOD**

Tributary Area (A) =	4.01					
Compound Runoff Coefficient (C) =	0.67					
Design Constant (K1) = A X C =	2.672					
Allowable Outflow Rate (Qo) = .20 cfs per acre =	0.801					
1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (100-yr Storm) (In/Hr)	Col. #2 x Col. #3 Inches	Inflow Volume = Col. #4xK1 (Cu. Ft.)	Outflow Volume Col. #2 x Qo (Cu. Ft.)	Storage Volume Col. 5 - Col. 6 (Cu. Ft.)
5	300	9.17	2750	7347.39	240.36	7107.03
10	600	7.86	4714	12595.52	480.72	12114.80
15	900	6.88	6188	16531.62	721.08	15810.54
20	1200	6.11	7333	19593.03	961.45	18631.59
30	1800	5.00	9000	24045.99	1442.17	22603.83
60	3600	3.24	11647	31118.35	2884.34	28234.01
90	5400	2.39	12913	34500.77	4326.50	30174.27
120	7200	1.90	13655	36483.58	5768.67	30715
180	10800	1.34	14487.80	38708.19	8653.01	30055.18

**PROPOSED SEDIMENTATION BASIN VOLUME**

ELEVATION	AREA (FT)	AVG AREA (FT)	INC VOLUME (CF)	VOLUME (CF)
939	104			
		225		
940	347		225	225
		539		
941	731		539	764
		994		
942	1,258		994	1,759
		1,592		
943	1,926		1,592	3,351
		2,310		
944	2,693		2,310	5,660
		3,106		
945	3,518		3,106	8,766
<b>945.60</b>		<b>3,958</b>		<b>11,141</b>
946	4,398		3,958	12,724

**PROPOSED DETENTION BASIN VOLUME**

ELEVATION	AREA (FT)	AVG AREA (FT)	INC VOLUME (CF)	VOLUME (CF)
943	5,432			
		6,198		
944	6,964		6,198	6,198
		7,758		
945	8,552		7,758	13,955
<b>945.60</b>		<b>9,375</b>		<b>19,580</b>
946	10,197		9,375	23,330

**REQUIRED VOLUME SUMMARY**

FIRST FLUSH VOLUME	$V_{fff} = 1815 \times A \times C$	=	4,849 CF
BANK FULL FLOOD VOLUME	$V_{bff} = 8160 \times A \times C$	=	21,802 CF
100-YEAR VOLUME	$V_{100}$	=	30,715 CF
SEDIMENTATION VOLUME	$V_{sed} = 5\% \times V_{100}$	=	1,536 CF

**REQUIRED VOLUME SUMMARY ADJUSTED FOR SEDIMENTATION VOLUME**

PROVIDED SEDIMENTATION VOLUME	$V_{psed}$	=	11,141 CF
ADJUSTED BANK FULL FLOOD VOLUME	$V_{abff} = V_{bff} - V_{psed}$	=	10,661 CF
ADJUSTED 100-YEAR VOLUME	$V_{a100} = V_{100} - V_{psed}$	=	19,574 CF

**STORAGE ELEVATIONS**

FIRST FLUSH	=	943.00	V1	0
ELEVATION 1	=	944.00	V2	6,198
ELEVATION 2	=		Vff	4,849
FF ELEVATION (Zff)	=	<b>943.78</b>		
SEDIMENTATION	=	942.00	V1	1,759
ELEVATION 1	=	943.00	V2	3,351
ELEVATION 2	=		Vsed	1,536
SED ELEVATION (Zsed)	=	<b>941.86</b>		
ADJUSTED BANKFULL	=	944.00	V1	6,198
ELEVATION 1	=	945.00	V2	13,955
ELEVATION 2	=		Vabff	10,661
BF ELEVATION (Zabf)	=	<b>944.58</b>		
100-YEAR	=	945.00	V1	13,955
ELEVATION 1	=	946.00	V2	23,330
ELEVATION 2	=		Va100	19,574
100 ELEVATION (Za100)	=	<b>945.60</b>		
1' FREEBOARD (Zfb)	=	<b>946.60</b>		

**PROVIDED VOLUME SUMMARY**

PROVIDED SEDIMENTATION BASIN VOLUME	=	11,141 CF
PROVIDED DETENTION BASIN VOLUME	=	19,580 CF
<b>TOTAL PROVIDED STORM WATER STORAGE</b>	=	<b>30,721 CF</b>

OUTLET CONTROL STRUCTURE CALCULATIONS

**OUTLET CONTROL STRUCTURE ORIFICE CALCULATIONS**

AVERAGE ALLOWABLE RELEASE RATE FOR RUNOFF IS 0.5" OVER THE SITE IN 24 HOURS

$$Q_{ff} = \frac{V_{fff}}{T_{24}} = \frac{V_{fff}}{24 \times 3600} = 0.056 \text{ CFS}$$

OPENINGS IN BOTTOM OF BASIN

$$Z_{bttm} = 943.00$$

$$H_{avg} = \frac{2}{3} \times (Z_{ff} - Z_{bttm}) = 0.522 \text{ FT}$$

$$A_{ff} = \frac{Q_{ff}}{0.62\sqrt{2 \times g \times H_{avg}}} = 0.016 \text{ SF}$$

1" DIA HOLE HAS AN AREA OF 1 0.083 = 0.0055 SF

NUMBER OF HOLES =  $\frac{A_{ff}}{\text{NOMINAL HOLE AREA}} = 2.864 \text{ EA}$

USE	3	1" DIA.	HOLES AT 943.00
-----	---	---------	-----------------

$$Q_{ff} = \frac{A_{ff}}{0.62\sqrt{2 \times g \times h}} = 0.0035 \text{ CFS}$$

$$T_{ff} = \frac{V_{ff}}{Q_{ff}} = \frac{V_{ff}}{Q_{ff} \times 3600} = 24.00 \text{ HRS}$$

DETENTION TIME OF 44 HOURS = 44 HRS

$$V_{rem} = V_{bf} - V_{ff} = 16,952 \text{ CF}$$

$$T_{rem} = T_{tot} - T_{ff} = 20.00 \text{ HRS}$$

VOLUME THROUGH ONE (1) 0.75" DIA HOLE IN 20 HOURS = 20.00 HRS

$$H_{avg} = \frac{2}{3} (Z_{bf} - Z_{ff}) + (Z_{ff} - Z_{bttm}) = 1.311 \text{ FT}$$

$$Q_1 = 0.62 \times A_{ff} \sqrt{2 \times g \times H_{avg}} = 0.089 \text{ CFS}$$

$$V_1 = T_{rem} \times Q_1 = 6,407 \text{ CF}$$

$$V_2 = V_{rem} - V_1 = 10,546 \text{ CF}$$

$$Q_2 = \frac{V_2}{T_{rem}} = 0.146 \text{ CFS}$$

$$H_{avg} = \frac{2}{3} (Z_{bf} - Z_{ff}) = 0.529 \text{ FT}$$

$$A_2 = \frac{Q_2}{0.62\sqrt{2 \times g \times H_{avg}}} = 0.040 \text{ SF}$$

1" DIA HOLE HAS AN AREA OF 1 0.083 = 0.005 SF

NUMBER OF HOLES =  $\frac{A_2}{\text{NOMINAL HOLE AREA}} = 7.427 \text{ EA}$

USE	8	1" DIA.	HOLES AT 943.78
-----	---	---------	-----------------

100-YEAR FLOOD Qa (ALLOWABLE) = 0.200 CFS

$$Q_{ff} + Q_{bf} = 0.080 \text{ CFS}$$

$$Q_{100} = Q_a - (Q_{ff} + Q_{bf}) = 0.120 \text{ CFS}$$

$$A_{100} = \frac{Q_{100}}{0.62\sqrt{2 \times g \times (Z_{100} - Z_{bf})}} = 0.024 \text{ SF}$$

1" DIA HOLE HAS AN AREA OF 1 0.083 = 0.005 SF

NUMBER OF HOLES =  $\frac{A_{100}}{\text{NOMINAL HOLE AREA}} = 4.36 \text{ EA}$

USE	5	1" DIA.	HOLES AT 944.58
-----	---	---------	-----------------

**SUMMARY**

BASIN BOTTOM ELEVATION	3 1" DIA.	HOLES AT	943.00
FIRST FLUSH VOLUME ELEVATION	8 1" DIA.	HOLES AT	943.78
BANKFULL VOLUME ELEVATION	5 1" DIA.	HOLES AT	944.58

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**STORM WATER CALCULATIONS**

NORTH POND OFFICE CENTER  
1112 RICKET ROAD  
PART OF SE 1/4, SEC 31, T2N-R6E  
CITY OF BRIGHTON, LIVINGSTON COUNTY, MI

DATE	DESCRIPTION
9/8/2020	PRELIMINARY SITE PLAN SUBMITTAL
9/25/2020	FINAL SITE PLAN SUBMITTAL
3/19/2021	REV. FINAL SITE PLAN PER COMMENTS
4/14/2021	REV. FINAL SITE PLAN PER COMMENTS
4/27/2021	REV. FINAL SITE PLAN PER COMMENTS

ORIGINAL ISSUE DATE:  
8/3/2020

PROJECT NO: 20-088

SCALE: 1" = 40'

0 1/2" 1"

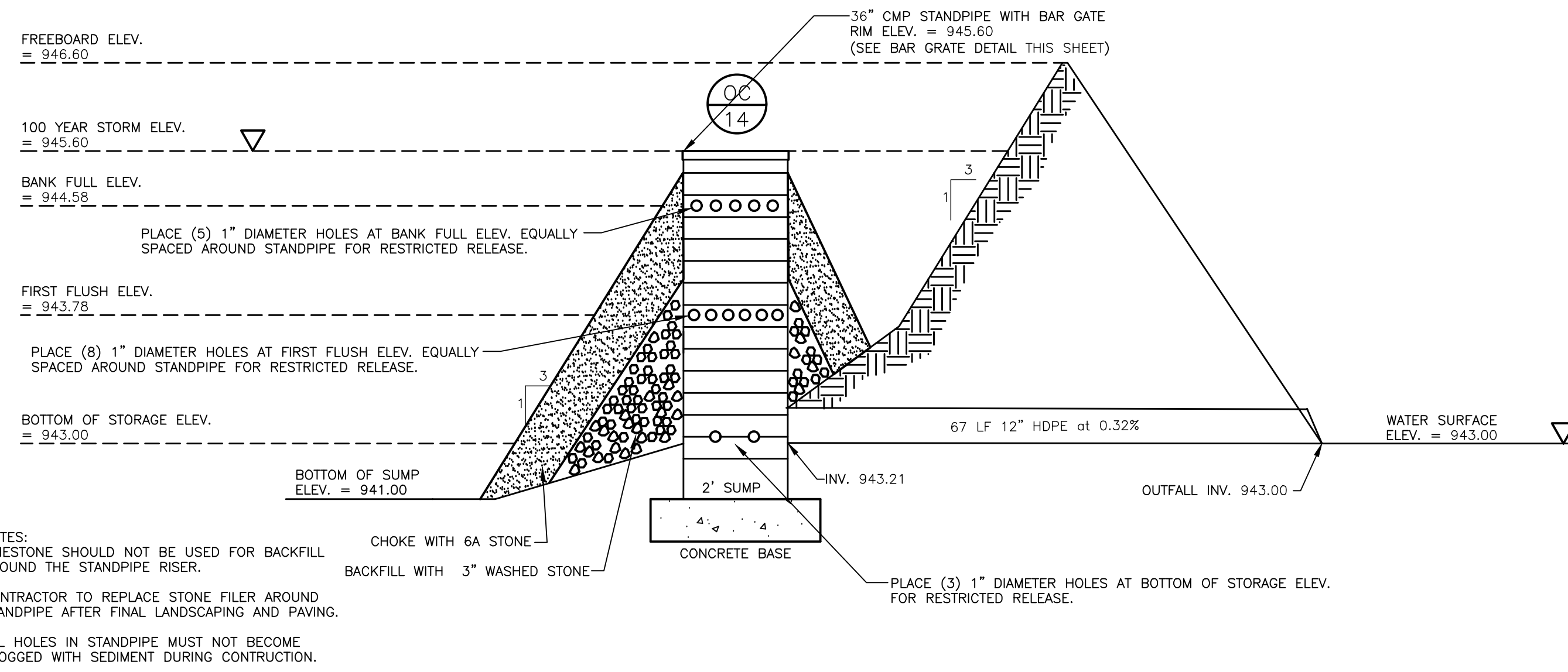
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**C-9.1**

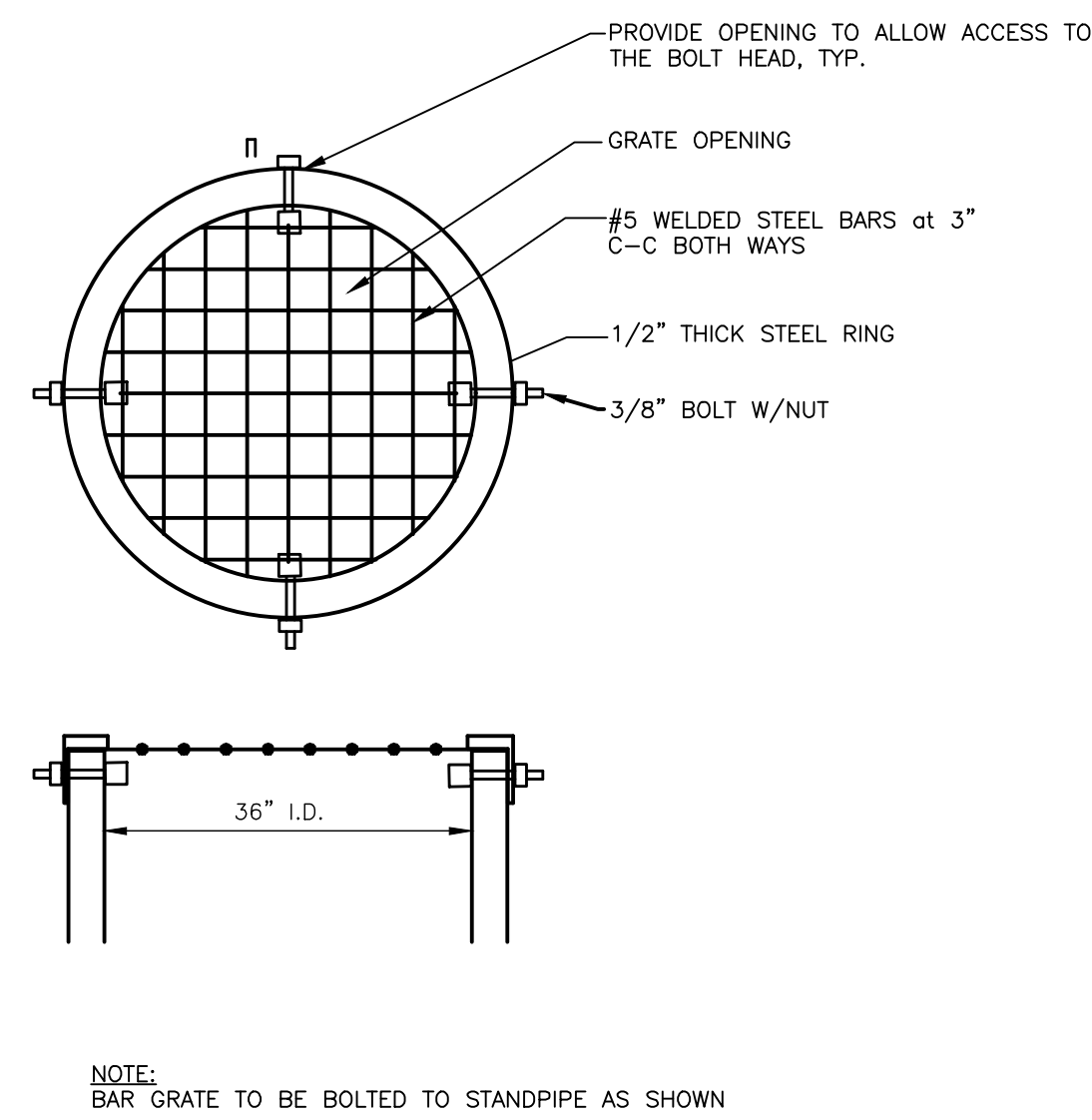
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# NORTH POND OFFICE CENTER DETENTION BASIN DETAILS

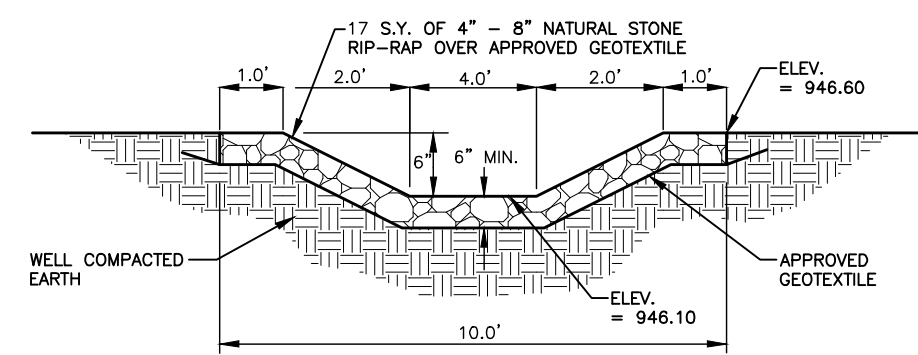
## DETENTION BASIN OUTLET CONTROL STRUCTURE DETAIL



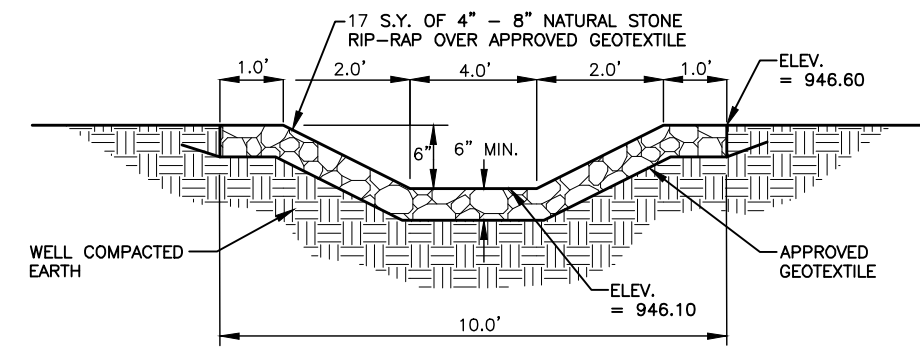
## BAR GRATE DETAIL



## OVERFLOW SPILLWAY DETAIL - DETENTION BASIN



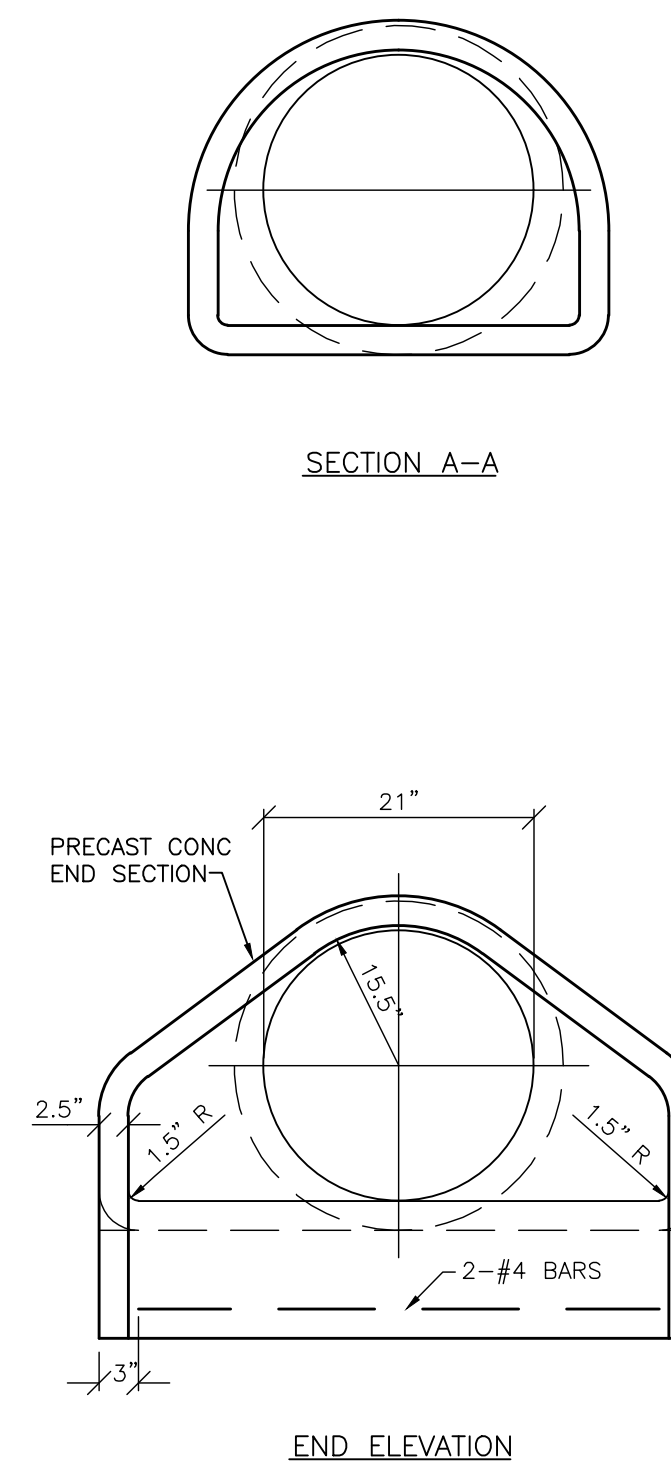
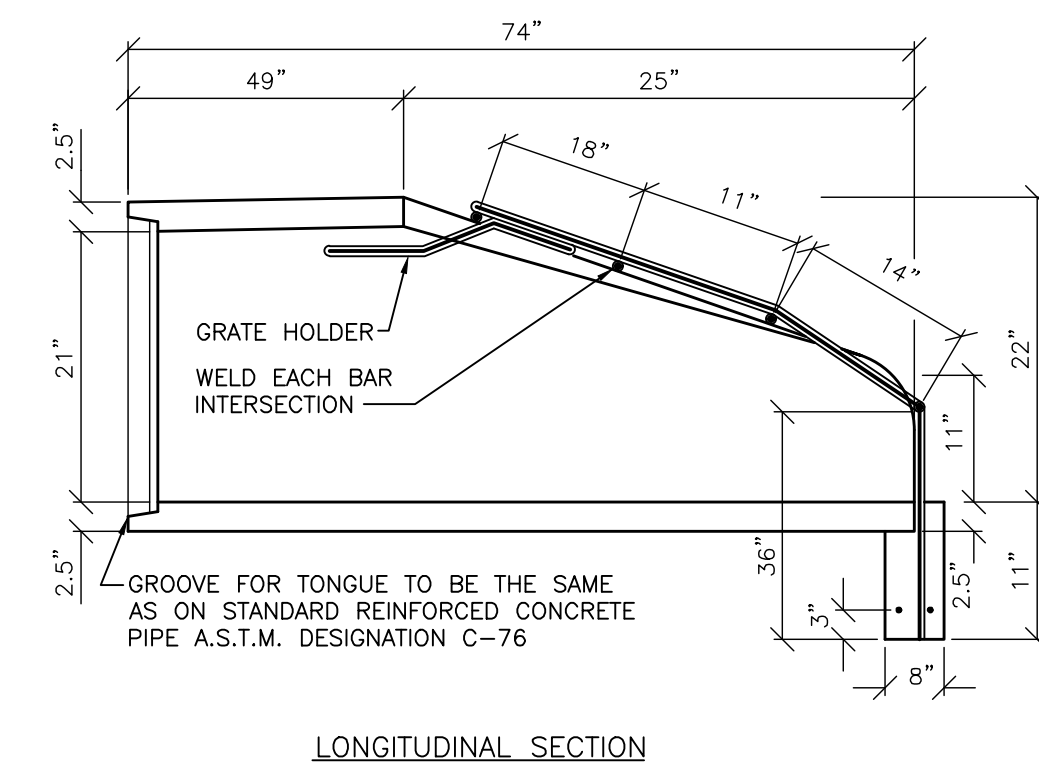
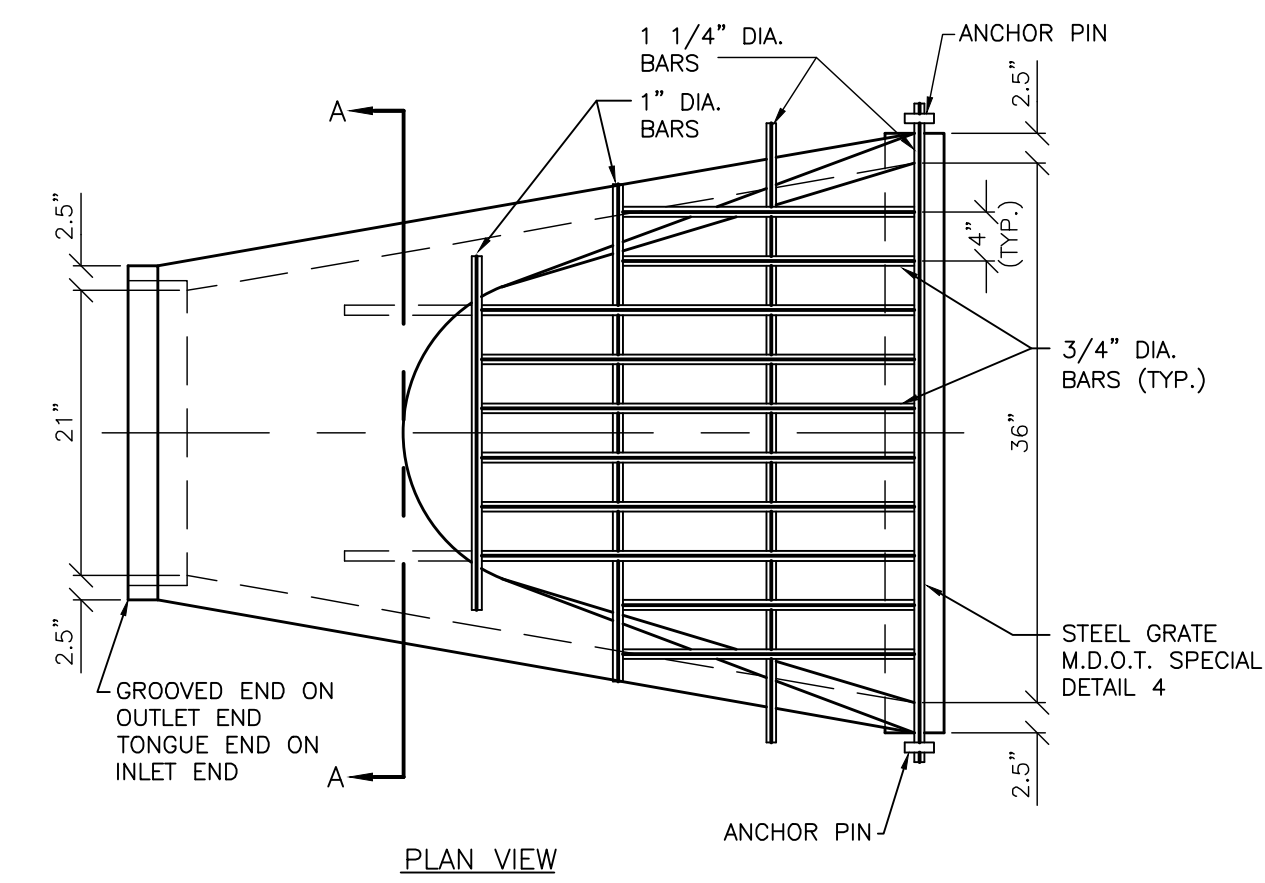
## OVERFLOW SPILLWAY DETAIL - SEDIMENTATION BASIN



## STORM WATER MAINTENANCE SCHEDULE

MAINTENANCE ACTIVITIES	SYSTEM COMPONENTS										FREQUENCY
	Catch Basins, Inlets & Storm Sewers	Channels & Vegetated Swales	Inlet to Pretreatment Systems & Detention/Retention Systems	Forebays	Open Detention Basins & Retention Basins	Flow Restrictors, Overflow Structures & Outlet Pipes	Emergency Spillways	Riprap	Buffer Strip	Pavement Area	
<b>Monitoring / Inspection</b>											
Inspect for Sediment Accumulation	X	X	X	X	X	X	X	X	X	X	Annually
Inspect for Floatables, Dead Vegetation & Debris	X	X	X	X	X	X	X	X	X	X	Annually & After Major Events
Inspect for Erosion and Integrity of Banks & Berms	X	X	X	X	X	X	X	X	X	X	Annually & After Major Events
Inspect Components During Wet Weather & Compare to As-Built Plans	X	X	X	X	X	X	X	X	X	X	Annually
Monitor Plantings/Vegetation	X	X	X	X	X	X	X	X	X	X	2 Times per Year
Ensure Maintenance Access Remains Open/Clear	X	X	X	X	X	X	X	X	X	X	Annually
<b>Preventive Maintenance</b>											
Mowing		X			X	X	X	X	X	X	Up to 2 Times/Year, select areas only
Remove Accumulated Sediments	X	X			X	X	X				As Needed, select areas only
Remove Floatables, Invasive & Dead Vegetation & Debris	X	X	X	X	X	X	X				As needed
Replace or Wash/Reuse Stone Riser Filters						X	X	X			Every 3 Years; more frequently as needed
Remove Invasive Plant Species		X			X	X			X		Annually
<b>Remedial Action</b>											
Repair/Stabilize Areas of Erosion		X	X	X	X	X	X	X	X	X	As Needed
Replace Dead Plantings, Bushes & Trees		X	X	X	X	X			X		As Needed
Reseed Bare Areas		X	X	X	X	X	X		X		As Needed
Structural Repairs	X	X			X	X	X	X	X	X	As Needed
Make Adjustments/Repairs to Ensure Proper Functioning	X	X	X	X	X	X	X	X	X	X	As Needed

## OUTFALL DETAIL



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**DETENTION BASIN DETAILS**

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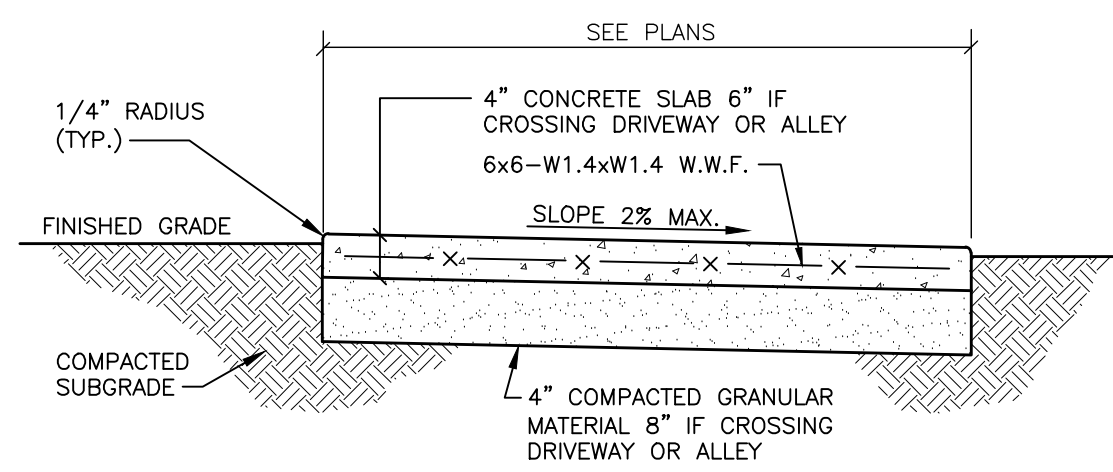
SCALE: 1" = 40'

FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

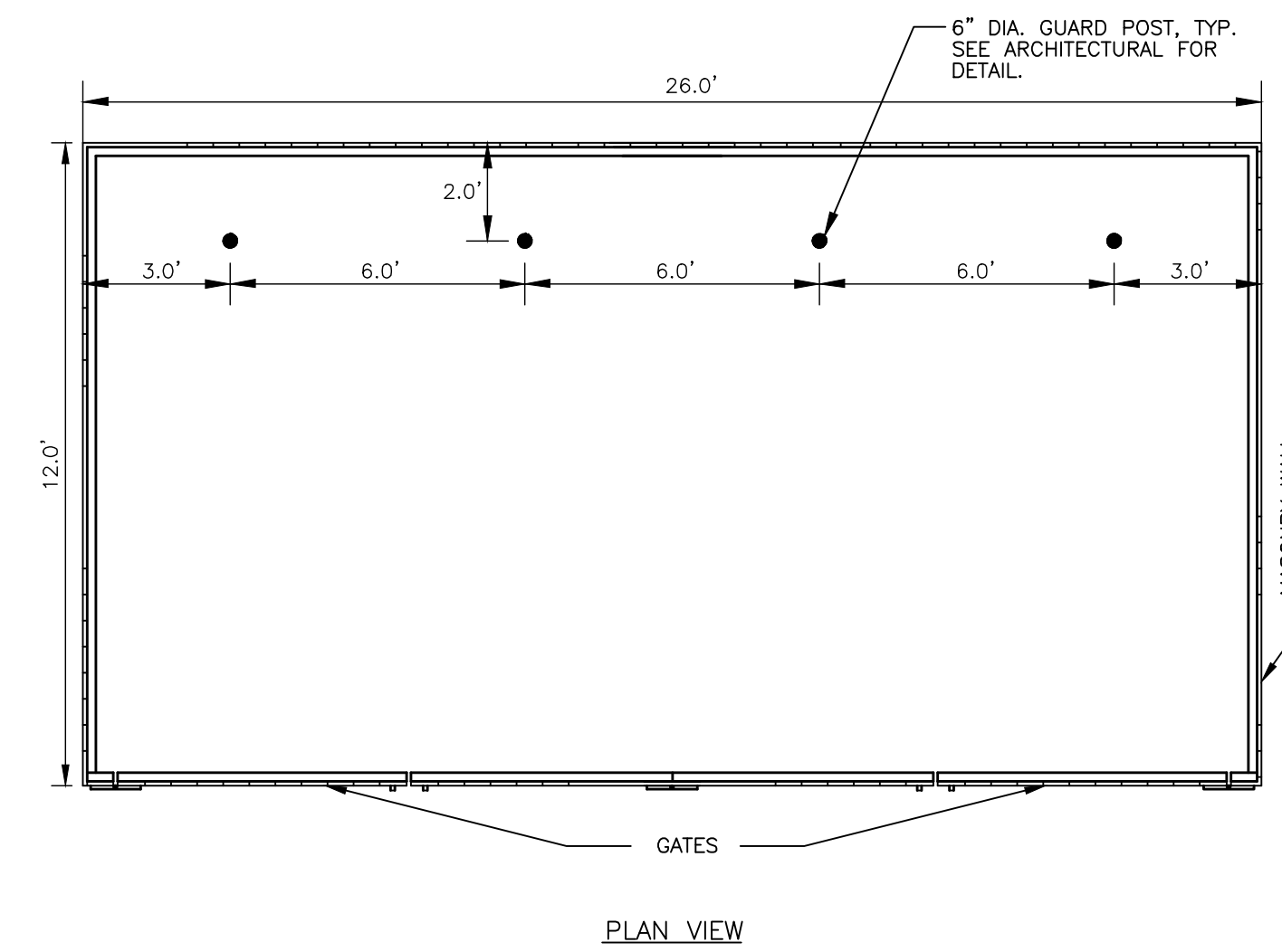
**C-9.2**

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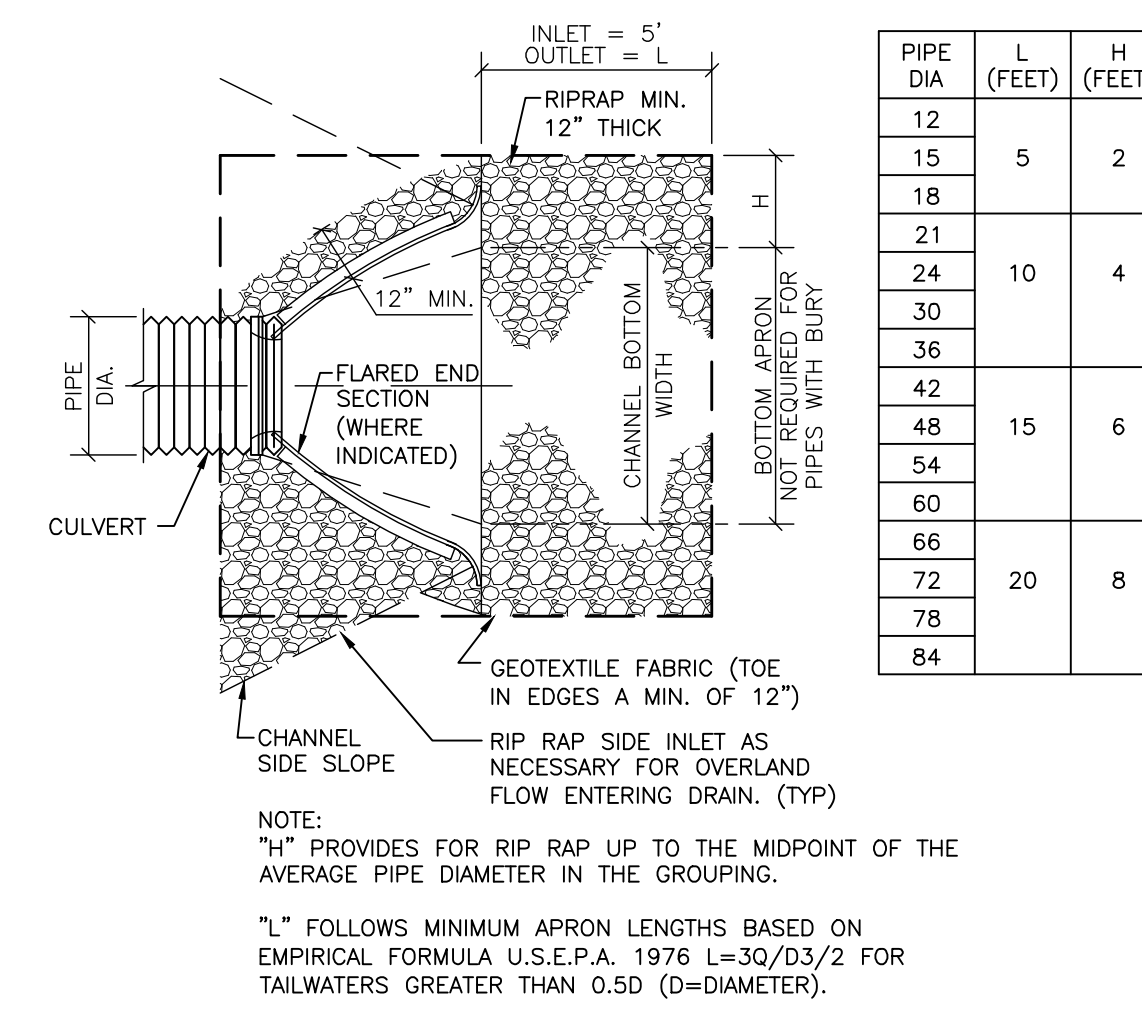
**SIDEWALK DETAIL - CONCRETE**



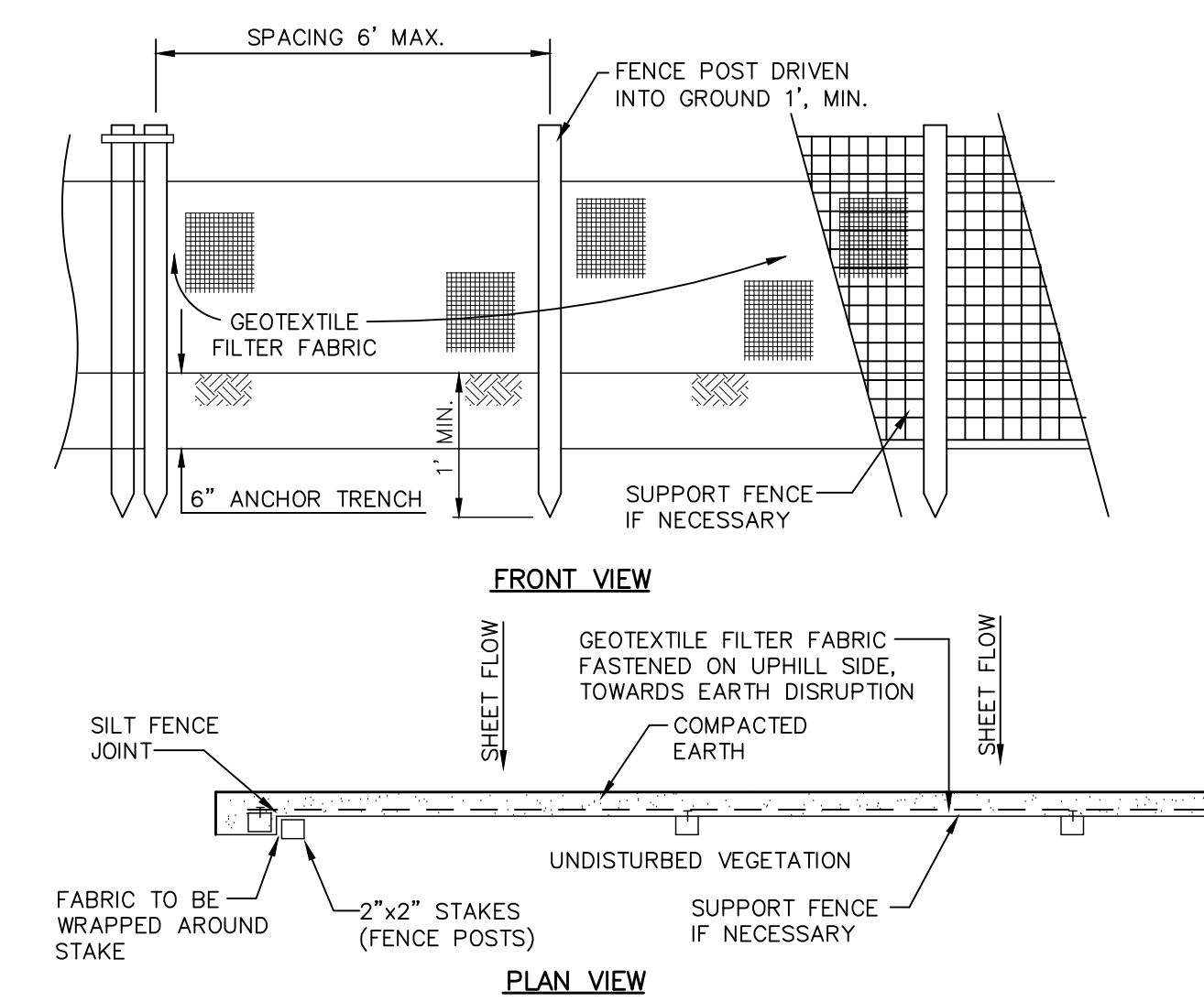
**REFUSE ENCLOSURE DETAIL - MASONRY WALL WITH BRICK FACE - DOUBLE**



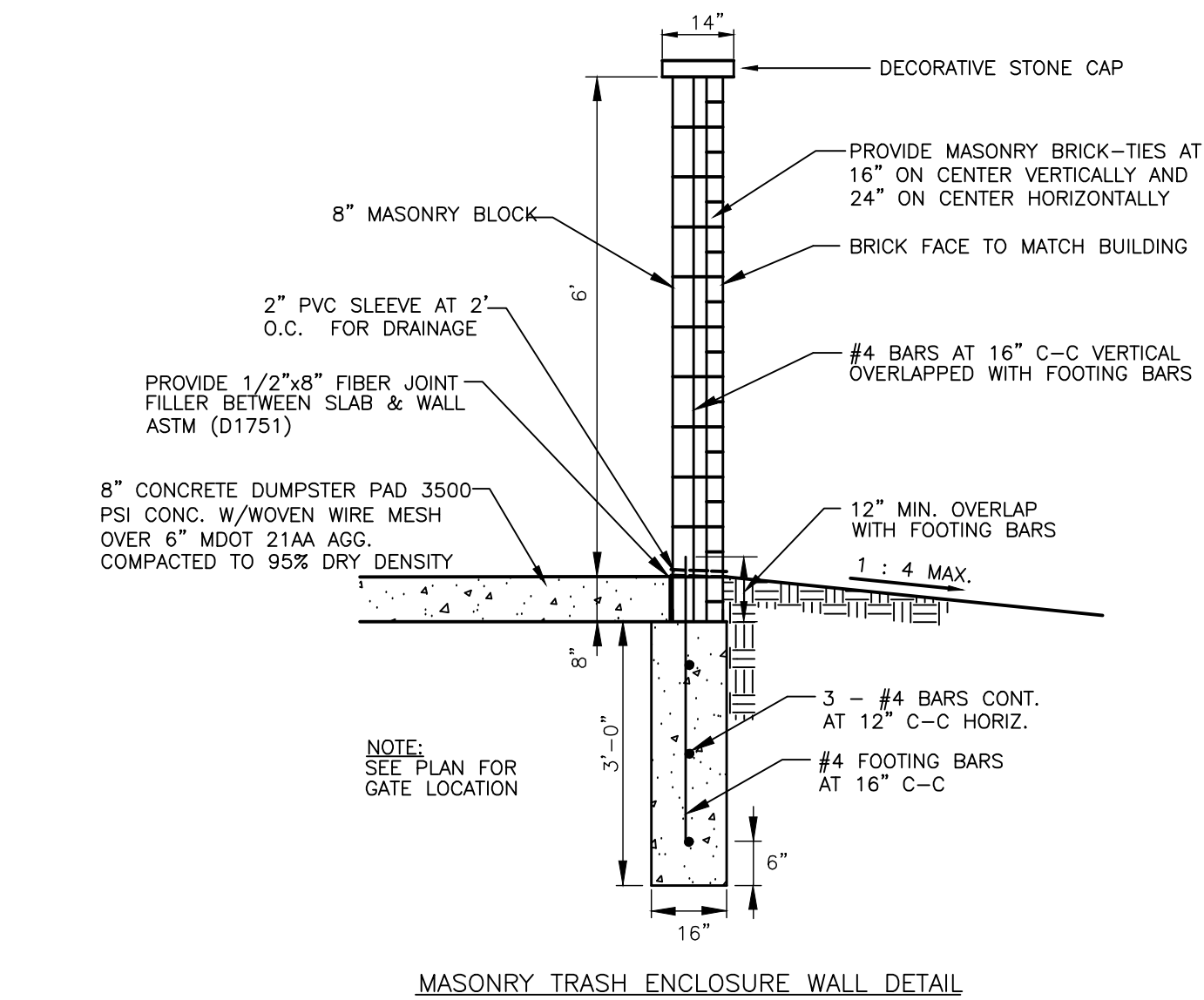
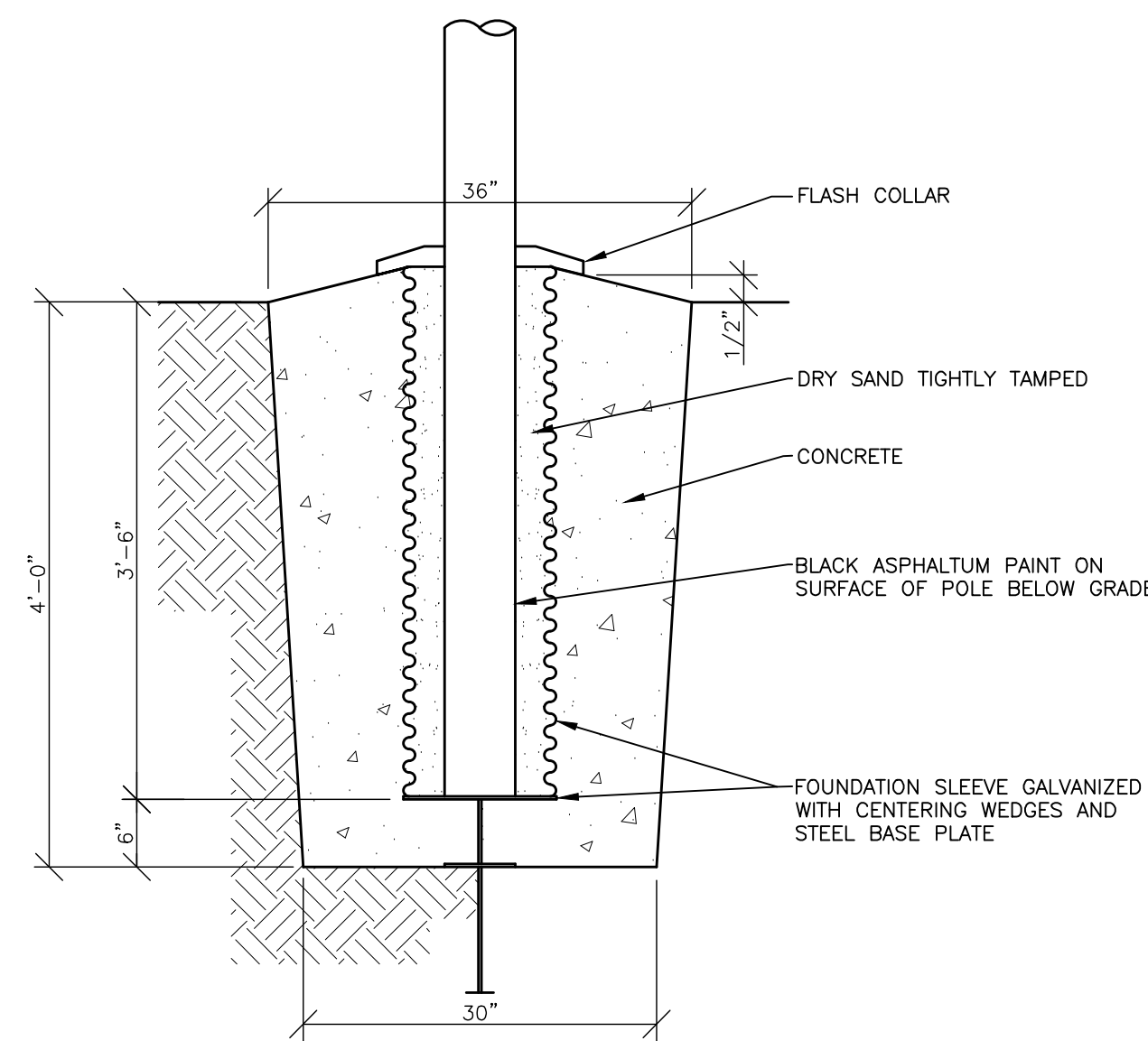
**RIPRAP DETAIL - END TREATMENT**



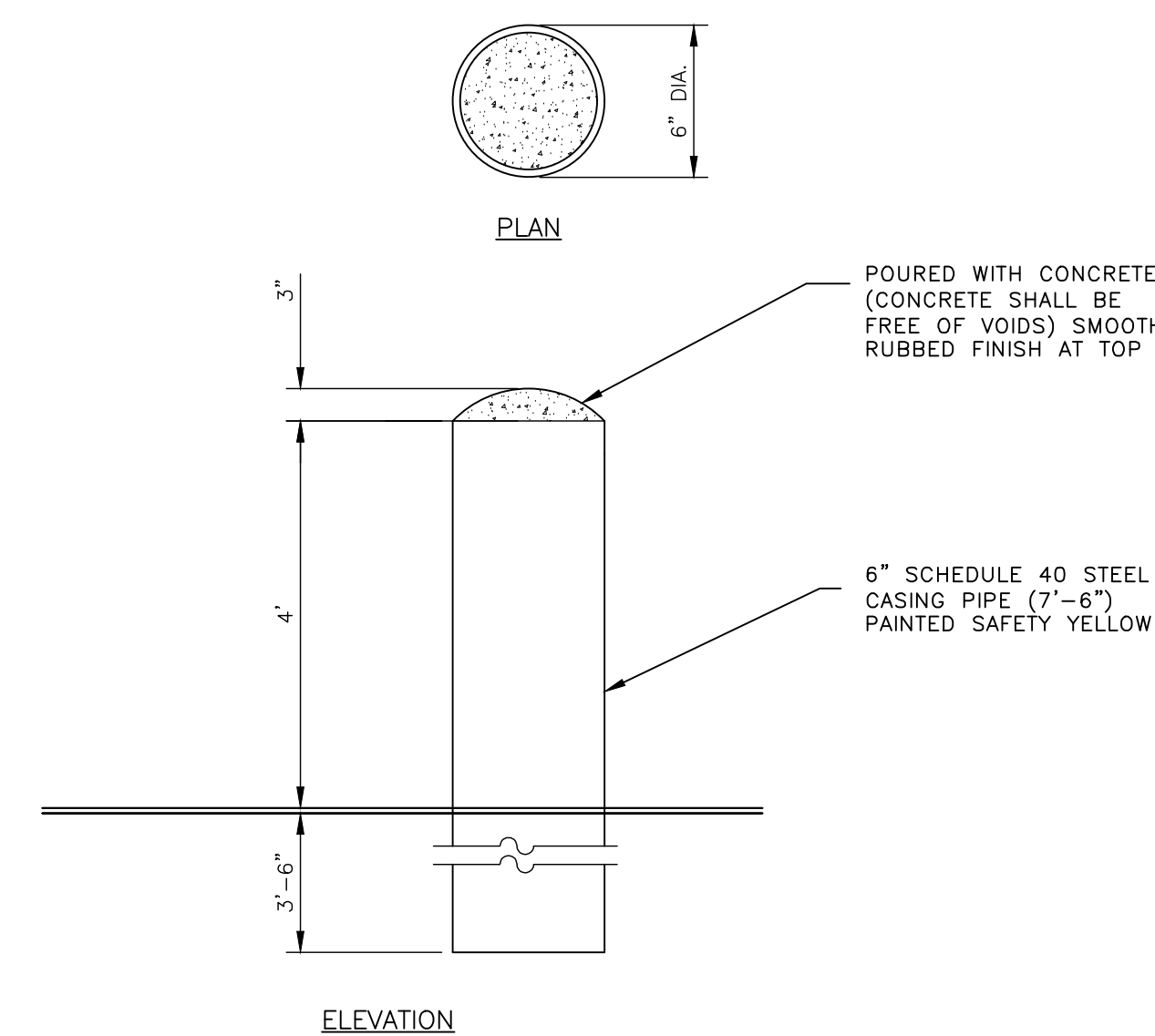
**SILT FENCE DETAIL - FRONT & PLAN VIEW**



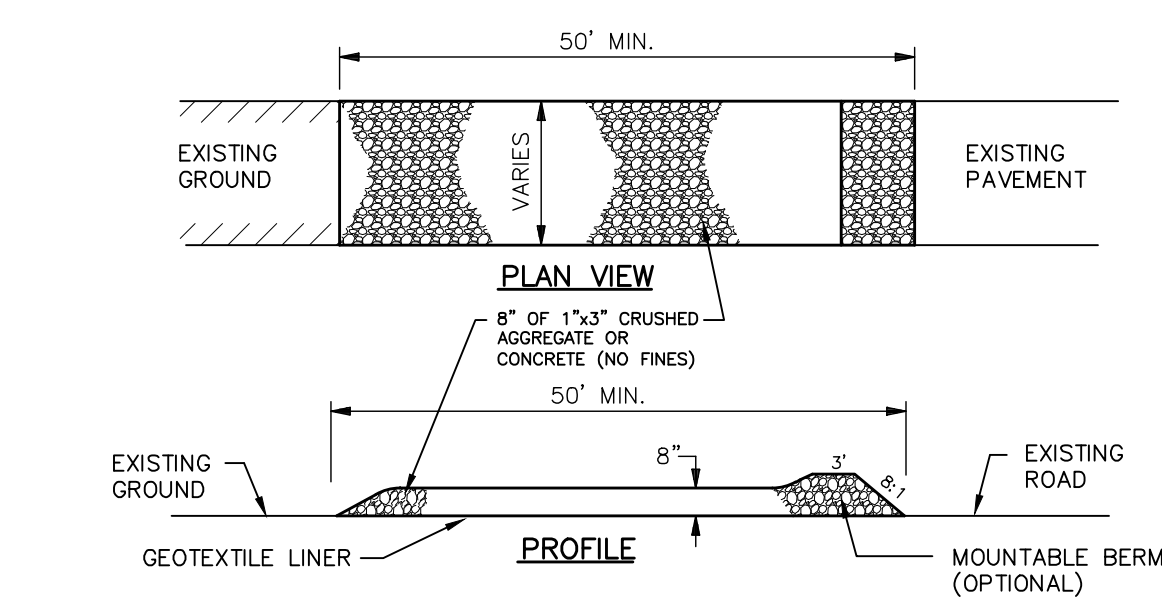
**FLAG POLE BASE DETAIL**



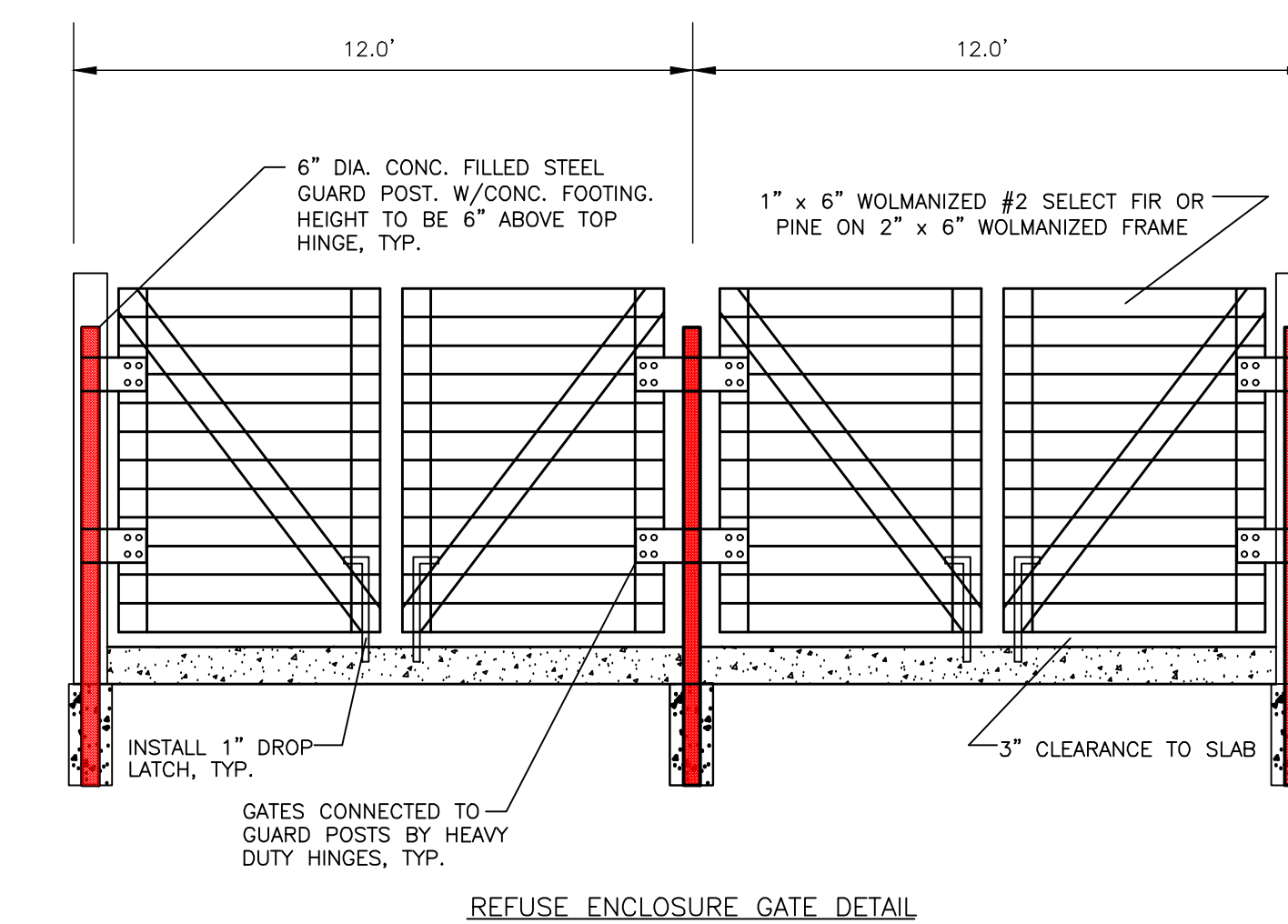
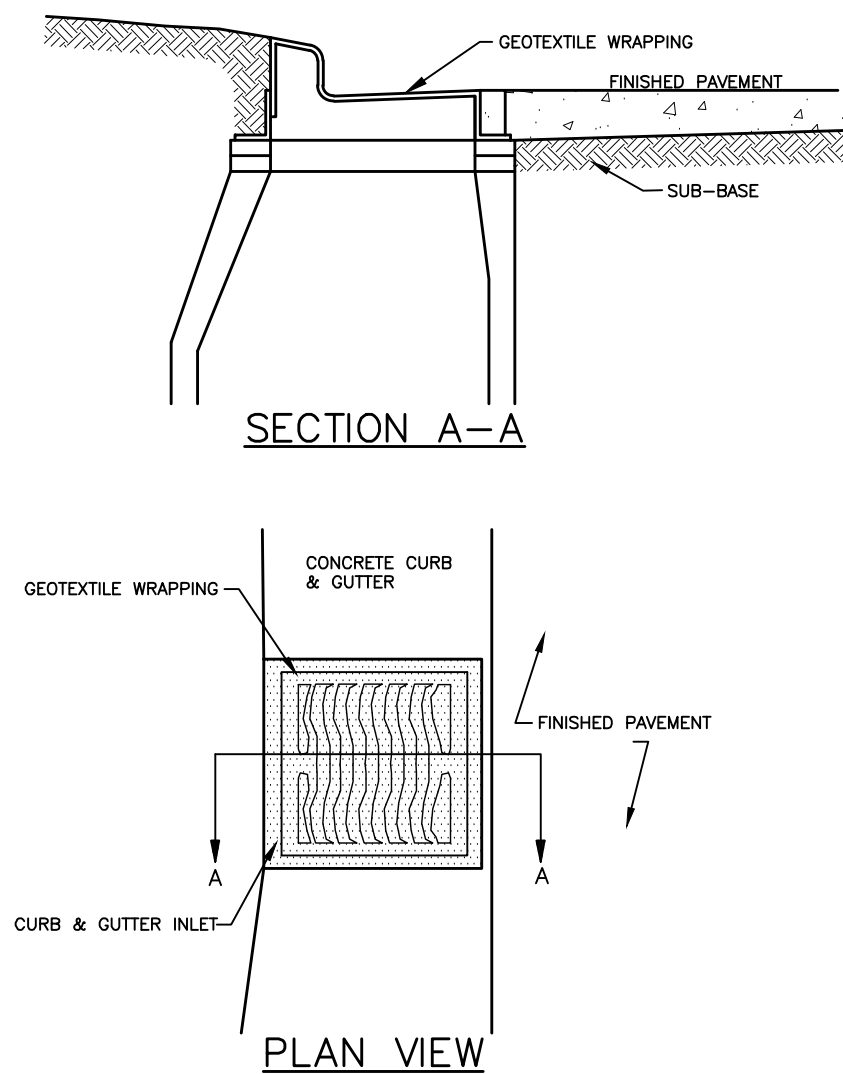
**BOLLARD DETAIL - 6\"/>**



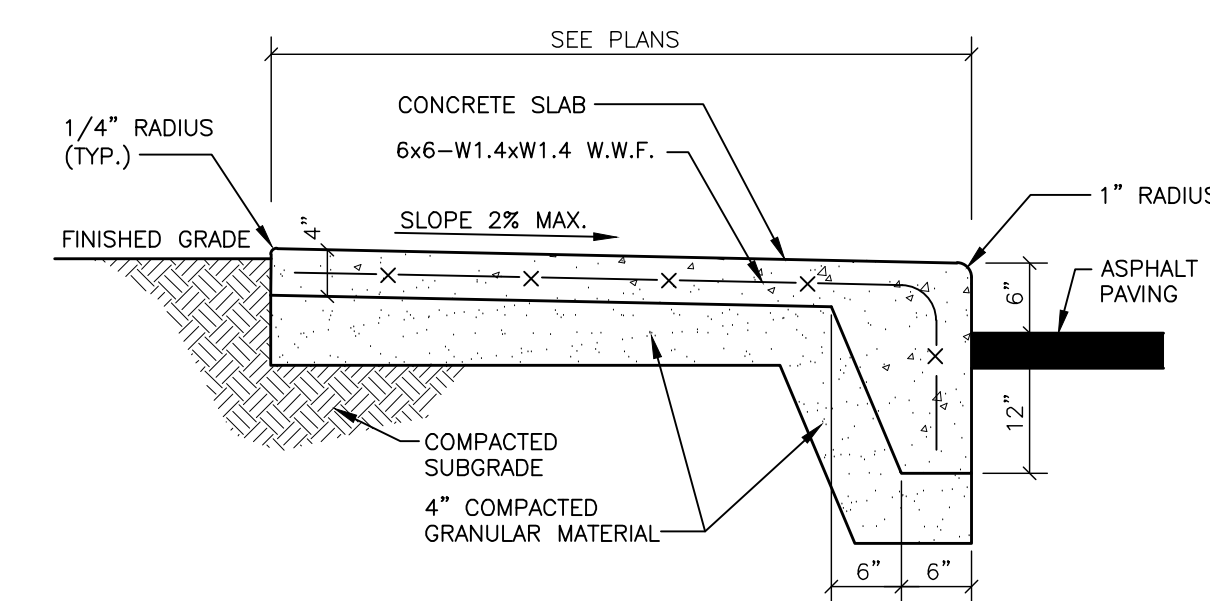
**TRACKING MAT DETAIL**



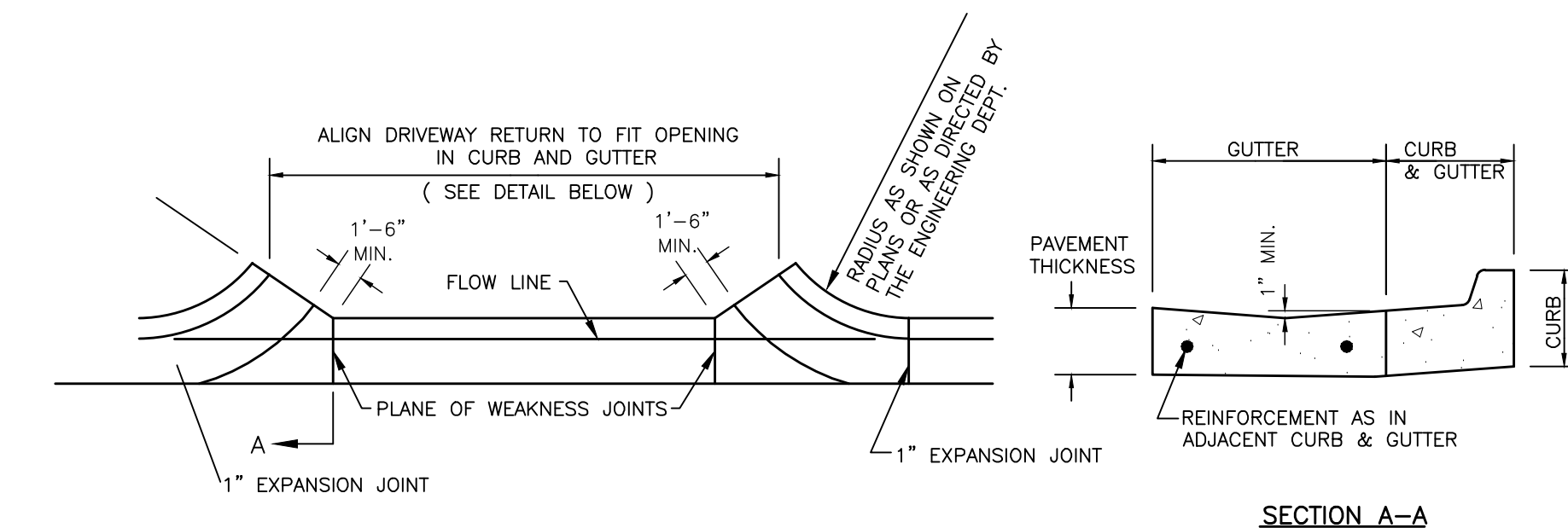
**INLET FILTER DETAIL - CURB & GUTTER**



**SIDEWALK DETAIL - THICKENED EDGE**



**M.D.O.T. DRIVEWAY OPENING DETAIL "M"**



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**DETAILS**

**NORTH POND OFFICE CENTER**  
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ORIGINAL ISSUE DATE:  
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PROJECT NO: 20-088

SCALE: 1" = 40'

FIELD: AJS, CW, JH  
DRAWN BY: DC  
DESIGN BY: DD  
CHECK BY: AP

**C-11.0**

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# landscape plan for: North Pond Office Center City of Brighton, Michigan

**note:**  
unless noted otherwise, numerical value on landscape quantities specified on plan take precedence over graphic representation.

## general landscape notes:

- LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISTING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK, CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.
- PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES, GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING.
- NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON SITE IF NECESSARY.
- ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY CITY OF BRIGHTON AND LANDSCAPE ARCHITECT.
- ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND UNRAFFED AS DETAILED, SHOWN ON PLAN.
- PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARBARK MULCH.
- DIG SHRUB PITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
- NATURAL COLOR FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.
- REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4" DIA. CIRCLE WITH 3" PULLED AWAY FROM TRUNK. 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.
- PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE STANDARDS.
- PROVIDE PEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.
- ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
- PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:
  - SHADE TREES 5 FT.
  - ORNAMENTAL AND EVERGREEN TREES 10 FT.
  - SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY 2 FT.
- NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.
- ALL LAWN AREAS AND LANDSCAPE BEDS TO BE FULLY IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM. IRRIGATION SYSTEM TO HAVE SEPARATE ZONES FOR LAWN AREAS, PARKING ISLANDS AND SHRUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED.

- UNLESS NOTED OTHERWISE, LANDSCAPE BEDS ADJACENT TO LAWN TO RECEIVE EDGING. EDGING SHALL BE 4" X 1/8" METAL (FINISH BLACK OR GREEN) OR APPROVED EQUAL, AND TO BE INSTALLED WITH HORIZONTAL METAL STAKES AT 32" O.C. OR PER MANUFACTURER'S SPECIFICATION.
- ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND FLOOR SOILS A MIN. OF 16"-18" DEPTH, BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS. ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.
- WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
- ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEAR BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLATION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.

DISTURBED AREAS TO RECEIVE IRRIGATION & SEEDING ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE.

ADJACENT BUILDING FOUNDATION PLANTINGS. SEE SHT. L9-2 FOR DETAILS.  
DETENTION POND- SEE SHEET L5-3 FOR PROPOSED PLANTINGS AND POND SEED MIX DETAILS

ADJACENT LANDSCAPE PLANTINGS. SEE SHT. L9-3 FOR DETAILS.  
HATCHING DENOTES EXISTING TREES TO BE RETAINED.

## landscape requirements:

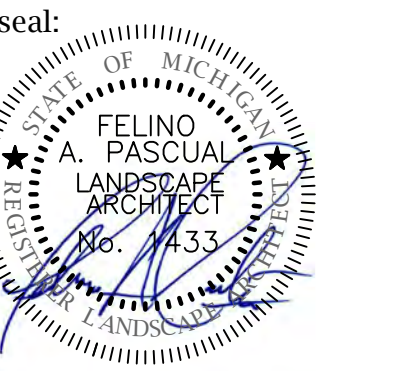
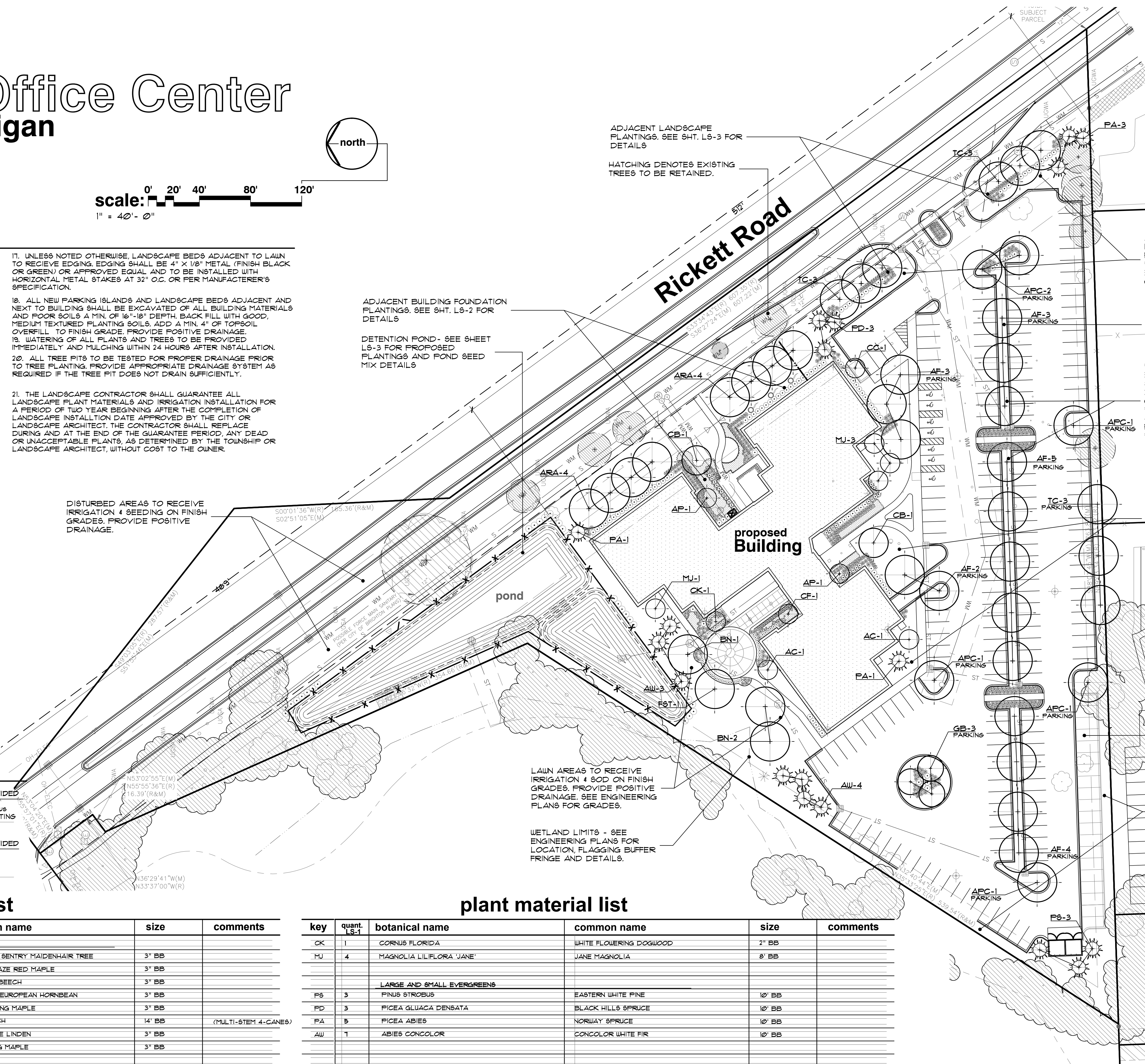
greenbelt (Rickett Road)	REQUIRED	PROVIDED
TOTAL LN.FT. OF GREENBELT FRONTAGE	901 1/2	21 plus EXISTING
ONE (1) DECIDUOUS OR EVERGREEN TREE PER 30'	32	
(901' / 30 FT. = 32 TREES)		
parking	REQUIRED	PROVIDED
TOTAL AREA OF PARKING	7139 SQ.FT.	
ONE (1) 3" DECIDUOUS OR EVERGREEN TREE PER 250 SQ.FT	29	29
(AREA / 250 SQ.FT. = 28.5 TREES)		

## plant material list

key	quant.	botanical name	common name	size	comments
<b>LARGE AND SMALL TREES</b>					
GB	3	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	3" BB	
AF	11	ACER X FREEMANI 'JEFFERSRED'	AUTUMN BLAZE RED MAPLE	3" BB	
FST	1	FAGUS SYLVATICA TRICOLOR	TRICOLOR BEECH	3" BB	
CB	2	CARPINUS BETULUS 'FASTIGIATA'	COLUMNAR EUROPEAN HORNBEECH	3" BB	
APC	6	ACER PLATANOIDES	CRIMSON KING MAPLE	3" BB	
BN	3	BETULA NIGRA	RIVER BIRCH	14" BB	(MULTI-STEM 4-CANES)
TC	9	TILIA G. 'GREENSPIRE'	GREENSPIRE LINDEN	3" BB	
ARA	8	ACER R. 'ARMSTRONG'	ARMSTRONG MAPLE	3" BB	
<b>SMALL FLOWERING TREES</b>					
AC	2	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	10" BB	(MULTI-STEM)
CC	1	CERCIS CANADENSIS	EASTERN REDBUD (MULTI-STEM)	10" BB	(MULTI-STEM)
AP	2	ACER PALMATUM 'BLOODGOOD'	BLOODGOOD JAPANESE LACELEAF MAPLE	1" CONT	
CF	1	CORNUS KOUSA	KOUSA DOGWOOD	10" BB	

## plant material list

key	quant.	botanical name	common name	size	comments
CK	1	CORNUS FLORIDA	WHITE FLOWERING DOGWOOD	2" BB	
MJ	4	MAGNOLIA LILIFLORA 'JANE'	JANE MAGNOLIA	8" BB	
<b>LARGE AND SMALL EVERGREENS</b>					
PS	3	PINUS STROBUS	EASTERN WHITE PINE	10' BB	
PD	3	PICEA GLAUCA DENSATA	BLACK HILLS SPRUCE	10' BB	
PA	5	PICEA ABIES	NORWAY SPRUCE	10' BB	
AW	1	ABIES CONCOLOR	CONCOLOR WHITE FIR	10' BB	



client:  
**Richard C. Thomas**  
7960 Grand River Rd. Brighton, Michigan

project:  
**NORTH POND OFFICE CENTER**

project location:  
City of Brighton, Michigan  
1112 Rickett Road

sheet title:  
**overall landscape planting detail**

job no./issue/revision date:  
LS21.019.3 CLIENT REVIEW 3-2-2021  
LS21.019.04 SPA 4-27-2021

drawn by:  
**JP, DK**  
checked by:  
**FP**  
date:  
**1-26-2021**

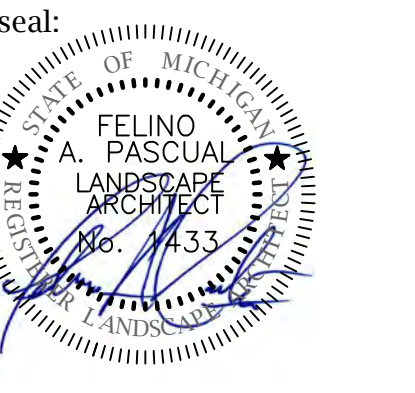
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project no:  
**LS21.019.01**

sheet no:  
**LS-1** of 3



client:  
**Richard C. Thomas**  
 7960 Grand River Rd. Brighton, Michigan

project:  
**NORTH POND OFFICE CENTER**

project location:  
 City of Brighton, Michigan  
 1112 Rickett Road

sheet title:  
**plant material list and planting details**

job no./issue/revision date:  
 LS21.019.3 CLIENT REVIEW 3-2-2021  
 LS21.019.04 SPA 4-27-2021

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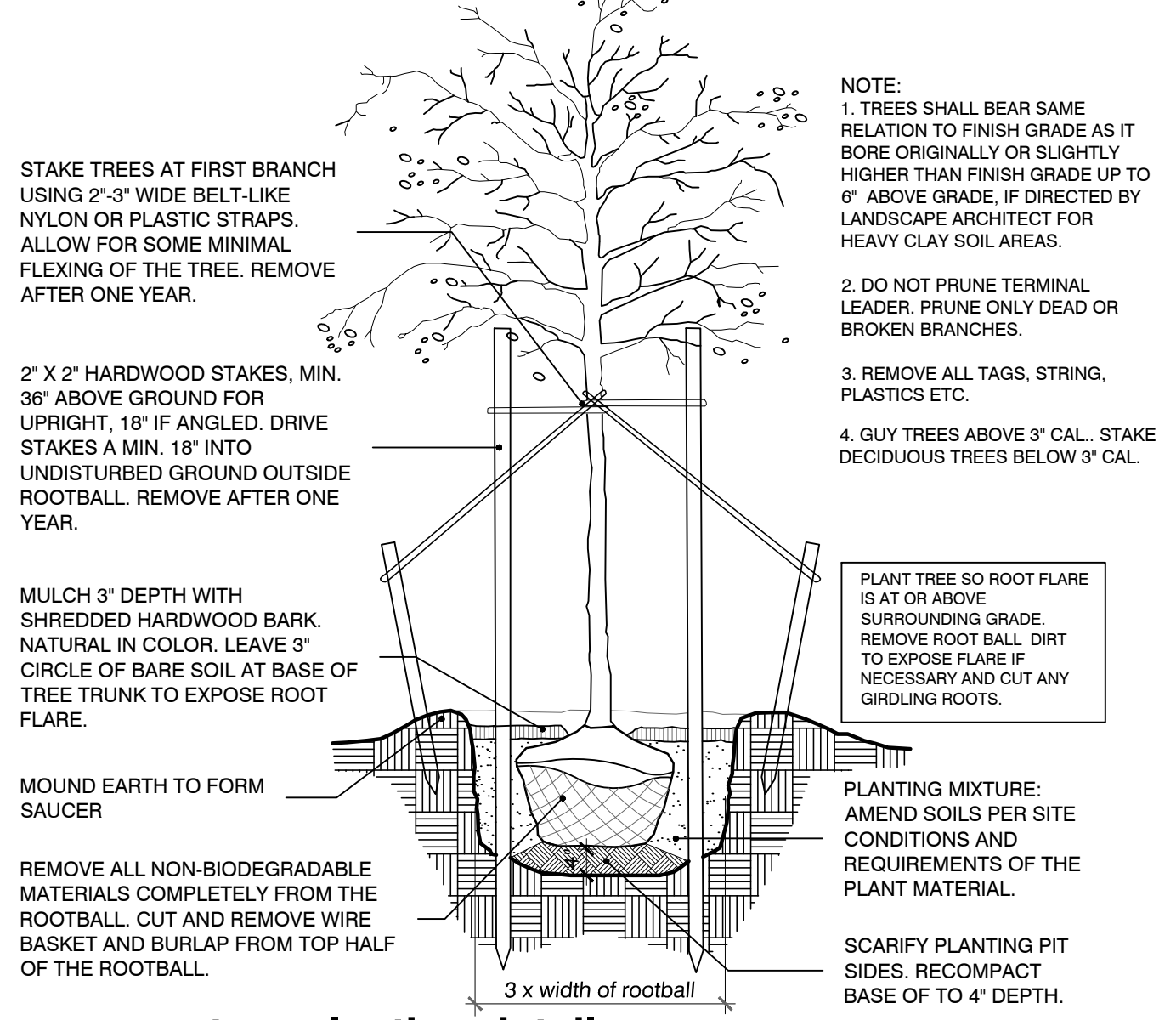
project no:  
**LS21.019.01**

**Planting landscape notes:**

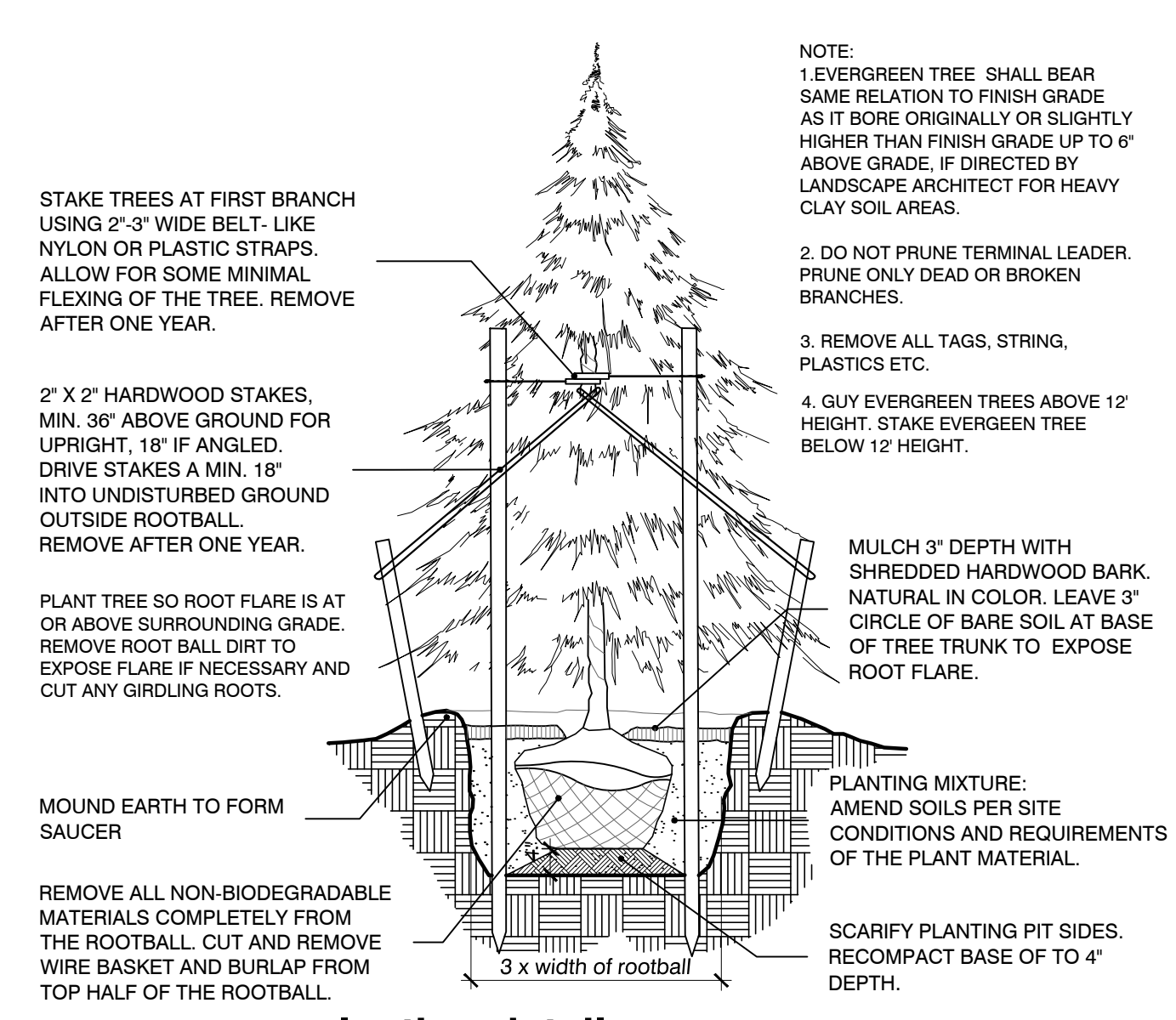
- GENERAL NOTES:**
- 1) PLANT MATERIALS TO BE INSTALLED ACCORDING TO THE CITY OF BRIGHTON LANDSCAPE STANDARDS AND CURRENT AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARDS.
  - 2) PLANT MATERIALS TO BE GUARANTEED FOR 2 YEARS, REPLACE FALLING MATERIAL WITHIN 1 YEAR, OR THE NEXT APPROPRIATE PLANTING PERIOD.
  - 3) PLANT MATERIALS TO BE OF PREMIUM QUALITY, NO. 1 GRADE NORTHERN NURSERY GROWN, IN HEALTHY CONDITION, FREE OF PESTS AND DISEASES.
  - 4) MULCH IS TO BE NATURAL COLORED, FINELY SHREDDED HARDWOOD BARK OF 4" THICK BARK MULCH FOR TREES IN 4" DIA. CIRCLE 1/3" PULLED AWAY FROM TRUNK, 3" THICK BARK MULCH FOR SHRUBS AND 2" THICK BARK MULCH FOR PERENNIALS.
  - 5) CALL MISS DIG AT 1-800-482-7171 PRIOR TO ANY CONSTRUCTION.
- DECIDUOUS & EVERGREEN TREE:**
- 1) TREE SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
  - 2) DO NOT PRUNE TERMINAL LEADER, PRUNE ONLY DEAD OR BROKEN BRANCHES.
  - 3) REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY AND COULD CAUSE GIRDLING.
  - 4) REMOVE TREE STAKES, GUY WIRES AND TREE WRAP AFTER ONE WINTER SEASON.
- SHRUB:**
- 1) SHRUB SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
  - 2) DO NOT PRUNE TERMINAL LEADER, PRUNE ONLY DEAD OR BROKEN BRANCHES.
  - 3) REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY AND COULD CAUSE GIRDLING.
- LAWN:**
- 1) SOD LAWN AREAS SHALL BE KENTUCKY BLUE GRASS BLEND GRASS IN A SOD NURSERY ON LOAM SOIL. SOD TO BE INSTALLED ON MINIMUM 2" TOPSOIL.
  - 2) SEEDED LAWN AREAS SHALL CONSIST OF THE FOLLOWING TYPES AND PROPORTIONS:  
 5% PERENNIAL RYE GRASS  
 10% RED FESCUE  
 25% CHEWING FESCUE  
 60% KENTUCKY BLUE GRASS  
 SEED MIX SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE AND WEED CONTENT SHALL NOT EXCEED 1%. PROVIDE A MINIMUM 4" TOP SOIL ON ALL SEEDED AREA.

**plant material list**

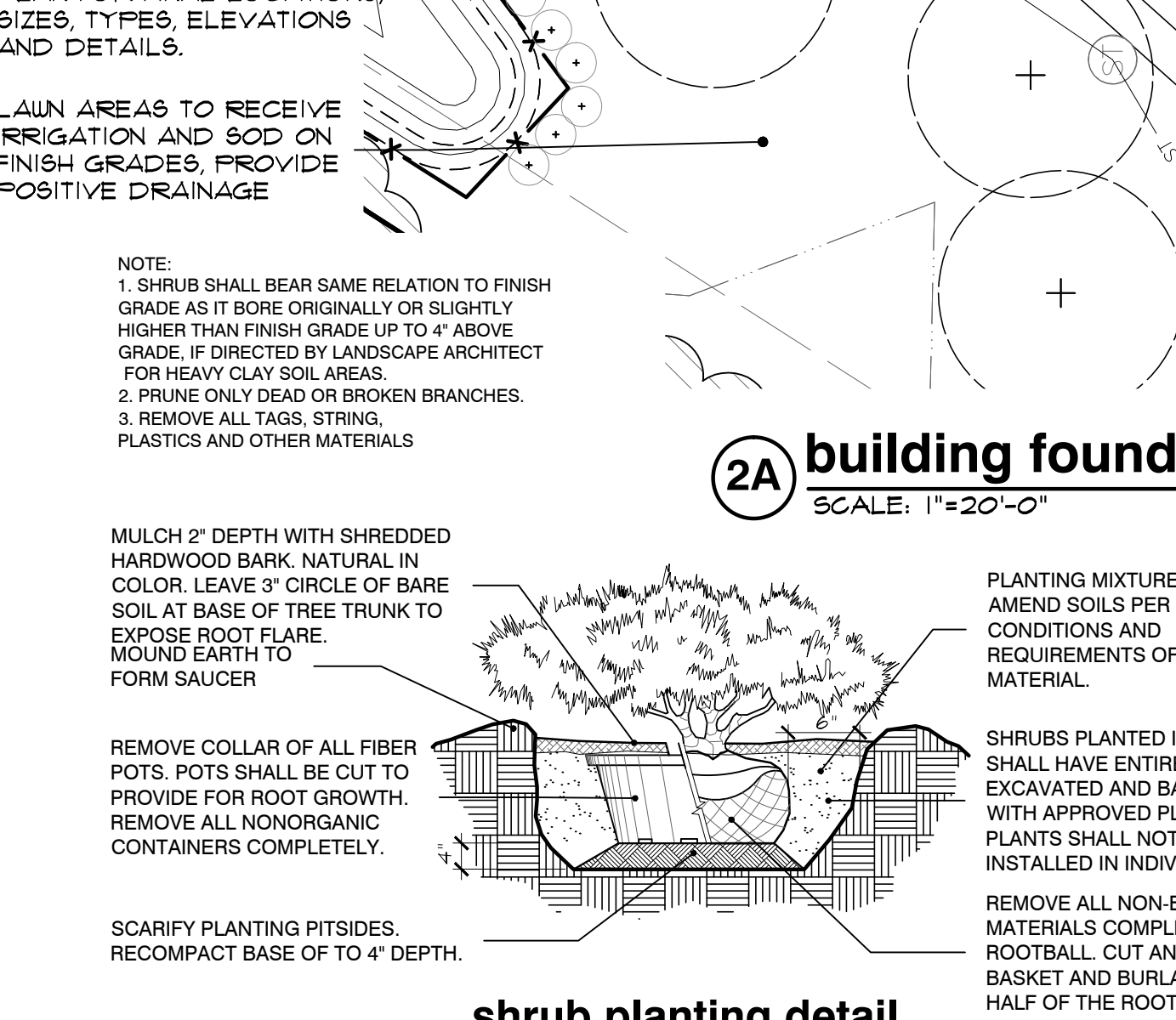
key	quant. 2A	botanical name	common name	size	comments
<b>SHRUBS</b>					
HA	28	HYDRANGEA ANNABELLE	ANNABELLE HYDRANGEA	5' CONT./30" HIGH	36" O.C. SPACING
HE	1	HYDRANGEA M. 'GLOWING EMBERS'	GLOWING EMBERS HYDRANGEA	5' CONT./30" HIGH	36" O.C. SPACING
LV	40	LIGUSTRUM X. VICARYI	GOLDEN VICARY PRIVET	3' BB	42" O.C. SPACING
WF	4	WEIGLA FLORIDA 'ALEXANDRA'	WINE AND ROSE PRINCE WEIGELA	5' CONT./30" HIGH	36" O.C. SPACING
BW	113	BUXUS GREEN VELVET	GREEN VELVET BOXWOOD	18" BB	24" O.C. SPACING
RA	33	RIBES ALPINUM	ALPINE CURRANT	5' CONT./24" HIGH	32" O.C. SPACING
SK	7	SYRINGA P. MISS KIM	MISS KIM LILAC	3' BB	30" O.C. SPACING
VC	2	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	3' BB	36" O.C. SPACING
LL	21	LIGUSTRUM VULGARE 'LODENSE'	LODENSE PRIVET	3' BB	36" O.C. SPACING
TH	32	TAXUS XM. 'HICKSII'	HICKS YEW	36" BB	32" O.C. SPACING
HP	13	HYDRANGEA Q. 'FREE WEE'	'FREE WEE' HYDRANGEA	5' CONT./30" HIGH	36" O.C. SPACING
AZ	3	AZALEA 'GIBRALTER'	GIBRALTER AZALEA	5' CONT./30" HIGH	36" O.C. SPACING
IX	10	ILEX X MESSEYEA 'CHINA GIRL'	CHINA GIRL HOLLIE	5' CONT./30" HIGH	36" O.C. SPACING
IX	2	ILEX X MESSEYEA 'CHINA BOY'	CHINA BOY HOLLIE	5' CONT./30" HIGH	36" O.C. SPACING
SG	3	SPIREA X.B. 'GOLDFLAME'	GOLDFLAME SPIREA	5' CONT./24" HIGH	36" O.C. SPACING
<b>PERENNIALS AND GRASSES</b>					
PAC	1820	PACHYANDRA TERMINALIS 'GREEN CARPET'	GREEN CARPET PACHYANDRA	32"/FLAT	10" O.C. SPACING
M8G	3	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT JAPANESE SILVER GRASS	5' CONT.	
PAH	35	FENISTETUM ALOPECUROIDES 'HAMELN'	DUARF FOUNTAIN GRASS	5' CONT.	36" O.C. SPACING
CKF	25	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	5' CONT.	36" O.C. SPACING
SED	20	SEDUM SPECTABILE 'NEON'	NEON SEDUM	4" CONT.	12" O.C. SPACING
EPM	7	ECHINACEA 'PIXIE MEADDOUBRITE'	PIXIE MEADDOUBRITE PURPLE CONEFLOWER	4" CONT.	12" O.C. SPACING
HPP	3	HEUCHERA 'BERRY SMOOTHIE'	BERRY SMOOTHIE CORAL BELL	4" CONT.	12" O.C. SPACING
HOS	13	HOSTA 'PATRIOT'	PATRIOT HOSTA	4" CONT.	24" O.C. SPACING
PAB	11	FENISTETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	5' CONT.	36" O.C. SPACING



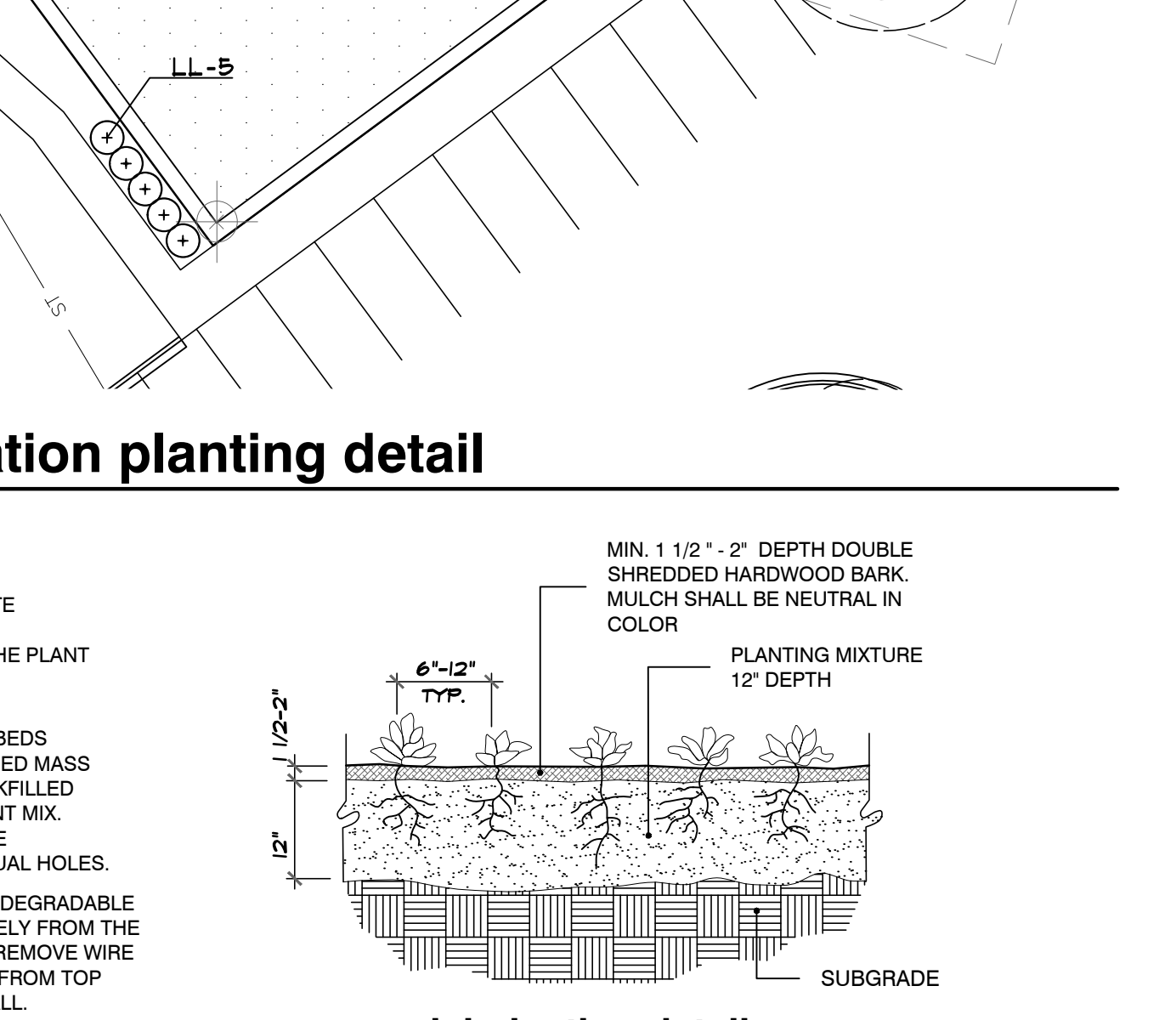
**tree planting detail**  
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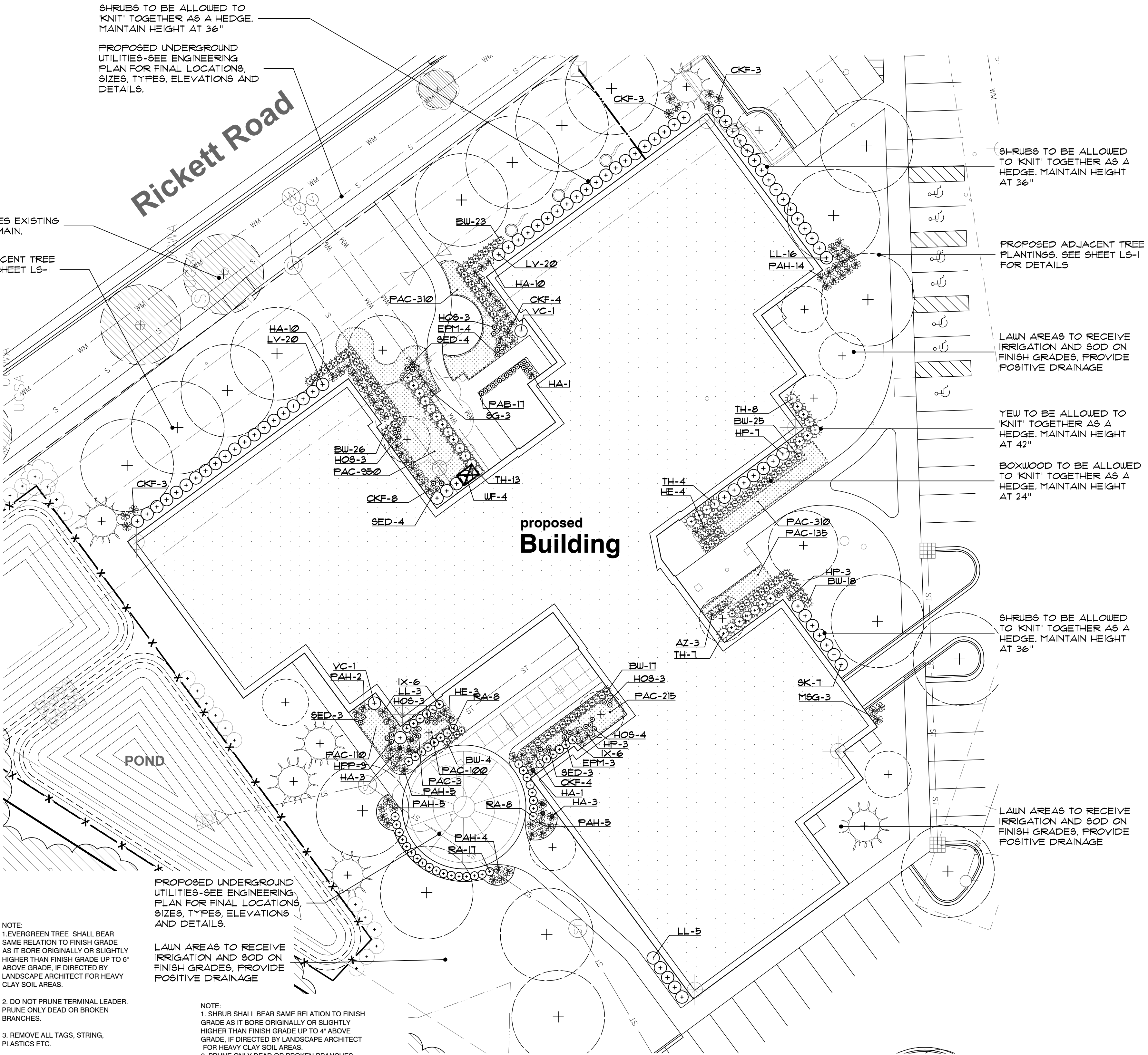
**evergreen planting detail**  
 no scale



**shrub planting detail**  
 no scale



**perennial planting detail**  
 no scale



**2A building foundation planting detail**  
 SCALE: 1"=20'-0"

NOTE:  
 1. EVERGREEN TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.  
 2. DO NOT PRUNE TERMINAL LEADER, PRUNE ONLY DEAD OR BROKEN BRANCHES.  
 3. REMOVE ALL TAGS, STRING, PLASTICS ETC.  
 4. GUY EVERGREEN TREES ABOVE 12' HEIGHT. STAKE EVERGREEN TREE BELOW 12' HEIGHT.

NOTE:  
 1. SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.  
 2. PRUNE ONLY DEAD OR BROKEN BRANCHES.  
 3. REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS

MULCH 3" DEPTH WITH SHREDDED HARDWOOD BARK, NATURAL IN COLOR. LEAVE 3" CIRCLE OF BARE SOIL AT BASE OF TREE TRUNK TO EXPOSE ROOT FLARE.  
 PLANTING MIXTURE: AMEND SOILS PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL.  
 SCARIFY PLANTING PIT SIDES. RECOMPACT BASE OF TO 4" DEPTH.

MULCH 2" DEPTH WITH SHREDDED HARDWOOD BARK, NATURAL IN COLOR. LEAVE 3" CIRCLE OF BARE SOIL AT BASE OF TREE TRUNK TO EXPOSE ROOT FLARE. MOUND EARTH TO FORM SAUCER.  
 SHRUBS PLANTED IN BEDS SHALL HAVE ENTIRE BED MASS EXCAVATED AND BACKFILLED WITH APPROVED PLANT MIX. PLANTS SHALL NOT BE INSTALLED IN INDIVIDUAL HOLES.  
 REMOVE ALL NON-BIODEGRADABLE MATERIALS COMPLETELY FROM THE ROOTBALL. CUT AND REMOVE WIRE BASKET AND BURLAP FROM TOP HALF OF THE ROOTBALL.

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

MIN. 1 1/2" - 2" DEPTH DOUBLE SHREDDED HARDWOOD BARK. MULCH SHALL BE NEUTRAL IN COLOR.  
 PLANTING MIXTURE 12" DEPTH  
 SUBGRADE

HATCHING DENOTES EXISTING TREES TO BE REMAIN.  
 PROPOSED ADJACENT TREE PLANTINGS. SEE SHEET LS-1 FOR DETAILS

SHRUBS TO BE ALLOWED TO 'KNIT' TOGETHER AS A HEDGE. MAINTAIN HEIGHT AT 36"

PROPOSED ADJACENT TREE PLANTINGS. SEE SHEET LS-1 FOR DETAILS

LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE

YEW TO BE ALLOWED TO 'KNIT' TOGETHER AS A HEDGE. MAINTAIN HEIGHT AT 42"

BOXWOOD TO BE ALLOWED TO 'KNIT' TOGETHER AS A HEDGE. MAINTAIN HEIGHT AT 24"

SHRUBS TO BE ALLOWED TO 'KNIT' TOGETHER AS A HEDGE. MAINTAIN HEIGHT AT 36"

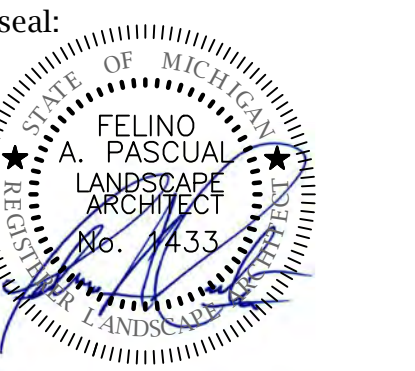
LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE

SHRUBS TO BE ALLOWED TO 'KNIT' TOGETHER AS A HEDGE. MAINTAIN HEIGHT AT 36"

PROPOSED UNDERGROUND UTILITIES-SEE ENGINEERING PLAN FOR FINAL LOCATIONS, SIZES, TYPES, ELEVATIONS AND DETAILS.

PROPOSED UNDERGROUND UTILITIES-SEE ENGINEERING PLAN FOR FINAL LOCATIONS, SIZES, TYPES, ELEVATIONS AND DETAILS.

LAWN AREAS TO RECEIVE IRRIGATION AND SOD ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE



client:  
**Richard C. Thomas**

7960 Grand River Rd. Brighton, Michigan

project:  
**NORTH POND OFFICE CENTER**

project location:  
 City of Brighton, Michigan  
 1112 Rickett Road

sheet title:  
**plant material list and planting details**

job no./issue/revision date:  
 LS21.019.3 CLIENT 3-2-2021  
 LS21.019.04 SPA 4-27-2021

drawn by:  
**JP, DK**  
 checked by:  
**FP**  
 date:  
**1-26-2021**

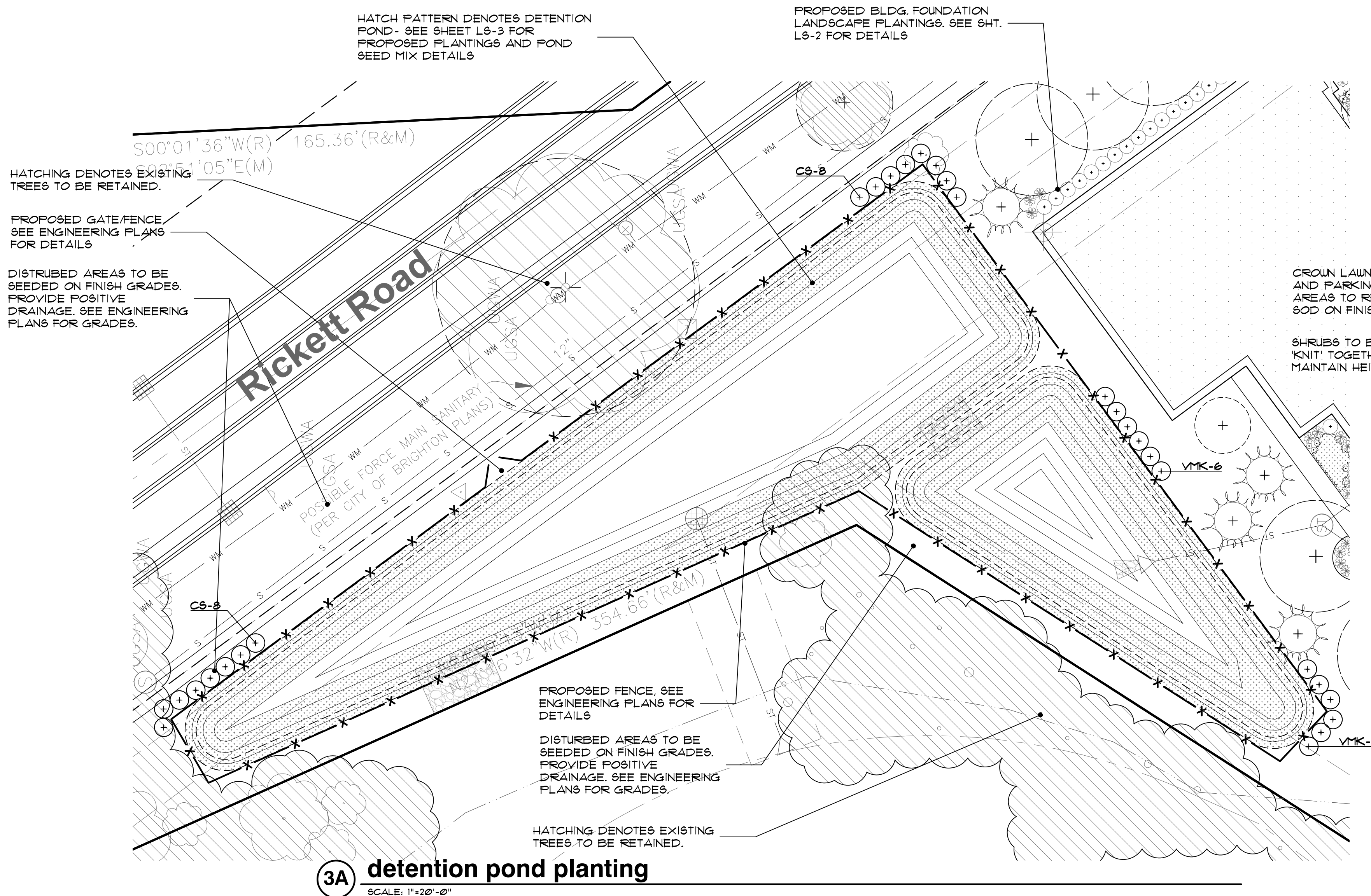
notice:  
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 Do Not scale drawings. Use figured dimensions only.



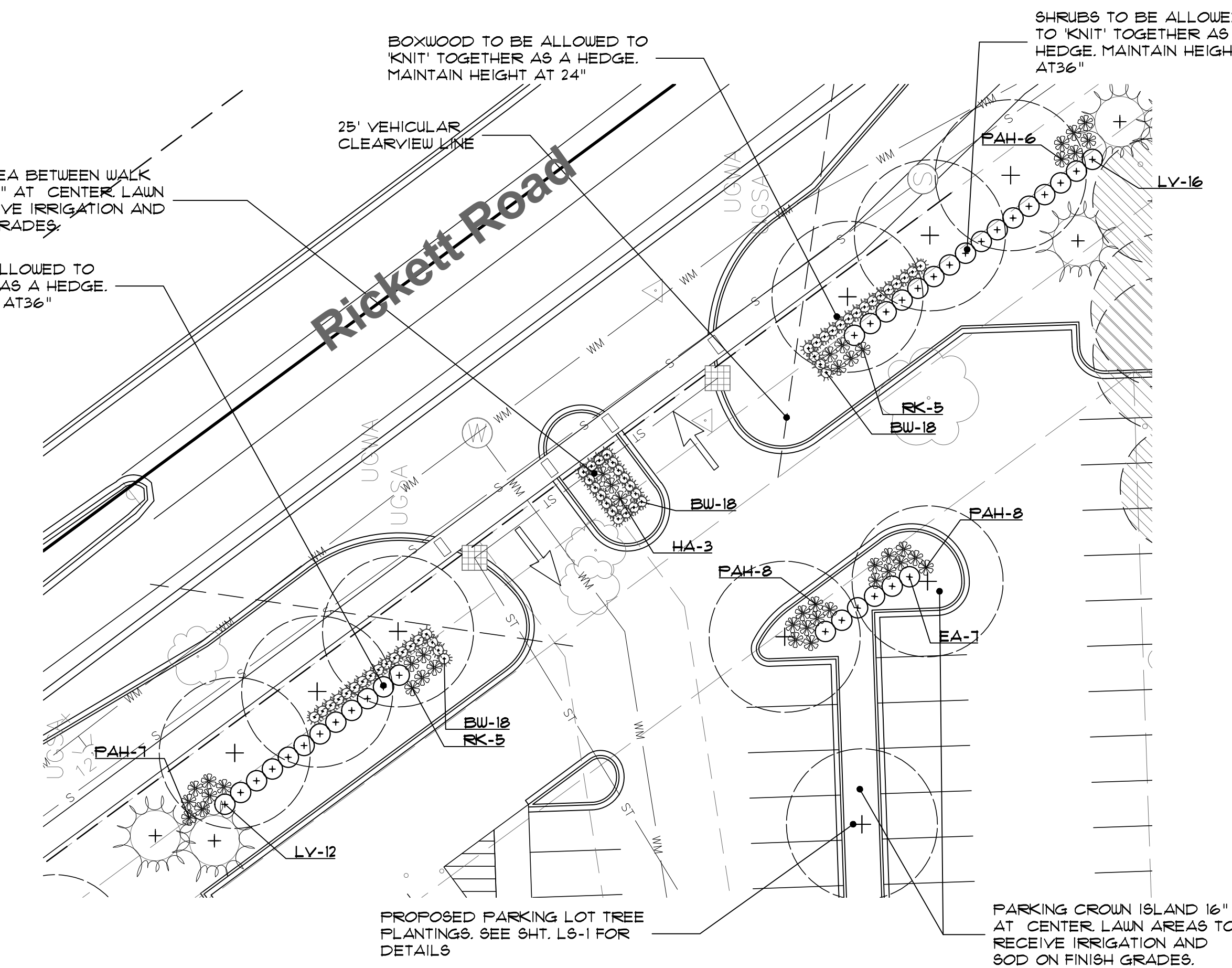
The location and elevations of existing underground utilities as shown on this drawing are only approximate; no guarantee is either expressed or implied as to the completeness of accuracy; contractor shall be exclusively responsible for determining the exact location and elevation prior to the start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

project no:  
**LS21.019.01**

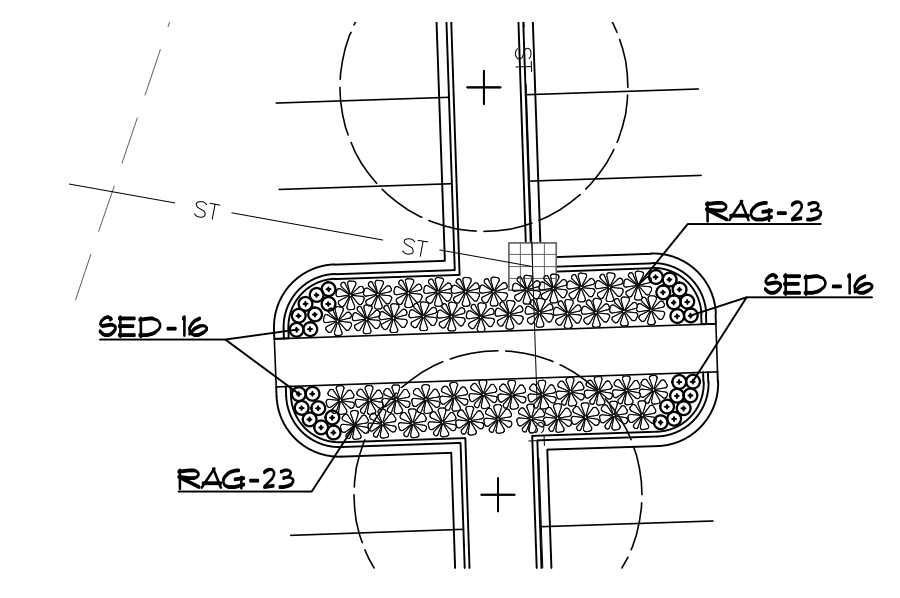
sheet no:  
**LS-3 of 3**



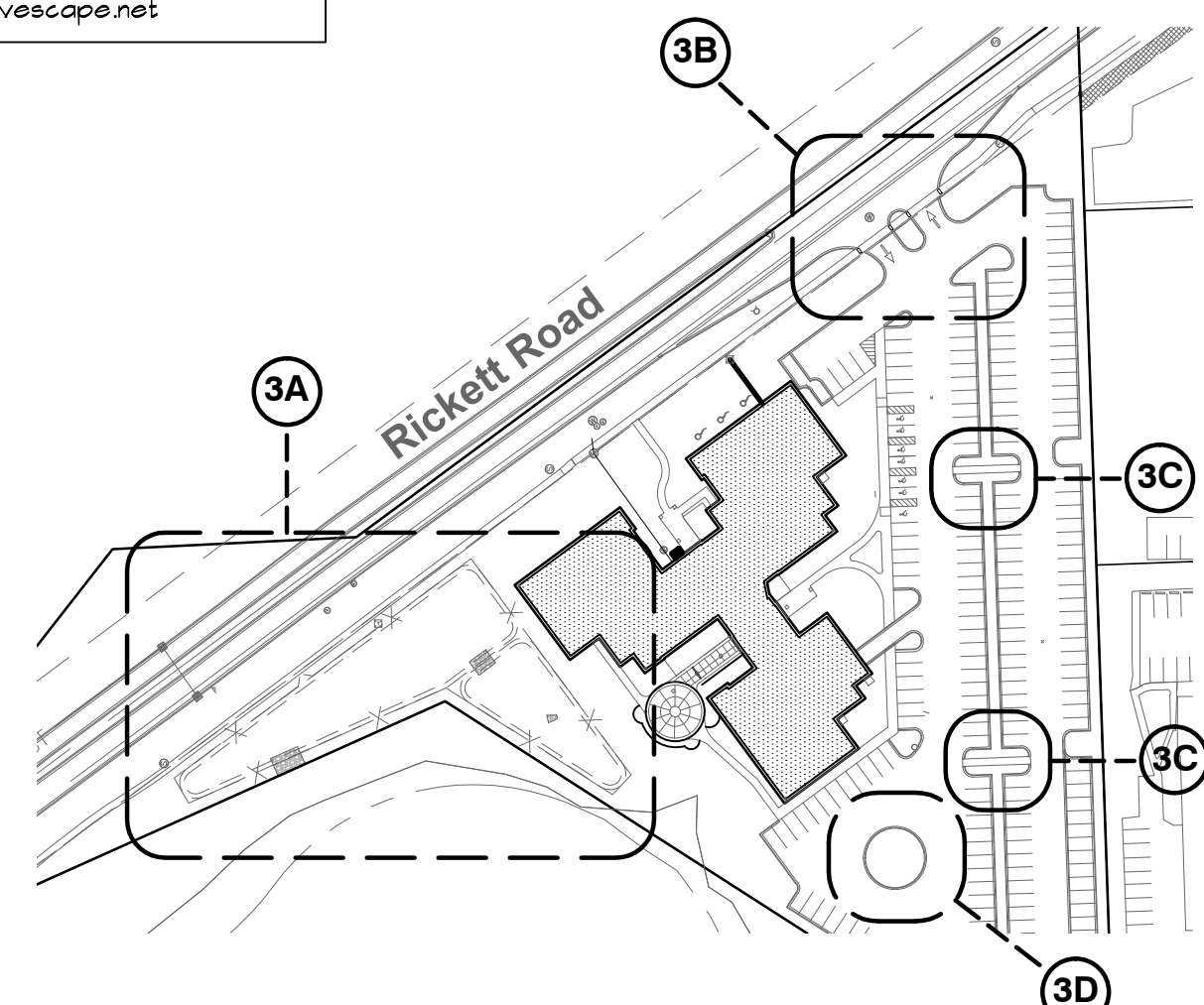
**3A detention pond planting**  
 SCALE: 1"=20'-0"



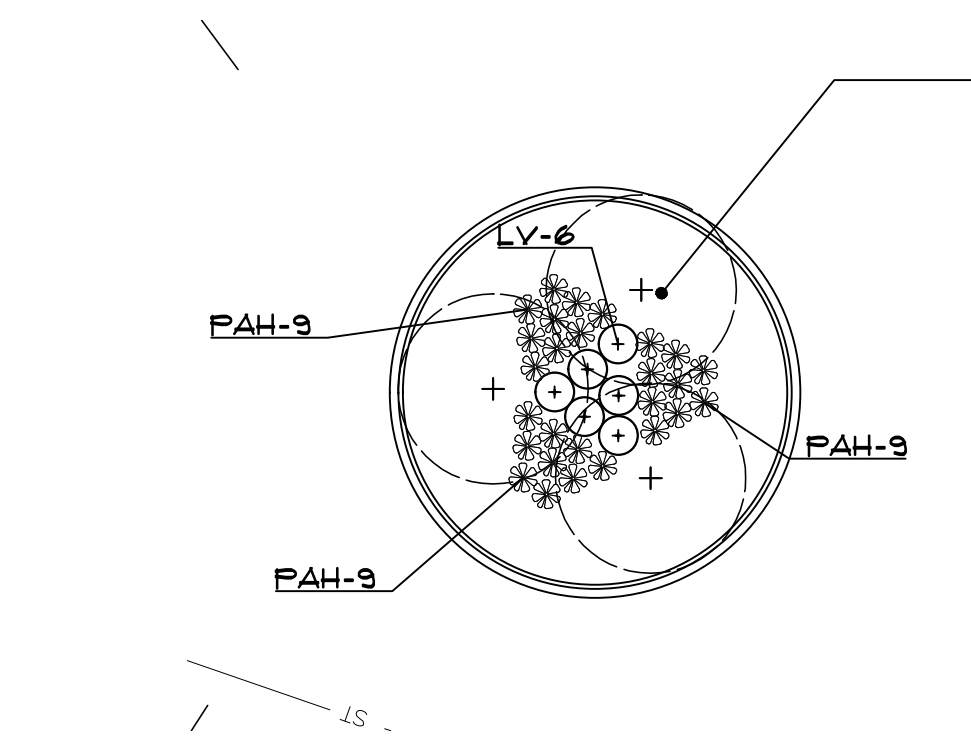
**3B entry planting detail**  
 SCALE: 1"=20'-0"



**3C parking island planting detail**  
 SCALE: 1"=20'-0" (2-CONDITIONS)



**key reference location map**  
 NO SCALE



**3D parking island planting detail**  
 SCALE: 1"=20'-0"

**landscape maintenance notes:**

- LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN, ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED FUNCTIONS OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.
1. LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
  2. PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
  3. ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 15 AND NOVEMBER 15 OR UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

**detention basin seed mix:**

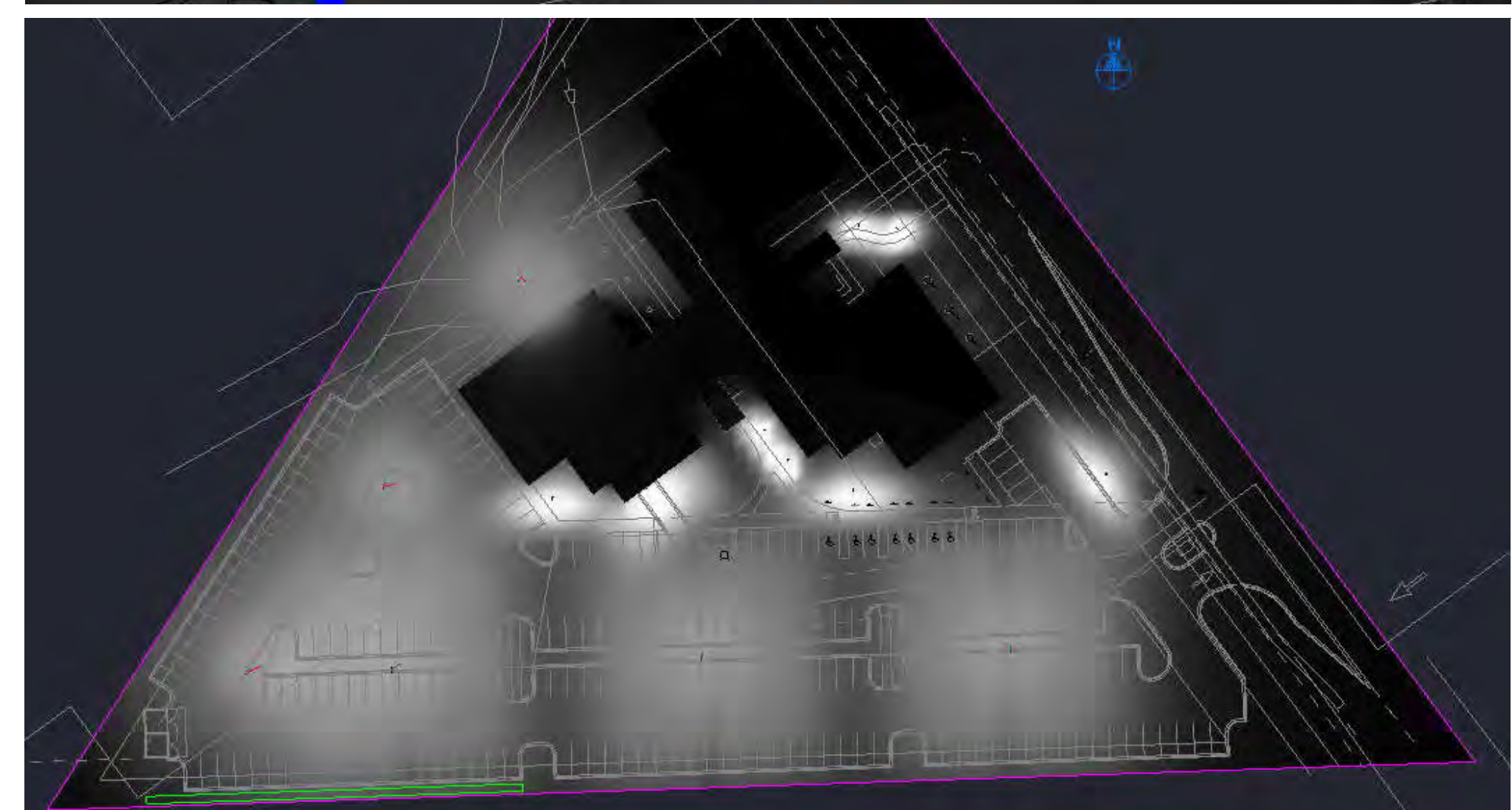
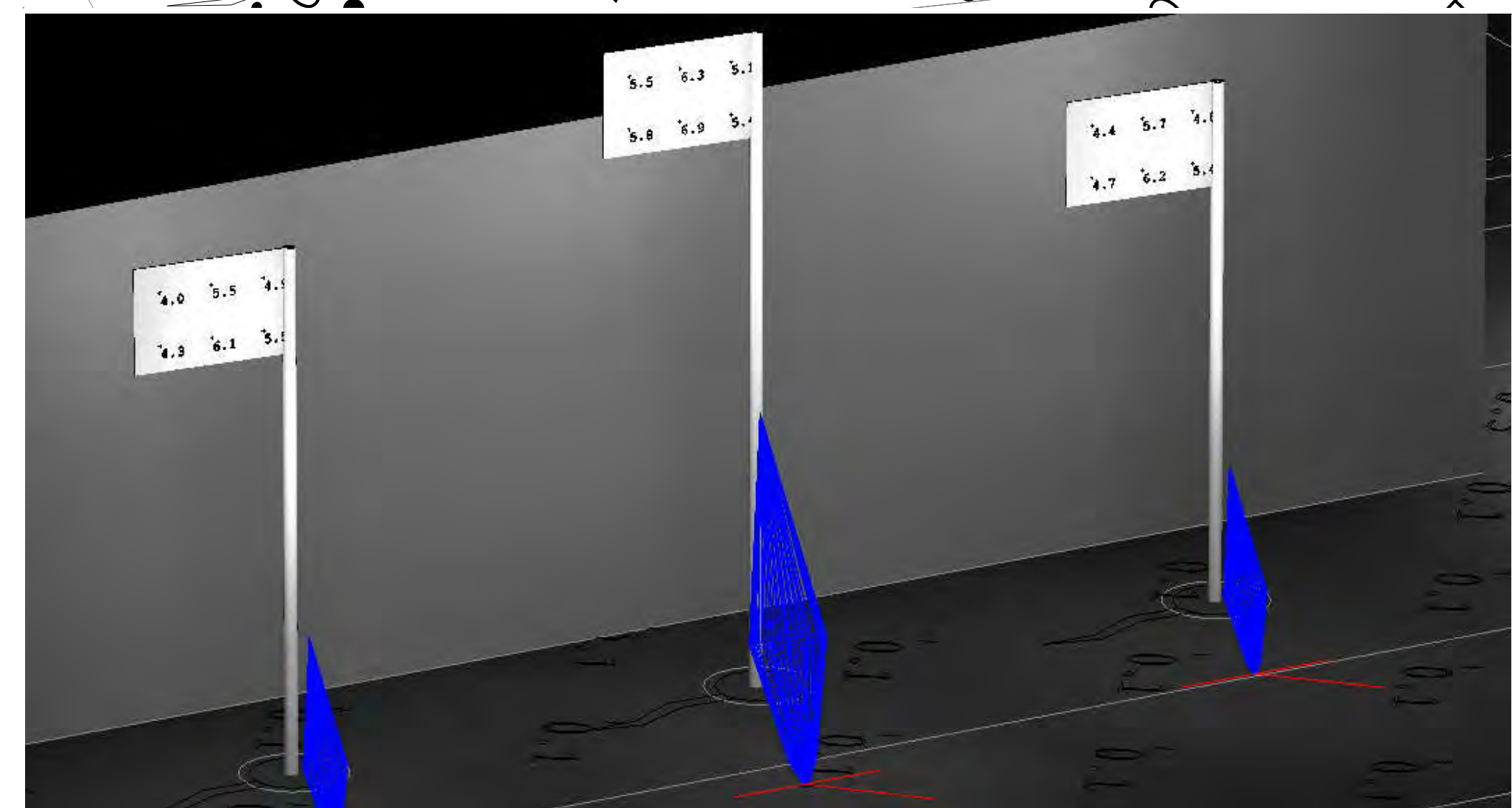
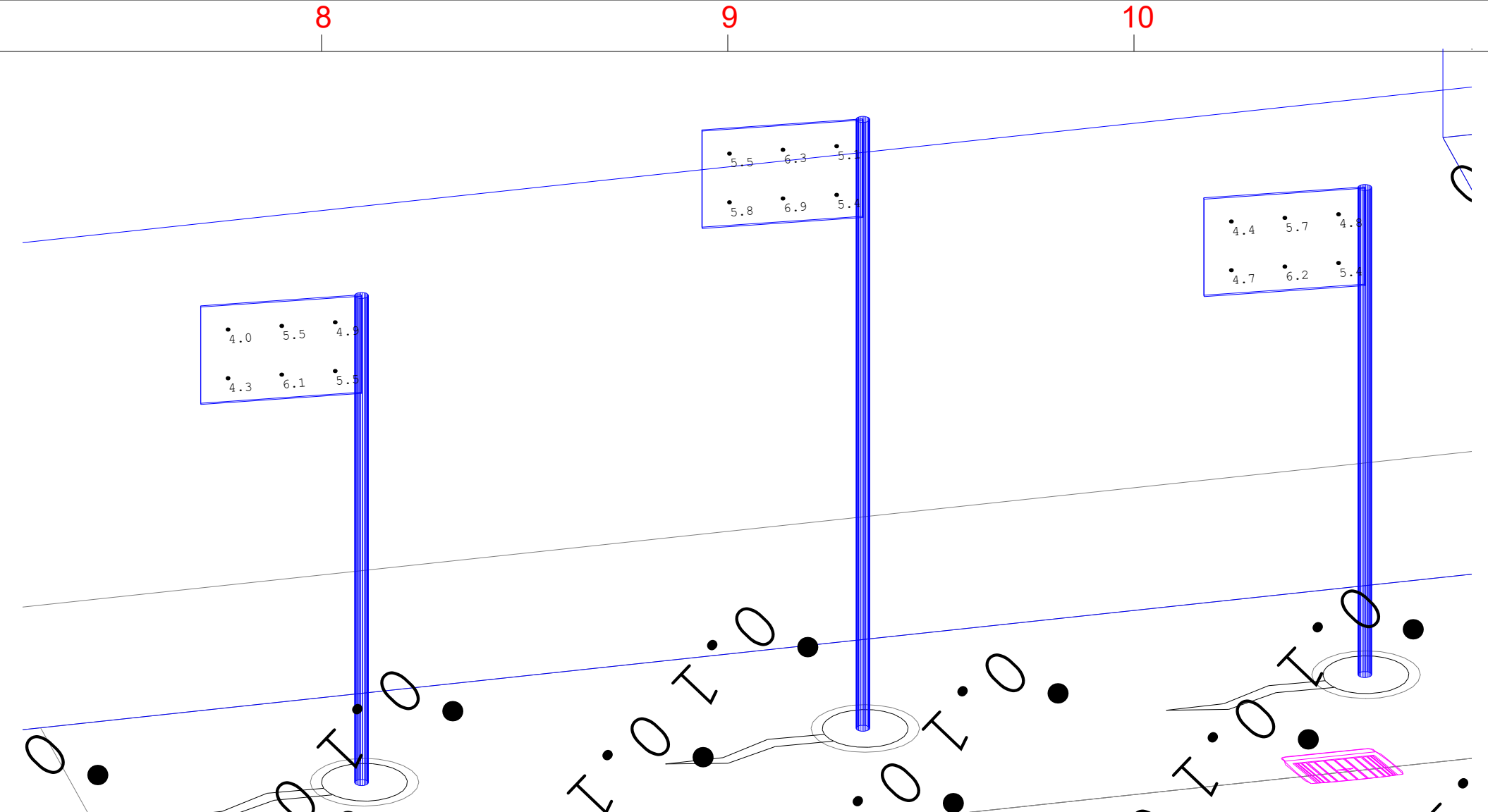
- Sedge Meadow Mix: (Edge Zone)**  
 A mix of sedges, grasses and wildflowers recommended for soils that are saturated during most of the growing season. Use just above the normal waterline in the capillary zone in our Lake Edge Enhancement System.
- Sedge Meadow Mix oz/acre**
- |    |   |   |   |
|----|---|---|---|
| 1  | Carex crinitella (Crested Sedge)        | 1 | Aster puniceus (Swamp Aster)                        |
| 6  | Carex frankii (Frank's Sedge)           | 1 | Aster umbellatus (Flat-topped Aster)                |
| 2  | Carex hystericina (Porcupine Sedge)     | 3 | Cassia helicarpa (Wild Senna)                       |
| 4  | Carex lurida (Lurid Sedge)              | 2 | Eupatorium maculatum (Spotted Joe-Pye Weed)         |
| 2  | Carex stipitata (Pointed Oval Sedge)    | 2 | Eupatorium perfoliatum (Boneset)                    |
| 2  | Carex tribuloides (Pointed Oval Sedge)  | 2 | Helianthus autumnalis (Autumn Sneezeweed)           |
| 6  | Carex vulpinoidea (Fox Sedge)           | 2 | Liatris spicata (Dense Blazing Star)                |
| 64 | Elymus virginicus (Virginia Wild Rye)   | 1 | Lobelia cardinalis (Cardinal Flower)                |
| 8  | Glyceria striata (Fowl Manna Grass)     | 1 | Lobelia siphilitica (Great Blue Lobelia)            |
| 8  | Leersia oryzoides (Rice Cut Grass)      | 2 | Penstemon digitalis (Foxglove Beardtongue)          |
| 2  | Panicum virgatum (Switchgrass)          | 1 | Pycnanthemum virginianum (Mountain Mint)            |
| 2  | Scirpus atrovirens (Dark Green Bulrush) | 3 | Rudbeckia fulgida speciosa (Showy Black-Eyed Susan) |
|    |   | 4 | Rudbeckia hirta (Black-Eyed Susan)                  |
|    |   | 3 | Rudbeckia subtomentosa (Sweet Black-Eyed Susan)     |
|    |   | 2 | Silphium integrifolium (Rosinweed)                  |
|    |   | 2 | Silphium perfoliatum (Cupplant)                     |
|    |   | 2 | Silphium terebinthaceum (Prairie Dock)              |
|    |   | 1 | Solidago patula (Swamp Goldenrod)                   |
|    |   | 2 | Solidago riddellii (Riddell's Goldenrod)            |
|    |   | 2 | Verbena hastata (Blue Vervain)                      |
|    |   | 2 | Vernonia fasciculata (Smooth Ironweed)              |
|    |   | 1 | Veronicastrum virginicum (Culver's Root)            |
|    |   | 1 | Zizia aurea (Golden Alexanders)                     |
- Forbs oz/acre**
- |    |   |
|----|---|
| 1  | Alisma subcordatum (Water plantain)     |
| 64 | Angelica atropurpurea (Angelica)        |
| 1  | Aster novae-angliae (New England Aster) |

**Components per acre**  
 Sedge Meadow 8 lbs grasses and sedges, 3 lbs forbes  
**annual cover: (Edge Upland & Dry Upland Zones)**  
 50% Temporary Grasses: will contain two of the following species.  
 Seed Oats Avaria sativa  
 Annual Rye Lolium multiflorum  
 Winter Wheat Triticum aestivum  
 American Slough Grass Beckmannia syzigachne

SOURCE:  
 NATIVESCAPe L.L.C.  
 P.O. BOX 122  
 MANCHESTER, MICHIGAN 48158  
 ph. 517.456.9696  
 www.nativescapenat.com

**plant material list**

key	quant. 3A	quant. 3B	quant. 3C	quant. 3D	botanical name	common name	size	comments
HA	-	3	-	-	HYDRANGEA ANNABELLE	ANNABELLE HYDRANGEA	15 CONT.	MIN. 24" HIGH
LV	-	28	-	6	LIGUSTRUM X. VICARYI	GOLDEN VICARY PRIVET	3" BB	42" OC. SPACING
RK	-	10	-	-	ROSA X. OSA EASY DOUBLE RED™	ROSA EASY DOUBLE RED ROSE	15 CONT.	
BW	-	54	-	-	BUXUS GREEN VELVET	GREEN VELVET BOXWOOD	18" BB	
RAG	-	-	46	-	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	15 CONT.	
EA	-	6	-	-	HYDRANGEA ANNABELLE	ANNABELLE HYDRANGEA	15 CONT.	MIN. 24" HIGH
VTK	12	-	-	-	HYDRANGEA ANNABELLE	ANNABELLE HYDRANGEA	15 CONT.	MIN. 24" HIGH
CS	16	-	-	-	HYDRANGEA ANNABELLE	ANNABELLE HYDRANGEA	15 CONT.	MIN. 24" HIGH
PAH	-	29	-	-	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	15 CONT.	
SED	-	-	32	21	SEDUM SPECTABILE 'NEON'	NEON SEDUM	11 CONT.	



Symbol	Qty	Label	Arrangement	LLF	Description	Arr. Lum. Lumens	BUG Rating	Lum. Watts
	3	A	2 @ 180 DEGREES	0.950	VISIONAIRE VSX-II_T5LS_10L_4K-VOLT D180° @ 30' MTG. HT. (N)	19532	B3-U0-G2	70
	3	B	2 @ 180 DEGREES	0.950	VISIONAIRE VSX-II_T5SR_5L_4K-VOLT D180° @ 20' MTG. HT. (N)	10222	B2-U0-G1	34
	3	C	SINGLE	0.950	VISIONAIRE VSX-II_T2_5L_4K-VOLT SINGLE @ 12' MTG. HT. (N)	4998	B1-U0-G1	34
	1	D	SINGLE	0.950	VISIONAIRE VSC-II-T4-32LC-7-4K-VOLT WM @ 12' MTG. HT. (N)	8221	B2-U0-G2	74
	4	E	SINGLE	0.950	VISIONAIRE VBL-1-3.5-T3-16LC-S-3-4K-VOLT @ GROUND	2195	B0-U0-G1	16
	2	F	SINGLE	0.950	VISIONAIRE VSF-1-FN-16LC-3-4K-VOLT-TM @ GROUND 165° TILT (15° UPWARDS)	2571	B3-U0-G0	18
	1	G	SINGLE	0.950	VISIONAIRE VSF-1-FN-16LC-7-4K-VOLT-TM @ GROUND 165° TILT (15° UPWARDS)	4554	B3-U0-G1	37

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.63	17.1	0.0	N.A.	N.A.
FLAG_1_FRONT SIDE	Illuminance	Fc	5.20	6.2	4.4	1.18	1.41
FLAG_2_FRONT SIDE	Illuminance	Fc	5.83	6.9	5.1	1.14	1.35
FLAG_3_FRONT SIDE	Illuminance	Fc	5.05	6.1	4.0	1.26	1.53
South PL	Illuminance	Fc	0.12	0.4	0.0	N.A.	N.A.
Parking Lot	Illuminance	Fc	0.82	4.6	0.0	N.A.	N.A.

DRAWING NUMBER : **LS091820LS-BRIGHT OFFICE BLDG-04**

LAYOUT DESIGNER : **LS**

DESIGNER EMAIL : **Lsalgado@visionairelighting.com**

PROJECT DATE : **09/21/20**

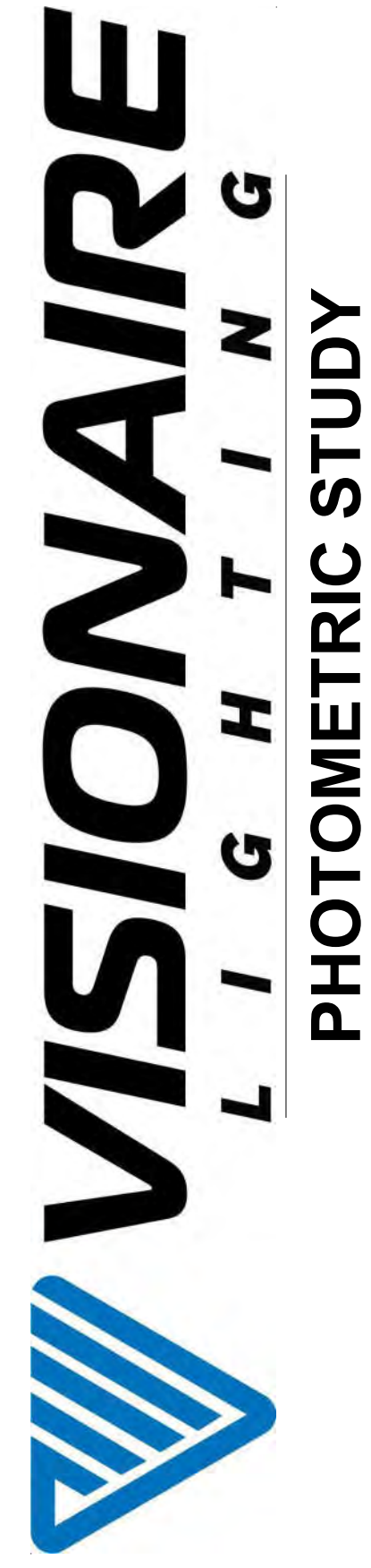
REVISION DATE : **03/22/21**

REP : **CLARUS LIGHTING AND CONTROLS**

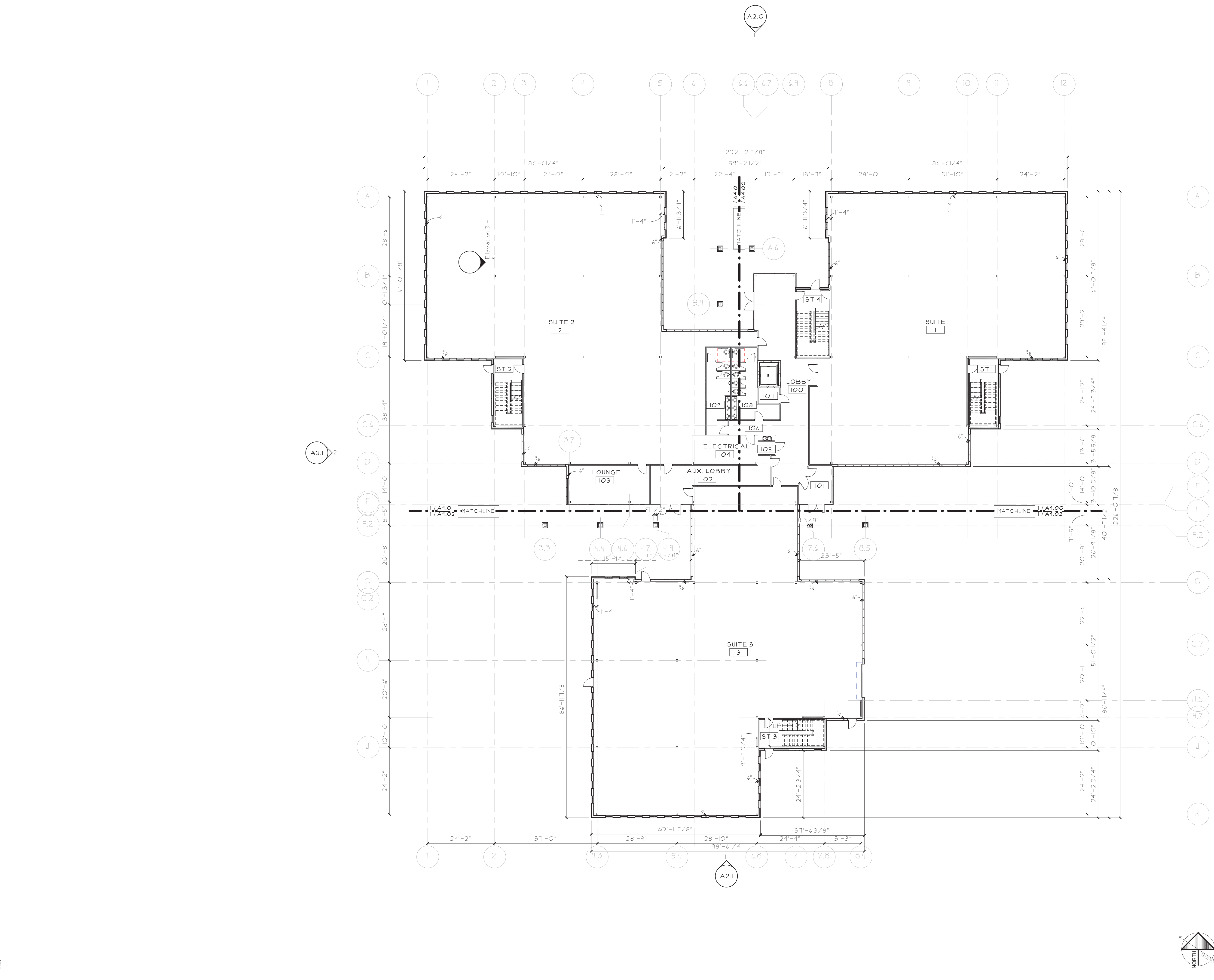
NOTE/S: **-**

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www.visionairelighting.com  
 Phone: (310) 512-6480 Fax: (310) 512-6486  
 19645 Rancho Way-Rancho Dominguez, CA. 90220  
 POINT-BY-POINT CALCULATION  
 Illuminance at Grade (Footcandles), unless otherwise specified.

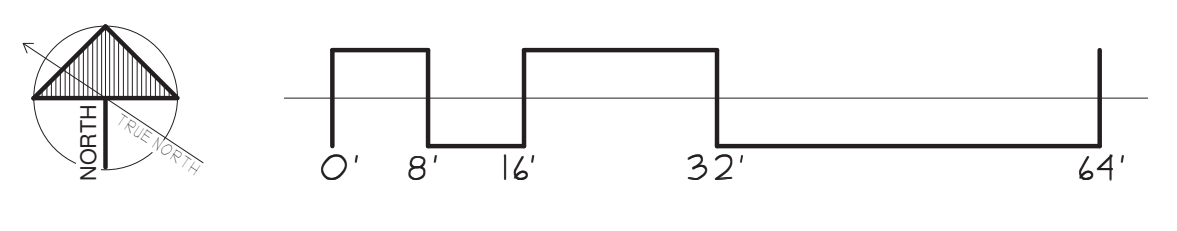


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ROOM LEGEND (FIRST FLOOR)	
NUMBER	ROOM NAME
1	SUITE 1
2	SUITE 2
3	SUITE 3
100	LOBBY
101	VESTIBULE
102	AUX. LOBBY
103	LOUNGE
104	ELECTRICAL
105	JANITOR'S CLOSET
106	CORRIDOR
107	ELEV. EQUIP.
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200	LOBBY

Architectural Sheet Index	
A1.1	First Floor Plan
A1.2	Second Floor Plan
A1.3	Area Plans
A4	Elevations
A5	Elevations
A6	Exterior Renderings
A7	Exterior Renderings



**1**  
**A2.0**  
**FIRST FLOOR LEVEL**  
 1/16" = 1'-0"

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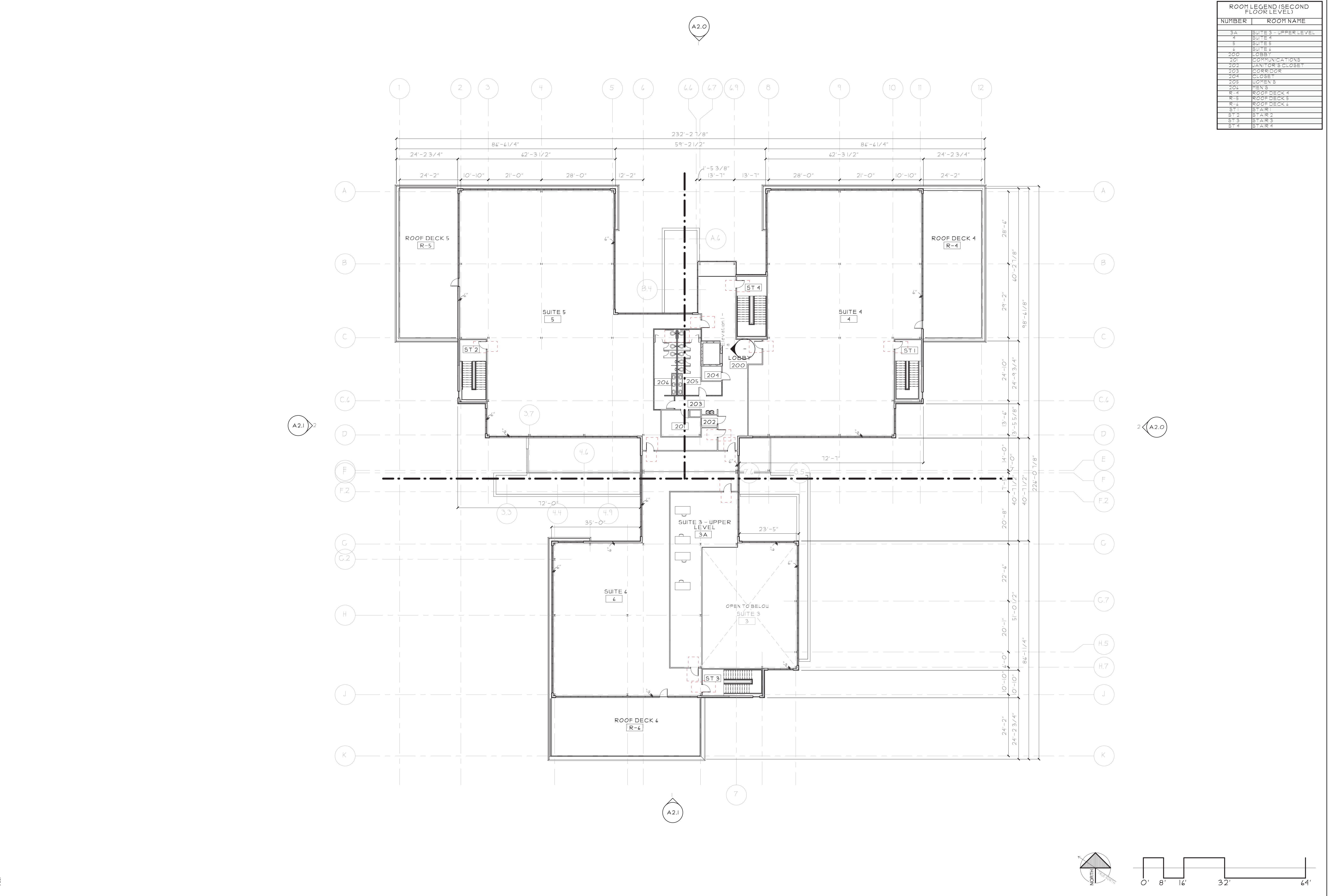
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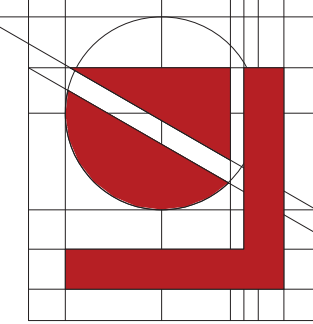
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ROOM LEGEND (SECOND FLOOR LEVEL)	
NUMBER	ROOM NAME
3A	SUITE 3 - UPPER LEVEL
4	SUITE 4
5	SUITE 5
6	SUITE 6
200	LOBBY
201	COMMUNICATIONS
202	JANITOR'S CLOSET
203	CORRIDOR
204	CLOSET
205	TOILETS
206	TOILETS
R-4	ROOF DECK 4
R-5	ROOF DECK 5
R-6	ROOF DECK 6
R-7	ROOF DECK 7
ST 1	STAIR
ST 2	STAIR
ST 3	STAIR
ST 4	STAIR



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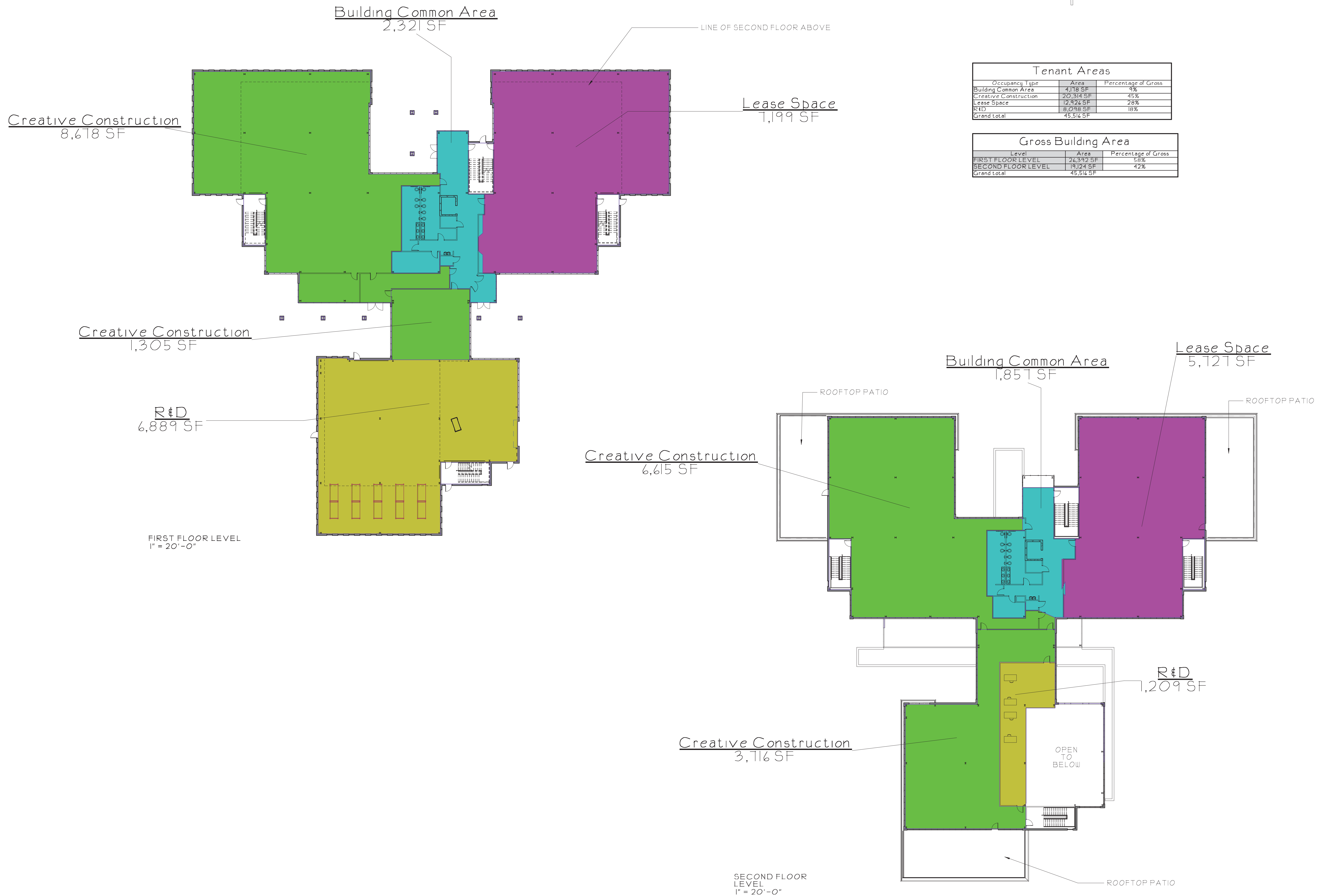
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**Northpond**  
 1112 RICKETT RD., BRIGHTON, MI 48116  
**Second Floor Plan**

**1**  
**A2.0** SECOND FLOOR LEVEL  
 1/16" = 1'-0"

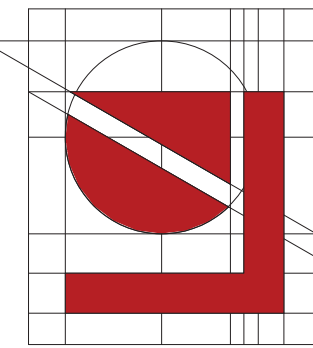
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Tenant Areas		
Occupancy Type	Area	Percentage of Gross
Building Common Area	4,118 SF	9%
Creative Construction	20,314 SF	45%
Lease Space	12,926 SF	28%
R&D	8,048 SF	18%
<b>Grand Total</b>	<b>45,516 SF</b>	

Gross Building Area		
Level	Area	Percentage of Gross
FIRST FLOOR LEVEL	24,392 SF	58%
SECOND FLOOR LEVEL	19,124 SF	42%
<b>Grand Total</b>	<b>45,516 SF</b>	



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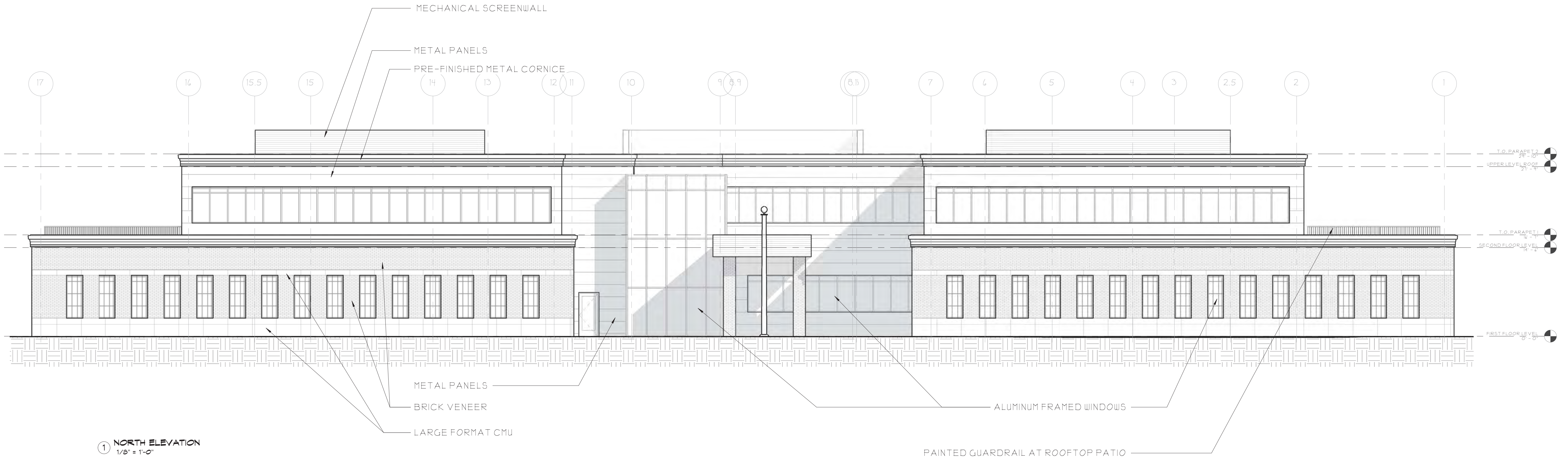
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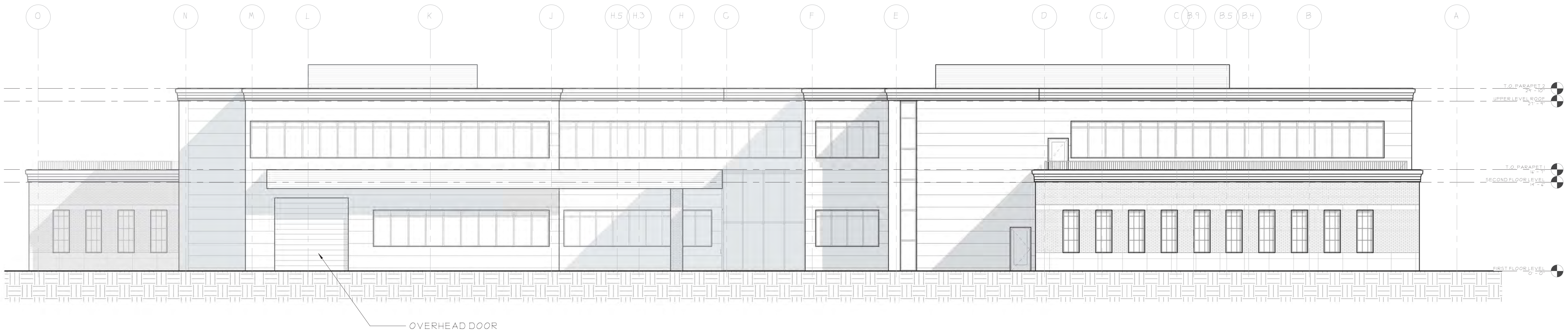
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**AREA PLANS**

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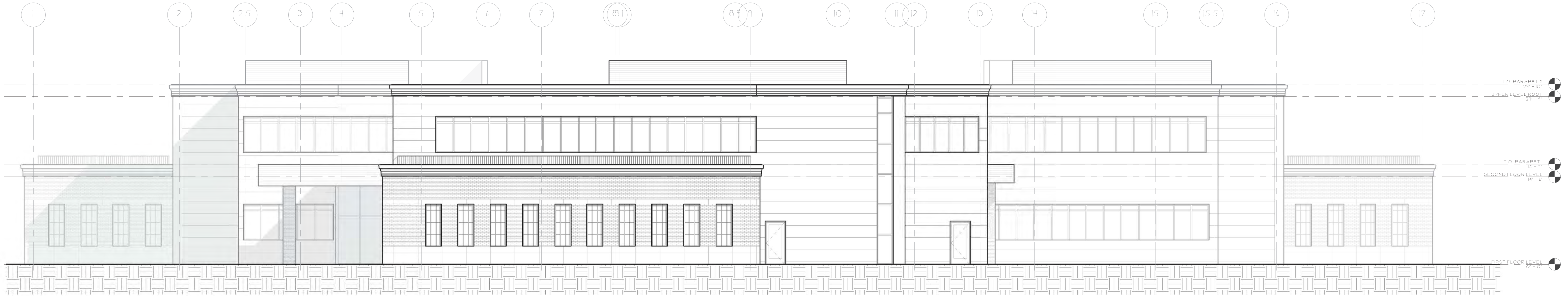
① NORTH ELEVATION  
1/8" = 1'-0"



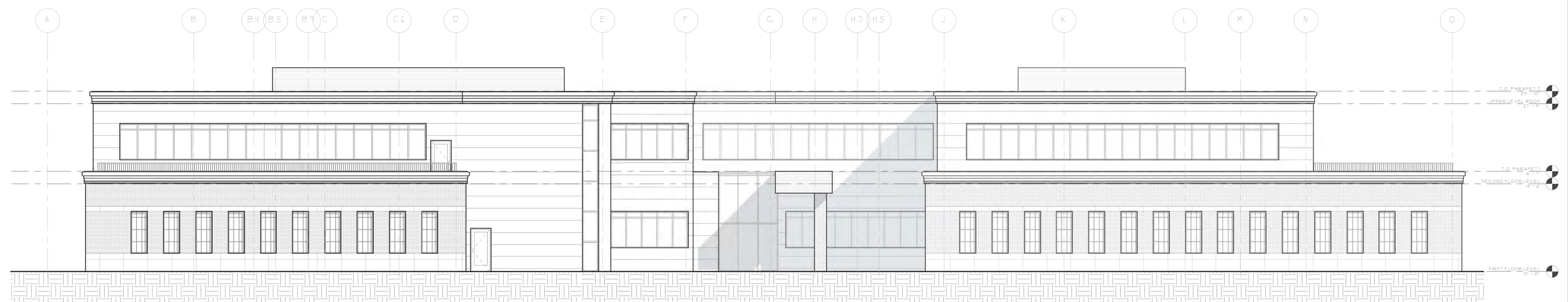
② EAST ELEVATION  
1/8" = 1'-0"

EXTERIOR MATERIALS		
MASONRY:	11,021 SF	29%
METAL PANEL:	17,372 SF	45%
GLAZING:	9,926 SF	26%

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1 SOUTH ELEVATION  
1/8" = 1'-0"



2 WEST ELEVATION  
1/8" = 1'-0"



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GENERAL NOTES

- 1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE LOCAL MUNICIPALITY, THE LOCAL WATER AND/OR SEWER AUTHORITY, THE COUNTY DRAINAGE COMMISSIONER, MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES AND ENERGY, THE STATE OF MICHIGAN, AND THE COUNTY ROAD COMMISSIONER WHEN APPLICABLE.
2. RULES, REGULATIONS OR LAWS OF ANY CONTROLLING GOVERNMENTAL AGENCY SHALL GOVERN, WHEN THEY ARE MORE STRINGENT THAN THE REQUIREMENTS OF THESE SPECIFICATIONS.
3. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS OR THE REQUIREMENTS OF ANY OTHER AGENCIES, CONTRACTOR SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
4. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT TO COMPLETE THE TYPE OF WORK WHICH IS BID, IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, DETAILS AND TO THE SATISFACTION OF THE OWNER AND OWNER'S REPRESENTATIVE.
5. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.
6. ANY WORK WITHIN STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GOVERNING AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL PERMITS HAVE BEEN ISSUED BY THESE GOVERNING AUTHORITIES.
7. ALL NECESSARY PERMITS, BONDS, INSURANCES, ETC., SHALL BE PAID FOR BY THE CONTRACTOR.
8. ALL ELEVATIONS SHOWN ARE BASED ON BENCHMARKS PROVIDED BY THE LOCAL MUNICIPALITY UNLESS OTHERWISE NOTED ON THE DRAWINGS.
9. ALL ITEMS OF WORK NOT SPECIFICALLY INDICATED AS PAY ITEMS ON THE DRAWINGS OR IN THE BID PACKAGE SHALL BE CONSIDERED INCIDENTAL ITEMS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION.
11. AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG (1-800-482-7171) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES AND SHALL NOTIFY REPRESENTATIVES OF OTHER UTILITIES IN THE VICINITY OF THE WORK.
12. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER.
13. MANHOLE, CATCH BASIN, GATE WELLS RIMS AND HYDRANT FINISH GRADE ELEVATIONS MUST BE AS-BUILT AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE. AGENCY REQUIREMENTS FOR RECORD DRAWINGS ALSO APPLY.
14. CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR OTHER UNWANTED DEBRIS, AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS, THE BURNING OR BURYING OF TRASH, STUMPS OR OTHER DEBRIS WILL NOT BE ALLOWED.
15. ALL REFERENCES TO M.D.O.T. SPECIFICATIONS REFER TO THE MOST CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
16. ALL CONTRACTORS BIDDING THIS PROJECT SHALL HAVE VISITED THE SITE TO BECOME THOROUGHLY FAMILIAR WITH THE SITE AND THE CONDITIONS IN WHICH THEY WILL BE CONDUCTING THEIR OPERATIONS. ANY VARIANCE FOUND BETWEEN THE PLANS AND EXISTING CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.
17. THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UNDERGROUND FACILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION PROVIDED BY THE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN.
18. THE OWNER MAY EMPLOY AND PAY FOR THE SERVICES OF AN ENGINEER TO PERFORM ON-SITE INSPECTION AND VERIFY IN THE FIELD THAT ALL BACKFILL, PAVEMENTS AND CONCRETE CURB AND GUTTER HAVE BEEN PLACED AND COMPACTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. IF, IN THE OPINION OF THE ENGINEER, THE WORK DOES NOT MEET THE TECHNICAL OR DESIGN REQUIREMENTS STIPULATED FOR THE WORK, THE CONTRACTOR SHALL MAKE ALL NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL MAKE NO DEVIATIONS FROM THE CONTRACT DOCUMENTS WITHOUT SPECIFIC WRITTEN APPROVAL OF THE OWNER.
19. ALL EXCAVATED MATERIAL REMOVED FROM THE SANITARY SEWER, STORM SEWER AND WATER MAIN TRENCHES UNDER, THROUGH AND WITHIN 3 FEET OF THE 45° ZONE OF INFLUENCE LINE OF EXISTING OR PROPOSED PAVING, SIDEWALK AREAS AND OTHER PLANS, NOT SUITABLE FOR BACKFILL, SHALL BE REMOVED FROM THESE AREAS AND DISPOSED OF.
20. THE CONTRACTOR SHALL RESTORE TO THEIR PRESENT CONDITIONS ANY PAVEMENT OR PUBLIC RIGHTS-OF-WAY THAT IS DISTURBED BY THE OPERATIONS OF THE CONTRACTOR. ALL RESTORATION WORK IN PUBLIC RIGHTS-OF-WAY SHALL BE PERFORMED TO THE SATISFACTION OF THE GOVERNMENT AGENCIES HAVING JURISDICTION.
21. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE AND LIGHTS TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC, IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
22. O.S.H.A. SAFETY REQUIREMENTS - ALL WORK, WORK PRACTICE, AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY, OCCUPATIONAL HEALTH AND ENVIRONMENTAL REGULATIONS AND ALSO NFPA AND ANSI CODES AS APPLICABLE. ALL WORK INSIDE A CONFINED SPACE SUCH AS MANHOLES OR UNDERGROUND STRUCTURES SHALL BE COORDINATED WITH UTILITY OWNER AND ALL WORKERS STRICTLY ENFORCED. LAND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
23. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY.
24. CONTRACTOR SHALL PROVIDE FOR THE CONTINUOUS OPERATION OF EXISTING FACILITIES WITHOUT INTERRUPTION DURING CONSTRUCTION UNLESS SPECIFICALLY AUTHORIZED OTHERWISE BY THE RESPECTIVE AUTHORITY.
25. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES IN THE PROJECT PLANS. TRENCH BACKFILL FOR EXISTING UTILITIES SHALL BE EXAMINED CAREFULLY. ANY TRENCH WHICH, IN THE OPINION OF THE SOILS ENGINEER ARE FOUND TO BE SOFT OR UNSUITABLE MATERIAL SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL. SAND BACKFILL SHALL BE USED UNDER PAVEMENT OR WITHIN 3 FEET OF THE 45° INFLUENCE LINE OF PAVED OR STRUCTURES.
EROSION CONTROL STANDARDS
1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE JURISDICTIONAL AGENCY UNDER PART 91 OF ACT 451 OF 1994, AS AMENDED.
2. UNDER "MICHIGAN'S PERMIT-BY-RULE FOR CONSTRUCTION ACTIVITIES", PROMULGATED UNDER ACT 245, PUBLIC ACTS OF 1929 AS AMENDED, AN NPDES STORM WATER DISCHARGE COVERAGE PERMIT IS REQUIRED FOR ANY CONSTRUCTION ACTIVITY THAT DISTURBS 1 ACRE OR MORE OF LAND. A CERTIFIED STORM WATER OPERATOR IS REQUIRED FOR THE SUPERVISION AND INSPECTION OF THE SOIL EROSION CONTROL MEASURES AT THE CONSTRUCTION SITE IN ACCORDANCE WITH THE PROVISIONS OF THESE RULES.
3. DAILY INSPECTIONS SHALL BE MADE BY CONTRACTOR WHILE WORKING TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY. ALL SOIL EROSION CONTROL PROVISIONS SHALL BE PROPERLY MAINTAINED DURING CONSTRUCTION.
4. EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS INCLUDING BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, AND PONDS.
5. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGE AREAS HAVE BEEN COMPLETED.

EROSION CONTROL STANDARDS CONTINUED

- 6. STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
7. SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
8. DUST SHALL BE CONTROLLED BY WATERING OR BY OTHER APPROVED MEANS THROUGHOUT ALL CONSTRUCTION OPERATIONS.
9. ALL WATER FROM DEWATERING OR SURFACE DRAINAGE FROM THE CONSTRUCTION SITE SHALL BE CONTROLLED TO ELIMINATE SEDIMENT CONTAMINATION OF OFF-SITE WATERWAYS OR STORM SEWERS. SUCH MEASURES SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY DEWATERING OR LAND DISTURBANCE.
10. PERMANENT SOIL EROSION CONTROL MEASURES FOR SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 5 CALENDAR DAYS. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.

STORM SEWER SPECIFICATIONS

- 1. THESE SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE GENERAL SPECIFICATIONS AND THE SPECIFICATIONS AND DETAIL SHEETS OF THE GOVERNING AGENCIES. IF ANY CONFLICT IS FOUND BETWEEN THE SPECIFICATIONS, THE STRICTER SPECIFICATIONS SHALL BE FOLLOWED.
2. CONTRACTOR SHALL FURNISH CERTIFIED EVIDENCE THAT ALL MATERIAL TESTS AND INSPECTIONS HAVE BEEN PERFORMED AND THAT THE PRODUCT HAS BEEN MANUFACTURED IN COMPLIANCE WITH THE APPLICABLE SPECIFICATIONS.
3. PROPER IMPLEMENTS, TOOLS AND FACILITIES SHALL BE PROVIDED AND USED FOR UNLOADING AND DISTRIBUTING MATERIALS ALONG THE LINE OF WORK. ANY PIPE OR FITTING DAMAGED IN TRANSPORTATION OR HANDLING SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE JOB SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF ALL MATERIAL INTENDED FOR THE WORK. HE SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO MATERIALS, EQUIPMENT AND WORK.
5. PIPE BEDDING, UNLESS OTHERWISE INDICATED, SHALL BE CL. II SAND, CRUSHED STONE OR ROUNDED GRAVEL. BEDDING MATERIAL SHALL HAVE 95% PASSING A 3/4" SIEVE AND AT LEAST 50% RETAINED ON A NO. 4 SIEVE.
6. POROUS FILTER MATERIAL FOR PERFORATED SUBSURFACE DRAINS SHALL BE CRUSHED ROCK OR GRAVEL GRADED BETWEEN 1-1/2" AND 3/4" OR PER PLANS AND DETAILS.
7. BACKFILL, UNLESS OTHERWISE NOTED, SHALL BE COARSE SAND, FINE GRAVEL OR SAND WITH A LOW PLASTICITY INDEX, FREE OF ROCKS, DEBRIS AND OTHER FOREIGN MATERIALS AND DEFINED AS ALL PASSING THROUGH A 3/8" SIEVE AND NOT MORE THAN 10% BY VOLUME PASSING THROUGH A 200-MESH SIEVE.
8. STORM SEWER PIPING AND FITTINGS SHALL BE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL CONFORM TO THE FOLLOWING:
A. POLYVINYL CHLORIDE (PVC) AND ACRYLONITRILE BUTADIENE STYRENE (ABS) FOR PIPE UP TO AND INCLUDING 10" IN DIAMETER, SHALL CONFORM TO ASTM D3034, SDR 23.5 FOR PVC PIPE AND ASTM D2751 FOR ABS PIPE WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D3212 OR CHEMICALLY WELDED PIPE JOINTS CONFORMING TO ASTM F545.
B. REINFORCED CONCRETE PIPE, FOR PIPE 12" IN DIAMETER AND UP, SHALL CONFORM TO ASTM C-76, CLASS IV UNLESS MODIFIED BY THE DRAWINGS. JOINTS SHALL BE MODIFIED GROOVED TONGUE WITH RUBBER GASKET CONFORMING TO ASTM C-443.
C. PERFORATED SUBSURFACE DRAIN PIPE SHALL BE PVC CONFORMING TO ASTM D-2729 OR PERFORATED, CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONFORMING TO ASTM C-76, CLASS IV UNLESS MODIFIED BY THE DRAWINGS. POLYETHYLENE PIPE SHALL BE PREFABRICATED COUPLING WITH SOLVENT WELD.
9. MANHOLES, CATCH BASINS, AND INLETS SHALL BE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL BE CONSTRUCTED OF THE FOLLOWING:
A. REINFORCED PRE-CAST CONCRETE MANHOLE SECTIONS INCLUDING CONCENTRIC OR ECCENTRIC CONES AND GRADE RINGS SHALL BE 4000 PSI CONCRETE AND CONFORM TO ASTM C-478-84T.
B. BRICK SHALL BE SOUND, HARD-BURNED THROUGHOUT AND OF UNIFORM SIZE AND QUALITY AND SHALL BE IN ACCORDANCE WITH AASHTO M 91, GRADE MS.
C. CONCRETE MASONRY SHALL BE SOUND PRE-CAST SEGMENTAL UNITS CONFORMING TO ASTM C-139.
10. IRON CASTINGS SHALL CONFORM TO ASTM A-48, CLASS 30. BEARING SURFACES BETWEEN CAST IRON FRAMES, COVERS AND GRATES SHALL BE MACHINED, FITTED TOGETHER AND MATCHED-MARKED TO PREVENT ROCKING. SYSTEM IDENTIFYING LETTERS 2" HIGH SHALL BE STAMPED OR CAST INTO ALL COVERS SO THAT THEY ARE PLAINLY VISIBLE. SEE MUNICIPALITY STANDARDS FOR ACTUAL WORDING.
11. CASTINGS SHALL BE MANUFACTURED BY EAST JORDAN IRON WORKS, INC., NEENAH FOUNDRY COMPANY OR EQUAL.
12. CONCRETE AND MASONRY MATERIALS FOR CONSTRUCTION OF STORM DRAINAGE STRUCTURES SHALL CONSIST OF THE FOLLOWING:
A. PORTLAND CEMENT SHALL BE STANDARD BRAND OF PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I OR IA.
B. FINE AND COARSE AGGREGATES FOR CONCRETE SHALL BE PER ASTM C-33.
C. AGGREGATE FOR CEMENT MORTAR SHALL BE CLEAN, SHARP SAND CONFORMING TO ASTM C-144.
D. HYDRATED LIME SHALL COMPLY WITH ASTM C-207, TYPE S.
E. WATER SHALL MEET THE REQUIREMENTS OF MDOT SPEC SECTION 911.
F. REINFORCING STEEL FOR CONCRETE SHALL BE INTERMEDIATE-GRADE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 40.
13. CONCRETE, UNLESS OTHERWISE NOTED, SHALL HAVE COMPRESSIVE STRENGTH AFTER 28 DAYS OF 3000 PSI MINIMUM WITH 3" MAXIMUM SLUMP.
A. CONCRETE FILL BELOW GRADE MAY BE 2500 PSI AT 28 DAYS.
B. CONCRETE, WHERE EXPOSED TO THE WEATHER, SHALL BE AIR-ENTRAINED. AIR ENTRAINMENT SHALL BE ACCOMPLISHED BY THE USE OF ADDITIVES CONFORMING TO ASTM C-260. AIR CONTENT SHALL BE 6% + 1% ADDITIVE SHALL BE USED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S PRINTED DIRECTIONS.
C. READY-MIX CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-94.
14. MORTAR SHALL BE SPECIFIED HEREINAFTER. USE METHOD OF MIXING MORTAR AT JOB SO THAT SPECIFIED PROPORTIONS OF MORTAR MATERIALS CAN BE CONTROLLED AND ACCURATELY MAINTAINED DURING WORK PROGRESS. MORTAR SHALL NOT BE MIXED IN GREATER QUANTITIES THAN REQUIRED FOR IMMEDIATE USE, WITH AMOUNT OF WATER CONSISTENT WITH SATISFACTORY WORKABILITY. RE-TAMPING OF MORTAR IS NOT PERMITTED.
A. MORTAR FOR LAYING BRICK OR CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C-270, TYPE M, AVERAGE COMPRESSIVE STRENGTH 3500 PSI MINIMUM AT 28 DAYS. MORTAR MIX SHALL BE PROPORTIONED BY VOLUME.
B. MORTAR FOR PLASTERING SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 2-1/2 PARTS SAND.
C. MORTAR FOR GROUTING OF RIP-RAP SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 3-1/2 PARTS SAND.
15. PERFORM ALL EXCAVATING AND TRENCHING TO DIMENSIONS AND ELEVATIONS INDICATED ON DRAWINGS.

STORM SEWER SPECIFICATIONS, CONTINUED

- 16. OPEN NO MORE TRENCH IN ADVANCE OF PIPE LAYING THAN IS NECESSARY TO EXPEDITE THE TRENCH.
17. CARE SHALL BE TAKEN NOT TO EXCAVATE BELOW THE DEPTHS INDICATED ON DRAWINGS. WHERE EXCESSIVE OR UNAUTHORIZED EXCAVATION TAKES PLACE, THE OVERDEPTH SHALL BE BACKFILLED TO THE PROPER GRADE WITH COMPACTED BEDDING MATERIAL, AT NO EXPENSE TO THE OWNER.
18. WHERE UNSTABLE SOIL IS ENCOUNTERED, CONTRACTOR SHALL NOT PLACE PIPE UNTIL A SOLID BED HAS BEEN PROVIDED.
19. EXCAVATION FOR DRAINAGE STRUCTURES SHALL EXTEND A SUFFICIENT DISTANCE FROM THE WALLS AND FOOTINGS TO ALLOW FOR FORMS, CONSTRUCTION OF WALLS, CONNECTIONS AND FOR INSPECTION.
20. PROVIDE REQUIRED TIMBER SHEETING, BRACING AND SHORING TO PROTECT SIDES OF EXCAVATION. DO NOT BRACE SHEETING OR SHORING. PROVIDE SUITABLE LADDERS FOR SAFE ENTRY TO AND EXIT FROM EXCAVATION.
21. DURING EXCAVATION, MATERIAL SUITABLE FOR BACKFILLING SHALL BE PILED IN AN ORDERLY MANNER A SUFFICIENT DISTANCE FROM THE BANKS OF TRENCHES TO AVOID OVERLOADING, AND TO PREVENT SLIDES OR CAVE-INS.
22. WHEN WET EXCAVATION IS ENCOUNTERED, THE TRENCH SHALL BE DE-WATERED UNTIL THE PIPE HAS BEEN LAID AND BACKFILLED TO A POINT AT LEAST 1 FOOT ABOVE TOP OF PIPE.
23. MANHOLES AND CATCH BASINS SHALL BE CONSTRUCTED OF BRICK, CONCRETE MASONRY UNITS OR PRE-CAST CONCRETE WITH CAST IRON FRAMES, COVERS AND MANHOLE STEPS.
24. THE WALL THICKNESS OF MANHOLES AND CATCH BASINS CONSTRUCTED OF VARIOUS MATERIALS AND SET AT VARIOUS DEPTHS SHALL MEET THESE MINIMUMS, ACCORDING TO REQUIREMENTS OF THE GOVERNING AGENCY IF THEY EXCEED THESE THICKNESSES:
TABLE: DEPTH, BRICK, CONCRETE BLOCK, PRE-CAST CONCRETE
• 0' - 10' 8" 6" 6"
• 10' - 16' 12" 8" 8"
• 16' - 25' 16" 12" 12"
25. WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER, TO CENTER, AROUND THE PERIPHERY OF OPENINGS TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OUT.
26. MANHOLE STEPS SHALL BE BUILT INTO AND THOROUGHLY ANCHORED TO WALLS. STEPS SHALL BE FACTORY INSTALLED IN PRE-CAST STRUCTURES.
27. ALL PIPING ENTERING OR LEAVING DRAINAGE STRUCTURES SHALL BE ADEQUATELY SUPPORTED BY POURED-IN-PLACE CONCRETE FILL FROM PIPE CENTER TO UNDISTURBED GROUND.
28. SET FRAMES IN FULL BED OF STIFF MORTAR OR BITUMINOUS MASTIC JOINTING COMPOUND AT FINAL ELEVATION.
29. ALL TIMBER SHEETING BELOW A PLANE 12" ABOVE TOP OF PIPE SHALL REMAIN IN PLACE IN ORDER NOT TO DISTURB PIPE GRADING. BEFORE BACKFILLING, REMOVE ALL OTHER SHEETING BRACING AND SHORING.
30. BEDDING USED FOR TRENCH BOTTOM SHALL BE EXTENDED UP THE SIDES AND CAREFULLY PLACED AROUND AND OVER PIPE IN 6" MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS PER ASTM D-1557 (MODIFIED PROCTOR) UNTIL 12" OF COVER EXISTS OVER PIPE.
31. REMAINDER OF TRENCH SHALL BE BACKFILLED WITH SPECIFIED BACKFILL MATERIAL TO SPECIFIED SUBGRADE ELEVATION. BACKFILLING SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY PER ASTM D-1557.
32. WITHIN 3' OF THE 45° INFLUENCE LINE OF THE SUBGRADE OF STREETS, DRIVES, PARKING LOTS AND OTHER AREAS TO HAVE OR HAVING IMPROVED HARD SURFACES, BACKFILL SHALL BE MATERIAL SPECIFIED AND SHALL BE DEPOSITED IN 6" LOOSE LAYERS AT OPTIMUM MOISTURE CONTENT (±2%) AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER ASTM D1557. (MODIFIED PROCTOR) SUITABLE MATERIALS FOUND ON SITE MAY BE USED.
33. BEFORE BACKFILLING AROUND DRAINAGE STRUCTURES, ALL FORMS, TRASH AND DEBRIS SHALL BE REMOVED AND CLEARED AWAY. SELECTED EXCAVATED MATERIAL SHALL BE PLACED SYMMETRICALLY ON ALL SIDES IN 8" MAXIMUM LAYERS. EACH LAYER SHALL BE MOISTENED AND COMPACTED WITH MECHANICAL OR HAND TAMPERS.
34. AFTER INSTALLATION OF PIPES AND DRAINAGE STRUCTURES, CLEAN THEM, AND ADJUST TOPS TO FINISH GRADE. PIPE SHALL BE STRAIGHT BETWEEN STRUCTURES, WITH THE FULL INSIDE DIAMETER VISIBLE WHEN SIGHTING BETWEEN STRUCTURES.
35. ENDS OF HEADWALL AND END SECTIONS FOR PIPES LARGER THAN 6 INCHES, SHALL BE FITTED WITH A #4 ROUND MINIMUM WELDED STEEL ROD GRATING. RODS SHALL BE SPACED 6" O.C. MAXIMUM. WELD ROD AT ALL INTERSECTIONS. GRATE SHALL BE REMOVED FOR ACCESS AND CLEANING.
36. RIP-RAP SHALL BE LAID FROM THE BOTTOM UPWARD; STONES SHALL BE LAID BY HAND WITH 8" MINIMUM DIMENSION PERPENDICULAR TO GRADE WITH WELL-BROKEN JOINTS, COMPACTED AS IT GOES, TRUE TO LINE. JOINTS SHALL BE FILLED WITH CEMENT MORTAR. SURFACE STONE TO BE EXPOSED. CLEAN JOINTS WITH WIRE BRUSH.
37. THE CONTRACTOR SHALL DO ALL REQUIRED EXCAVATION AND TRENCHING WORK AND THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPLETION OF THE WORKS HEREIN REGARDLESS OF THE NATURE OF MATERIALS ENCOUNTERED DURING THE COURSE OF THE WORK. THE OWNER WILL NOT BE LIABLE FOR ANY COSTS WHATSOEVER ASSOCIATED WITH, BUT NOT LIMITED TO, THE PRESENCE OF ROCK, PEAT, SUBTERRANEAN STREAMS, EXCESSIVE WATER OR OTHER DIFFICULT OR UNANTICIPATED SUB-SURFACE PHENOMENA.
38. ALL CONNECTIONS TO EXISTING SEWERS SHALL BE PER MUNICIPAL REQUIREMENTS, AND ALL COSTS INCLUDING TESTING AND/OR VIDEO OF SEWERS SHALL BE INCIDENTAL TO THE JOB.
WATER MAIN SPECIFICATIONS
1. WATER MAIN SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE GENERAL SPECIFICATIONS, THE WATERMAIN SPECIFICATIONS, AND THE DETAIL SHEETS OF THE GOVERNING AGENCIES. IF ANY CONFLICT IS FOUND BETWEEN THE SPECIFICATIONS, THE STRICTER SPECIFICATIONS SHALL BE FOLLOWED.
2. DUCTILE IRON PIPE, 16" DIAMETER AND SMALLER, SHALL CONFORM TO ANSI/AWWA SPECIFICATION C151/A21.51, CLASS 54. DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA SPECIFICATION C110/A21.10 FOR STANDARD FITTINGS OR TO ANSI/AWWA SPECIFICATION C153/A21.53 FOR COMPACT FITTINGS. DUCTILE IRON PIPE AND FITTINGS SHALL HAVE A DOUBLE THICKNESS CEMENT MORTAR LINING CONFORMING TO ANSI SPECIFICATION A21.4.
3. JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE U.S. PIPE AND FOUNDRY COMPANY "TYTON JOINT" OR APPROVED EQUAL.
4. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF FIVE FEET, OR AS SPECIFIED BY THE LOCAL GOVERNING MUNICIPALITY, BELOW FINISH GRADE UNLESS OTHERWISE NOTED IN THE PLANS. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL 11-1/4 BENDS PROPERLY ANCHORED.
5. SEE THE WATER MAIN STANDARD DETAIL SHEETS OF THE GOVERNING AGENCY FOR THE SPECIFIC TYPE OF HYDRANTS AND VALVES TO BE USED FOR THIS PROJECT. THESE DETAIL SHEETS ARE INCLUDED AS PART OF THE PLANS.
6. BEFORE ANY WATER MAIN WILL BE ACCEPTED BY THE GOVERNING AGENCY, IT MUST PASS A COMPLESSURE TEST COMPLYING WITH THE CURRENT SPECIFICATIONS AND PROCEDURES OF THE AGENCY.
7. BEFORE ANY WATER MAIN SYSTEM WILL BE ACCEPTED BY THE GOVERNING AGENCY, THE FIRE HYDRANTS MUST BE PAINTED AS INDICATED ON THE WATER MAIN STANDARD DETAIL SHEETS.
8. TWO INCH (2") DIAMETER CORPORATION STOPS SHALL BE PROVIDED IN BOTH THE EXISTING WATER MAIN AND THE NEW WATER MAIN AT ALL NEW CONNECTIONS.
9. ALL TEES, BENDS CONNECTIONS, ETC. ARE INCIDENTAL TO THE JOB.
10. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATERMANS UNLIL TESTING IS SATISFACTORILY COMPLETED.

WATER MAIN SPECIFICATIONS

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9. ALL TEES, BENDS CONNECTIONS, ETC. ARE INCIDENTAL TO THE JOB.
10. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATERMANS UNLIL TESTING IS SATISFACTORILY COMPLETED.

WATER MAIN SPECIFICATIONS, CONTINUED

- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF ALL MATERIAL INTENDED FOR THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO MATERIALS EQUIPMENT AND WORK.
12. PIPE BEDDING, UNLESS OTHERWISE INDICATED, SHALL BE CRUSHED STONE OR ROUNDED GRAVEL. BEDDING MATERIAL SHALL HAVE 95% PASSING A 3/4" SIEVE AND 50% RETAINED ON A NO. 4 SIEVE. LOAD FACTOR SHALL BE 1.5.
13. BACKFILL, UNLESS OTHERWISE NOTED, SHALL BE COARSE SAND, FINE GRAVEL OR EARTH HAVING A LOW PLASTICITY INDEX, FREE OF ROCKS, DEBRIS AND OTHER FOREIGN MATERIALS AND DEFINED AS ALL PASSING THROUGH A 3/8" SIEVE AND NOT MORE THAN TEN PERCENT (10%) BY VOLUME PASSING THROUGH A 200 MESH SIEVE.
14. GATE WELLS SHALL BE REINFORCED PRE-CAST CONCRETE SECTIONS INCLUDING CONCENTRIC OR ECCENTRIC CONES AND GRADE RINGS SHALL BE 4000 PSI CONCRETE AND CONFORM TO ASTM C-478.
15. THRUST BLOCKS, IF REQUIRED BY THE MUNICIPALITY, SHALL BE MADE OF 3000 PSI CONCRETE NET MIX
16. THE MAXIMUM WIDTH OF TRENCH TO TOP OF PIPE SHALL BE AS FOLLOWS:
TABLE: PIPE DIAMETER, TRENCH WIDTH
• THROUGH 12" 36"
• 15" THROUGH 36" O.D. PLUS 24"
• 42" THROUGH 60" O.D. PLUS 30"
• 66" AND LARGER O.D. PLUS 36"
17. OPEN NO MORE TRENCH IN ADVANCE OF PIPE LAYING THAN IS NECESSARY TO EXPEDITE THE WORK.
18. CARE SHALL BE TAKEN NOT TO EXCAVATE BELOW THE DEPTHS INDICATED ON DRAWINGS. WHERE EXCESSIVE OR UNAUTHORIZED EXCAVATION TAKES PLACE, THE OVERDEPTH SHALL BE BACKFILLED AT THE PROPER GRADE WITH COMPACTED BEDDING MATERIAL, AT NO EXPENSE TO THE OWNER.
19. WHERE UNSTABLE SOIL IS ENCOUNTERED, CONTRACTOR SHALL NOT PLACE PIPE UNTIL A SOLID BED HAS BEEN PROVIDED.
20. EXCAVATION FOR STRUCTURES SHALL EXTEND A SUFFICIENT DISTANCE FROM THE WALLS AND FOOTINGS TO ALLOW FOR FORMS, CONSTRUCTION OF WALLS, CONNECTIONS AND FOR INSPECTION.
21. GATE WELLS SHALL BE CONSTRUCTED OF BRICK, CONCRETE MASONRY UNITS OR PRE-CAST CONCRETE WITH CAST IRON FRAMES, COVERS AND MANHOLE STEPS, AS INDICATED ON DRAWINGS AND SPECIFIED HEREIN.
A. COMPLETELY FLAT JOINTS ON PRE-CAST CONCRETE SECTIONS WITH BITUMINOUS MASTIC JOINTING COMPOUND OR JOINTS SHALL BE MADE WITH CEMENT MORTAR WITH INSIDE POINTING AND OUTSIDE RUBBER WRAP.
B. BRICK SHALL BE WET WHEN LAID. LAY BRICK OR CONCRETE MASONRY UNITS IN MORTAR SO AS TO FORM FULL BED, WITH END AND SIDE JOINTS IN ONE OPERATION, WITH JOINTS NOT MORE THAN 3/8" WIDE EXCEPT WHEN BRICKS OR CONCRETE MASONRY UNITS ARE LAID RADIALLY, IN WHICH CASE THE NARROWEST PART OF JOINT SHALL NOT EXCEED 1/4". LAY IN TRUE LINE AND, WHENEVER PRACTICAL, JOINTS SHALL BE CAREFULLY STRUCK AND POINTED ON INSIDE.
C. PROTECT FRESH BRICK WORK FROM FREEZING, FROM DRYING EFFECTS OF SUN AND WIND, AND FOR SUCH TIME AS DIRECTED BY THE GEOTECHNICAL ENGINEER, IN FREEZING WEATHER, HEAT SUFFICIENTLY TO REMOVE ICE AND FROST FROM BRICK WORK.
22. GATE WELL STEPS SHALL BE BUILT INTO AND THOROUGHLY ANCHORED TO WALLS.
23. ALL PIPING ENTERING OR LEAVING GATE WELLS SHALL BE ADEQUATELY SUPPORTED BY POURED-IN-PLACE CONCRETE FILL FROM PIPE CENTER TO UNDISTURBED GROUND.
24. THE OUTSIDE SURFACES OF BRICK OR CONCRETE MASONRY PORTION OF GATE WELLS SHALL BE PLASTERED AND TROWELED SMOOTH WITH 1/2" LAYERS OF CEMENT MORTAR.
25. SET FRAMES IN FULL BED OF STIFF MORTAR OR BITUMINOUS MASTIC JOINTING COMPOUND AT FINAL ELEVATION.
26. IF REQUIRED BY THE MUNICIPALITY, PLACE HORIZONTAL AND/OR VERTICAL THRUST BLOCKS AT ALL PLUGS, CAPS, TEES AND FITTINGS. THE COST OF THRUST BLOCKS SHALL BE INCLUDED IN THE PRICE BID PER FOOT FOR WATER MAIN. THRUST BLOCKS SHALL NOT BE BACKFILLED PRIOR TO OBSERVATION BY THE CONTROLLING GOVERNMENTAL AGENCY. IF THRUST BLOCKS ARE NOT UTILIZED, ALL FITTINGS SHALL HAVE RESTRAINED JOINTS PER THE MANUFACTURER.
27. IN UNSTABLE SOIL CONDITIONS, THRUST BLOCKS SHALL BE SUPPORTED BY PILING DRIVEN TO SOLID FOUNDATIONS OR BY REMOVAL OF THE UNSTABLE SOILS AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS. THE COST OF PILING OR BALLAST AT THRUST BLOCKS SHALL BE INCLUDED IN THE PRICE BID FOR WATER MAIN.
28. PLACE ALL CONCRETE ANCHORAGES AND ENCASEMENTS, AS CALLED FOR ON THE DRAWINGS. THE COST OF RESTRAINED JOINTS OR ANCHORAGE AND ENCASEMENTS SHALL BE INCLUDED IN THE PRICE BID FOR WATER MAIN.
29. BEDDING USED FOR TRENCH BOTTOM SHALL BE EXTENDED UP THE SIDES AND CAREFULLY PLACED AROUND AND OVER PIPE IN 6" MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS PER ASTM D-1557(MODIFIED PROCTOR) UNTIL 12" OF COVER EXISTS OVER PIPE.
30. REMAINDER OF TRENCH SHALL BE BACKFILLED WITH SPECIFIED BACKFILL MATERIAL TO SPECIFIED SUBGRADE ELEVATION. BACKFILLING SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY PER ASTM D-1557.
31. WITHIN 3' OF THE 45° INFLUENCE LINE OF THE SUBGRADE OF STREETS, DRIVES, PARKING LOTS AND OTHER AREAS PAVED, OR AREAS PROPOSED TO BE PAVED, PLACE SAND BACKFILL IN 6" LOOSE LAYERS AT OPTIMUM MOISTURE CONTENT (±2%) AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR).
32. BEFORE BACKFILLING AROUND STRUCTURES, ALL FORMS, TRASH AND DEBRIS SHALL BE REMOVED AND CLEARED AWAY. SELECTED EXCAVATED MATERIAL SHALL BE PLACED SYMMETRICALLY ON ALL SIDES IN 8" MAXIMUM LAYERS; EACH LAYER SHALL BE MOISTENED AND COMPACTED WITH MECHANICAL OR HAND TAMPERS.
33. THE CONTRACTOR SHALL DO ALL REQUIRED EXCAVATION AND TRENCHING WORK AND THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPLETION OF THE WORKS HEREIN REGARDLESS OF THE NATURE OF MATERIALS ENCOUNTERED DURING THE COURSE OF THE WORK. THE OWNER WILL NOT BE LIABLE FOR ANY COSTS WHATSOEVER ASSOCIATED WITH, BUT NOT LIMITED TO, THE PRESENCE OF ROCK, PEAT, SUBTERRANEAN STREAMS, EXCESSIVE WATER OR OTHER DIFFICULT OR UNANTICIPATED SUB-SURFACE PHENOMENA.

SANITARY SEWER SPECIFICATIONS

- 1. THESE SPECIFICATIONS SHALL BE USED IN CONJUNCTION WITH THE GENERAL SPECIFICATIONS AND THE SANITARY SEWER SPECIFICATIONS AND DETAIL SHEETS OF THE GOVERNING AGENCIES. IF ANY CONFLICT IS FOUND BETWEEN THE SPECIFICATIONS, THE STRICTER SPECIFICATIONS WILL BE FOLLOWED.
2. THE GOVERNING AGENCY WILL INSPECT THE INSTALLATION OF ALL SANITARY SEWER PIPING.
3. PROPER IMPLEMENTS, TOOLS AND FACILITIES SHALL BE PROVIDED AND USED FOR UNLOADING AND DISTRIBUTING MATERIALS ALONG THE LINE OF WORK. ANY PIPE OR FITTING DAMAGED IN TRANSPORTATION OR HANDLING SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE JOB SITE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF ALL MATERIAL INTENDED FOR THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO MATERIALS, EQUIPMENT AND WORK.
5. THE CONTRACTOR SHALL DO ALL REQUIRED EXCAVATION AND TRENCHING WORK AND THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPLETION OF THE WORKS HEREIN REGARDLESS OF THE NATURE OF MATERIALS ENCOUNTERED DURING THE COURSE OF THE WORK. THE OWNER WILL NOT BE LIABLE FOR ANY COSTS WHATSOEVER ASSOCIATED WITH, BUT NOT LIMITED TO, THE PRESENCE OF ROCK, PEAT, SUBTERRANEAN STREAMS, EXCESSIVE WATER OR OTHER DIFFICULT OR UNANTICIPATED SUB-SURFACE PHENOMENA.
6. ALL SEWERS OVER 24" DIAMETER SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24" DIAMETER OR SMALLER, WHERE GROUND WATER LEVEL ABOVE THE TOP OF SEWER IS OVER SEVEN (7) FEET, SHALL BE SUBJECTED TO AN INFILTRATION TEST.
7. ALL SEWERS OF 24" DIAMETER OF LESS, WHERE THE GROUND WATER LEVEL ABOVE THE TOP OF THE SEWER IS SEVEN (7) FEET OR LESS, SHALL BE SUBJECT TO AIR TESTS OR EXFILTRATION TESTS.
8. NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD.
A. ALL SEWERS OVER 24" DIAMETER SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24" DIAMETER OR SMALLER, WHERE GROUND WATER LEVEL ABOVE THE TOP OF SEWER IS OVER SEVEN (7) FEET, SHALL BE SUBJECTED TO AN INFILTRATION TEST.
B. ALL SEWERS OF 24" DIAMETER OF LESS, WHERE THE GROUND WATER LEVEL ABOVE THE TOP OF THE SEWER IS SEVEN (7) FEET OR LESS, SHALL BE SUBJECT TO AIR TESTS OR EXFILTRATION TESTS.
9. NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD.

SANITARY SEWER SPECIFICATION, CONTINUED

- 6. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE THE SANITARY SEWER INSTALLATION WITH THE GRADING, EXCAVATION AND OTHER SITE UTILITY SUBCONTRACTORS AND THE OWNERS REPRESENTATIVE SO AS TO PROVIDE FOR A SMOOTH AND ORDERLY PROGRESSION OF THE WORK.
7. SANITARY SEWER PIPING AND FITTINGS SHALL BE OF THE SIZE AND TYPE INDICATED ON THE DRAWINGS AND SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING AGENCY.
8. REINFORCED PRE-CAST CONCRETE MANHOLE SECTIONS INCLUDING CONCENTRIC OR ECCENTRIC CONES AND GRADE RINGS SHALL BE 4000 PSI CONCRETE AND CONFORM TO ASTM C-478 OR AASHTO M-199.
9. OPEN NO MORE TRENCH IN ADVANCE OF PIPE LAYING THAN IS NECESSARY TO EXPEDITE THE WORK.
10. CARE SHALL BE TAKEN NOT TO EXCAVATE BELOW THE DEPTHS INDICATED ON DRAWINGS. WHERE EXCESSIVE OR UNAUTHORIZED EXCAVATION TAKES PLACE, THE OVERDEPTH SHALL BE BACKFILLED AT THE PROPER GRADE WITH COMPACTED BEDDING MATERIAL, AT NO EXPENSE TO THE OWNER.
11. PROVIDE REQUIRED TIMBER SHEETING, BRACING AND SHORING TO PROTECT SIDES OF EXCAVATION. DO NOT BRACE SHEETING OR SHORING. PROVIDE SUITABLE LADDERS WHERE REQUIRED.
12. DURING EXCAVATION, MATERIAL SUITABLE FOR BACKFILLING SHALL BE PILED IN AN ORDERLY MANNER A SUFFICIENT DISTANCE FROM THE BANKS OF TRENCHES TO AVOID OVERLOADING, AND TO PREVENT CAVE-INS.
13. WHEN WET EXCAVATION IS ENCOUNTERED, THE TRENCH SHALL BE DE-WATERED UNTIL THE PIPE HAS BEEN LAID AND BACKFILLED TO A POINT AT LEAST 1 FOOT ABOVE TOP OF PIPE.
14. SANITARY SEWER CROSSINGS SHALL BE MADE WITH 18" OF VERTICAL CLEARANCE FROM ANOTHER UTILITY AND SHALL BE MADE WITHOUT PLACING POINT LOADS ON EITHER PIPE. CONSTRUCT SADDLES, OR PLACE PROTECTIVE CONCRETE CAP TO PREVENT DAMAGE.
15. ALL CONNECTION BRANCHES IN THE SEWER PIPE SHALL BE SECURELY AND COMPLETELY FASTENED TO OR FORMED IN THE WALL OF THE PIPE DURING THE COURSE OF MANUFACTURE. ALL PIPE CONTAINING SUCH CONNECTION BRANCHES SHALL BE INSTALLED WITH THE MAIN SEWER. THE PROPOSED LOCATION OF THE WVE SHALL BE PER PLAN OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
16. SERVICE LEADS SHALL TERMINATE (WITH AN APPROVED STOPPER) PER PLANS OR AS DIRECTED BY OWNER OR OWNER'S REPRESENTATIVE.
17. EACH RISER AND/OR SERVICE LEAD SHALL BE MARKED WITH A 2 INCH X 2 INCH X 8 FOOT LONG HARDWOOD MARKER, PLACED VERTICALLY AT THE END OF THE PIPE.
18. DOWNSPOUTS, WEED TILE, FOOTING DRAINS, OR ANY CONDUIT, THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
19. ANY CONNECTION TO AN EXISTING SANITARY SEWER MANHOLE SHALL BE MADE IN STRICT CONFORMANCE WITH THE PLANS AND SPECIFICATIONS, WITH ALL WORK BEING DONE IN A WORKMANLIKE MANNER. THIS WORK SHALL INCLUDE THE CONSTRUCTION OF A PROPER CHANNEL IN THE EXISTING MANHOLE AT WHICH THE CONNECTION IS TO BE MADE, TO DIRECT THE FLOW OF INCOMING FLUIDS TO THE EXISTING OUTLET IN A MANNER WHICH WILL TEND TO CREATE THE LEAST AMOUNT OF TURBULENCE. ANY PORTION OF THE EXISTING STRUCTURE WHICH WOULD INTERFERE WITH SUCH CONSTRUCTION SHALL BE REMOVED. THE COST OF ALL CONNECTIONS, INCLUDING ALL TESTING AND/OR TESTING REQUIRED BY THE LOCAL MUNICIPALITY, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE MAIN SEWER UNLESS OTHERWISE PROVIDED IN THE PROPOSAL.
20. WHEN CONNECTIONS ARE MADE WITH SEWERS OR DRAINS CARRYING FLUIDS, SPECIAL CARE MUST BE TAKEN THAT NO PART OF THE PIPE IS BUILT UNDER WATER. A FLUME OR DAM MUST BE INSTALLED AND PUMPING MAINTAINED, IF NECESSARY, AND THE NEW WORK KEPT DRY UNTIL COMPLETED AND ANY CONCRETE OR MORTAR HAS SET.
21. ALL TIMBER SHEETING BELOW A PLANE 12" ABOVE TOP OF PIPE SHALL REMAIN IN PLACE IN ORDER NOT TO DISTURB PIPE GRADING. BEFORE BACKFILLING, REMOVE ALL OTHER SHEETING, BRACING AND SHORING.
22. BEDDING USED FOR TRENCH BOTTOM SHALL BE EXTENDED UP THE SIDES AND CAREFULLY PLACED AROUND AND OVER PIPE IN 6" MAXIMUM LAYERS. EACH LAYER SHALL BE THOROUGHLY AND CAREFULLY COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS PER ASTM D-1557 (MODIFIED PROCTOR) UNTIL 12" OF COVER EXISTS OVER PIPE.
23. REMAINDER OF TRENCH SHALL BE BACKFILLED WITH SPECIFIED BACKFILL MATERIAL AS APPROVED BY THE GEOTECHNICAL ENGINEER TO SPECIFIED SUBGRADE ELEVATION. BACKFILLING SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY PER ASTM D-1557.
24. WITHIN 3' OF THE 45° INFLUENCE LINE OF THE SUBGRADE OF STREETS, DRIVES, PARKING LOTS AND OTHER AREAS TO HAVE OR HAVING IMPROVED HARD SURFACES, BACKFILL SHALL BE MATERIAL SPECIFIED AND SHALL BE DEPOSITED IN 6" LOOSE LAYERS AT OPTIMUM MOISTURE CONTENT (±2%) AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR). SUITABLE MATERIALS FOUND ON SITE MAY BE USED IF APPROVED BY THE GEOTECHNICAL ENGINEER AND OWNER'S REPRESENTATIVE. WHERE SERVICE OR UTILITY LINES CROSS PAVEMENT OR SIDEWALK, BEDDING SHALL BE CARRIED TO 3 FEET BEHIND THE CURB LINE OR 3 FEET BEHIND THE SIDE OF SIDEWALK FARTHEST AWAY FROM THE PROPOSED PAVEMENT.
25. BEFORE BACKFILLING AROUND MANHOLES, ALL FORMS, TRASH AND DEBRIS SHALL BE REMOVED AND CLEARED AWAY. SELECTED EXCAVATED MATERIAL SHALL BE PLACED SYMMETRICALLY ON ALL SIDES IN 8" MAXIMUM LAYERS; EACH LAYER SHALL BE MOISTENED AND COMPACTED WITH MECHANICAL AND HAND TAMPERS.
26. SANITARY SEWER MANHOLES MUST BE WATER-TIGHT AND SHALL BE PRECAST SECTIONS WITH MODIFIED GROOVED TONGUE JOINTS WITH RUBBER GASKETS, CONFORMING TO ASTM DESIGNATION C478. CAST IRON STEPS SHALL BE CAST INTO THE MANHOLE SECTIONS AT 16" O.C. DURING MANUFACTURE AND AT 45° FROM THE CENTERLINE OF THE SEWER. MANHOLE STEPS SHALL BE NEENAH R-1980-E, EAST JORDAN IRON WORKS, 8500 OR APPROVED EQUAL.
27. WHEN EXISTING REINFORCED CONCRETE MANHOLES OR SEWER PIPES ARE TO BE TAPPED, A HOLE OF THE APPROPRIATE DIAMETER, SHALL BE CORE DRILLED, THROUGH THE WALL OF THE MANHOLE OR SEWER PIPE, TO ACCEPT A RESILIENT CONNECTOR CONFORMING TO ASTM DESIGNATION C-923. RESILIENT CONNECTORS SHALL BE "KOR-N-SEAL" AS MANUFACTURED BY THE CORLE AND SEAL CO. OR APPROVED EQUAL.
28. ALL SEWERS SHALL BE SUBJECTED TO INFILTRATION, AIR OR EXFILTRATION TESTS OR A COMBINATION THEREOF IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS, OR PER THE SEWER AUTHORITY'S STANDARDS, PRIOR TO ACCEPTANCE OF THE SYSTEM AND PRIOR TO REMOVAL OF THE BULKHEADS.
A. ALL SEWERS OVER 24" DIAMETER SHALL BE SUBJECTED TO INFILTRATION TESTS. ALL SEWERS OF 24" DIAMETER OR SMALLER, WHERE GROUND WATER LEVEL ABOVE THE TOP OF SEWER IS OVER SEVEN (7) FEET, SHALL BE SUBJECTED TO AN INFILTRATION TEST.
B. ALL SEWERS OF 24" DIAMETER OF LESS, WHERE THE GROUND WATER LEVEL ABOVE THE TOP OF THE SEWER IS SEVEN (7) FEET OR LESS, SHALL BE SUBJECT TO AIR TESTS OR EXFILTRATION TESTS.
29. NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION EXCEEDING 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD.

EROSION CONTROL STANDARDS

- 1. ALL EROSION AND SEDIMENT CONTROL

## GRADING AND EARTHWORK SPECIFICATIONS

- ALTHOUGH A SUB-SURFACE INVESTIGATION MAY HAVE BEEN MADE BY THE OWNER, THE BIDDER AND ANY SUB-CONTRACTORS SHALL MAKE A PERSONAL INVESTIGATION OF SITE AND EXISTING SURFACE AND SUB-SURFACE CONDITIONS. THE CONTRACTOR IS RESPONSIBLE TO ACCOUNT HIMSELF WITH CONDITIONS OF THE WORK AREA. THE CONTRACTOR IS ADVISED TO DETERMINE THE SUB-SURFACE SOIL CONDITIONS AND GROUND WATER CONDITIONS TO HIS OWN SATISFACTION PRIOR TO BIDDING. NO MODIFICATIONS TO THE UNIT PRICES BID FOR ANY ITEM WILL BE MADE DUE TO VARIABLE SUB-SURFACE CONDITIONS. DETERMINING, IF DETERMINED NECESSARY BY THE CONTRACTOR, BY WELL POINTING OR DEEP WELLS WILL BE INCIDENTAL TO THE INSTALLATION COST OF THE ITEM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING DETERMINED TO HIS SATISFACTION PRIOR TO THE SUBMISSION OF HIS BID THE CONFIRMATION OF THE GROUND, THE CHARACTER AND QUANTITY OF THE SUBSTRATA, THE TYPES AND QUANTITIES OF MATERIALS TO BE ENCOUNTERED, THE NATURE OF THE GROUNDWATER CONDITIONS, THE PROSECUTION OF THE WORK, THE GENERAL AND LOCAL CONDITIONS INCLUDING CLIMATIC CHANGES, THE TIME OF YEAR IN WHICH CONSTRUCTION WILL TAKE PLACE AND ALL OTHER MATTERS WHICH CAN IN ANY WAY AFFECT THE WORK UNDER THIS CONTRACT.
- PRIOR TO COMMENCING THE EXCAVATION THE CONTRACTOR SHALL SUBMIT A PLAN OF HIS PROPOSED OPERATIONS AND TIME SCHEDULE TO THE OWNER & OWNERS REPRESENTATIVE FOR THEIR APPROVAL.
- THE CONTRACTOR SHALL CONSIDER, AND HIS PLAN FOR EXCAVATION SHALL REFLECT, THE EQUIPMENT AND METHODS TO BE EMPLOYED IN THE EXCAVATION AND WHAT METHODS WILL BE USED WHEN WET CONDITIONS ARE ENCOUNTERED REQUIRING GROUNDWATER CONTROL OR OTHER MOISTURE CONDITIONING. THE CONTRACTOR SHALL SUBMIT AN OUTLINE OF HIS EARTHWORK METHODS WHICH SHALL TAKE INTO ACCOUNT THE OVERALL CONSTRUCTION SCHEDULE. THE UNIT PRICES ESTABLISHED IN THE PROPOSAL FOR THE WORK TO BE DONE SHALL REFLECT ALL COSTS PERTAINING TO THE WORK. NO CLAIMS FOR EXTRAS BASED ON SUBSTRATA OR GROUNDWATER TABLE CONDITIONS OR MOISTURE CONDITIONING WILL BE ALLOWED.
- THE CONTRACTOR SHALL KEEP INFORMED AND THE OWNER'S REPRESENTATIVE INFORMED AT ALL TIMES AS TO A "FILL SURPLUS OR SHORTAGE" SITUATION. SHORTAGE OR SURPLUS OF SUITABLE MATERIAL AT THE CONCLUSION OF THE GRADING AND EARTHWORK OPERATION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HE WILL BE REQUIRED TO NOTIFY THE DEFICIENCY OR DISPOSE OF THE SURPLUS WITHOUT ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL REMOVE VEGETATION, DEBRIS, UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND OTHER DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO CUT OR FILL OPERATIONS. SUCH MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR TO BE DISPOSED OF IN A LEGAL MANNER OFF SITE.
- MATERIALS FOR FILL OR BACKFILL REQUIRED TO GRADE THE SITE AND ACHIEVE DESIGN ELEVATIONS SHALL BE EITHER ON OR OFF-SITE SLOES WHICH ARE FREE OF ORGANIC MATTER AND DEBRIS. NO TOPSOIL SHALL BE USED AS ENGINEERED FILL.
- NO FILL MAY BE PLACED UNTIL THE EXPOSED SURFACES HAVE BEEN APPROVED BY THE GEOTECHNICAL ENGINEER. ALL FILL MATERIALS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND DESIGN ENGINEER PRIOR TO PROCEEDING.
- ALL FILL MATERIAL SHALL BE PLACED AND COMPACTED AT THE OPTIMUM MOISTURE CONTENT OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- NO FROZEN MATERIAL SHALL BE USED AS FILL NOR WILL ANY FILL BE PLACED ON A FROZEN BASE.
- NO ROCK OR SIMILAR MATERIAL GREATER THAN 6" DIAMETER SHALL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE GEOTECHNICAL ENGINEER IN ADVANCE AND APPROVED BY THE OWNER AND OWNER'S REPRESENTATIVE.
- COMPACT FILL MATERIAL TO AT LEAST THE FOLLOWING PERCENTAGE OF MAXIMUM DRY DENSITY, AS DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR). NO DEVIATION FROM THESE COMPACTATION DENSITIES WILL BE ALLOWED UNLESS SPECIFICALLY RECOMMENDED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE OWNER AND OWNER'S REPRESENTATIVE.

FILL AREAS	% OF MAXIMUM DRY DENSITY
FILL UNDER BUILDING (EXTENDING 5' BEYOND FOOTINGS AT A SLOPE OF 1 ON 1)	98%
FILL UNDER PAVEMENT OR SIDEWALKS	95%
FILL PLACED UNDER OR BEHIND RETAINING WALLS	95%
ALL OTHER FILL	90%

- ALL FILL MATERIAL SHALL BE PLACED AND COMPACTED IN LIFTS, THAT WILL NOT EXCEED THE DEPTH SPECIFIED IN THE CONTRACT DOCUMENTS. THE MAXIMUM DENSITY REQUIRED FOR THE ENTIRE DEPTH OF THE MATERIAL PLACED IN THE LIFT.
- ALL AREAS WHERE FILL HAS BEEN PLACED ON THE EXISTING SOILS HAVE BEEN DISTURBED SHALL BE SUBJECT TO COMPACTATION TESTING BY THE GEOTECHNICAL ENGINEER AND SHALL BE TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER, OWNER AND OWNER'S REPRESENTATIVE.
- FILL MATERIAL UNDER PAVEMENTS OR STRUCTURES SHALL BE FREE OF ORGANIC OR DELETERIOUS MATERIALS IT SHALL BE SUITABLE FOR SUPPORTING PAVEMENTS AND STRUCTURES WITHOUT ADVERSE SHRINKING OR SWELLING.
- FILL MATERIAL IN BERMS AND LANDSCAPE AREAS SHALL BE SUITABLE TO SUPPORT GROWTH OF THE LANDSCAPING MATERIALS (TYPICAL FOR THE LOCAL CLIMATE) AND AS PROPOSED BY THE LANDSCAPE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF, IN A LEGAL MANNER, ANY TREES, BRUSH OR DEBRIS THAT ARE WITHIN THE DESIGNATED CUTTING AND FILLING AREAS TO BRING THE SITE TO PROPOSED GRADES.
- THE CONTRACTOR SHALL STOCKPILE EXCAVATED MATERIAL ONLY IN DESIGNATED AREAS AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- DURING THE PERFORMANCE OF SITE GRADING OPERATIONS, THE SUBGRADE SHALL BE EXAMINED CRITICALLY, AND ANY AREAS DISCOVERED WHICH, IN THE OPINION OF THE OWNER'S REPRESENTATIVE OR GEOTECHNICAL ENGINEER, ARE SOFT AND UNSTABLE, SHALL BE EXCAVATED TO SUCH DEPTHS AS MAY BE NECESSARY TO INSURE SATISFACTORY SUPPORTING PROPERTIES AS DETERMINED BY THE GEOTECHNICAL ENGINEER. THESE AREAS OF EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AND SHALL BE BROUGHT BACK TO THE ELEVATION OF THE SURROUNDING AREAS WITH APPROVED FILL MATERIAL AND IN ACCORDANCE WITH THE EARTH FILL CONSTRUCTION PROCEDURE.
- NEWLY GRADED AREAS SHALL BE PROTECTED FROM THE ACTION OF THE ELEMENTS. ANY SETTLEMENT, DISPLACEMENT, PONDING OR CRACKING THAT MAY OCCUR PRIOR TO COMMENCING THE NEXT PHASE OF CONSTRUCTION SHALL BE REPAIRED, AND GRADES REESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES.
- THE FINISHED SUBGRADE SURFACE SHALL BE SHAPED TO INDICATED PROFILES AND SHALL BE REASONABLY SMOOTH AND FREE FROM IRREGULAR SURFACE CHANGES AND SHALL BE NO MORE THAN 1 INCH ABOVE OR BELOW THE INDICATED SUBGRADE ELEVATIONS.
- THE GRADING CONTRACTOR SHALL BACKFILL ALL PARKING LOT PLANTERS AND LAWN AREAS TO WITHIN 2 INCHES OF THE TOP ADJACENT CURB GRADES. THE TOP 4 INCHES MINIMUM SHALL BE TOPSOIL, FREE FROM DEBRIS AND STONES LARGER THAN 1 INCH IN DIAMETER.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PUMPS, DITCHING, WELL POINT SYSTEMS AND OTHER MEANS FOR REMOVING WATER FROM EXCAVATIONS, TRENCHES, SUBGRADES AND OTHER PARTS OF THE WORK. THE CONTRACTOR SHALL CONTINUE DE-WATERING OPERATIONS UNTIL THE WATER HAS BEEN REMOVED ENTIRELY. UPON COMPLETION OF WATER REMOVAL THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO DRY AND STABILIZE SOILS, REGRADE PROPOSED ELEVATIONS AND COMPACT SOILS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AND OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL DISPOSE OF WATER IN A SAFE AND SANITARY WAY TO PREVENT FLOODING OR INJURY TO PUBLIC OR PRIVATE PROPERTY AND SHALL OBTAIN APPROVAL FROM THE APPLICABLE AUTHORITY BEFORE DISCHARGING RUN-OFF WATER TO THEIR SYSTEM. SEE EROSION CONTROL NOTES FOR ADDITIONAL REQUIREMENTS.
- THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING GRADES AND NEW GRADES.

## BITUMINOUS PAVING SPECIFICATIONS

- REFERENCE SPECIFICATIONS WHERE APPLICABLE TO WORK UNDER THIS SECTION ARE REFERRED TO BY ABBREVIATION AS FOLLOWS:
  - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).
  - THE ASPHALT INSTITUTE (TAI)
  - MICHIGAN DEPARTMENT OF TRANSPORTATION/ CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION (MDOIT)
  - AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
- AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF SECTION 902 OF THE MDOIT STANDARD SPECIFICATION FOR CONSTRUCTION AND SHALL CONSIST OF 21AA CRUSHED AGGREGATE. THE USE OF SLAG IS PROHIBITED.
- TACK COAT SHALL BE EMULSIFIED ASPHALT MEETING REQUIREMENTS OF MDOIT SECTION 904, GRADE CSS-1H.
- AGGREGATE SHALL CONSIST OF CRUSHED STONE, CRUSHED GRAVEL, A MIXTURE OF UNCRUSHED GRAVEL WITH EITHER CRUSHED STONE OR CRUSHED GRAVEL, OR OTHER INERT MATERIAL HAVING SIMILAR CHARACTERISTICS. IT SHALL BE COMPOSED OF CLEAN, TOUGH, DURABLE FRAGMENTS FROM AN EXCESS OF FLAT OR ELONGATED PIECES, AND SHALL BE FREE OF ORGANIC MATTER AND DELETERIOUS SUBSTANCES AND MEET THE REQUIREMENTS OF MDOIT STANDARD SPECIFICATIONS, SECTION 902, 21AA. CONTRACTOR MAY USE CRUSHED HMA AGGREGATE SCREENED TO MEET THE REQUIREMENTS OF MDOIT 21AA MATERIAL.
- FINE AGGREGATE SHALL BE WELL GRADED FROM COARSE TO FINE AND CONSIST OF NATURAL SAND, STONE SCREENINGS, OR A BLEND OF NATURAL SAND AND ANGLULAR GRAINS OF QUARTZ OR OTHER HARD DURABLE ROCK AND MEET THE REQUIREMENTS OF MDOIT STANDARD SPECIFICATIONS, SECTION 902 FOR CLASS II OR CLASS III GRANULAR MATERIAL. CONTRACTOR MAY USE CRUSHED HMA AGGREGATE SCREENED TO MEET THE REQUIREMENTS OF MDOIT CLASS II OR CLASS III MATERIAL.
- ASPHALT CEMENT SHALL COMPLY WITH THE REQUIREMENTS OF MDOIT SECTION 904.
- HOT MIXED ASPHALT (HMA) SHALL COMPLY WITH MDOIT SECTION 501 OF STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- BITUMINOUS LEVELING COURSE SHALL BE MDOIT HMA, 13A, UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY OR ROAD AGENCY WITH JURISDICTION.
- BITUMINOUS WEARING COURSE SHALL BE MDOIT HMA, 36A UNLESS OTHERWISE REQUIRED BY THE MUNICIPALITY OR ROAD AGENCY WITH JURISDICTION. CONTRACTOR MAY SUBSTITUTE 13A WITH THE APPROVAL OF THE OWNER AND ENGINEER.
- THE CONTRACTOR SHALL SUBMIT, TO THE OWNER, TWO COPIES OF MATERIALS CERTIFICATES SIGNED BY MATERIAL PRODUCER AND CONTRACTOR. CERTIFICATES SHALL STATE THAT EACH MATERIAL ITEM MEETS SPECIFIED REQUIREMENTS.
- THE CONTRACTOR SHALL SUBMIT TO THE GEOTECHNICAL ENGINEER, JOB-MIX FORMULAS FOR EACH REQUIRED ASPHALT AGGREGATE MIXTURE. MIX DESIGNS SHALL BE WITHIN ALLOWABLE TOLERANCES AS SPECIFIED BY MDOIT FOR THE PARTICULAR APPLICATION.
- SUBGRADE PREPARATIONS SHALL CONSIST OF THE FINAL MACHINING OF THE SUBGRADE IMMEDIATELY PRIOR TO PLACING THE BITUMINOUS BASE COURSE. THE SUBGRADE SHALL BE COMPACTED PER PLANS AND DETAILS. THE SUBGRADE SHALL BE TRUE TO LINE AND GRADE.
- CRUSHED AGGREGATE BASE COURSE SHALL BE COMPACTED TO A DENSITY EQUAL TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR).
- BITUMINOUS CONCRETE PAVEMENT CONSTRUCTION METHODS SHALL CONFORM TO APPLICABLE PORTION OF SECTION 501 OF THE MDOIT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- THE CONTRACTOR SHALL NOT PLACE THE AGGREGATE BASE COURSE OR THE BITUMINOUS BASE COURSE PRIOR TO THE APPROVAL OF THE SUBGRADE BY THE GEOTECHNICAL ENGINEER.
- EACH LIFT AND COURSE OF BITUMINOUS CONCRETE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER, PRIOR TO THE PLACEMENT OF A SUCCEEDING COURSE OR LIFT.
- APPLY BITUMINOUS TACK COATS ONLY WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES F. FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. CONSISTENT BITUMINOUS CONCRETE WEARING COURSE ONLY WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40-DEGREES F AND RISING, AND PROCEEDING COURSE OR LIFT IS CLEAN AND DRY. BASE COURSE MAY BE LAID WHEN TEMPERATURE IS ABOVE 35 DEGREES F. AND RISING AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- THE BITUMINOUS CONCRETE SHALL BE TRANSPORTED FROM THE MIXING PLANT TO THE POINT OF USE IN VEHICLES CONFORMING TO THE REQUIREMENTS OF SECTION 501 OF THE MDOIT STANDARD SPECIFICATIONS FOR CONSTRUCTION. DELIVERIES SHALL BE SCHEDULED SO THAT SPREADING AND ROLLING OF ALL BITUMINOUS CONCRETE PREPARED FOR ONE DAY'S RUN CAN BE COMPLETED DURING DAYLIGHT, UNLESS ADEQUATE ARTIFICIAL LIGHTING IS PROVIDED. HAULING OVER FRESHLY PLACED BITUMINOUS MAT SHALL NOT BE PERMITTED UNTIL THE BITUMINOUS CONCRETE HAS BEEN COMPLETED, AS SPECIFIED, AND ALLOWED TO COOL TO ATMOSPHERIC TEMPERATURE.
- UPON ARRIVAL, THE BITUMINOUS CONCRETE SHALL BE SPREAD TO A THICKNESS NOT TO EXCEED 3-INCHES AND TO THE FULL WIDTH BY AN APPROVED BITUMINOUS PAVEMENT. IT SHALL BE STRUCK OFF IN A UNIFORM LAYER OF SUCH DEPTH THAT, WHEN THE WORK IS COMPLETED, IT SHALL HAVE THE REQUIRED THICKNESS AND CONFORM TO THE GRADE AND CONTOUR INDICATED. THE SPEED OF THE PAVEMENT SHALL BE REGULATED TO ELIMINATE PULLING AND TEARING OF THE BITUMINOUS MAT, UNLESS OTHERWISE STATED. THE BITUMINOUS CONCRETE SHALL BE PLACED IN CONSECUTIVE ADJACENT STRIPS HAVING A MINIMUM WIDTH OF 10 FEET, EXCEPT WHERE EDGE LANES REQUIRE LESS WIDTH TO COMPLETE THE AREA. TRANSVERSE JOINTS IN ADJACENT LANES SHALL BE OFFSET A MINIMUM OF 10 FEET. WHERE POSSIBLE, JOINTS SHALL BE LOCATED AT THE LANE EDGES.
- ON AREAS WHERE IRREGULARITIES OR UNAVOIDABLE OBSTACLES MAKE THE USE OF MECHANICAL SPREADING AND FINISHING EQUIPMENT IMPRACTICAL, THE BITUMINOUS CONCRETE MAY BE SPREAD AND RAKED BY HAND TOOLS.
- THE BITUMINOUS CONCRETE SHALL BE PLACED AT A TEMPERATURE OF NOT LESS THAN 250 OR NOR HIGHER THAN THE RECOMMENDED TEMPERATURE OF THE BINDER PRODUCER OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- THE BITUMINOUS CONCRETE MIXTURE SHALL BE THOROUGHLY AND UNIFORMLY COMPACTED BY ROLLING. THE SURFACE SHALL BE ROLLED WHEN THE BITUMINOUS MAT HAS ATTAINED SUFFICIENT STABILITY SO THAT THE ROLLING DOES NOT CAUSE UNIFORM DISPLACEMENT, CRACKING AND SHOWING. THE SEQUENCE OF ROLLING OPERATIONS SHALL BE AT THE DISCRETION OF THE CONTRACTOR.
- THE SPEED OF THE ROLLER SHALL, AT ALL TIMES, BE SUFFICIENTLY SLOW TO AVOID DISPLACEMENT OF THE HOT BITUMINOUS CONCRETE. ANY DISPLACEMENT OCCURRING AS A RESULT OF REVERSE DIRECTION OF THE ROLLER, OR FROM ANY OTHER CAUSE, SHALL BE CORRECTED AT ONCE.
- SUFFICIENT ROLLERS SHALL BE FURNISHED TO HANDLE THE OUTPUT OF THE PLANT. ROLLING SHALL CONTINUE UNTIL ALL ROLLER MARKS ARE ELIMINATED, THE SURFACE IS OF UNIFORM TEXTURE AND TRUE TO GRADE AND CROSS-SECTION, AND THE REQUIRED FILL DENSITY IS OBTAINED.
- TACK COAT SHALL BE APPLIED TO THE SURFACE OF PREVIOUS LIFTS AND COURSES OF BITUMINOUS CONCRETE AND TO SURFACES ABUTTING OR PROJECTING INTO THE BITUMINOUS CONCRETE.
- IMMEDIATELY BEFORE PLACING A SUCCEEDING LIFT OR COURSE OF BITUMINOUS CONCRETE THE PRECEDING LIFT OR COURSE SHALL BE CLEARED OF ANY DEBRIS OR STANDING WATER BY APPROPRIATE METHODS.
- TO PREVENT ADHESION OF THE BITUMINOUS CONCRETE TO THE ROLLER, THE WHEELS SHALL BE KEPT PROPERLY MOISTENED, BUT EXCESSIVE WATER WILL NOT BE PERMITTED.
- IN AREAS NOT ACCESSIBLE TO THE ROLLER, THE BITUMINOUS CONCRETE SHALL BE THOROUGHLY COMPACTED WITH HOT HAND TAMPERS.
- ANY BITUMINOUS CONCRETE THAT BECOMES LOOSE AND BROKEN, MIXED WITH DIRT, OR IN ANY WAY DEFECTIVE SHALL BE REMOVED AND REPLACED WITH FRESH HOT BITUMINOUS CONCRETE AND IMMEDIATELY COMPACTED TO CONFORM TO THE SURROUNDING AREA. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. SKIN PATCHING SHALL NOT BE ALLOWED.
- THE CONTRACTOR SHALL PROVIDE AT LEAST TWO ROLLERS FOR EACH PAVEMENT OPERATING ON THE WORK. THE CONTRACTOR SHALL USE ADDITIONAL ROLLERS AS REQUIRED TO OBTAIN THE SPECIFIED PAVEMENT DENSITY.

## BITUMINOUS PAVING SPECIFICATIONS, CONTINUED

- THE CONTRACTOR SHALL CAREFULLY MAKE JOINTS BETWEEN OLD AND NEW PAVEMENTS, OR BETWEEN SUCCESSIVE DAYS' WORK, TO ENSURE A CONTINUOUS BOND BETWEEN ADJOINING WORK. CONTRACT JOINTS TO HAVE THE SAME TEXTURE, DENSITY AND SMOOTHNESS AS OTHER SECTIONS OF THE BITUMINOUS CONCRETE COURSE. THE CONTRACTOR SHALL CLEAN CONTACT SURFACES OF SAND, DIRT, OR OTHER OBJECTIONABLE MATERIAL AND APPLY TACK COAT BEFORE MAKING THE JOINT.
- THE CONTRACTOR SHALL TEST THE FINISHED SURFACE OF EACH BITUMINOUS CONCRETE COURSE FOR SMOOTHNESS, USING A 10 FOOT STRAIGHTEDGE APPLIED PARALLEL WITH AND AT RIGHT ANGLES TO CENTERLINE OF PAVED AREA. SURFACE SHALL NOT BE ACCEPTABLE IF EXCEEDING THE FOLLOWING TOLERANCES FOR SMOOTHNESS.
  - LEVELING COURSE SURFACE: 1/4 INCH, PLUS OR MINUS 1/4 INCH.
  - SURFACE COURSE: 1/4 INCH
- THE CONTRACTOR SHALL TEST CROWNED SURFACES WITH A CROWN TEMPLATE, CENTERED AND AT RIGHT ANGLES TO THE CROWN. SURFACES WILL NOT BE ACCEPTABLE IF THE FINISHED CROWN SURFACES VARY MORE THAN 1/4 INCH FROM THE CROWN TEMPLATE.
- AFTER FINAL ROLLING, THE CONTRACTOR SHALL NOT PERMIT VEHICULAR TRAFFIC ON THE BITUMINOUS CONCRETE PAVEMENT UNTIL IT HAS COOLED AND HARDENED, AND IN NO CASE SOONER THAN SIX HOURS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- THE AGGREGATE BASE MUST EXTEND A MINIMUM OF 1' BEHIND THE BACK-OF-CURB OR BEYOND EDGE OF PAVEMENT WHEN NO CURB IS PROPOSED.
- THESE SPECIFICATIONS SHALL GOVERN THE CONSTRUCTION OF ALL PAVEMENTS, CURB AND GUTTER, SIDEWALKS, SERVICE WALKS, DRIVEWAY APPROACHES, AND LOADING DOCK AREAS, AS INDICATED ON THE DRAWINGS.
- REFERENCE SPECIFICATIONS WHERE APPLICABLE TO WORK UNDER THIS SECTION ARE REFERRED BY ABBREVIATION AS FOLLOWS:
  - AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).
  - AMERICAN CONCRETE INSTITUTE (ACI)
  - MICHIGAN DEPARTMENT OF TRANSPORTATION/ CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION (MDOIT)
  - AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- THE FINE AGGREGATE SHALL MEET ALL REQUIREMENTS OF SECTION 902 OF MDOIT SPECIFICATION FOR NO. 2MS NATURAL SAND.
- THE COARSE AGGREGATE SHALL MEET ALL REQUIREMENTS OF SECTION 902 OF M.D.O.T. SPECIFICATIONS FOR 6AA COARSE AGGREGATE.
- THE CONTRACTOR SHALL SUBMIT, TO THE OWNER, TWO COPIES OF MATERIALS CERTIFICATES SIGNED BY MATERIAL PRODUCER AND CONTRACTOR. CERTIFICATES SHALL STATE THAT EACH MATERIAL ITEM MEETS SPECIFIED REQUIREMENTS.
- THE CONTRACTOR SHALL SUBMIT TO THE GEOTECHNICAL ENGINEER, JOB MIX-FORMULAS FOR EACH REQUIRED CEMENT-AGGREGATE MIXTURE. MIX DESIGNS SHALL BE WITHIN ALLOWABLE TOLERANCES AS SPECIFIED FOR THE PARTICULAR APPLICATION.
- CONCRETE MIX SHALL BE AIR-ENTRAINED AND PROPORTIONED TO PROVIDE THE FOLLOWING:
  - COMPRESSIVE STRENGTH AT 28 DAYS: 3500 PSI MIN. OR AS INDICATED ON PLANS.
  - TOTAL AIR CONTENT BY VOLUME: 5% TO 8%.
  - SLUMP 3 INCH MAXIMUM, OR AS INDICATED ON PLANS.
- THE CONTRACTOR SHALL AT HIS EXPENSE FURNISH SAMPLES OF FRESH CONCRETE AND PROVIDE SAFE AND SATISFACTORY FACILITIES FOR OBTAINING THE SAMPLES.
- CONSTRUCT CONCRETE CURBING ONLY WHEN GROUND TEMPERATURE IS ABOVE 35 DEGREES F. AND BASE IS DRY.
- ALL CEMENT USED IN CURB CONSTRUCTION SHALL BE PORTLAND CEMENT, TYPE I OR IA ASTM C-150.
- WATER USED IN CONCRETE SHALL MEET THE REQUIREMENTS OF MDOIT SECTION 911.
- AIR ENTRAINING ADMIXTURE SHALL BE SELECTED FROM THE MDOIT QUALIFIED PRODUCTS LIST.
- ALL READY-MIXED CONCRETE SUPPLIERS MUST BE APPROVED BY THE OWNER AND MEET THE CURRENT REQUIREMENTS OF THE NATIONAL READY MIX CONCRETE ASSOCIATION (NRMA). IF REQUESTED BY THE OWNER, SUBMIT A WRITTEN DESCRIPTION OF PROPOSED READY-MIXED CONCRETE MANUFACTURER, GIVING QUALIFICATIONS OF PERSONAL, LOCATION OF BATCHING PLANT, LIST OF PROJECTS SIMILAR IN SCOPE OF SPECIFIED WORK, AND OTHER INFORMATION AS MAY BE REQUESTED BY THE OWNER.
- THE CONTRACTOR SHALL SUBMIT A STATEMENT OF PURCHASE FOR READY-MIXED CONCRETE. PRIOR TO ACTUAL DELIVERY OF CONCRETE, SUBMIT TO THE GEOTECHNICAL ENGINEER FOUR COPIES OF STATEMENT OF PURCHASE, GIVING THE DRY WEIGHTS OF CEMENT AND SATURATED SURFACE DRY WEIGHTS OF FINE AND COARSE AGGREGATES AND QUANTITIES, TYPE AND NAME OF ADMIXTURES (IF ANY) AND OF WATER PER CU.YD., THAT WILL BE USED IN THE MANUFACTURE OF THE CONCRETE. THE CONTRACTOR SHALL ALSO FURNISH EVIDENCE SATISFACTORY TO THE GEOTECHNICAL ENGINEER THAT THE MATERIALS TO BE USED AND PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF THE QUALITY SPECIFIED. WHATEVER STRENGTHS ARE OBTAINED, THE QUANTITY OF CEMENT USED SHALL NOT BE LESS THAN THE MINIMUM SPECIFIED.
- READY-MIXED CONCRETE DELIVERY TICKETS: SUBMIT ONE COPY OF EACH DELIVERY TICKET TO THE GEOTECHNICAL ENGINEER AND CONTRACTOR IN ACCORDANCE WITH SECTION 16 OF ASTM C94.
- READY-MIXED CONCRETE SHALL BE BATCHED, MIXED AND TRANSPORTED IN ACCORDANCE WITH ASTM C94, AND COMPLY WITH ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE," EXCEPT AS OTHERWISE SPECIFIED HEREIN.
- READY-MIXED CONCRETE SHALL BE MIXED AND DELIVERED TO THE POINT OF DISCHARGE AT THE JOB BY MEANS OF A READY MIX CONCRETE TRUCK.
- NO WATER FROM THE TRUCK WATER SYSTEM OR ELSEWHERE SHALL BE ADDED AFTER THE INITIAL INTRODUCTION OF THE MIXING WATER FOR THE BATCH. UNDER NO CIRCUMSTANCES SHALL WATER BE ADDED TO EXCEED THE MAXIMUM WATER CONTENT EXCEEDED NOR SHALL THE SLUMP EXCEED THE MAXIMUM SPECIFIED.
- DISCHARGE OF THE CONCRETE SHALL BE COMPLETED WITHIN 1-1/2 HOURS OR BEFORE THE DRUM HAS REVOLVED 300 REVOLUTIONS, WHICHEVER COMES FIRST. AFTER THE INTRODUCTION OF THE MIXING WATER TO THE CEMENT AND AGGREGATES OR THE INTRODUCTION OF THE CEMENT TO THE AGGREGATES.
- IN HOT WEATHER (AIR TEMPERATURE 80-DEGREES F. AND ABOVE) OR UNDER CONDITIONS CONTRIBUTING TO QUICK STIFFENING OF THE CONCRETE, THE TIME SHALL BE REDUCED TO ONE HOUR.
- CONCRETE DELIVERED IN COLD WEATHER (AIR TEMPERATURE 45-DEGREES F. AND LOWER) SHALL HAVE A TEMPERATURE NOT LESS THAN 60-DEGREES F. AT THE POINT OF DISCHARGE AT THE JOB, AND IN COMPLIANCE WITH ACI 306R "COLD WEATHER CONCRETING", CONCRETE PLACING WILL NOT BE PERMITTED WHEN THE AIR TEMPERATURE IS 35-DEGREES F. OR LOWER.
- CONCRETE DELIVERED UNDER HOT WEATHER CONDITIONS CONTRIBUTING TO QUICK STIFFENING OF CONCRETE, OR IN AIR TEMPERATURE OF 80-DEGREES F. AND OVER, SHALL HAVE A TEMPERATURE BETWEEN 60- AND 80-DEGREES F. AT THE POINT OF DISCHARGE AT THE JOB, AND IN ACCORDANCE WITH ACI 305R "HOT WEATHER CONCRETING".
- IN NO CASE SHALL THE MIXER OR TRUCK BE FLUSHED OUT ONTO THE STREET PAVEMENT OR IN A CATCH BASIN OR SEWER MANHOLE, OR IN ANY PUBLIC RIGHT-OF-WAY. SEE SOIL EROSION CONTROL PLAN FOR CONCRETE WASHOUT LOCATION.
- REINFORCEMENT BARS SHALL BE PER MDOIT SECTION 905.
- THE WIRE SHALL BE BLACK, ANNEALED STEEL WIRE, NOT LESS THAN 16 GAUGE.

## CONCRETE CURB, SIDEWALK AND PAVEMENT SPECIFICATIONS, CONTINUED

- BAR SUPPORTS SHALL CONFORM TO THE BAR SUPPORT SPECIFICATIONS CONTAINED IN CONCRETE REINFORCING STEEL INSTITUTE'S (CRS) "MANUAL OF STANDARD PRACTICE." PROVIDE CHAIRS, SPACERS AND OTHER DEVICES SUITABLE FOR PROPER SPACING SUPPORTING AND FASTENING REINFORCING BARS.
- WHEN FORMS ARE USED AND THE CURB RADIUS IS LESS THAN 200 FEET, THE CURVED ALIGNMENT SHALL BE PROVIDED FOR BY EITHER STANDARD STEEL FORMS EQUIPPED WITH FLEXIBLE LINES OR BY FLEXIBLE FORMS. THE FORMS SHALL BE OF THE FULL DEPTH OF THE SECTION. CURB AND GUTTER FORMS SHALL BE SO CONSTRUCTED AS TO PERMIT THE INSIDE OF THE FORMS TO BE SECURELY FASTENED TO THE OUTSIDE FORMS.
- ALL NEW CURB SHALL BE PLACED ONLY ON A PREPARED SUBGRADE, SMOOTH AND LEVELED TO THE GRADES ESTABLISHED BY THE ENGINEER.
- COMPACT AND CUT-TO-GRADE SUBGRADE UNDER FORMS SO THAT FORMS WHEN SET WILL BE UNIFORMLY SUPPORTED FOR THE ENTIRE LENGTH. SECURELY STAKE AND BRACE OR THE FORMS TO PREVENT LEAKAGE OF MORTAR. BRACING WITH EARTH WILL NOT BE PERMITTED.
- COAT SURFACES OF FORMS TO BE IN CONCRETE WITH A LIGHT CLEAR PARAFFIN OIL OR PARTING COMPOUND WHICH WILL NOT STAIN THE CONCRETE.
- THE INTERIOR SURFACES OF CONCRETE CONVEYING EQUIPMENT SHALL BE MAINTAINED FREE OF HARDENED CONCRETE, DEBRIS, WATER, SNOW, ICE AND OTHER DELETERIOUS MATERIALS.
- CURBING MAY BE CONSTRUCTED EITHER BY USE OF FORMS OR BY A MECHANICAL CURB AND GUTTER PAVEMENT, PROVIDED THE REQUIRED FINISH, AND CROSS-SECTION, ARE OBTAINED AND THE PLACING OPERATIONS ARE CONDUCTED TO PROVIDE ONE COURSE MONOLITHIC STRUCTURE WITHOUT THE USE OF MORTAR TOPPING OR SAND-CEMENT DRYER. CONCRETE SHALL BE SPADED OR VIBRATED SUFFICIENTLY TO ENSURE SATISFACTORY CONSOLIDATION.
- PROVIDE REINFORCEMENT FOR CONCRETE CURB AS SHOWN ON THE DRAWINGS. REINFORCEMENT SHALL BE KEPT CLEAN AND FREE FROM OBJECTIONABLE RUST, BENDS OR KINKS IN REINFORCING BARS SHALL BE CORRECTED BEFORE PLACING. ALL REINFORCEMENT SHALL BE ACCURATELY LOCATED IN FORMS AND SECURELY HELD IN PLACE BEFORE AND DURING CONCRETE PLACING, BY SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION.
- THE CONCRETE CURB SURFACE SHALL BE STRUCK OFF THE REQUIRED CROSS-SECTION WITH A TEMPLATE. AFTER THE CONCRETE CURB HAS BEEN FLOATED TO AN EVEN SURFACE, THE CONTRACTION JOINT SHALL BE CUT AND ALL SLAB EDGES ROUNDED WITH A 1/2 INCH RADIUS EDGING TOOL THAT WILL FINISH TO A WIDTH OF 2 INCHES. AFTER THE CONCRETE HAS SLIGHTLY SET, A BROOM SHALL BE BROUGHT LIGHTLY ACROSS THE SURFACE PARALLEL TO FORMS SO AS TO IMPART A ROUGH FINISH.
- CONTRACTION JOINTS SHALL BE CUT IN CONCRETE CURBING AT MINIMUM 10' INTERVALS. THE JOINT SHALL CUT 1/4 INCH WIDE BY 1/3 THE DEPTH OF THE CONCRETE CURB SECTION. JOINTS SHALL ALSO BE LOCATED ADJACENT TO CURB BORDERS.
- ISOLATION JOINTS SHALL BE PLACED IN CURBING AT TANGENT POINTS IN CURB RETURNS AT INTERSECTIONS, AT BOTH SIDES OF STRUCTURES LOCATED IN THE CURB AND KINGS IN REINFORCING BARS SHALL NOT EXCEED 400 FEET. ISOLATION JOINTS SHALL BE 1" THICK PRE-FORMED JOINT FILLER STRIPS. THE STRIPS SHALL EXTEND THE FULL DEPTH OF THE CONCRETE CURB SECTION. ISOLATION JOINTS SHALL BE PLACED AT THE END OF EACH DAYS POUR AND WHEN ABUTTING PREVIOUSLY POURED CURB.
- THE CURING COMPOUND SHALL BE A WHITE PARAFIN BASE COMPOUND SELECTED FROM MDOIT'S QUALIFIED PRODUCTS LIST APPLIED AT 200 SQ.FT./GAL.
- ALL CONTRACTION JOINTS IN CONCRETE CURB SECTIONS SHALL BE SEALED WITH EITHER HOT APPLIED JOINT SEALER OR COLD APPLIED JOINT SEALER.
- SLIGHTLY UNDERFILL JOINT GROOVE WITH JOINT SEALER TO PREVENT EXTRUSION OF THE SEALER. REMOVE EXCESS JOINT SEALER MATERIALS AS SOON AFTER SEALING AS POSSIBLE.
- FRESHLY PLACED CONCRETE SHALL BE PROTECTED AS REQUIRED TO MAINTAIN THE TEMPERATURE OF THE CONCRETE AT NOT LESS THAN 50 DEGREES F. NOR MORE THAN 80 DEGREES F. AND IN A MOST CONDITION CONTINUOUSLY FOR THE PERIOD OF CURING. OR A COMBINATION OF THESE AS REQUIRED TO MAINTAIN THE TEMPERATURE OF THE CONCRETE DURING CURING SHALL BE AS UNIFORM AS POSSIBLE AND SHALL NOT EXCEED 5 DEGREES F. IN ANY ONE HOUR, NOR 50 DEGREES F. IN ANY 24 HOUR PERIOD.
- COLD WEATHER PROTECTION: WHEN THE TEMPERATURE OF THE ATMOSPHERE IS 40-DEGREES F. AND BELOW, THE CONCRETE SHALL BE PROTECTED BY HEATING, INSULATION, OR A COMBINATION OF THESE AS REQUIRED TO MAINTAIN THE TEMPERATURE OF THE CONCRETE AT OR ABOVE 50-DEGREES F. AND IN A MOST CONDITION CONTINUOUSLY FOR THE CONCRETE CURING PERIOD. COLD WEATHER PROTECTION SHALL MEET THE REQUIREMENTS OF ACI 306R "COLD WEATHER CONCRETING".
- HOT WEATHER PROTECTION: WHEN THE TEMPERATURE OF THE ATMOSPHERE IS 90-DEGREES F. AND ABOVE, OR DURING OTHER CLIMATIC CONDITIONS WHICH WILL CAUSE TOO RAPID DRYING OF THE CONCRETE, THE CONCRETE SHALL BE PROTECTED BY WINDBREAKS, SHADING, FOG SPRAYING LIGHT COLORED MOISTURE RETAINING COVERING, OR A COMBINATION OF THESE AS REQUIRED TO MAINTAIN THE TEMPERATURE OF THE CONCRETE BELOW 90-DEGREE F. AND IN A MOST CONDITION CONTINUOUSLY FOR THE CONCRETE CURING PERIOD. "HOT WEATHER CONCRETING" SHALL MEET THE REQUIREMENTS OF ACI 305R "HOT WEATHER CONCRETING".
- ALL FORMS, RAILS AND STAKES SHALL BE REMOVED WITHIN 24 HOURS AFTER PLACING THE CURB. EXPOSED EDGES OF CONCRETE SHALL BE IMMEDIATELY BACKFILLED OR SPRAYED WITH CURING COMPOUND.
- AFTER COMPLETION OF CONCRETE CURBING IN AN AREA, REMOVE ALL WEATHER PROTECTION MATERIALS, RUBBISH AND DEBRIS RESULTING FROM SPECIFIED WORK, SWEEP CONCRETE CURBS CLEAN, AND SEAL JOINTS.
- ALL CEMENT USED IN SIDEWALK CONSTRUCTION SHALL BE PORTLAND CEMENT, TYPE I OR IA ASTM C-150.
- ALL NEW WALKS AND CONCRETE PAVEMENTS SHALL BE PLACED ONLY ON A PREPARED SUBGRADE, SMOOTHED AND LEVELED TO THE GRADES ESTABLISHED BY THE ENGINEER. IN HOT WEATHER, THE SUBGRADE SHALL BE EXCAVATED 2-INCHES BELOW THE SIDEWALK BASE AND FILLED WITH APPROVED SAND MEETING MDOIT CLASS II, SAND DESIGNATION.
- CONSTRUCT CONCRETE SURFACE COURSE ONLY WHEN GROUND TEMPERATURE IS ABOVE 35 DEGREES F. AND BASE IS DRY.
- SIDEWALKS SHALL PITCH TOWARD THE STREET OR AWAY FROM BUILDINGS WITH A MINIMUM CROSS SLOPE OF 1/4-INCH PER FOOT OF WIDTH AND A MINIMUM CROSS SLOPE OF 1/8-INCH PER FOOT OF WIDTH. CROSS SLOPE DIRECTION TRANSITIONS SHALL BE ACCOMPLISHED IN LENGTHS OF 10 FEET OR LESS.
- PRIOR TO PLACING THE CONCRETE, ALL DEBRIS, STONES, DIRT, ETC., SHALL BE REMOVED FROM THE SUBGRADE. THE SUBGRADE SHALL BE MOISTENED WITH WATER IN SUCH A MANNER AS TO THOROUGHLY WET THE MATERIAL WITHOUT FORMING PUDDLES OR POCKETS OF WATER. NO CONCRETE SHALL BE PLACED ON FROZEN SUBGRADE.
- FORMS SHALL BE METAL OR WOOD AND OF AN APPROVED SECTION. THEY SHALL BE STRAIGHT, FREE FROM DISTORTION AND SHALL SHOW NO VERTICAL VARIATION GREATER THAN 1/8-INCH IN 10-FOOT LENGTH FROM THE TRUE PLANE SURFACE ON THE TOP OF THE FORMS WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE, AND SHALL SHOW NO LATERAL VARIATION GREATER THAN 1/4-INCH IN 10-FEET FROM THE TRUE PLANE SURFACE OF THE LATERAL FACE OF THE FORM WHEN TESTED WITH A 10-FOOT STRAIGHTEDGE. THEY SHALL BE OF THE DEPTH SPECIFIED FOR THE SIDEWALK, OR CONCRETE PAVEMENT PER PLANE AND DETAILS, AND BE SECURELY HELD IN PLACE AND TRUE TO LINE AND GRADE.
- THE CONCRETE SHALL BE DEPOSITED CONTINUOUSLY IN THE FORMS IN SUCH A MANNER AS TO AVOID SEGREGATION AND IT SHALL BE THOROUGHLY TAMPED OR VIBRATED SO THAT THE FORMS ARE ENTIRELY FILLED AND THE CONCRETE THOROUGHLY CONSOLIDATED. THE SLABS SHALL BE PLACED IN SECTIONS OR BLOCKS IN ONE OPERATION AS A MONOLITH.
- THE CONCRETE SURFACE SHALL BE STRUCK OFF TO A PLANE SURFACE WITH A STRAIGHTEDGE. AFTER THE CONCRETE HAS BEEN FLOATED TO AN EVEN SURFACE, THE CONTRACTION JOINT SHALL BE CUT AND ALL SLAB EDGES ROUNDED WITH A 1/2-INCH RADIUS EDGING TOOL THAT WILL FINISH TO A WIDTH OF 2-INCHES. AFTER THE CONCRETE HAS SLIGHTLY SET, A BROOM SHALL BE BRUSHED LIGHTLY ACROSS THE SURFACE AT RIGHT ANGLES TO FORMS SO AS TO IMPART A ROUGH FINISH.
- CONTRACTION JOINTS SHALL BE PLACED AT RIGHT ANGLES TO THE EDGE OF THE SIDEWALK OR CONCRETE PAVEMENT AND PERPENDICULAR TO THE SURFACE. AT A DEPTH OF AT LEAST 1/4 THE SLAB THICKNESS WITH A MINIMUM DEPTH OF 1-1/4-INCHES FOR SIDEWALKS AND 3-INCHES FOR CONCRETE PAVEMENT SLABS.
- CONTRACTION JOINTS IN SIDEWALKS SHALL BE SPACED AT A MINIMUM OF EVERY 5- FEET IN 4" SIDEWALK, OR 8- FEET IN 6" SIDEWALK, OR AS SHOWN ON THE PLANS.

## CONCRETE CURB, SIDEWALK AND PAVEMENT SPECIFICATIONS, CONTINUED

- ISOLATION PAPERS SHALL BE OF THE PRE-MOLDED, NON-EXTRUDING, ASPHALT IMPREGNATED TYPE, NOT LESS THAN 1/2-INCH THICK. THE LENGTH SHALL BE EQUAL TO THE WIDTH OF THE SLAB, AND THE DEPTH EQUAL TO THE THICKNESS OF THE SLAB PLUS 1-INCH.
- ISOLATION JOINTS SHALL BE PLACED AT THE FOLLOWING LOCATION FOR SIDEWALKS AND CONCRETE PAVEMENTS:
  - AT THE BACK OF THE CURB AND FRONT EDGE OF THE SIDEWALKS AND PAVEMENT SLABS ADJACENT TO EACH DRIVEWAY APPROACH AND SERVICE WALK.
  - AT INTERVALS NOT TO EXCEED 50- FEET IN ALL PUBLIC SIDEWALKS.
  - AT THE BACK OF THE CURB WHERE THE RAMPS EXTEND FROM THE KEY FLAG TO THE PAVEMENT.
  - BETWEEN THE KEY FLAG AND THE RAMP IN ALL CASES, EXCEPT WHERE THERE ARE EXISTING EXPANSION JOINTS AT THE INTERSECTIONS OF THE SIDEWALKS AND THE KEY FLAG.
  - AT ANY PLACE WHERE A SIDEWALK OR CONCRETE PAVEMENT ABUTS A BUILDING OR FIXED STRUCTURE.
  - AT ANY OTHER LOCATIONS INDICATED ON THE PLAN.
- CONTRACTION JOINTS IN THE CONCRETE PAVEMENT WILL BE AS FOLLOWS:
  - TRANSVERSE JOINTS SHALL BE AT MAXIMUM 10-FOOT INTERVALS OR AS SHOWN ON PLANS AND DETAILS.
  - LONGITUDINAL JOINTS SHALL BE AT MAXIMUM 12-FOOT INTERVALS OR AS SHOWN ON PLANS AND DETAILS.
- PRIOR TO APPLYING JOINT SEALER, CLEAN JOINT GROOVE OF FOREIGN MATTER AND LOOSE PARTICLES, AND DRY SURFACE.

## TRAFFIC LANE AND PARKING LOT MARKING

- PROVIDE ALL MATERIALS, LABOR, EQUIPMENT, AND SERVICES NECESSARY TO COMPLETE ALL TRAFFIC LANE AND PARKING LOT MARKINGS AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
- WORK INCLUDES, BUT NOT LIMITED TO PAINTING OF LETTERS, MARKINGS, STRIPES AND ISLANDS ON THE PAVEMENT SURFACE APPLIED IN ACCORDANCE WITH THIS SPECIFICATION AND AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE PAINT SHALL MEET THE REQUIREMENTS OF FEDERAL SPECIFICATION TT-P-1150C(3), WITH OR WITHOUT REFLECTORIZED BEADS AS REQUIRED ON THE PLANS.
- COLOR SHALL BE AS SPECIFIED ON THE PLANS OR AS FOLLOWS:
  - TRAFFIC LANE STRIPING SHALL BE WHITE OR YELLOW REFLECTORIZED, AS SHOWN ON THE PLANS.
  - TRAFFIC MARKING AND CURB FACES SHALL BE WHITE UNLESS NOTED OTHERWISE.
  - PARKING LOT STRIPING SHALL BE WHITE, UNLESS NOTED OTHERWISE.
  - HANDICAP STALL STRIPING MEETING CURRENT ADA REQUIREMENTS SHALL BE BLUE UNLESS NOTED OTHERWISE.
- THE PAINTING SHALL BE PERFORMED ONLY WHEN THE EXISTING SURFACE IS DRY AND CLEAN, AND THE ATMOSPHERIC TEMPERATURE IS ABOVE 40-DEGREE F. AND WHEN THE WEATHER IS NOT EXCESSIVELY WINDY, DUSTY OR FOGGY AND WHEN RAIN IS NOT FORECASTED FOR AT LEAST 2 HOURS AFTER PAINT IS APPLIED.
- ALL EQUIPMENT FOR THE WORK SHALL BE APPROVED BY THE CONTRACTOR AND SHALL INCLUDE THE APPARATUS NECESSARY TO PROPERLY CLEAN THE EXISTING SURFACE, A MECHANICAL MARKING MACHINE, AND SUCH AUXILIARY HAND EQUIPMENT AS MAY BE NECESSARY TO SATISFACTORILY COMPLETE THE JOB.
- THE MECHANICAL MARKER SHALL BE AN APPROVED ATOMIZING SPRAY-TYPE MARKING MACHINE SUITABLE FOR APPLICATION OF TRAFFIC PAINT. IT SHALL PRODUCE AN EVEN AND UNIFORM FILM THICKNESS AT THE REQUIRED COVERAGE AND SHALL BE DESIGNED SO AS TO APPLY MARKINGS OF UNIFORM CROSS-SECTIONS AND CLEAR-CUT EDGES WITHOUT RUNNING OR SPATTERING AND WITHIN THE L LIMITS FOR STRAIGHTNESS SET FORTH HEREIN. WHEN NEEDED, A DISPENSER SHALL BE FURNISHED WHICH IS PROPERLY DESIGNED FOR ATTACHMENT TO THE MECHANICAL MARKER AND SUITABLE FOR DISPENSING THE REQUIRED QUANTITY OF REFLECTIVE BEADS.
- SUITABLE ADJUSTMENTS SHALL BE PROVIDED ON THE SPRAYER/SPRAYERS OF A MACHINE FOR PAINTING THE WIDTH REQUIRED. MULTIPLE PARALLEL PASSES TO PAINT THE REQUIRED WIDTH WILL NOT BE ALLOWED.
- IMMEDIATELY BEFORE APPLICATION OF THE PAINT, THE EXISTING SURFACE SHALL BE DRY AND ENTIRELY FREE FROM DIRT, GREASE, OIL ACIDS, DEBRIS, OR OTHER FOREIGN MATTER WHICH WOULD RUIN OR WEAKEN THE BOND BETWEEN THE COAT OF PAINT AND THE PAVEMENT. THE SURFACE SHALL BE THOROUGHLY CLEANED BY SWEEPING AND BLOWING AS REQUIRED TO REMOVE ALL DIRT, DEBRIS AND LOOSE MATERIALS. AREAS WHICH CANNOT BE SATISFACTORILY CLEANED BY BROOMING AND BLOWING SHALL BE SCRUBBED AS DIRECTED WITH A WATER SOLUTION OF TRI-SODIUM PHOSPHATE (10% BY WEIGHT) OR AN APPROVED EQUIV. SOLUTION. AFTER SCRUBBING, THE SOLUTION SHALL BE RINSED OFF AND THE SURFACE DRIED PRIOR TO PAINTING.
- EXISTING MARKINGS OR STRIPES WHICH ARE TO BE ABANDONED OR REMOVED SHALL BE OBLITERATED OR OBTURED BY THE BEST METHODS SUITED FOR THE PURPOSE AND TO THE SATISFACTION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR LAYING OUT A SAMPLE SECTION OF STRIPING WHICH IS TO BE APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE AS TO QUALITY BEFORE THE CONTRACTOR PROCEED WITH THE STRIPING. THE CONTRACTOR IS TO INSURE THAT ALL SUBSEQUENT STRIPING MEETS THE QUALITY OF THE APPROVED SAMPLE APPLICATION.
- ON THOSE SECTIONS OF PAVEMENTS WHERE NO PREVIOUSLY APPLIED FIGURES, MARKINGS, OR STRIPES ARE AVAILABLE TO SERVE AS A GUIDE, SUITABLE LAYOUTS AND LOCAL OF PROPOSED STRIPES SHALL BE SPOTTED IN ADVANCE OF THE PAINT APPLICATION. CONTROL POINTS SHALL BE SPACED AT SUCH INTERVALS AS WILL ENSURE ACCURATE LOCATION OF ALL MARKINGS.
- THE CONTRACTOR SHALL PROVIDE AN EXPERIENCED TECHNICIAN TO SUPERVISE THE LOCATION ALIGNMENT, LAYOUT, DIMENSIONS AND APPLICATION OF THE PAINT.
- MARKINGS SHALL BE APPLIED AT THE LOCATIONS AND TO THE DIMENSIONS AND SPACING INDICATED ON THE PLANS OR AS SPECIFIED. PAINT SHALL NOT BE APPLIED UNTIL THE INDICATED ALIGNMENT IS LAID OUT AND THE CONDITIONS OF THE EXISTING SURFACE HAVE BEEN APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CURB SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION OF THE PAINT. THE PAINT SHALL BE MIXED AND APPLIED TO THE SURFACE OF THE PAVEMENT WITH THE MARKING MACHINE AT ITS ORIGINAL CONSISTENCY WITHOUT THE ADDITION OF THINNER. IF THE PAINT IS APPLIED BY BRUSH, THE SURFACE SHALL RECEIVE TWO (2) COATS. THE FIRST COAT SHALL BE THOROUGHLY DRY BEFORE THE SECOND COAT IS APPLIED.
- A MINIMUM OF ONE (1) WEEK SHALL ELAPSE BETWEEN APPLICATION OF THE BITUMINOUS SEAL COAT, SLURRY SEAL OR THE PLACEMENT OF THE BITUMINOUS SURFACE COURSE AND THE MARKING OF THE PAVEMENT. THE PAINT SHALL NOT BE APPLIED UNTIL THE SURFACE IS DRY TO THE TOUCH. ALL BITUMINOUS OR CONCRETE SURFACES. CURING COMPOUND MUST BE REMOVED FOR THE ENTIRE WIDTH OF THE PAINTED STRIPE OR SYMBOL PRIOR TO PAINTING NEW CONCRETE.
- IN THE APPLICATION OF STRAIGHT STRIPES, ANY DEVIATION IN THE EDGES EXCEEDING 1/2-INCH IN 50- FEET SHALL BE OBLITERATED AND THE MARKING CORRECTED. THE WIDTH OF THE MARKINGS SHALL BE AS DESIGNATED WITHIN A TOLERANCE OF 5 PERCENT (5%). ALL PAINTING SHALL BE PERFORMED TO THE SATISFACTION OF THE OWNER OR OWNER'S REPRESENTATIVE BY COMPETENT AND EXPERIENCED EQUIPMENT OPERATORS, LABORERS, AND ARTISANS IN A NEAT AND WORKMANLIKE MANNER.
- PAINT SHALL BE APPLIED UNIFORMLY BY SUITABLE EQUIPMENT AT A RATE OF 0.0094 GAL./S.F. FOR STENCILS AND 0.00313 GAL./FT. FOR STRIPING. PAINT NOT BEING APPLIED SHALL PRODUCE AN AVERAGE WET FILM THICKNESS OF 0.015-INCHES.
- AFTER APPLICATIONS OF THE PAINT, ALL MARKINGS SHALL BE PROTECTED WHILE THE PAINT IS DRYING. THE FRESH PAINT SHALL BE PROTECTED FROM INJURY OR DAMAGE OF ANY KIND. THE CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE AND SHALL ERECT OR PROVIDE SUITABLE WINDSHIELDS, FLAGS, OR BARRICADES. PROTECTIVE SCREENS OR COVERINGS AS REQUIRED. ALL SURFACES SHALL BE PROTECTED FROM DISFIGURATION BY SPATTER, SPLASHES, SPILLAGE, DRIPPINGS OF PAINT OR OTHER MATERIAL.

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MEGA

**City of Brighton  
200 N. First St. Brighton, MI 48116  
Planning Commission  
Regular Meeting Minutes  
April 19, 2021**

The Board for the Planning Commission held a Regular Meeting on Monday, April 19, 2021 at 7:00 p.m., conducted virtually.

**1. Call to Order/Roll Call**

Chairman Smith called the meeting to order at 7:01 p.m.

**Commissioners Present:** Ken Schmenk, Steve Monet, Chuck Hundley, Susan Gardner, Matt Smith, Jim Bohn, Dave Petrak, Bill Bryan and Mike Schutz. All members participated remotely and disclosed their locations.

**Also Present:** Kari Jozwik, Tetra Tech; Mike Caruso, Community Development Manager; Kelly Haataja, Executive Assistant to Community Development; and an audience of eight (8) persons.

**2. Consider Approval of Consent Agenda Items**

**Consent Agenda Items**

- a. Approval of the February 22, 2021 Regular Meeting Minutes
- b. Approval of the April 19, 2021 Agenda

**Motion** by Commissioner Gardner, seconded by Commissioner Schutz to approve the Consent Agenda Items. **The motion carried unanimously by a roll call vote.**

**3. Call to the Public**

Chairperson Smith opened the Call to the Public at 7:03 p.m.  
Hearing and seeing no comments, the Call to the Public closed at 7:04 p.m.

**Old Business**

- 3. None

**New Business**

**4. Consider Approval for Extension Request to Site Plan 18-04, Towne Place Suites**

Mr. Caruso offered a brief background of the site plan and the past two extensions granted for it.

The Commissioners voiced concerns with market saturation, tax tribunal cases and the ongoing crime issues happening at hotels throughout the City.

Mr. Joel Yono, attorney on behalf of the applicant described extended stay hotels. He discussed the property owner's right to challenge the tax assessment and explained there has been delays for financing due to the pandemic.

Commissioner Schutz asked Mr. Yono if it would be likely the applicant will be requesting for another extension next year.

Mr. Yono replied yes.

Commissioners discussed tabling the item for further data and attorney review.

**Motion** by Commissioner Gardner, seconded by Commissioner Monet to deny the request to extend Site Plan 18-04, Towne Place Suites. **Motion carried by a roll call vote, with Commissioners Smith and Bohn voting no.**

#### **5. Consider Approval of Site Plan 20-19, Northpond Office Complex, 1112 Rickett Rd.**

Mr. Caruso introduced the item and noted he has received revised letters from consultants with only minor issues for the applicant to complete.

Mr. Dave Richardson, Lindhout Associates presented the design of the 45,000 square foot, two-story building, to be constructed for office and research development space.

Mr. Richard Thomas of Creative Construction Concepts who is the developer, owner's rep and contractor spoke about the tenant spaces.

The Commissioners discussed parking calculations and deferments, green space and future parking with the applicant.

**Motion** by Commissioner Bohn, seconded by Commissioner Schmenk to recommend approval for Site Plan 20-19, Northpond Office Complex, 1112 Rickett Rd. to include deferred parking of up to ten percent (10%), using the zoning ordinance language, with the condition all items in the consultant reports have been met. **Motion carried unanimously by a roll call vote.**

#### **Other Business**

#### **6. Staff Updates**

Mr. Caruso stated the public hearing for West Village is scheduled on May 3, 2021, new legal counsel has been obtained by City Council, and he provided an update of developments in progress.

## **7. Commissioner Report**

Commissioner Gardner announced there would be a ribbon cutting and open house at the Brighton Light House this Thursday.

## **8. Call to the Public**

Chairperson Smith opened the Call to the Public at 8:15 p.m.  
Hearing and seeing no comments, the Call to the Public closed at 8:16 p.m.

## **9. Adjournment**

**Motion** by Commissioner Petrak, seconded by Commissioner Schutz to adjourn the meeting at 8:16 p.m. **Motion carried unanimously by a roll call vote.**

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***William Bryan, Secretary***

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***Kelly Haataja, Executive Assistant  
to Community Development***



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: PUBLIC HEARING AND CONSIDERATION OF ADOPTING THE FY 2021-22 BUDGET**

### **ADMINISTRATIVE SUMMARY**

- The City Manager's Proposed FY 2021-22 Budget was presented to the City Council on Thursday, April 1, 2021.
- The City Council held Budget Work Sessions on Tuesday April 13, 2021 and Wednesday, April 14, 2021.
- On Thursday April 1, 2021, the City Council approved a motion to hold a public hearing for the purpose of receiving citizen input regarding the Proposed Budget during the May 6, 2021 City Council meeting.
- The budget provides for a tax levy and utility fees, which comprise the majority of City's revenue used to support the expenditures/expenses. The City Council will consider the millage rates and the fee schedule in separate resolutions.
- The annual budget provides the authority to appropriate the funds for the operations of the City of Brighton from July 1, 2021 through June 30, 2022.

### **RECOMMENDATION**

It is the recommendation of staff that the City Council approve the attached resolution, including Exhibit A, to adopt the City's Budget for FY 2021-22.

Prepared by: Gretchen M. Gomolka, Finance Director

Approved by: Nate Geinzer, City Manager

## **RESOLUTION #2021-11**

### **ADOPTING THE FY 2021-22 BUDGET**

WHEREAS, the City of Brighton Municipal Charter requires that an annual budget be approved by the City Council; and

WHEREAS, said Charter requires the appropriation of funds for the upcoming Fiscal Year; and

WHEREAS, the Manager's recommended budget for Fiscal Year 2021-22 was submitted to the City Council of Brighton and a copy thereof placed on the City's website for public review on April 1, 2021; and

WHEREAS, on May 6, 2021 the City Council of Brighton held a public hearing on the proposed budget for Fiscal Year 2021-22; and

WHEREAS, estimated revenues and fund balances are sufficient to provide for proposed expenditures and year end reserves required for the 2021-22 Fiscal Year; and

NOW, THEREFORE, pursuant to Chapter 8, Section 4 of the City of Brighton Charter, BE IT RESOLVED, that the City Council of Brighton hereby approves the Fiscal Year 2021-22 budget by activity, as presented by the Manager, reviewed and amended by Council, and implemented through the following policies and specifications as the official budget for the City of Brighton for the Fiscal Year beginning July 1, 2021;

#### **I. ADOPTION BY FUND AND ACTIVITY WITHIN EACH FUND**

The Budget is hereby adopted and appropriated by fund, and department within each fund, as provided on Exhibit A with council amendments.

#### **II. APPROPRIATIONS/TRANSFERS**

Appropriations made during Fiscal Year 2021-22 pursuant to said budget shall be considered the maximum authorization to incur expenditures and not a mandate to spend, subject to the following conditions:

- i. Additional appropriations may be made by the City Council from the unappropriated fund balance account of the General Fund for approved reallocations, providing that such appropriations do not cause the unreserved fund balance account to be less than 15% of the total General Fund budgeted operating expenditures.
- ii. Transfers may be made by the City Manager from departmental reserves or surplus of the General Fund to any department of the General Fund in amounts not to exceed five percent of the original total budget for the department receiving the transfer, provided that such transfers shall not exceed the total amount of operating reserves or surplus available at the time of transfer, and providing that such transfers do not cause the unreserved fund balance account to be less than 15% of the total General Fund budgeted operating expenditures.

- iii. Transfers may be made by the City Manager from departmental reserves or surplus of the General Fund to any other Fund of the City in amounts not to exceed ten percent of the original total budget for all such transfers, providing that the limitations of Section (B) are not exceeded.
- iv. Appropriations in excess of the limitations of Sections (A - C) above may be authorized by the City Council but only if new revenues are available to fund such expenditures.

III. LIMIT ON OBLIGATIONS AND PAYMENTS

No obligation shall be incurred against, and no payment shall be made from any appropriation account unless there is a sufficient unencumbered balance in the appropriation, and sufficient funds are or will be available to fund such expenditures.

IV. CONFORMITY WITH PREVIOUS ACTIONS

The City Council rescinds any prior actions not in conformity with the above stated policies and specifications.

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

RESOLUTION DECLARED ADOPTED

Dated: \_\_\_\_\_

**CERTIFICATION**

I, Tara Brown, City Clerk of the City of Brighton, do hereby certify that the foregoing is true and correct copy of a Resolution adopted by the City Council of the City of Brighton at a regular meeting held on May 6, 2021.

\_\_\_\_\_  
Tara Brown, City Clerk

**EXHIBIT A****Budget 2021-22****REVENUES - ALL FUNDS**

<u>Source</u>	<u>Budget</u>
Property Taxes, Penalties, Interest & Fees	\$ 9,359,760
Licenses & Permits	378,100
Federal & State Grants	21,000
State Shared Revenue	1,565,000
Fines & Forfeitures	79,475
Local Unit Contribution	86,500
Service Charges	5,623,475
Investment Earnings	27,775
Rents & Royalties	115,199
Other Revenue	335,664
Other Financing Sources :Bond Proceeds	-
Other Financing Sources : Transfers In	10,091,105
<b>TOTAL REVENUES</b>	<b>\$ 27,683,053</b>

**EXPENDITURES BY FUND**

<u>Fund</u>	<u>Department</u>	<u>Appropriation</u>
	City Council	\$ 30,837
	City Manager	243,296
	Communications	45,369
	Legal Services	303,133
	City Clerk	201,303
	Human Resources	175,078
	Finance	848,058
	Information Systems	127,484
	Police	3,423,592
	Public Works	2,442,522
	Community Development	477,968
	Post Employment Benefits	448,476
	Transfers to Other Agencies	166,200
	Transfers to Other Fund	1,159,342
General Fund		<b>10,092,658</b>

**EXHIBIT A****Budget 2021-22****Continued**

Major Streets	1,397,118
Local Streets	3,257,635
Street Millage Fund	764,318
Arts & Cultural Commission	8,350
Imagination Station Maintenance	5,250
State Forfeiture Funds	-
Federal Forfeiture Funds	27,705
Street Non-voted Debt	334,862
Capital Improvement	1,345,416
Capital Reserve	965,436
2021 Bond Construction Fund	3,048,965
Law Enforcement/Public Safety	333,560
Brownfield Redevelopment Authority	-
Downtown Development Authority	1,255,700
2021 Utility Bond Construction Fund	2,700,160
Utilities	9,705,248
<b>TOTAL EXPENDITURES</b>	<b>35,242,381</b>
Less: Depreciation	(2,305,000)
<b>TOTAL EXPENDITURES: Less Depreciation</b>	<b>\$ 32,937,381</b>
<b>Net Reduction to Fund Balance/Net Position</b>	<b>(5,254,328)</b>

Note: \$5,749,125 of bond proceeds are budgeted to be spend in 2021-22, which is causing the net reduction to fund balance above.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: CONSIDERATION OF ADOPTING THE PROPOSED FY 2021-22 FEE SCHEDULE**

### ADMINISTRATIVE SUMMARY

The City's fees and charges are reviewed at least annually and amended where warranted. The attached Resolution is staff's recommendation for adopting the attached proposed FY 21-22 Fee Schedule.

The proposed FY 2021-22 Fee Schedule includes a column that shows the prior year fees in yellow highlight if they are different from the proposed FY 2021-22 fees. In order to provide clarity, upon adoption, the prior year numbers and highlights will be removed and the final fee schedule will be produced. There were very few changes in the current year. You will see one new proposed fee in the Community Development Department. There is a change in the utility inspection fees in addition to the utility rates as outlined below.

Included in the highlighted changes on the attached fee schedule are the following Utility Fees.

### Utility Fees – (as reflected in the FY 2021-22 Proposed Budget):

#### **Utility User Charges (bi-monthly):**

<b>Water:</b>	<b>City</b>	<b>Genoa Pine Creek</b>	<b>Genoa Dillion</b>	<b>Genoa N.Star1</b>	<b>Genoa N.Star2</b>	<b>Brighton Township</b>	<b>Hamburg Township</b>
Commodity (1,000 Gal.) -	\$5.45	\$5.45	\$6.01	\$6.28	\$6.01	\$6.01	\$5.45

<b>Wastewater:</b>	<b>City</b>	<b>Genoa</b>	<b>MDOT</b>	<b>Hamburg</b>
Commodity (1,000 Gal.) -	\$6.24	\$6.24	\$6.24	\$5.40
Administrative (per meter/service)	\$9.64**	\$14.46*	\$14.46*	\$14.46*

<b>Debt Service (per meter size/service)</b>	<b>City</b>	<b>Genoa</b>	<b>MDOT</b>	<b>Hamburg</b>
.75"	\$24.87**	\$9.51***		
1.00"	\$42.27**	\$16.17***	\$63.41*	
1.50"	\$84.54**			
2.00"	\$134.27**			
3.00"	\$266.06**			
4.00"	\$415.25**			
6.00"	\$830.50**			

\* Rates reflect quarterly billing

\*\* Rates reflect bi-monthly billing

\*\*\* Rates reflect bi-monthly billing and are for only the Genoa Pine Creek customers. Pine Creek customers only pay debt service on debt issued in 2021 or thereafter.



# City of Brighton

REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

Un-metered Charge

Residential -	\$103.15
Governmental -	\$306.34
Commercial/Industrial -	\$568.23

**The Average Combined Sewer and Water User Fees at 8 thousand gallons per billing cycle would increase by 7.1%.**

**RECOMMENDATION**

It is the recommendation of staff that the City Council consider the attached resolution to set the fees and charges for FY 2021-22.

Prepared by: Gretchen M. Gomolka, Finance Director

Approved by: Nate Geinzer, City Manager

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES
<b>CITY HALL - COMMON FEES</b>		
<b>Licenses and Permits</b>		
<b>Adult Entertainment Business</b>		
	Operating application fee	\$300.00
	Operating license fee	\$400.00
	<b>Artist Application Fee</b>	\$25.00
<b>Auctions</b>		
	Bond Required	\$2,000.00
	Annual license to operate	\$25.00
	*Per day private auction	\$5.00
	*Per day public auction house	\$25.00
<i>* This amount payable until a total of \$300.00 is reached; thereafter, daily fee of \$2.00 for the balance of the calendar year.</i>		
<b>Carnivals</b>		
	Application fee to operate	\$150.00
	License to operate	\$300.00
<b>Collection Containers</b>		
	<b>Registration fee</b>	\$50.00
	<b>Annual permit fee</b>	\$100/container
<b>Liquor License Application Fee</b>		
	Application for On-Premise Liquor License, new or transfer (Class C, Tavern, etc.)	\$500.00
	Application for Off-Premise Liquor License, new or transfer (SDD, SDM, etc.)	\$300.00
	Application to amend or change existing license (additional licensee/stock holder, etc.)	\$200.00
	Application to add special permit to license (dance, entertainment, etc.)	\$100.00
	Application for Farmer's Market Alcohol Permit	\$150.00
<i>Application for combined licenses (i.e. - Class C/SDM) to be charged only on the On-Premise fee</i>		
<b>Redevelopment Liquor License</b>		
	Submittal Fee (Process up through City Council Action) - non-refundable	\$250.00
	Processing Fee (Process after City Council Action) - non-refundable	\$750.00
	<b>24 hour Liquor License Fee</b>	\$40.00

**FY 2020/21 FEES IF CHANGED**

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES
<b>Licenses and Permits (continued)</b>		
<b>Massage Business</b>		
	Application & Inspection fee	\$100.00
	Initial License fee	\$300.00
		+ \$10/each additional table
	Annual License fee renewal	\$200.00
		+ \$10/each additional table
<b>Mechanical or Electronic Amusement Devices</b>		
	Application fee to operate	\$100.00
	Annual license fee per machine	\$20.00
<b>Pawn Shop Fee</b>		
		\$250.00
<b>Peddlers/Solicitors</b>		
	Bond Required	\$1,000.00
	Investigation fee	\$40.00/person
	Annual permit fee	\$60.00
<b>Pool, Bowling and Roller Rink Establishments</b>		
	Application fee	\$50.00
	License fee	\$100.00
<b>Public Dances Annual License to Operate</b>		
		\$25.00
<b>Sidewalk Café Permit with Alcohol Sales</b>		
	Tri-annual application fee	\$200.00
	Annual inspection fee	\$100.00
<b>Sidewalk Café Permit without Alcohol Sales</b>		
	Tri-annual application fee	\$150.00
	Annual inspection fee	\$50.00
<b>Sidewalk Occupancy</b>		
	Annual application fee	\$50.00
	Annual permit fee	\$100.00
<b>Street Closure Fee</b>		
		\$300.00
<b>Temporary Land Use Fee</b>		
		\$250.00
<b>Tent Permit (temporary commercial use only)</b>		
		\$50.00
<b>Trailer - Permit to Park Fee</b>		
		\$100.00
<b>Notary Fee</b>		
	Resident	\$0.00
	Non-Resident	\$10.00

**FY 2020/21 FEES IF CHANGED**

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Photocopy Fees - All Departments *</b>			
	Assessment Card	\$2.00/page	
	Assessment Tax Roll	\$1.00/page	
	Deed	\$1.00/page	
	11 x 17	\$1.50/page	
	Legal size	\$1.00/page	
	Letter size	\$1.00/page	
	Larger than 11 x 17	\$5.00/page	
* Taxpayers/Utility customers who request a copy of their <b>current bills</b> will have the photocopy fee waived (fees are the same whether documents are picked up, mailed, emailed, or faxed).			
<b>Public Documents *</b>			
	Assessment Map	\$1.00/page	
	City Annual Audit	\$10.00	
	City Budget	\$15.00	
	City Charter	\$5.00	
	City Code	\$45.00	
	Executive Plan	\$5.00	
	Land Development Design Manual	\$25.00	
	Master Plan	\$25.00	
	Master Utility Plan	\$25.00	
	Photo Reproduction Fee	\$1.00	
	Planimetric Map	\$5.00	
	Sign Ordinance w/map	\$25.00	
	Utility System Map	\$5.00	
	Voter History Disk/Electronic Media	\$0.03/name	
	Voter History Paper/Labels	\$1.00/page	
	Voter Registration Labels	\$80.00	
	Voter Registration on Roll/Disk/Electronic Media	\$20.00	
	Voter Registration Roll/Paper	\$55.00	
	Zoning Map (11 x 17)	\$8.00	
	Zoning Ordinance w/map	\$25.00	

\* Charges for public documents may be waived by the City Manager to promote educational, charitable or community welfare interests)

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>DEPARTMENT FEES</b>			
<b>City Clerk's Department</b>			
<b>Document Fees</b>			
	See "Public Documents" for specific documents and fees related to City Clerk's Office.		
<b>Photocopy Fees</b>			
	See "Photocopy Fees - All Departments" for specific fees related to City Clerk's Office.		
<b>Freedom of Information Act (FOIA) Requests</b>			
	See Freedom of Information Act Procedures and Guidelines at <a href="http://www.brightoncity.org/Reference%20Desk">www.brightoncity.org/Reference Desk</a> or go to City Hall, 200 N. First Street, Brighton, MI 48116 for details on fees charged for providing a public record.		
<b>CEMETERIES</b>			
<b>Sale of Graves</b>			
	Regular Grave - Resident/Non-Resident	\$900.00/\$1,350.00	
	Children's Grave - Resident/Non-Resident	\$600.00/\$800.00	
	Cremains Grave - Resident/Non-Resident	\$450.00/\$750.00	
	Indigents - Resident/Non-Resident	Free/Non-Resident Fee	
	Transfer Fee - Resident	\$50.00/grave	
	Grave Buy Back	30% of purchase price up to \$300 per grave	
	<b>Columbarium Fee - Resident/Non-Resident</b>	\$900.00/\$1,350.00	
<b>Interments (Opening, Closing, Restoration)</b>			
<b>Regular Grave</b>			
	Monday - Friday	\$750.00	
	Saturday	\$1,200.00	
	Sunday & Holiday	\$1,800.00	
<b>Children's Grave (up to 4 feet)</b>			
	Monday - Friday	\$600.00	
	Saturday	\$750.00	
	Sunday & Holiday	\$825.00	
<b>Cremains Grave</b>			
	Monday - Friday	\$450.00	
	Saturday	\$525.00	
	Sunday & Holiday	\$600.00	
<b>Columbarium Niche</b>			
	Monday - Friday	\$150.00	
	Saturday	\$200.00	
	Sunday & Holiday	\$250.00	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>City Clerk's Department (continued)</b>			
Indigents		Free	
<b>Additional Fees</b>			
	Monday - Friday - Burial after 2:00pm	add'l \$450	
<b>Winter Surcharge (as determined by weather conditions)</b>			
		add'l \$375	
<b>Disinterment</b>			
<b>Regular Graves</b>			
	Monday-Friday	\$1,500.00	
	Saturday	\$2,400.00	
<b>Children's Graves</b>			
	Monday-Friday	\$1,200.00	
	Saturday	\$1,500.00	
<b>Cremaains</b>			
	Monday-Friday	\$900.00	
	Saturday	\$1,050.00	
<b>FOUNDATION AND INSTALLATION CHARGES</b>			
<i>A two inch foundation border is required for all monuments, elevated markers, and bronze markers (except government).</i>			
<i>Example: A 36" x 12" marker or monument will need a 40' x 16' foundation. The cost would be \$153.</i>			
<i>Foundations are installed a minimum of 90 days after interment.</i>			
<b>Foundation Sizes</b>			
	24x12	\$123.00	
	28x16	\$125.00	
	36x16	\$150.00	
	40x16	\$153.00	
	42x16	\$156.00	
	42x18	\$160.00	
	48x22	\$173.00	
	52x18	\$169.00	
	58x18	\$177.00	
	60x16	\$181.00	
	66x18	\$183.00	
	72x18	\$190.00	
	80x20	\$198.00	
	98x16	\$210.00	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
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**City Clerk's Department (continued)**

<b>CUSTOM MADE FOUNDATIONS</b>		0.40/inch	
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*All custom foundations (those not found on the list above) shall be charged by the monument base size at \$0.40 per square inch.*

*Example: A 36" x 14" marker or monument will need a 40" x 18" foundation. 40 x 18 = 720 square inches. 720 x \$.40 = \$288*

**FLUSH SET MARKER INSTALLATIONS \***

16X8		\$75.00	
24X12		\$85.00	
36X12		\$95.00	
42X12		\$110.00	
48X12		\$110.00	
54X12		\$115.00	
Vases		\$75.00	
Cremains and Columbarium Plaques		\$65.00	
Government Marker Installations		\$100.00	
Setting of ornamental vases and urns		\$50.00	

*\* Note: Sizes other than those listed above are priced on request. Charges include direct costs to City plus administrative fee. Foundation orders must be received 15 business days before Memorial Day.*

**Veterans Section of Brighton Hills Cemetery**

*The Veterans section is reserved for eligible Livingston County veterans and their spouses*

**Sale of Veterans Graves**

Regular Grave		\$450.00	
Columbarium		\$900.00	

**Veterans Interments**

City Resident		Free	
Livingsnton County Resident - not in City of Brighton		See Interment fees above	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Community Development - Building Department</b>			
<b>Document Fees</b>			
	See "Public Documents" for specific documents and fees related to the Building Department.		
<b>Photocopy Fees</b>			
	See "Photocopy Fees - All Departments" for specific fees related to the Building Department.		
<b>Addressing Fee</b>			
	For issuing each New Property Address in the City. Includes metes and bounds addresses as well as individual lots and parcels.	\$25.00	
<b>Admin Fee</b>		\$50.00	
<b>Awning Permit Fee</b>		\$60/ 1st awning + \$15 each add'l + Admin Fee + Refundable Bond	
<b>Certificate of Occupancy (C of O) Fees</b>			
	Commercial/Industrial Certificate of Occupancy	10% of permit costs min. \$150.00 - max. \$1,000.00	
	Residential Certificate of Occupancy	\$100.00 each	
	Temporary Certificate of Occupancy-Commercial/Industrial	\$200.00	
	Temporary Certificate of Occupancy-Residential	\$100.00	
<b>Commercial Building Permit Fee</b>		Based on est. building cost + Admin Fee + Refundable Bond	
<b>Commercial Plan Review Fee</b>		\$90.00/hour	
<b>Contractors Registration Fee</b>		\$20.00/year	
<b>Construction Trailer Permit Fee</b>		\$200 + Admin Fee + \$200 Refundable Bond	
<b>DBD Annual Sandwich Board Permit Fee</b>		\$50.00	
<b>Demolition Permit Fee</b>			
	Commercial/Industrial	\$800 + Admin Fee + Refundable Bond (see bond schedule below)	
	Residential	\$400 + Admin Fee + Refundable Bond (see bond schedule below)	
<b>House Moving Permit Fee</b>		\$75.00+(\$5.00/\$1000.00 Est Cost) + Admin Fee + Refundable Bond	
<b>Recovery Fee for Signs removed from City Right of Way</b>		\$25.00/sign	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Community Development - Building Department (continued)</b>			
<b>Refundable Performance Bonds*</b>			
	Construction cost up to \$1,000	\$100.00	
	Construction cost more than \$1,000 up to \$5,000	\$200.00	
	Construction cost more than \$5,000 up to \$15,000	\$300.00	
	Construction cost more than \$15,000 up to \$20,000	\$400.00	
	Construction cost more than \$20,000 up to \$100,000	\$1,500.00	
	Construction more than \$100,000 - Residential	\$2,500.00	
	Construction more than \$100,000 - Commercial	2.5% of construction cost	
<b>Residential Permit Fees</b>			
	Admin Fee	\$50.00	
	Inspection Fees	\$45.00/ per inspection	
	Plan Review Fees - New Construction	\$50/hour	
	Plan Review Fees - Other Than New Construction	\$40/hour	
	Refundable Performance Bond	See above	
	Re-inspection Fee	\$45.00	
<b>Additional Permit Fees Apply to The Following:</b>			
	Deck - Fee per square footage	.25/Sq.Ft. (\$70 min. charge)	
	Driveway, Patio, Porch, Sidewalk - Fee per square footage	.25/Sq.Ft. (\$70 min. charge)	
	Garage, Home Additions, Interior Renovations - Fee per square footage	.40/Sq.Ft. (\$70 min. charge)	
	<b>Re-occupancy Permit Fee</b>	\$75.00	
	<b>Sign Installation without Sign Permit</b>	\$200.00	
	<b>Sign Review Fee</b>	\$40.00	
	<b>Sign Permit Fee</b>	\$60.00/sign face+ \$15.00 each add'l	
	<b>Temporary Sign Permit Fee (60 days for grand opening otherwise max. 3 weeks)</b>	\$60.00	
<b>Work Without a Building Permit</b>			
	Commercial	\$400.00	
	Residential	\$200.00	
	<b>Zoning Verification Request</b>	\$150.00	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Community Development - Code Enforcement</b>			
<b>Document Fees</b>			
	See "Public Documents" for specific documents and fees related to Code Enforcement.		
<b>Photocopy Fees</b>			
	See "Photocopy Fees - All Departments" for specific fees related to Code Enforcement.		
<b>Code Violation/City Charter Violation Penalties:</b>			
	A person found violating a City Charter requirement shall be subject to the penalties established in the City Charter.		
<b>Code Enforcement Inspection fee</b>		\$70.00	
<b>Vacant/Abandoned Structure</b>			
	Registration Fee	\$115.00	
	Monthly Administrative Fee	\$135.00	
	Exterior Inspection Fee	\$70.00	
	Interior Inspection Fee	\$115.00	
	Late Fee - After ten days, five percent (5%) non-compounding late fee will be assessed daily	\$35.00	
<b>Weed Cutting/Debris Removal *</b>			
	<i>* Total cost of invoice plus code enforcement inspection fee</i>		
<b>Community Development - Planning and Zoning</b>			
<b>Document Fees</b>			
	See "Public Documents" for specific documents and fees related to Planning and Zoning.		
<b>Photocopy Fees</b>			
	See "Photocopy Fees - All Departments" for specific fees related to Planning and Zoning.		
<i>The following fees represent amount to be paid by applicant at time of application for approval. In the case of rezoning, special land use permit, amendment to approved site plan, administrative site plan and public right of way vacation applications, possible engineering fees will be billed directly to the applicant as they are incurred.</i>			
<b>Construction Board of Appeals</b>		\$200.00	
<b>Engineering Fees</b>		See Planning Department	
<b>Industrial Facilities Tax Exemption (IFT)</b>			
	Step 1: Establish district	\$500.00	
	Step 2: Process application	\$1,000.00	
<b>Planned Unit Development</b>	Cost of rezoning and site plan review fees		
<b>Public Right of Way Vacation</b>		\$1200 + possible consulting fees	
<b>Rezoning</b>		\$1,500 + possible consulting fees	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Community Development - Planning and Zoning (continued)</b>			
<b>Site Plan Review</b>			
	Administrative Review	\$400 + consulting fees	
	Amendment to Approved Plan	\$675 + any consulting fees	
	Commercial Property Change of Use Application	\$675 + possible consulting fees	
	Commercial Property - Exterior Building Renovations Application	\$675 + possible consulting fees	\$0 - New Fee
	Conceptual Site Plan Review	\$300 + any consulting fees	
	Site Plan Extension	\$500.00	
	Site Plan Submittal*	\$3,800.00	
	<i>* Includes written comments of review, one planning commission meeting and one city council meeting</i>		
<b>Plat Review</b>			
	Tentative approval of preliminary plat	\$5.00 per-lot \$300 minimum	
	Final approval of preliminary plat	\$3.50 per lot-\$300 minimum	
<b>Final Plat Approval</b>			
	Plat review	\$15.00 per lot-\$350 minimum	
<b>Site Condominium Review</b>			
	Site visit	\$300.00	
	Preliminary Plan Review	\$9.00 per unit-\$450 minimum	
	Final Plan Review	\$5.00 per unit-\$300 minimum	
<b>Special Meetings</b>			
	Planning Commission Meeting	\$700.00	
	Zoning Board of Appeals Meeting	\$600.00	
	<b>Special Use Permit</b>	1200.00 + possible consulting fees	
	<b>ZBA Variances</b>	\$725.00	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

**DEPARTMENT / SERVICE**

**FEE DESCRIPTION**

**FY 2021/22 FEES**

**FY 2020/21 FEES IF CHANGED**

**Community Development - Rental Inspection**

**Document Fees**

International Property Maintenance Code \$20.00

**Residential Rental Registration Fees**

**Building/Single Family Unit**

First unit \$30.00

Each additional unit \$10.00

Unregistered units or false information given on registration form See Ordinance Section 18-90

Late Fee per unit\* \$50.00

*\* A late fee will be assessed per unit if not registered within the allotted time according to Section 18-86 of the ordinance.*

**Residential Rental Registration Inspection Fees**

Single Family (single family, condos, duplex with owner occupied unit) \$100/unit

Multiple-family buildings up to 4 units \$90/unit

Multiple-family buildings over 4 units \$80/unit

Exterior property Inspection \$60 + \$20/additional structures

Missed inspection appointment fee for inspections scheduled by owner or agent inspection fee as outlined above

Past Due Compliance fee \$60.00

Re-inspection Fee - first \$60.00

Re-inspection Fee - second and beyond \$100.00

Inspection requested by tenant (request must be in writing) \$80.00

**Late Fee\***

Within 10 days \$100.00

After 10 days \$100 + 5% daily charge

*\* Per Ordinance Section 18-98.*

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
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**Finance Department - Administration, Treasury, Assessing**

**Document Fees**

See "Public Documents" for specific documents and fees related to the Finance Department.

**Photocopy Fees**

See "Photocopy Fees - All Departments" for specific fees related to the Finance Department.

<b>Returned Check Fee (NSF, etc.)</b>	\$25.00		
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**Dog License \***

*\* Dog License renewal is to take place the month of vaccination expiration. A \$20 Late fee applies to all renewals the month following vaccination expiration.*

	<u>Per Dog</u>		
1 year neutered	\$10.00		
1 year neutered w/ late fee	\$30.00		
1 year non-neutered	\$25.00		
1 year non-neutered w/ late fee	\$45.00		
3 year neutered	\$25.00		
3 year neutered w/ late fee	\$45.00		
3 year non-neutered	\$60.00		
3 year non-neutered w/late fee	\$80.00		

Replacement license	\$5.00		
Service Dogs	Free		

<b>Duplicate Tax/Special Assessment/Utility Bill *</b>	\$3.00/account		
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*\* Taxpayers/Utility customers who request a copy of their **current bills** will have the photocopy fees waived. Tax Escrow Agents who are registered with the City as a designated agent for the payment of taxes receive one free listing of requested parcels per tax season. \$3.00 fee per parcel applies for additional requests.*

<b>Tax Search Fee - Per Property Per Tax Year</b>	\$3.00		
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<b>Property Splits/Merger - fee per parcel</b>	\$250.00		
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<b>Property Transfer Affidavit Form Late Filing Fee*</b>	\$5.00/day up to \$200		
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*\*Daily fee starts after a 45 day grace period. Fees apply for each separate "Failure to File".*

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Mayor / City Council</b>			
<b>Document Fees</b>			
	See "Public Documents" for specific documents and fees related to Mayor/City Council.		
<b>Photocopy Fees</b>			
	See "Photocopy Fees - All Departments" for specific fees related to Mayor/City Council.		
<b>Mayoral Marriage</b>			
	Resident	\$50.00	
	Non Resident	\$100.00	
<b>Rental of City Council Chambers</b>		\$50.00/hour	
<b>Special Council Meeting</b>		\$365.50	
<b>Police Department</b>			
	<b>Impounded Vehicle Fee</b>	\$25.00	
	<b>Background Check Fee per Fire Authority Request</b>	\$5.00	
	<b>Copy of Police Reports Authorized for Distribution</b>	\$10.00	
	<b>Court Ordered Preliminary Breathe Test</b>	\$5.00	
		1st Instance per year - \$0, when notify PD of correction of problem	
	<b>False Alarm Fines</b>	\$50.00/each thereafter	
	<b>Fingerprinting (2 cards only)</b>	\$25.00	
	<b>Juvenile Offender Diversion Program Admin Fee</b>	Max \$150 per Offense	
	<b>Local Criminal History Record Check</b>	\$15.00	
	<b>Parking Permits</b>	\$35.00/each	
	<b>Reimbursement/Restitution Drunken Driving Arrests-Routine Case*</b>	\$150.00	
	<i>* In cases where actual costs exceed \$150, such as accident or other unusual circumstance requiring numerous officers or other resources, amount will be calculated based on actual costs.</i>		
	<b>Special Duty, Regular Officer</b>	Current billable hourly rate of Officers, as calculated annually, call for current rates	
	<b>Special Duty, Reserve Officer</b>	Current billable hourly rate of Officers, as calculated annually, call for current rates	
	<b>Video/Audio Recording Duplication Fee per tape/disk</b>	\$50.00	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

**DEPARTMENT / SERVICE**

**FEE DESCRIPTION**

**FY 2021/22 FEES**

**FY 2020/21 FEES IF CHANGED**

**Police Department (continued)**

**PARKING FINES:**

Nature of Offense	Paid within 72 hours / Paid after 72 hours but within 30 days
Abandoned vehicle (plus towing and storage charges)	\$20/\$40
All night parking (between 3 am and 6 am)	\$5/\$10
Angle Parking violation	\$10/\$20
Between a sidewalk and curb	\$10/\$20
Bicycle parking violations	\$10/\$20
Bus, taxicab stand violations	\$10/\$20
Disabled vehicle, failure to move	\$20/\$40
Failure to set brakes	\$10/\$20
Headed against traffic or left wheels to edge of roadway	\$20/\$40
In alley	\$10/\$20
Keys in vehicle or motor running	\$20/\$40
Load zone violation	\$10/\$20
Non-metered area, not parked within space	\$10/\$20
Obstructing traffic	\$20/\$40
Overtime parking, exceeding posted limit	\$5/\$10
Parked on grade, wheels not turned to curb	\$10/\$20
Parking too far from curb	\$10/\$20
<b>Parking for Prohibited Purpose:</b>	
Working/repairing vehicle	\$10/\$20
Displaying advertising	\$10/\$20
Selling merchandise	\$10/\$20
Storage over 48 hours	\$10/\$20
<b>Prohibited Zone:</b>	
In prohibited zone	\$10/\$20
In tow away zone	\$10/\$20
In fire lane	\$10/\$20

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Police Department (continued)</b>			
<b>PARKING FINES (continued):</b>		<b>Paid within 72 hours / Paid after 72 hours</b>	
<b>Nature of Offense</b>		<b>but within 30 days</b>	
<b>Prohibiting Parking (Signs Unneccesary):</b>			
On sidewalk		\$20/\$40	
In front of drive		\$10/\$20	
Within intersection		\$20/\$40	
Within 15 feet of hydrant		\$10/\$20	
On crosswalk		\$20/\$40	
Within 20 feet of crosswalk or 15 feet of corner lot lines		\$10/\$20	
Within 30 feet of street side traffic sign or signals		\$10/\$20	
Within 50 feet of R x R crossing		\$10/\$20	
Within 20 feet of fire station entrance		\$10/\$20	
Double parking		\$10/\$20	
On bridge or viaduct or within tunnel		\$20/\$40	
Blocking emergency exit		\$10/\$20	
<b>Taxicab, parking other than cab stand</b>		\$10/\$20	
<b>Unauthorized parking in handicap space</b>		\$50/\$100	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Department of Public Works</b>			
Car Wash Rental Deposit		\$50.00	
DPW Labor-Regular time		\$42/hour	
DPW Labor-Saturdays		\$63/hour	
DPW Labor-Sundays & Holidays		\$84/hour	
Freon filled Appliances*		\$35/each	
<i>* Residents may purchase a \$35 sticker from the Department of Public Works to place on a Freon-filled appliance to have it picked up curbside.</i>			
Millpond Amphitheater Rental (4 hour block) - Refundable Deposit		\$500.00	
Millpond Amphitheater Rental (4 hour block) - City Resident		\$100.00	
Millpond Amphitheater Rental (4 hour block) - Non-City Resident		\$150.00	
Sculpture Garden Rental		\$20/hour	
<b>Utility Right of Way Permits</b>			
Residential*		\$50.00	
Commercial*		\$125.00	
Ariel Cable/Wire Installation or Maintenance including Street Light Maintenance	*		
Bore, Jack, and Tunnel (Auxiliary Underground Maintenance or Installation)	*		
Pavement cutting for any Purpose	*		
Annual Blanket Utility Right of Way Work Permit**		\$3,000.00	
<i>* A performance bond may be required as detailed below</i>			
<i>** Payable once a year and the fee may replace or be used for an unlimited number of permit fees in a given year for any work performed in the ROW. An annual right-of-way work permittee must submit a monthly application form to the city manager and public works director describing nature and location of all planned right-of-way work for the following month for approval prior to date work begins.</i>			
<b>Performance Bond Amounts:</b>			
Disruption, boring, removal, etc. asphalt or concrete street		\$1,000.00	
Disruption or removal of curb		\$500.00	
Disruption or removal of sidewalk		\$250.00	
Disruption of greenbelt		TBD by DPW Director (\$50.00)	

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

**DEPARTMENT / SERVICE**

**FEE DESCRIPTION**

**FY 2021/22 FEES**

**FY 2020/21 FEES IF CHANGED**

**Refuse Collection & Disposal**

**Residential Refuse User Fee**

\$17.09/month plus any recycling surcharges by Waste Management

\$16.43/month plus any recycling surcharges by Waste Management

**The following are in reference to refuse and reflect the details of the rubbish hauling and disposal contract with Waste Management:**

**Weekly Refuse Volume Limitations**

Weekly refuse volumes for all customers will be limited to what can fit in one trash cart and one recycle card.

Three (3) 30 gallon plastic bags or one (1) curb cart.

Customers who have an occasional need to dispose of more refuse than the above volumes may contact Waste Management to schedule pickup for an additional fee.

**Special Pickups**

Each residential unit collected under the Refuse Collection Contract is entitled to one special pick-up per fiscal year at no charge. All materials will be collected at the curb or roadside only.

"No Charge" special pick-ups must be scheduled in advance through Waste Management on a first come basis. There is a limit of fifteen (15) special pick-ups per service day, up to thirty (30) per week, unless otherwise agreed.

Special pick-up items include Freon-free appliances, furniture, yard waste, and miscellaneous trash. Small items must be in containers or bundled as to be easily handled by the contractor.

Any one item must not exceed what 2 persons can safely and reasonably lift.

Total volume cannot exceed two (2) cubic yards. This is an area 3'x3'x6'. It is equivalent to approximately 3 washers/dryers, 2 couches, 20 bags of leaves or grass.

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

**DEPARTMENT / SERVICE**

**FEE DESCRIPTION**

**FY 2021/22 FEES**

**FY 2020/21 FEES IF CHANGED**

**Utilities (Water and Sewer)**

**Utility User Fees (bi-monthly)**

**Water**

**(Commodity per 1,000 Gallons):**

City

\$5.45

\$4.96

Genoa Pine Creek, Hamburg Township

\$5.45

\$4.96

Genoa Dillon, Genoa Northstar 2, Brighton Township

\$6.01

\$5.46

Genoa Northstar 1

\$6.28

\$5.71

PILOT (Payment in Lieu of Taxes)

\$16.66

Bulk Water - (8\*Commodity Rate)\*4 (4,000 gallon minimum)+ (2\*Commodity Rate) for every 1,000 or fraction thereof used over 4,000.\*

\$174.40 minimum + \$10.90 for each add't 1,000 gallons

\$158.72 minimum + \$9.92 for each add't 1,000 gallons

*\* Ex: (8\*\$5.45)\*4 = \$174.4 minimum charge + (2\*\$5.45) for every 1,000 gallons used over 4,000*

Note: If a contractor is performing work for the City and requires bulk water for the contracted work, then the contractor will pay the (8\*Commodity Rate) for the first 4,000 gallons only once, regardless of how many times bulk water is provided for the given project. Thereafter, the (2\*Commodity Rate) for every 1,000 gallons or fraction thereof used over 4,000 will apply.

**CITY OF BRIGHTON FEE SCHEDULE  
FY 21/22**

DEPARTMENT / SERVICE	FEE DESCRIPTION	FY 2021/22 FEES	FY 2020/21 FEES IF CHANGED
<b>Utilities (Water and Sewer) (continued)</b>			
<b>Wastewater:</b>			
<b>(Commodity per 1,000 Gallons):</b>			
	City	\$6.24	\$5.20
	Genoa, MDOT	\$6.24	\$5.20
	Hamburg	\$5.40	\$4.50
<b>Administrative (per meter size/service)</b>			
	City - Rates reflect Bi-monthly Billing	\$9.64	\$9.19
	Genoa, Hamburg, MDOT - Rates reflect Quarterly Billing	\$14.46	\$13.79
<b>Debt Service (per meter size/service)</b>			
	City - Rates reflect Bi-monthly Billing		
	.75"	\$24.87	\$29.10
	1.00"	\$42.27	\$49.49
	1.50"	\$84.54	\$98.95
	2.00"	\$134.27	\$157.14
	3.00"	\$266.06	\$311.37
	4.00"	\$415.25	\$485.95
	6.00 "	\$830.50	\$971.87
	Genoa Pine Creek - Rates reflect Bi-monthly Billing		
	.75"	\$9.51	\$0.00
	1.00"	\$16.17	\$0.00
	MDOT - Rates reflect Quarterly Billing		
	1.00"	\$63.41	\$74.23
<b>Un-metered Charge - Includes Debt Service and Admin Fee in the rates</b>			
	Residential	\$103.15	\$102.43
	Governmental	\$306.34	\$291.95
	Commercial/Industrial	\$568.23	\$527.04
<b>Penalties - 10% of <u>all</u> charges due on the 21st day after billing</b>			

**RESOLUTION 2021-12**

**A RESOLUTION ADOPTING THE SCHEDULE OF FOR THE CITY OF BRIGHTON FOR FY 2021/2022**

WHEREAS, pertinent sections of the Brighton Municipal Code require that the Brighton City Council periodically establish fees to be collected by the City staff for selected services, penalties and licenses; and

WHEREAS, City staff has reviewed the revenue needs of the City for Fiscal Year 2021/2022 and has proposed to the City Council a fee and charge schedule to meet those needs; and

WHEREAS, the Brighton City Council has reviewed the proposed fee schedule.

NOW, THEREFORE, BE IT RESOLVED by the Brighton City Council as follows:

1. The Council accepts the recommendations of City staff as they relate to the proposed fee schedule.
2. The proposed fee schedule is adopted as presented.
3. City staff is directed to implement the fee schedule effective July 1, 2021.

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

This Resolution was \_\_\_\_ this \_\_\_\_ day of May 2021.

Tara Brown, City Clerk



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: CONSIDER ESTABLISHING THE LEVY AND AUTHORIZING THE COLLECTION OF TAXES, PENALTIES AND FEES FOR FY 2021/2022**

### ADMINISTRATIVE SUMMARY

- The Council's proposed FY 2021/2022 budget reflects:
  - City operating millage of 14.7736 mills
  - Law Enforcement/Public Safety millage of 0.3674 mills
  - Street millage of 2.4199 mills
  - Economic Development millage of 0.0979 mills
- For the third year in a row and the third time in 14 years the city has received a Headlee rollback factor for FY 2021/2022. This factor of 0.9843 is multiplied by the maximum allowable levy for 2020/2021 to determine the new maximum allowable levy for 2021/2022.
- The City operating, Law Enforcement/Public Safety, and Street millage rates, which are levied at the maximum allowable rates are being rolled back from 2020/2021 levels of 15.0093, 0.3733, and 2.4585 respectively.
- The 2021/22 budget reflects a decrease of 0.0038 mills in the Economic Development millage to be levied. The maximum allowable for this levy is \$ 50,000 in revenue annually, which equates the 0.979 for the recommended budget.
- The attached resolution, if adopted, would establish a total City millage of 17.6588 for FY 2021/2022, which is a decrease over FY 2020/21 of 0.2840 mills.

### RECOMMENDATION

It is the recommendation of staff that the City approve the attached resolution to set the levy and authorize the collection of taxes, penalties and fees for FY 2021/2022.

Prepared by: Gretchen M. Gomolka, Finance Director

Approved by: Nate Geinzer, City Manager

**RESOLUTION #2021-13**

**ESTABLISHING THE LEVY AND AUTHORIZING THE COLLECTION OF TAXES,  
PENALTIES AND FEES FOR FISCAL YEAR 2021/2022**

WHEREAS, the City Council adopted the fiscal year 2021/2022 budget, which includes a proposed tax millage rate to support the budget, at their May 6, 2021 meeting; and

WHEREAS, the Charter Tax Rate Limitation of 20 mills has been reduced to 17.5609 mills (14.7736 operating plus 0.3674 public safety plus 2.4199 streets override) for 2021 by the cumulative effect of the "Headlee Amendment" roll back and voted override; and

WHEREAS, the City Charter requires the establishment of a required millage for the levy of taxes; and

WHEREAS, the General Property Tax laws of the State of Michigan authorize the imposition of penalties and administration fees on current taxes; and

WHEREAS, the Council annually officially establishes the millage by resolution:

NOW, THEREFORE, BE IT RESOLVED by the Brighton City Council as follows:

1. The operating tax rate for FY 2021/2022 is levied at 14.7739 mills.
2. The Law Enforcement/Public Safety millage tax rate for FY 2021/2022 is levied at 0.3674 mills.
3. The Headlee Override Streets millage tax rate for FY 2021/2022 is levied at 2.4199 mills.
4. The Economic Development millage tax rate for FY 2022/2022 is levied at 0.0979 mills.
5. A 2021 Summer Tax Late Penalty Charge is established and will be collected on behalf of all the taxing units as follows:
  - August 18, 2021 - August 31, 2021: 2%
  - September 1, 2021 - September 30, 2021: 4%
  - October 1, 2021 - February 28, 2022 an additional .50% per month up to 6%
6. A 2021 Summer and Winter Tax Administration Fee of 1% is established and will be collected on behalf of the City of Brighton.

AYES: \_\_\_\_\_

NAYS: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

This Resolution was \_\_\_\_ this \_\_\_\_ day of May 2021.

Tara Brown, City Clerk



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

**SUBJECT:        CONSIDER APPROVAL OF STAFF RECOMMENDATION FOR ENGINEER OF RECORD AND PRE-QUALIFIED PROJECT ENGINEERS**

### **BACKGROUND**

- Throughout the past year, Staff has been working through a Quality Based Selection (QBS) process to retain an engineer of record for the City of Brighton. This process was based on recommendations from the millage taskforce and discussions held with Council at the October 27, 2018 budget retreat in an effort to ensure the City was getting competitive rates and services from their professional service providers. With engineering being one of the more expensive professional services provided, ensuring the City is receiving the best value is a high priority, especially now that the streets millage and bond program have moved forward.
- When evaluating engineering services, there are obvious factors that need to be considered like experience and pricing. However, while these things may help us to arrive at final decisions, a deeper look into the services that a firm can provide will make a big difference in the outcome of a project. As Staff has explored what we expect in an engineering firm, items such as communication, quality assurance and control, troubleshooting and pricing accuracy became key points. After all, poor performance in either of these areas can make a project a positive or negative experience.

### **ADMINISTRATIVE SUMMARY**

- For nearly 30 years, Tetra Tech Engineering Services Company has provided engineering services for the City of Brighton. While the City has developed a good relationship with Tetra Tech, the decision was made to evaluate its current needs and review pricing to determine if other firms had something better to offer that would benefit the City.
- Staff researched other cities and studied their engineering structure to see if there was a benefit to changing our current process. As the City moves forward with a new era of construction, evaluating how the relationship should continue for the City and its engineers will be more important than ever as the next several years will be filled with significant engineering needs. Having a firm that can consistently deliver results and value will be essential.
- Staff began the process of developing a QBS Request for Qualification (RFQ) document after reviewing information collected from comparable cities. Once the final RFQ was developed, it was published on the Michigan Intergovernmental Trade Network (MITN) where 12 proposals were collected at City Hall on September 1, 2020. Shortly after, Staff met to assess the 12 proposals and develop a list of questions that would be asked of the firms. Each staff person received three proposals and was responsible for reviewing them and contacting their references. While attempts to contact each firm's references were made, some did not respond by either phone or email. Consequently, these firms were removed for consideration. Additionally and in consensus Staff removed candidates they felt did not possess the skills or qualities preferred.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

- Once each member finished their review and reference checks, the Staff team identified their top three performers based on the following factors: Experience, communication, references, and specialty areas. Shortly thereafter, Staff held a meeting to discuss their choices and a list of five firms were chosen for interviews. See table below.

FIRM	CLOSEST OFFICE LOCATION
OHM Advisors	Dexter, Michigan
Tetra Tech Engineering Services	Brighton, Michigan
Civil Engineering Services, Inc.	Milford, Michigan
Hubbell, Roth & Clark	Howell, Michigan
Giffels Webster	Birmingham, Michigan

- Because Staff felt there would not be enough time to learn as much as we could about each candidate during the interview, a list of questions was provided to each firm before the interview with instructions to send them back to the City to evaluate. There were also additional questions that Staff developed for the interview itself. This gave Staff a chance to compare answers from both sets of questions. During the interviews each candidate was rated, when the interviews were complete, discussions were held to determine which firms would move on to the second round of the interview process.
- Although the five firms all interviewed well and showed a desire to be chosen, Staff was looking for what we thought would best serve the City. Eventually, the choice was narrowed to the three we felt would benefit the City the most: Tetra Tech Engineering Services, Hubbell, Roth & Clark, and Civil Engineering Services, Inc.
- To ensure the candidates could perform at the level desired, Staff developed two exercises for the second round of the interview process. The first exercise was a site plan review of a development that recently took place in the City. As Tetra Tech had previously done the site plan review, we only required it of the two other engineering candidates for comparison. This gave Staff an idea of how thorough each firm was and how familiar they were with our Code of Ordinances. In comparison, it gave Staff an idea of how thorough the site plan review from Tetra Tech was.
- The second exercise was a mock street reconstruction project developed by Staff. This included new sidewalks, street surface and underground utilities. The project included a few trouble areas that we left up to each firm to address. This process proved to be advantageous as each firm had a chance to show how they would deal with issues that could possibly arise. Included in this exercise were directions on how Staff wanted to receive the information back and how to break it down. This was useful in determining if the firm could follow directions and give Staff what they were looking for. Once the finished exercises were received, Staff reviewed the submittals and discussed the performance of each firm.
- After the review, the decision was made to eliminate one firm that Staff felt interviewed very well, but submitted an incomplete second round submittal. To keep a well-rounded field of applicants, Staff felt it necessary to bring back one of the other five firms that participated in the first round of the interview process. The newly included firm was then sent the site plan and mock reconstruction project and given a deadline for their submittal. Once Staff received the final submittal, a meeting was held to evaluate the outcome of all applicants and decide what recommendation should be brought to Council.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

MAY 6, 2021

- As mentioned previously, this RFQ was developed as a QBS or Quality Based Selection. This means that before the hourly rates were revealed and considered, Staff chose prospective firms based on qualifications, skill level and references only. Once the choices were narrowed down to three, Staff then reviewed the hourly rates of the remaining firms.
- Additionally, after the RFQ process began, Staff explored different service structuring options that may be a benefit to the City. Through the process, Staff discovered many cities were using a roster of multiple firms. Staff assessed theorized that having multiple firms would give the City options when considering projects where a specific expertise was required. With the variety of upcoming projects that Brighton has, one can see the benefit to this approach. An additional rationale for the retaining multiple firms appeared to be that this approach could reduce engineering costs. Considering the original intent of this process was to ensure the City was getting the best value for its dollar, having additional firms to choose from should make project pricing more competitive.
- Granted, value is a subjective term. However, in the context of this QBS RFQ, Staff is assessing value based on the qualifications, experience, and service provided first then pricing. A firm with institutional knowledge does hold value of its own, but that type of value is difficult to quantify in tangible, non-hypothetical terms. Rather, Staff took a comprehensive approach with fresh eyes to evaluate what a chosen firm would be able to provide for the City moving forward while considering where the City has been.
- Now that the review process is complete, Staff has developed a recommendation. In light of the upcoming utility and street projects needed in the future, Staff recommends that keeping multiple firms will be most beneficial for the City. This structure will ensure that quality of service and pricing will play an important factor in future engineering projects and provide the City with options should a firm not perform to the standards expected by Staff. The final three engineering firms would all be pre-qualified and capable of performing the majority of the work needed for the City.
- It is the recommendation of Staff to employ one Engineer of Record for a three-year contract, and at the end of that period, that firm's services can be re-evaluated. Additionally, Staff would prefer the ability to utilize the other two pre-qualified firms for projects as needed during the same timeframe. This gives the two other firms an opportunity to demonstrate their skill and ability on City projects and also utilize them for their specialized fields.
- The three engineering firms to succeed to the final step of the interview process were Tetra Tech Engineering Services, Hubbell Roth & Clark (HRC), and Giffels Webster. Throughout the interview process, Staff recognized that each firm had strengths that could be utilized by the City. As Staff explores more utility improvements, and with the changes in State and Federal Regulatory requirements, it is clear that having a firm that understands these developments will be very important.
- Tetra Tech, as you know, has several years of experience in every aspect of engineering and quite a resume of completed projects for the City of Brighton. They have participated in most, if not all, of the engineering needs for the City since the late 1980s and have an extensive knowledge of the City streets and utility infrastructure. This has helped them over the years to be able to provide us with not only City projects, but also in-depth site plan reviews for new developments.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

They also have access to many disciplines of engineering in house, which can make it easier for City Staff to reach their objective.

- Hubbell, Roth & Clark comes with a comparable amount of experience and has many successful projects to reference. A company that has been in business in Michigan for over 100 years, they have considerable experience in street construction and appear to have extensive experience in utility upgrades for wastewater and water systems. It was clear that they pride themselves on the communication aspect of their service as they outlined how they work with current clients and their process of getting familiar with new ones. One feature they wanted to point out, and that Staff found significant, was their having a division that deals with grant funding. They make it a priority to reach out to clients about upcoming grants and offer services if a client is interested. Currently, Staff researches grants on their own.
- With Giffels Webster being the final firm in the list that Staff feel could benefit the City, they have proven to be valuable as things have progressed with the anticipated Downtown Streetscape project. As Staff has worked with them over the last two years in developing a preliminary scope of the project, they have promoted communication and made information transfer between their Staff and the City much easier with a shared drive system and update meetings. With having an architectural design division in-house, it makes communication between the designers, engineers and City flow efficiently and smoothly. From design and construction to working with business owners and residents, we found their references to be pleased with their performance.
- Now that the review process is complete and pricing compared, there were noticeable differences. If the City was to choose an engineer based on pricing alone, there would be no need for the QBS process and Staff would be recommending a change in our current Engineer of Record. However, the process was to look at quality first, so Staff has created a recommendation it believes is the best for the City at this time.
- With Tetra Tech's institutional knowledge and being heavily involved with the current Northwest Neighborhood, Rickett Road Phase 2, and Grand River Avenue and Stub Street Projects, it is Staff's recommendation to keep them in their current position as Engineer of Record for a three-year term, which at the end, their engineering services will be re-evaluated. This would allow them to continue to perform our site plan reviews and allow Staff to continue using them for immediate engineering needs. With that being said, Hubbell, Roth & Clark and Giffels Webster's performance in the mock site plan review and street reconstruction project show their eagerness to prove themselves. With their extensive experience, positive references, communication strategy and competitive pricing, it is Staff's recommendation that we keep them on as pre-qualified engineers for consideration of future projects.
- Should Council approve this recommendation, Staff would meet with Hubbell, Roth & Clark and Giffels Webster representatives to discuss and clarify their role for the City of Brighton and have the City attorney review contract documentation as needed. Additionally, Staff will meet with Tetra Tech to clarify their role and discuss any concerns they may have moving forward, and a new service agreement assembled. This gives the City three options for project engineering as each firm can be considered. In the event that a new firm receives a project from the City, it will give Staff the opportunity to compare and evaluate services and pricing. It also affords Tetra Tech the opportunity to prove their position as the best choice for the Engineer of Record.



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL MAY 6, 2021

- As stated earlier, choosing the right engineering firm is important for many reasons. Having a deep bench of experience to pull from gives the City many options when it comes to new projects or regulatory requirements. Staff relies on its engineering partners to make sure the product they are delivering is accurate and consistent. Having clearly defined expectations between the City and its engineering firm will ultimately deliver better results when services are needed. From project estimates and design engineering to quantity calculations and billing, the better the firm performs, the less possibility there will be for problems to occur on site or in-house.
- This process proved to be quite in-depth and time consuming; Staff did not take it lightly. While Staff sees the benefits of having a familiar service provider, we must consider the benefit of competition to ensure that we are getting the best possible service and value for the residents' hard-earned dollar. With several factors to consider and knowing that the City has spent \$2.25 million on engineering services over the past five years, Staff believes that this recommendation will put the City in a better position for the future.

### **RECOMMENDATION**

Approve Staff recommendation for Engineer of Record and Pre- Qualified Project Engineers.

Prepared by: Marcel Goch, DPS Director

Reviewed by: Josh Bradley, Regulatory Compliance Superintendent

Corey Brooks, Deputy DPS Director

Mike Caruso, Community Development Director

Daren Collins, DPW Superintendent

Henry Outlaw, Assistant to the City Manager

Approved by: Nate Geinzer, City Manager



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

**SUBJECT: CONSIDER APPROVAL OF BIDS RELATING TO CITY COUNCIL CHAMBERS REHABILITATION IN THE AMOUNT OF \$130,625.83 PER SUBCOMMITTEE RECOMMENDATION AND RELATED BUDGET AMENDMENTS**

### ADMINISTRATIVE SUMMARY

A City Council subcommittee was assembled to determine costs involved for a complete rehabilitation of the City Council Chambers with safety, security, ADA accessibility, and technology at the forefront of planning. A complete renovation of Chambers has not been done in some time; therefore, it was determined to begin with the following necessary updates:

- ADA Accessibility - The current dais is not ADA accessible. In order to correct this, the ramp must be taken down and the distance from wall to dais must be increased
- Safety - In today's growing climate of unrest, it was prudent for the subcommittee to approach the design process to ensure safety of all council, board, commission, and audience members through various safety upgrades to the dais and chamber room
- Security - Increase the exit points and emergency call buttons
- Technology - The broadcasting system has become obsolete and we are unable to purchase compatible replacement equipment. The recommended upgrades will allow City Council meetings to resume daily rebroadcasting, allow for greater remote control capabilities, as well as position the City to move to high definition when Comcast makes the change for government access channels

### PROJECT SCOPE

- New carpet
- New constructed dais with safety enhancements and a solid writing surface
- New security features including exit points and emergency call buttons
- New acoustical ceiling tiles with efficient LED lighting
- New chairs for audience and officials
- Upgraded broadcasting system
- Projected completion is 90 days, which aligns with the end of the current local State of Emergency

### BUDGET INFORMATION

- The funding for this project is through accumulated PEG fees which may only be utilized in the "studio". The current balance of the accumulated PEG fees is \$95,093 and is projected by \$109,115 at June 30, 2021 after all annual payments are received. The annual PEG fees in recent years approximates \$14,000 to \$15,000. The bids totaling \$130,625.83 is approximately \$21,500 higher than the estimated accumulated PEG fees at yearend. The



# City of Brighton

## REPORT FROM THE CITY MANAGER TO CITY COUNCIL

May 6, 2021

task force is proposing that the difference be funded by the Capital Improvement fund, which will be reimbursed by the General Fund as future year PEG fees are collected.

### **RECOMMENDATION**

Approval of bids relating to the City Council chambers rehabilitation in the amount of \$130,625.83 and related budget amendments.

Prepared by: Tara Brown, City Clerk

Reviewed by: Gretchen Gomolka, Finance Director

Approved by: Nate Geinzer, City Manager

Attachment: Memo Bid Summary, Lindhout and Associates  
Chambers Schematic  
Mock-up images

**MEMO**



Lindhout Associates architects aia pc  
10465 citation drive, brighton, michigan 48116

www.lindhout.com  
810-227-5668 (fax) 810-227-5855

**City of Brighton Council Chamber Renovation**

**COMM. NO. 20097**

**DATE:** April 1, 2021

**TO:** Tara Brown, Clerk  
City Council Sub Committee

Project Cost Summary:

Architectural Trades	\$74,000.00	John Stewart Associates
Electrical	\$11,573.83	Bray Electrical
Audio/Visual	\$17,081.00	American Video Transfer Inc.
Security	\$ 2,567.00	Absolute Sales International
Furniture	\$ 7,333.00	Dais seating (13) \$5,876.00 (estimated)
		Audience seating (30) \$1,457.00
Project Contingency	\$ 5,000.00	
Architectural Fee	<u>\$13,071.00</u>	
<b>Total</b>	<b>\$130,625.83</b>	

**FROM:** Piet Lindhout & Mike O'Leary

NEW DAIS CHAIR

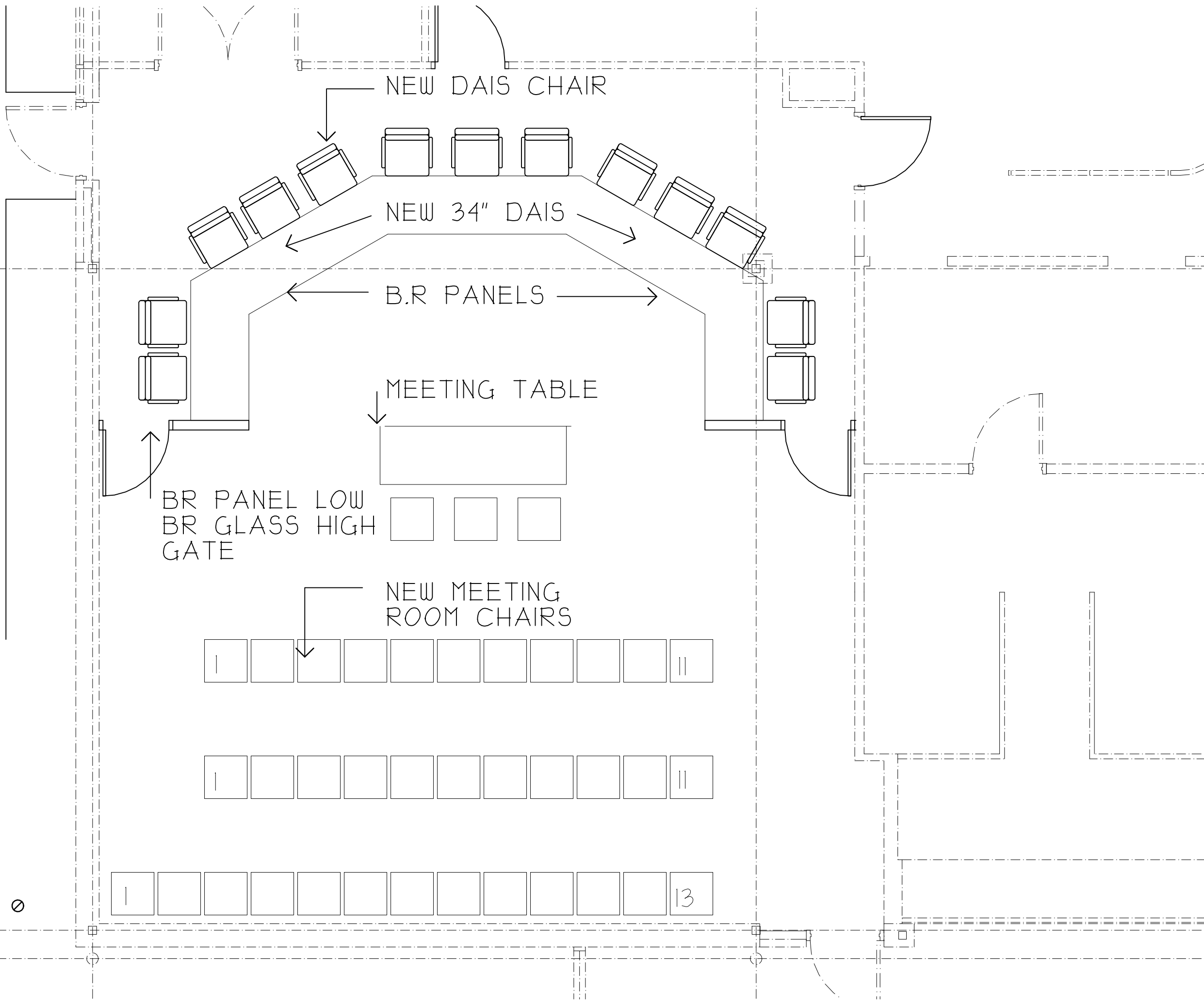
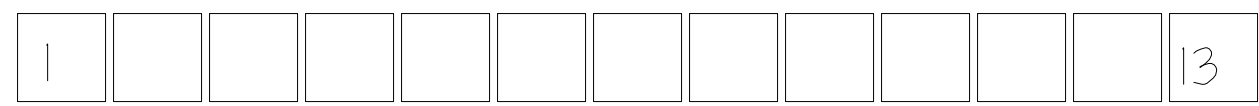
NEW 34" DAIS

B.R PANELS

MEETING TABLE

BR PANEL LOW  
BR GLASS HIGH  
GATE

NEW MEETING  
ROOM CHAIRS







City of  
**Brighton**

