CITY OF CRYSTAL LAKE
AGENDA
CITY COUNCIL
REGULAR MEETING

City of Crystal Lake
100 West Woodstock Street, Crystal Lake, IL
City Council Chambers
February 4, 2025
7:00 p.m.

1. **Call to Order**

2. **Roll Call**

3. **Pledge of Allegiance**

4. **Approval of Minutes – January 21, 2025 Regular Meeting**

5. **Accounts Payable**

6. **Public Presentation**
   The public is invited to make an issue oriented comment on any matter of public concern not otherwise on the agenda. The public comment may be no longer than 5 minutes in duration. Interrogation of the City staff, Mayor or City Council will not be allowed at this time, nor will any comment from the Council. Personal invectives against City staff or elected officials are not permitted.

7. **Mayor's Report**

8. **City Council Reports**

9. **Consent Agenda**
   a. **Special Event Request – Raue Center for the Arts, 2025 Bob Blazier Run for the Arts, Street Closure and Police Assistance Fee Waiver – Sunday, May 4, 2025**

10. **Waterside, CalAtlantic/Lennar - Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential, Rezoning from M-PUD Manufacturing to R-3B PUD Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision for a 107-unit townhome development**

11. **100 N. Virginia Street - Final Planned Unit Development Amendment to allow changes to the site plan and exterior facade**

12. **Vehicle Purchase – Use of Sourcewell Contract #091521-NAF, for the pricing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines, at a total cost of $178,225.65**

13. **Vehicle Purchase – Use of Suburban Purchasing Cooperative Contract #206, for the pricing and delivery of three (3) new 2025 Ford Escapes, at a total cost of $102,594.00**

14. Amendments to Sections 329-3(A) of the City Code relating to certification of applications for liquor licenses and Section 329-2 relating to the requirement that liquor licensees also maintain a current liquor license issued by the Illinois Liquor Control Commission

15. Board and Commission Appointment – Sustainability Committee

16. Adjourn to Executive Session for the purpose of discussing matters of pending and probable litigation, the sale, purchase or lease of real property, collective bargaining and personnel

17. Reconvene to Regular Session

18. Adjourn

If special assistance is needed in order to participate in a City of Crystal Lake public meeting, please contact Melanie Gray, Executive Assistant, at 815-459-2020, at least 24 hours prior to the meeting, if possible, to make arrangements.

Agenda Item No: 9a

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: Special Event Request – Raue Center for the Arts 2025 Bob Blazier Run for the Arts, Street Closure and Police Assistance Fee Waiver – Sunday, May 4, 2025

City Council discretion: Motion to approve the Special Event request for the 2025 Bob Blazier Run for the Arts, including Street Closure, pursuant to the recommended conditions listed below and a waiver of the Police Officer assistance fees ($3,475.08).

Staff Contact: Kathryn Cowlin, Director of Community Development
Laurrie Fitzgerald, Support Services Coordinator

Background:
The Raue Center is in the process of planning the 2025 Bob Blazier Run for the Arts, which will be the event's 28th year. The run will take place in Downtown Crystal Lake on Sunday, May 5, 2025. The event includes a 5K run and 1-mile run/walk. The proceeds of this fundraiser benefit the Raue Center.

As part of the event, the Raue Center is requesting the closure of Williams Street between Woodstock Street and Crystal Lake Avenue between 6:00 a.m. and 11:00 a.m. They have also requested that parking be temporarily prohibited on the south side of Woodstock Street between Grant and Williams Streets between 6:00 a.m. and 9:30 a.m.

Last year, the City Council granted the waiver of the Police Officer assistance fee. Again this year the applicants are requesting the waiver of this fee again this year. This year's Police Officer assistance fee is estimated to be $3,475.08.

City staff has reviewed the petitioner's request and does not have concerns regarding the street closures, providing the following conditions are met:

1. All directly affected businesses and residents on North Williams Street must be notified in advance of the road closure.
2. Signs indicating the road closure to be posted a minimum of 24 hours prior to the event and in the locations designated by the Police Department. The petitioner must meet with

the City's Police, Community Development, and Public Works Departments to discuss signage needed.

3. Organizers are to contact the Police Department for official "No Parking" signs. The "No Parking" signs are not to be posted on telephone poles and are to be removed immediately after the race.
4. Barricades borrowed from the City of Crystal Lake must be returned to City Hall on the first working day after the event.
5. Barricades must be placed so that a firefighter is able to move them if an emergency vehicle(s) need access or position the barricades so that emergency vehicles can go through the barricaded street.
6. The barricades on Brink Street should be placed near the alley entrances, instead of the Williams Street intersection, to avoid cars getting trapped at the closure points with no room to turn around. Also, place barricades or cones on the south end of Williams Street to help delineate the limits of the temporary vehicle restriction for pedestrians/event visitors.
7. Parking is restricted along the east side of Grant Street and south side of Woodstock Street in addition to the closed portion of Williams Street.
8. Add cones or other physical separation for the temporary "runners' lane" in the southern bay of parking on Woodstock Street between Grant and Williams.
9. Work with the Police Department as to positioning of volunteers, as well as the number of officers required for this event.
10. Ensure that the lead and follow vehicles do not block traffic. The lead vehicle and trail car are required to be police squads to ensure the safety of the participants.
11. Runners should be reminded that they are obligated to follow all laws related to pedestrians in the roadway.
12. No smoking, cooking, nor open flames are permitted under the canopies/tents.
13. An access lane of no less than 20 feet must be maintained for emergency vehicles access to Williams and area streets. Items must not be located so as to block sidewalks.
14. This event will require one supervisor and twelve Crystal Lake Police Department staff members and a minimum of five volunteers to direct traffic and race participants throughout City streets. If no volunteers are willing and/or able to participate, the additional locations will need to be covered by Police Officers. Volunteers must wear traffic safety vests, and have the ability to communicate via radio or cellular telephone with organizers and police in the event of an emergency. Please contact the Police Department by April 1, 2025, to determine/arrange for police officers for traffic control, lead vehicle, etc.
15. All trash must be picked up along the race route, as well as in the downtown area.
16. Streets are not to be marked with paint or any permanent materials.
17. The use of the downtown lighting system to provide electrical power for the sound system is prohibited.
18. All temporary signage associated with this event is approved via this permit. The details of the signage must be submitted to the Building Division to ensure the sign, number, location, and duration meet the requirements.
19. In the case of inclement weather, an alternate date can be approved by the City Manager.

Fee Waiver
The Police Department estimates that the approximate cost for Police Officer assistance for this event is $3,475.08. The applicant is requesting a waiver from paying this cost, which has been waived in previous years.

The applicant has been made aware of these recommended conditions and advised to attend the February 4, 2025 City Council meeting to answer any questions.

Votes Required to Pass:
Simple majority vote.

CITY OF Crystal Lake ILLINOIS

RECEIVED
DEC 3 1 2024
By LNPM

SPECIAL EVENTS APPLICATION

Please PRINT or TYPE

EVENT NAME Bob Blazier Run For The Arts

EVENT LOCATION 26 N. Williams st /Start and Finish at Rave/Run through surrounding neighborhoods

This application should be completed by the "Event Manager", who will be the main coordinator and contact person for the event. Completing the application form will give you a good idea of the types of arrangements, approvals and documents that will be necessary for your special event. Please complete as much of the following information as possible before turning in the application. Once the application is turned in, a staff liaison will be in contact with you who will guide you in completing the remainder of the application and fulfilling City requirements for the event.

Please note that City Council approval may be required for certain special events/requests

GENERAL EVENT INFORMATION

1. TYPE OF EVENT (Check all that apply)

☐ Carnival	☐ General use of City-owned property
☐ Circus	☐ Parade
☐ Festival	☐ Outdoor Sales
☐ Filming	☒ Run/Walk Event
☐ Other	

2. General Description/Purpose of the event:
The Bob Blazier Run For the Arts is a 5K Run/Walk and accompanying 1 mile walk through the residential areas of Crystal Lake. Now in its 28th year, this fundraiser helps support Rave Center, a 501(c)3 non-profit arts organization.

3. Will the event require the use of City-owned property? ☒ Yes ☐ No

4. Is a Site Map/Route Map attached? ☒ Yes ☐ No

5. Is the event an annual/recurring event? ☒ Yes ☐ No

6. Will the event require a public street/sidewalk to be blocked or closed? ☒ Yes ☐ No

7. Will the event require use of a public parking lot? ☐ Yes ☒ No

8. Number of persons scheduled to monitor and work the event: 6 staff - 45-50 volunteers

9. Estimated attendance: 350

10. Is a "rain date" proposed? Y ☐ or N ☑ If yes, what is the rain date? _____

ORGANIZATION INFORMATION

11. ☑ Organization is registered with the State of Illinois as a Non-Profit Organization

12. Name of Event Manager: James Knight

13. Contact Information for Event Manager:

Address: 80 Union St.
Crystal Lake, IL 60014

(Please check preferred means of contact)

Daytime phone: (815) 356-9010 x 114 ☑

Emergency phone: _____ ☐

Cell phone: [redacted] ☐

Email: jknight@rauecenter.org ☑

EVENT OPERATION

14. Date(s) of the event (including time for assembling and/or dismantling support structures):

Set Up: 5/2/25 afternoon

Event: 5/4/25 @ 8 AM

Dismantling: 5/4/25 @ 10:30 AM

15. Hours of the event:

Set Up: 5/2/25 1-2 pm, 5/4/25 6am - 7:30 am

Event: 5/4/25 8 am - 9:30 am

Dismantling: 5/4/25 9:30 - 10:30 am

CITY MANAGER'S OFFICE

16. Will the event hold a raffle of any kind? ☐ Yes* ☑ No

***If yes, please complete attached Raffle License Application**

17. Is the Certificate of Insurance and Hold Harmless Agreement attached? ☑ Yes ☐ No

***Attached please see the City's insurance provisions (Required for all special events)**

18. Will alcoholic beverages be served or sold at the event? ☐ Yes* ☑ No

28. Please state what provisions have been made for first aid and emergency medical services, if any:
First aid kits in building
Police on site
Ambulance within 5 minute drive

PUBLIC WORKS

29. Will the event require barricades for traffic control? ☒ Yes* ☐ No

If yes, please complete the attached Barricade Borrowing Application

30. Will the event require water? ☐ Yes ☒ No

Specify _____

Please remember to include the necessary attachments, if possible. (Please check those included)

- ☒ Barricade Borrowing Application
- ☒ Certificate of Insurance/Hold Harmless Agreement
- ☐ Raffle License Application
- ☐ Temporary Liquor License Application

The undersigned has read the foregoing application and knows the contents thereof, and affirms that the information is true and correct to the best of his/her knowledge, information and belief. For special events, the undersigned agrees to indemnify and hold harmless the City, together with its officers, agents, volunteers, and employees from all losses, damages, injuries, claims, demands and expenses arising out of, or as the result of, the operation of the event, the special City services provided for the event, and/or the permit issued for same, and/or the condition, maintenance and use of the public property in connection with the event, as well as for any injury to or sustained by a City employee, agent, or contractor in conjunction with the event authorized by the City.

Signature

12-30-24
Date

James Knight
Print Name

STAFF USE ONLY

Assigned City Department: _____

Assigned City Staff Liaison: _____

Meeting with Event Organizer Required: ☐ Yes ☐ No

City Council Approval Required: ☐ Yes ☐ No

If yes, what type of alcoholic beverages will be served?

_____

_____

_____

Please complete the attached Temporary Liquor License Application

COMMUNITY DEVELOPMENT

19. Will the event require tents or temporary structures? ☐ Yes ☒ No

20. What signs or advertising do you anticipate needing for the event?

    Temporary community event signs ☒ Yes ☐ No

    Temporary neighborhood event signs ☒ Yes ☐ No

    Directional signs ☒ Yes ☐ No

    Banner ☒ Yes ☐ No

21. Will food be served or sold at the event? ☐ Yes* ☒ No

    If yes, please contact the McHenry County Health Department and please provide the City with a copy of the approval from the McHenry County Health Department.

22. Will the event include vendors selling products? ☐ Yes ☒ No

    Description of Products_____

23. Will the event require portable sanitation facilities? ☐ Yes ☒ No

    Name of Company_____
    Address_____
    Phone_____

24. Will the use of electricity be required for the event? ☒ Yes ☐ No

    If yes, please specify the power requirements and plan for provision
    Use of Rave Center's electricity for stage needs
    _____

PUBLIC SAFETY *Please remember to post the Firearm Concealed Carry Act sign*

25. Does this event require assistance from the Police Department? ☒ Yes ☐ No

26. Does this event require an on-site ambulance? ☐ Yes ☒ No

27. Will the event require sound amplification of any kind? ☒ Yes ☐ No



December 30, 2024

City of Crystal Lake
Community Development Department
100 W. Woodstock St.
Crystal Lake, IL 60014

To Whom It May Concern:

Please find the attached special events application for the Bob Blazier Run For the Arts on Sunday May 4th, 2025. The annual 5K Run/Walk will be conducted in the same manner as previous years with no change to the route or timetable of the event. Also included in this packet are the barricade and cone borrowing application, course maps, certificate of insurance, and hold harmless forms.

As done in previous years, Raue Center would also like to formally ask for a waiver of the Police Change Back fees.

Please let me know if there are any issues with the application, any extra steps I need to take, or anything else I can do to make the application process smoother.

Thank you,

James Knight
Economic Development Manager
Raue Center For The Arts

Richard Kuranda
executive director/CEO

Board of Directors
Tim Paul,
president

John Jacobsen,
vice president

Jerry Trachsler
treasurer

Luanne Flavin,
secretary

John Green
Mike Johnson
Stacey McInerney
Jack Minsley
Rich Naponelli
Michelle Nowland
Sandra Pierce
Regan Shepley
Chuck Stevens
Steven Szalaj

Administration Offices
104 Minnie Street
Crystal Lake, IL 60014
815.356.9010

Raue Center
School For The Arts
@ St. Mary's Episcopal
210 McHenry Avenue
Crystal Lake, IL 60014
815.356.9010

BBR 5K Volunteer Map 2025

Raue Contact: James Knight: 917-723-1223



Volunteer/Police Positions

- 1 - Williams/Franklin - Volunteer
- 2 - Franklin/College - Volunteer
- 3 - College/Rosedale - Volunteer
- 4 - Rosedale/McHenry - Police
- 5 - 1 mile split time - Volunteer
- 6 - McHenry/Douglas - Police
- 7 - Douglas/Pomeroy - Volunteer
- 8 - Douglas/Dole - Police
- 9 - Dole/Oak - Police
- 10 - Oak/Crystal Lake Ave - Police
- 11 -Oak/Woodstock - Police
- Water Station - Volunteer
- 12- Woodstock/Walkup - Police
- 13 - Woodstock/Grant - Volunteer
- 14 - Woodstock/Williams* - Volunteer

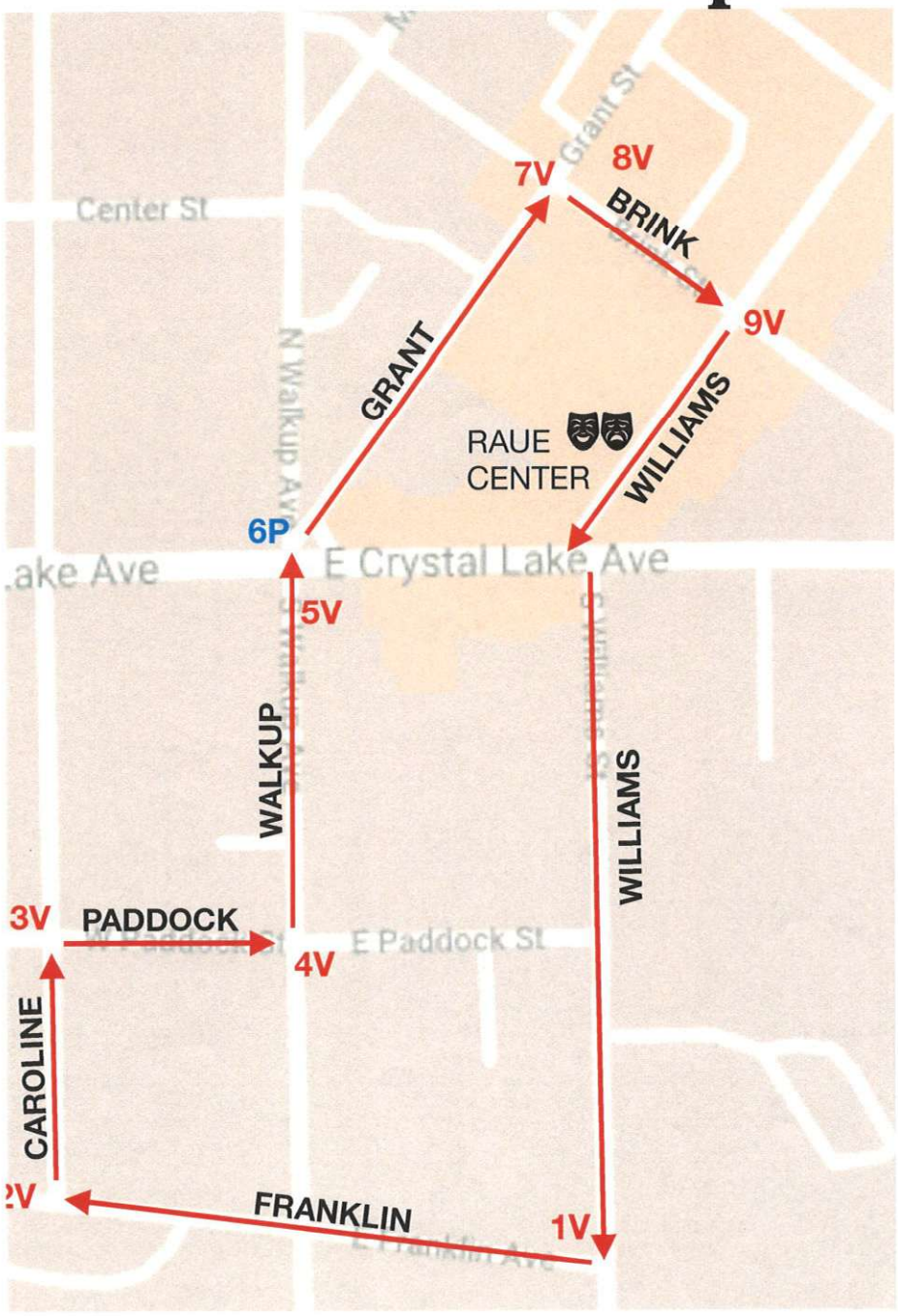
*Volunteer on Woodstock/Williams also to monitor parking lot on Woodstock

Instructions:

- 5K begins at 8:00 AM. *Its very important to arrive prior to this.*
- There will be a lead police car and and end police car.
- Stop oncoming traffic as runners come by: ask drivers to please wait.
- Allow cars to drive by if runners are in one lane.
- Cheer on runners and walkers.
- Please stay in your location until end police car drives by, return to Raue.

BBR 1 Mile
Volunteer Course Map 2025

Raue Contact: James Knight: 917-723-1223



Volunteer/Police Positions

- 1 - Williams/Franklin - Volunteer
- 2 - Franklin/Caroline - Volunteer
- 3 - Caroline/Paddock - Volunteer
- 4 - Paddock/Walkup - Volunteer
- 5 - Walkup/Crystal Lake Ave - Volunteer
- 6 - Walkup/Crystal Lake Ave - Police
- 7 - Grant/Brink - Volunteer
- 8 - Grant/Brink - Volunteer (Opposite Corner)
- 9 - Brink/Williams - Volunteer

Lead Bike: John Jacobsen

Instructions:

- *It is very important to be set up and ready before 8:10*
- There will be a lead bike.
- Stop oncoming traffic as walkers/ runners come by; ask drivers to please wait.
- Allow cars to drive by if runners are in one lane.
- Cheer on runners and walkers.
- Please stay in your location until the end police car drives by, return to Raue.

Agenda Item No: 10

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: REPORT OF THE PLANNING & ZONING COMMISSION

Request: Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential, Rezoning from M PUD Manufacturing to R-3B PUD Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision for a 107-unit townhome development

Petitioner: Lisa Waggoner, attorney
Rick Murphy, CalAtlantic/Lennar, petitioner

PZC Recommendation: To approve the Planning and Zoning Commission (PZC) recommendation and adopt an Ordinance granting a Preliminary Planned Unit Development Amendment, Final Planned Unit Development for the west side of Water's Edge Boulevard and Final Plat of Subdivision for a mixed-use development at the former Crystal Court Shopping Center.

Staff Contact: Kathryn Cowlin, Director of Community Development

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Background:

- Request: The petitioner is seeking the following:
    - Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential,
    - Rezoning from Manufacturing PUD to R-3B PUD Multi-Family Residential, and
    - Preliminary and Final Planned Unit Development for a 107-unit townhome development, and
    - Final Plat of Subdivision.
- Land Use: The Comprehensive Land Use map shows the area as Commerce. A Land Use map amendment to High Density Residential is required.
- Zoning: The site is zoned Manufacturing. A rezoning to R-3B Multi-Family Residential is required.
- The site is a vacant parcel, owned by Curran Contracting, and was previously used as a construction yard.

Key Points:

GENERAL:

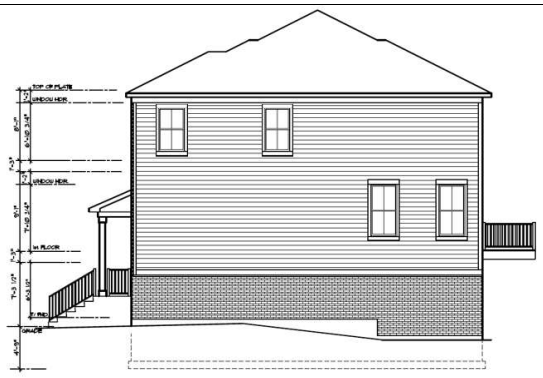
- The Petitioner is requesting variations in conjunction with the Planned Unit Development. Based on the plans submitted, the following variations are required:
    - Density: 12.37 dwelling units to the acre instead of the maximum 9 units to the acre.
    - Front Yard Setback: A portion of the development has a 20-foot setback, a variation of 10 feet.
    - Horizontal curvature for the roadway from a required 150 feet radius to a proposed 100 feet radius.
    - Defer the burial of overhead utilities until an area wide program.
    - Sign height of 7 feet and a sign face of 24 square feet, in lieu of the UDO Section 4-1000D-2 maximum sign height of 4 feet and maximum sign face of 16 feet.
    - Design Standards: To allow less than the UDO Section 4-900D-2b (ii) minimum 10% façade glazing area.
    - Sidewalks shall be constructed if none exist whenever any new development, nonresidential or residential is erected. (While a variation is required to not have a sidewalk along Main Street, as part of this development the City is requesting a multi-use path along the rear of the property to provide public access and connection to the loop trail around the lake).
    - Growth Management: To allow more than 25 dwelling units to be constructed in a calendar year.

SITE PLAN FRAMEWORK:

- Circulation: Access into the site would utilize the existing access at Main Street and Berkshire Drive, and a new, second right-in/right-out only access will be provided on Main Street at the northwest corner of the property.
- At the City's request, the petitioner will be responsible for installing an 8-foot paved multi-use path along the eastern property line for public use. This path will connect to the loop trail being installed around Three Oaks Recreation Area, as well as the existing path along the entry road.
- The petitioner will not install a sidewalk on the east side of S. Main Street as they will be required to install pedestrian signal heads to the north leg of S. Main Street at Berkshire Drive. This will allow the site to connect to the Prairie Trail on the west side of S. Main Street.
- Placemaking:
    - There will be two (2) parks within the site with a tot lot, pavilion, grill and seating areas.
    - A recommended condition of approval is to install the same public street lighting as Water's Edge to extend the Three Oaks Recreation Area sense of place.
- The proposed site plans include the use of City property for stormwater detention to the north. A portion of City property will be dedicated for right-of-way and a small corner transferred to the developer for landscaping purposes.

BUILDING ELEVATIONS:

- The buildings are three-story, rear-loading townhomes.
- Each unit will have a balcony over the driveway.
- The buildings will have a combination of brick and vertical and horizontal vinyl siding. There will be brick on the front and side elevations, with brick extending the full length on the front façade of the corner units or middle units depending on the number of units. There will be two (2) color schemes.
- Side Elevations:
    - The side elevations have brick along the full length of the façade and a hip roof. This reduces the amount of siding on the façade. The side elevations do not meet the requirement for 10% glazing.
    - The Planning and Zoning Commission expressed a desired for the side elevations to be enhanced. The recommended condition of approval was amended by the PZC to work with staff.
    - The petitioner has proposed to increase the initial tree planting height from six-feet to eight-feet along Main Street to create a more mature screen.
    - The following are options for enhancing the side elevations:



Add windows.

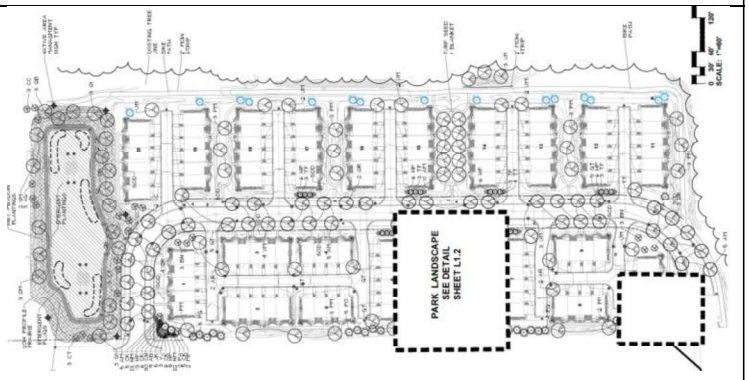
Petitioner has stated this does not work with the floor plan.



Enhance windows with a box bay window along Main St.

Petitioner has stated this is not buildable per the architect.





Add landscaping (15 evergreen species along east property line shown in blue).

PLAT OF SUBDIVISION:

- The proposed subdivision is a 20-lot subdivision with four outlots. Two outlots are created from the City owned parcel and the remaining outlots are the common space for the development.
- A new public road would be created to access the development.
- The property has a curve at the north end of the existing parcel from an old access way when the property was part of the gravel mining. Due to the curve, a portion of the City owned parcel would be transferred to the developer.

PZC Highlights:

- The PZC was supportive of townhomes at the subject property.
- There was a discussion on on-street parking. Signage will be placed to ensure it is clear where the "no parking" areas are on the new public street.
- The PZC felt the side elevations could be enhanced with either windows or landscaping. It was also mentioned that the rear deck railing could be black to complement the front railing. This could provide an alternative enhancement for the elevations instead of glazing on the side elevations.
- The PZC stated that the Findings of Fact had been met.

The PZC recommended **approval (7-0)** of the petitioner's request with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
   B. Site Plan (Gary R. Weber Associates, Inc., dated 12/18/2024)
   C. Final Plat of Subdivision (Mackie Consultants, LLC, dated 12/18/2024)
   D. Final Engineering Plans (Mackie Consultants, LLC, dated 12/17/2024)
   E. Elevations (Lennar Corporation, received 01/06/2025)
   F. Color Renderings (Lennar Corporation, received 01/03/2025)
   G. Landscape Plans (Gary R. Weber Associates, Inc., dated 12/19/2024)
   H. Fire Truck Turning Exhibit (Mackie Consultants, LLC, dated 12/18/2024)
   I. Stormwater Report (Mackie Consultants, LLC, dated 09/12/2024, revised 11/25/2024)
   J. Traffic Study (Gewalt Hamilton, dated 12/03/2024)

2. Elevations:
   A. ~~Add windows to the side elevations to meet the 10% glazing requirement~~. **Work with staff on City desired mitigation measures that would meet the intent of the 10% glazing requirement. (Amended by PZC)**
   B. All units are to be constructed with premium vinyl siding (0.044 or greater) and installed properly with long runs in order to allow for movement during temperature changes.

3. Site Plan:
   A. Extend the sidewalk from pod 20 to the 8-foot path to allow a second access point to the Three Oaks Recreation Area trail for the residents.
   B. Per the traffic study, the proposed crosswalk with pedestrian sign head upgrades on the north leg of the intersection of Main Street and Berkshire Drive will need to be installed as part of the townhouse development.
   C. A variance is required for the 650-4-100D(v) for the northern horizontal curve radii which is proposed at 100 feet instead of the Code requirement of 150 feet is approved.
   D. Parking is permitted on the east side of the new road along the straightaway only. Post no-parking signs accordingly.

4. Work with city staff to finalize the Landscape Plan.

5. Utilize the street lighting standard that was approved for the Water's Edge development along the new public street (Halophane GBLF3).

6. Install the multi-use path as part of the first phase of construction.

7. Plat of Subdivision:
   A. Work with staff to finalize easement language for the stormwater conveyance to the basin on the City's property.
   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

Votes Required to Pass: A simple majority.

Acknowledgement Form

Regarding **Waterside at Three Oaks Project.** Please check one of the choices and sign below.

- [X] I hereby acknowledge that I have read, understand, and agree to the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable).

- [ ] I hereby acknowledge that I have read, understand, and agree to most of the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable) but have concerns with the following items:

_____

_____

_____

_____

_____

_____

CalAtlantic Group, LLC

Petitioner's Name: Richard J. Murphy Date: 1/29/25

Signature

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
   B. Site Plan (Gary R. Weber Associates, Inc., dated 12/18/2024)
   C. Final Plat of Subdivision (Mackie Consultants, LLC, dated 12/18/2024)
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   I. Stormwater Report (Mackie Consultants, LLC, dated 09/12/2024, revised 11/25/2024)
   J. Traffic Study (Gewalt Hamilton, dated 12/03/2024)

2. Elevations:
   A. ~~Add windows to the side elevations to meet the 10% glazing requirement~~. **Work with staff on City desired mitigation measures that would meet the intent of the 10% glazing requirement. (Amended by PZC)**
   B. All units are to be constructed with premium vinyl siding (0.044 or greater) and installed properly with long runs in order to allow for movement during temperature changes.

3. Site Plan:
   A. Extend the sidewalk from pod 20 to the 8-foot path to allow a second access point to the Three Oaks Recreation Area trail for the residents.
   B. Per the traffic study, the proposed crosswalk with pedestrian sign head upgrades on the north leg of the intersection of Main Street and Berkshire Drive will need to be installed as part of the townhouse development.
   C. A variance is required for the 650-4-100D(v) for the northern horizontal curve radii which is proposed at 100 feet instead of the Code requirement of 150 feet is approved.
   D. Parking is permitted on the east side of the new road along the straightaway only. Post no-parking signs accordingly.

4. Work with city staff to finalize the Landscape Plan.

5. Utilize the street lighting standard that was approved for the Water's Edge development along the new public street (Halophane GBLF3).

6. Install the multi-use path as part of the first phase of construction.

7. Plat of Subdivision:
   A. Work with staff to finalize easement language for the stormwater conveyance to the basin on the City's property.
   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

PIQ Map
775 S. Main Street, Crystal Lake, IL



Ord. No.
File No.

The City of Crystal Lake Illinois

AN ORDINANCE GRANTING A COMPREHENSIVE LAND USE MAP AMENDMENT, REZONING TO R-3B MULTI-FAMILY RESIDENTIAL, PRELIMINARY AND FINAL PLANNED UNIT DEVELOPMENT AND FINAL PLAT OF SUBDIVISION AT 775 S. MAIN STREET

WHEREAS, pursuant to the terms of a Petition (File #PLN-2024-180) before the Crystal Lake Planning and Zoning Commission, the Petitioner has requested a Comprehensive Land Use Map Amendment from Commerce to High Density Residential, Rezoning from Manufacturing to R-3B Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision for 107-unit townhome development at 775 S. Main Street; and

WHEREAS, the Planning and Zoning Commission of the City of Crystal Lake, pursuant to notice duly published on December 28, 2024 in the Northwest Herald, held a public hearing at 7:00 p.m., on January 15, 2025 at City Hall at 100 W. Woodstock Street, Crystal Lake, Illinois to consider the proposed Final Planned Unit Development Amendment; and

WHEREAS, on January 15, 2025, the Planning and Zoning Commission, having fully heard and considered the testimony of all those present at the public hearing who wished to testify, made findings of fact as required by law and recommended to the Mayor and City Council of the City of Crystal Lake that the proposed Comprehensive Land Use Map Amendment, Rezoning to R-3B Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision be approved, as documented in the minutes, and

WHEREAS, it is in the best interests of the CITY OF CRYSTAL LAKE that the Comprehensive Land Use Map Amendment, Rezoning to R-3B Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision be issued as requested in said Petition.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE, McHENRY COUNTY, ILLINOIS, as follows:

Section I: That a Comprehensive Land Use Map Amendment to High Density Residential, Rezoning to R-3B Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision at 775 S. Main Street (19-09-100-028 and 19-09-100-029), Crystal Lake, Illinois is hereby approved.

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:

Draft

A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
B. Site Plan (Gary R. Weber Associates, Inc., dated 12/18/2024)
C. Final Plat of Subdivision (Mackie Consultants, LLC, dated 12/18/2024)
D. Final Engineering Plans (Mackie Consultants, LLC, dated 12/17/2024)
E. Elevations (Lennar Corporation, received 01/06/2025)
F. Color Renderings (Lennar Corporation, received 01/03/2025)
G. Landscape Plans (Gary R. Weber Associates, Inc., dated 12/19/2024)
H. Fire Truck Turning Exhibit (Mackie Consultants, LLC, dated 12/18/2024)
I. Stormwater Report (Mackie Consultants, LLC, dated 09/12/2024, revised 11/25/2024)
J. Traffic Study (Gewalt Hamilton, dated 12/03/2024)

2. Elevations:
   A. Work with staff on City desired mitigation measures that would meet the intent of the 10% glazing requirement.
   B. All units are to be constructed with premium vinyl siding (0.044 or greater) and installed properly with long runs in order to allow for movement during temperature changes.

3. Site Plan:
   A. Extend the sidewalk from pod 20 to the 8-foot path to allow a second access point to the Three Oaks Recreation Area trail for the residents.
   B. Per the traffic study, the proposed crosswalk with pedestrian sign head upgrades on the north leg of the intersection of Main Street and Berkshire Drive will need to be installed as part of the townhouse development.
   C. A variance is required for the 650-4-100D(v) for the northern horizontal curve radii which is proposed at 100 feet instead of the Code requirement of 150 feet is approved.
   D. Parking is permitted on the east side of the new road along the straightaway only. Post no-parking signs accordingly.

4. Work with city staff to finalize the Landscape Plan.

5. Utilize the street lighting standard that was approved for the Water's Edge development along the new public street (Halophane GBLF3).

6. Install the multi-use path as part of the first phase of construction.

Draft

7. Plat of Subdivision:
   A. Work with staff to finalize easement language for the stormwater conveyance to the basin on the City's property.
   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

Draft

Section III: That the City Clerk be and is hereby directed to amend all pertinent records and the official zoning map of the City of Crystal Lake to show the issuance of a Comprehensive Land Use Map Amendment, Rezoning to R-3B Multi-Family Residential, Preliminary and Final Planned Unit Development and Final Plat of Subdivision in accordance with the provisions of this Ordinance, as provided by law.

Section IV: That this Ordinance shall be in full force and effect from and after its passage, approval and publication as provide by law.

DATED at Crystal Lake, Illinois, this 4th day of February, 2025.

City of Crystal Lake, an
Illinois municipal corporation

_____
Haig Haleblian, MAYOR

SEAL

ATTEST:

_____
CITY CLERK

Ord. No.
File No.

Passed: February 4, 2025
Approved: February 4, 2025

Draft

#PLN-2024-180 Waterside
775 S. Main Street –Comprehensive Land Use Map Amendment, Rezoning, Preliminary/Final PUD & Plat of Subdivision
Project Review for Planning and Zoning Commission

Date:	January 15, 2025
Request:	1. Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential 2. Rezoning from M PUD Manufacturing to R-3B PUD Multi-Family Residential 3. Preliminary and Final Planned Unit Development for a 107-unit townhome development 4. Final Plat of Subdivision
Location:	775 S Main Street
Acreage:	10.5 acres
Zoning:	RE PUD Residential Estate
Surrounding Properties:	North: M PUD – Manufacturing (Three Oaks Recreation Area) South: M PUD – Manufacturing (Three Oaks Recreation Area) East: M PUD – Manufacturing (Three Oaks Recreation Area) West: M – Manufacturing & B-2 General Commercial
Staff Contact:	Kathryn Cowlin (815.356.3605)

Background:

- The site is a vacant parcel, owned by Curran Contracting, and was previously used as a construction yard.
- The petitioner presented a conceptual Planned Unit Development (PUD) at the June 5, 2024 Planning and Zoning Commission meeting and at the June 18, 2024 City Council meeting. At the meeting the petitioner received overall positive feedback with the following comments:
    - Support for the land use of owner-occupied townhomes.

- Concerns with the proposed amenities and pavilion as it looked manufactured. It did not appear inviting.
- Multiple Commissioners and Council members asked for elevated architecture for the development. The architecture should be enhanced on the side elevations, such as bay windows.

Development Analysis:

- The petitioner is seeking the following:
  - Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential,
  - Rezoning from Manufacturing PUD to R-3B PUD Multi-Family Residential, and
  - Preliminary and Final Planned Unit Development for a 107-unit townhome development, and
  - Final Plat of Subdivision.
- The Petitioner is requesting variations in conjunction with the Planned Unit Development. Based on the plans submitted, the following variations are required:
  - Density: 12.37 dwelling units to the acre instead of the maximum 9 units to the acre.
  - Front Yard Setback: A portion of the development has a 20-foot setback, a variation of 10 feet.
  - Horizontal curvature for the roadway from a required 150 feet radius to a proposed 100 feet radius.
  - Defer the burial of overhead utilities until an area wide program.
  - Sign height of 7 feet and a sign face of 24 square feet, in lieu of the UDO Section 4-1000D-2 maximum sign height of 4 feet and maximum sign face of 16 feet.
  - Design Standards: To allow less than the UDO Section 4-900D-2b (ii) minimum 10% façade glazing area.
  - Sidewalks shall be constructed if none exist whenever any new development, nonresidential or residential is erected. (While a variation is required to not have a sidewalk along Main Street, as part of this development the City is requesting a multi-use path along the rear of the property to provide public access and connection to the loop trail around the lake).
  - Growth Management: To allow more than 25 dwelling units to be constructed in a calendar year.

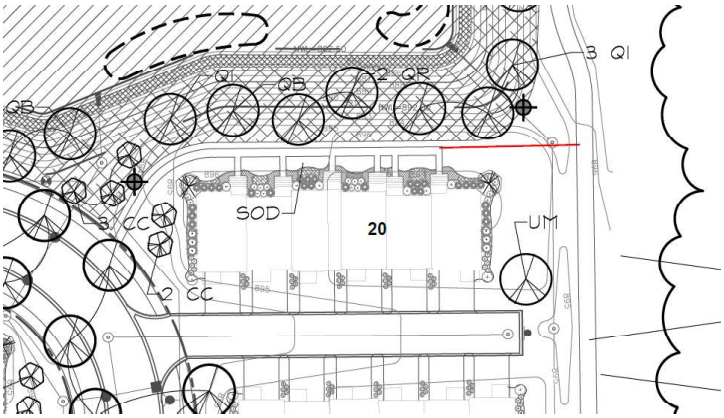
GENERAL

- The proposed development would consist of five (5) 4-unit buildings, three (3) 5-unit building and 12 6-unit buildings for a total of 107 units in 20 buildings.

- The site is currently zoned M PUD Manufacturing and requesting rezoning to R-3B PUD Multi-Family Residential to accommodate the owner-occupied townhomes. Nearby residential units includes the apartments and rental townhomes in Water's Edge.
- The R-3B zoning district permits nine units to the net acre. The development is proposed at 12.37 units to the acre.
- The front yard setback for the units fronting the new public street is 20 feet, a variation of 10 feet. The proposed development complies with the 30-foot front yard setback along Main Street.

SITE LAYOUT

- Access into the site would utilize the existing access at Main Street and Berkshire Drive, and a new, second right-in/right-out only access will be provided on Main Street at the northwest corner of the property.
- There will be two (2) parks within the site with a tot lot, pavilion, grill and seating areas.
- At the City's request, the petitioner will be responsible for installing an 8-foot paved multi-use path along the eastern property line for public use. This path will connect to the loop trail being installed around Three Oaks Recreation Area as well as the existing path along the entry road.
- There is a connection to the 8-foot path at the park area. It is recommended to add another connect at the north end of the development so residents of the townhomes can walk into Three Oaks without having to go south.



- Sidewalks and parkway trees are provided throughout the site.
- The petitioner will not install a sidewalk on the east side of S. Main Street as they will be required to install pedestrian signal heads to the north leg of S. Main Street at Berkshire Drive. This will allow the site to connect to the Prairie Trail on the west side of S. Main Street.

BUILDING ELEVATIONS

- The buildings are three-story, rear-loading townhomes. The Planning and Zoning Commission expressed a desired for rear-loaded townhomes during the conceptual PUD review process.
- The buildings will have a combination of brick and vertical and horizontal vinyl siding. There will be brick on the front and side elevations, with brick extending the full length on the front façade of the corner units or middle units depending on the number of units. There will be two (2) color schemes.

	
Color Scheme "A" Green	*Color Scheme "B" Dark Gray*

- Each unit will have a balcony over the driveway.
- City staff met with the petitioners to discuss the proposed elevations. The petitioner adjusted the roofline of the covered front porches on the four unit buildings to break up the façade of the middle two units.
- Per the UDO's Design Standards for single-family attached/multi-family residential, the following standards must be met.
    - Site Layout, <u>one of the three</u> criteria must be met:
        - ✓ Building orientation - *meets*
        - ✓ Building orientation to street edges - *meets*
        - ▪ Building orientation along interior property lines abutting other residential product types – *not applicable*
    - ✓ Mass and Form: Building design should incorporate visually heavier and more massive elements at the base - *meets*
    - Façade Articulation:
        - ✓ *Individual units are differentiated and articulated with varying porch rooflines, offsets and siding changes.*

      Front facades shall provide at <u>least three</u> of the following design features:

        - ▪ One or more dormer windows or cupola - *not provided*
        - ▪ A recessed entry – *staggered entries provided*
        - ✓ A covered porch - *provided*
        - ✓ Pillars, posts or pilasters - *provided*

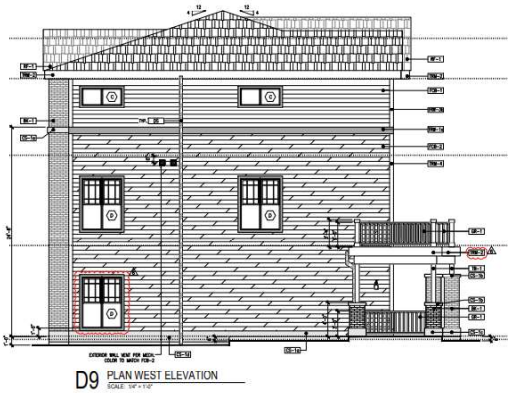
- One or more bay windows with a minimum projection of 12 inches from the façade planes - *not provided*
- ✓ Eaves with a minimum six-inch projection from the façade plane - *provided*
- A parapet wall with articulated design - *not provided*
- ✓ Multiple windows with a minimum four-inch-wide trim - *provided*

o All side and rear facades shall have a minimum of 10% façade glazing area. *The petitioner is seeking a variation from this criterion.*

✓ Roof Articulation: Minimum roof pitch is met and architectural shingles will be used. *Meets.*

✓ Building Materials: Traditional building materials are encouraged. *The proposed building materials are brick and vinyl siding. It is recommended that the vinyl siding be premium vinyl (.044 or greater).*

- It is recommended to add windows on the side elevations to comply with the 10% glazing requirement. Below are the side elevations of recently approved rear-loaded townhomes.

	
Enclave	Water's Edge

- As an alternative to adding windows to the side elevations for the townhomes fronting Main Street, an option could be to change the purposed side windows to a box bay window to provide dimension to the elevation. An example image is shown here.





PARKING

- Garage and surface parking would be utilized for the townhomes.
- Based on the submitted plans, 241 parking spaces would be required (2 per DU, 1 space shall be in an enclosed garage and 1 can be at least 21 feet long + 0.25 guest spaces per unit). Each unit has a two-car garage and the ability to park two vehicles in the driveways for a total of 428 parking spaces. There are an additional 10 spaces at the proposed park area for visitors.
- On-street parking would be permitted along the straightaway on the east side only. This adds another 23 parking spaces.

LANDSCAPING

- The proposed plans comply with the tree preservation section of the UDO.
- Foundation landscaping is provided.
- Enhanced landscaping along Main Street is proposed where side elevations or the end of driveways are present. This will screen the view of the buildings and driveways from Main Street.
- Two central parks are included to create a view corridor from Main Street to Three Oaks Recreation Area. The parks include landscape areas to provide shade and visual interest.
- The stormwater basin on the City's property to the north will have native naturalized plantings.
    - Existing trees along the Three Oaks Recreation Area entry road will remain.
    - Native trees such as Burr Oak, Swamp White Oak and Hawthorn trees will be added to complement Three Oaks Recreation Area.

SIGNAGE

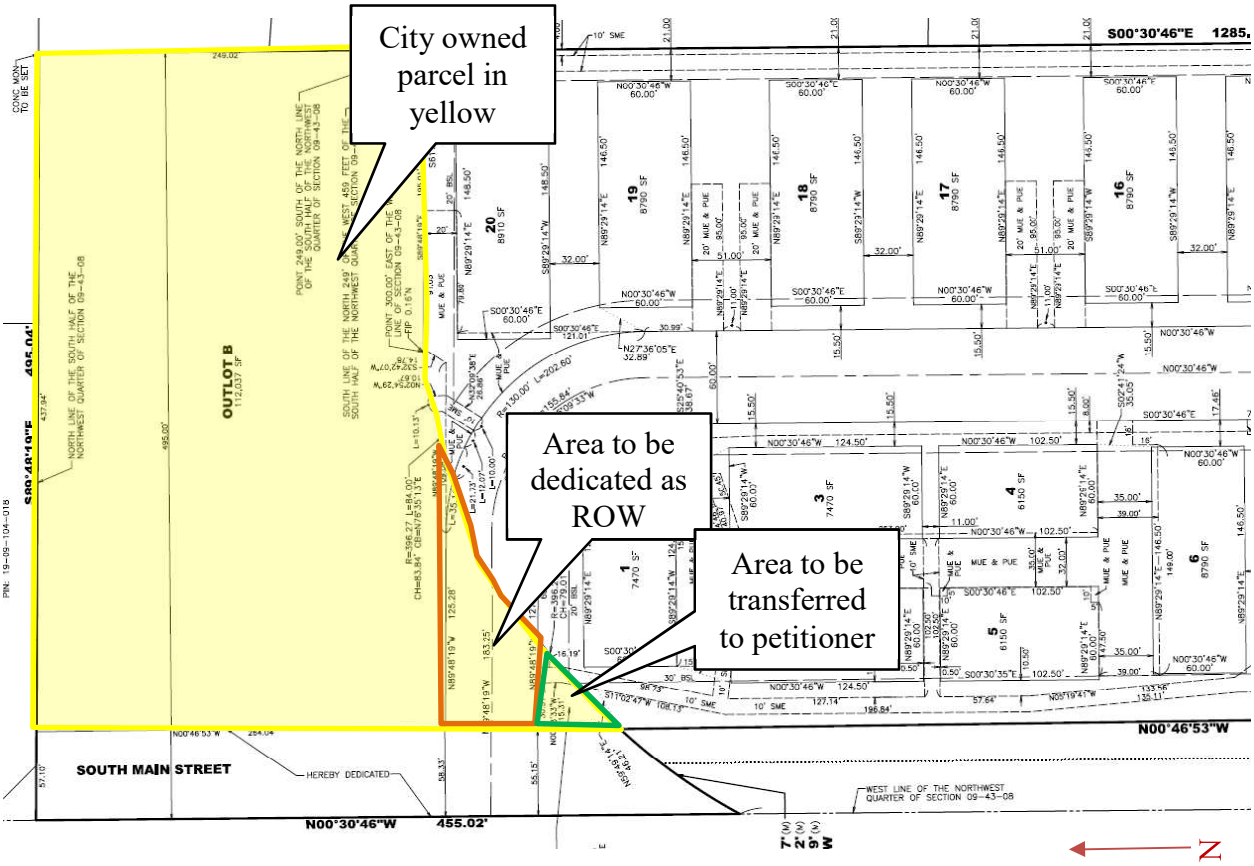
- A freestanding sign is proposed. The sign design is similar in design to the Water's Edge signs and Three Oaks Recreation Area signs.
- A variation is required for the sign height and area.

Sign	UDO Requirement	Request
Sign height	4 feet	7 feet
Sign area	16 square feet	25 square feet

SUBDIVISION

- The proposed subdivision is a 20-lot subdivision with four outlots. Two outlots are created from the City owned parcel and the remaining outlots are the common space for the development.
- A new public road would be created to access the development.

- The property has a curve at the north end of the existing parcel from an old access way when the property was part of the gravel mining. Due to the curve, a portion of the City owned parcel would be transferred to the developer. See diagram below.



Findings of Fact:

COMPREHENSIVE LAND USE PLAN AMENDMENT

Amendment from the existing Comprehensive Land Use Plan designation of Commerce to allow High Density Residential. High Density Residential would be the appropriate designation for the R-3B zoning district and the proposed townhome development.

REZONING

- The property is currently zoned Manufacturing PUD.
- The property would be rezoned to R-3B PUD Multi-Family Residential. The Multi-Family Residential zoning criteria are:
    - General: This district allows the highest density of residential development. It encourages a wide range of housing types, especially multifamily development, even though single-family detached and two-family dwellings are also allowed, to meet the diverse housing needs of City residents. The intent is to provide higher density housing in areas immediately around the historic downtown, areas near commercial

zoning or areas near transit stops where increased density and in-fill development are desirable.

- Character: This district is characterized by residential buildings that cover a large percentage of the lot, are taller and spaced closely enough to create a sense of vertical enclosure.
- Uses: This district is for higher density residential neighborhoods that meet the community's housing needs, particularly for higher density and in-fill housing development. Single-family and two-family dwellings are also permitted. Complementary uses such as certain civic and recreational uses are permitted, but are subject to restrictions set forth in this Ordinance.

Criteria for Rezoning:

(a) The existing uses and zoning of nearby property.
☒ *Meets* ☐ *Does not meet*

(b) The extent to which property values are diminished by a particular zoning classification or restriction.
☒ *Meets* ☐ *Does not meet*

(c) The extent to which the destruction of property value of a petitioner property owner promotes the health, safety, morals or general welfare of the public.
☒ *Meets* ☐ *Does not meet*

(d) The relative gain to the public as opposed to the hardship imposed on a petitioning property owner.
☒ *Meets* ☐ *Does not meet*

(e) The suitability of the subject property for its zoned purposes.
☒ *Meets* ☐ *Does not meet*

(f) The length of time the property has been vacant as zoned, considered in the context of land development in the area.
☒ *Meets* ☐ *Does not meet*

(g) The Comprehensive Plan designation and the current applicability of that designation.
☒ *Meets* ☐ *Does not meet*

(h) The evidence or lack of evidence, of community need for the use proposed.
☒ *Meets* ☐ *Does not meet*

PRELIMINARY/FINAL PLANNED UNIT DEVELOPMENT

The petitioner is requesting approval of a Preliminary and Final Planned Unit Development to allow a 107-unit townhome development. A Planned Unit Development is a Special Use and Special Uses require separate review because of their potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.

   ☒ *Meets* ☐ *Does not meet*

2. The use will not be detrimental to area property values.

   ☒ *Meets* ☐ *Does not meet*

3. The use will comply with the zoning districts regulations.

   ☒ *Meets* ☐ *Does not meet*

4. The use will not negatively impact traffic circulation.

   ☒ *Meets* ☐ *Does not meet*

5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.

   ☒ *Meets* ☐ *Does not meet*

6. The use will not negatively impact the environment or be unsightly.

   ☒ *Meets* ☐ *Does not meet*

7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.

   ☒ *Meets* ☐ *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.

   ☒ *Meets* ☐ *Does not meet*

9. The use will conform to any conditions approved as part of the issued Special Use Permit.

   ☒ *Meets* ☐ *Does not meet*

10. The use will conform to the regulations established for specific special uses, where applicable.

    ☒ *Meets* ☐ *Does not meet*

In addition PUDs must also meet the standards in Section 4-500 C. Development Standards and 4-500 D. 1 Additional standards for Planned Unit Developments Residential PUDs.

a. Location: A residential PUD can be located anywhere in the City, including any land proposed for annexation.
   ☒ *Meets* ☐ *Does not meet*

b. Permissible uses: A mix of different residential dwelling types in proximity to each other is encouraged. Neighborhood commercial uses serving the development may be approved as part of a residential PUD where appropriate.
   ☒ *Meets* ☐ *Does not meet*

c. Nonresidential uses: Any nonresidential use permitted in a residential PUD shall be compatible with the residential nature of the development. Parking areas which are intended to serve nonresidential uses shall be separated from those designed to serve residential areas. Unless commercial and residential uses are combined within a single structure, commercial uses shall be separated from dwelling units by a heavily landscaped buffer zone that meets the requirements of Section 4-400, Landscaping and screening standards.
☒ *Meets* ☐ *Does not meet*

d. Pedestrian paths: Pedestrian paths shall connect residential uses and nonresidential uses within a residential PUD.
☒ *Meets* ☐ *Does not meet*

e. Growth management: A growth management schedule shall be provided to and approved by the City Council, which indicates the number and type of residential units to be constructed in each calendar year. The maximum number of units to be constructed shall be 25 residential units or 15% of the total number of residential units (including all phases of the proposal), whichever is greater, in any calendar year. The City Council with recommendations from the Planning and Zoning Commission, at final PUD approval can approve, deny or adjust the percentage of an increase in the number of units that can be built in one calendar year. The City Council and the Planning and Zoning Commission shall consider the following criteria in approving an increase in the number of units that can be built annually:

i. Advance dedication of school and park sites and advance payment of school, park and other impact fees;
☒ *Meets* ☐ *Does not meet*

The public multi-use path will be completed during the first phase.

ii. Payment for installation of road impact improvements or fees applicable by law;
☒ *Meets* ☐ *Does not meet*

iii. Smaller subdivisions which encourage in-filling within an established part of the community;
☒ *Meets* ☐ *Does not meet*

This proposal is considered an infill development.

iv. Completion of major and collector road networks and critical linkages in the street systems;
☒ *Meets* ☐ *Does not meet*

v. Fulfill a need for various unit types and income levels such as low and moderate-income housing;
☒ *Meets* ☐ *Does not meet*

vi. Provisions which satisfy needed public facilities;
☒ *Meets* ☐ *Does not meet*

vii. Innovative architectural design, quality of exterior materials and creative use of landscaping;
☒ *Meets* ☐ *Does not meet*

viii. Other criteria or extraordinary amenities, not listed above, which may meet the development goals of the City.
☒ *Meets* ☐ *Does not meet*

PLANNED UNIT DEVELOPMENT VARIATIONS

The petitioner is requesting approval of a Preliminary and Final Planned Unit Development to allow variations for garage doors of attached garages cannot be more than 50% of the total length of building front façade and they must be offset two feet from next garage door and horizontal curve radius to allow less than the minimum required 150-foot centerline curve, and sidewalks shall be constructed if none exist whenever any new development, nonresidential or residential is erected. The purpose of Planned Unit Developments is to encourage and allow more creative and imaginative design of land developments than is possible under district zoning regulations. Planned Unit Developments are, therefore, intended to allow substantial flexibility in planning and designing a proposal. This flexibility is often in the form of relief from compliance with conventional zoning ordinance site and design requirements which may otherwise require individual requests and applications for zoning variations.

Ideally, this flexibility results in a development that is better planned, contains more amenities, and is ultimately more desirable than one that would have been produced through compliance with typical zoning ordinance and subdivision controls.

Therefore, more lenient site requirements may be granted where the Planned Unit Development contains features not normally required of traditional developments. Although a formal variation request is not required to be made in conjunction with a Planned Unit Development, staff identifies those aspects of the Planned Unit Development which effectively result in variations from UDO requirements. If the evidence is not found to justify these variations from the UDO that fact shall be reported to the City Council with a recommendation that the variations from the UDO which are proposed as part of the Planned Development be lessened or denied.

The Planned Unit Development Amendment proposed by the Petitioner includes the following variations from the UDO:

1. Article 3-200(A)(6) Maximum net density of nine units per acre to allow 12.37 units per acre.

   The development includes two park areas and open space between each pod.

2. Article 3-200(A)(6) Front yard setback of 30 feet to allow 20 feet for the pods fronting the new public street.

   The pods are set closer to the street to allow for a larger setback from Three Oaks Recreation Area.

3. Article 4-100(D)(2)(g) Sidewalks shall be constructed if none exist whenever any new development, nonresidential or residential is erected, unless a variation is granted. A variation would be required in order to not install sidewalks along Route 176.

   There are no sidewalks on the east side of Main Street and the City requested that a multi-use path be extended from the intersection of Main Street and Berkshire Drive to Three Oaks Recreation Area. This will connect the Prairie Trail with Three Oaks Recreation Area.

4. Article 4-500(D)(1)(e) Growth management to allow for greater than 25 units to be constructed in a year.

5. Article 4-100D.1(c)(v) Minimum Horizontal Curve 150-foot minimum centerline curve.

   The horizontal curve at the north end of the development does not meet the 150 foot minimum centerline curve due to site constraints and is at 100-foot.

6. Article 4-1000(D)(2) Sign requirements of a maximum height of four feet and area of 16 feet to allow a seven foot sign with 24 square feet of sign area.

   The proposed sign is smaller in design to the Water's Edge sign for the residential area. The Water's Edge sign is 10 feet in height and 120 square feet.

7. Article 4-900(D)(2)(b)(ii) Minimum 10% façade glazing area for the side elevations to allow 3.5%.

8. Article 5-200F.1 Public Utilities: Deferral of the burial of overhead utility lines until an area wide program.

FINAL PLAT OF SUBDIVISION

The petitioner is requesting a Final Plat of Subdivision for Waterside Subdivision. The subdivision is a 20-lot subdivision to divide the 13.2 acres into 20 townhome lots for separate ownership.

a) Promote the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of the City by providing for the orderly growth and development of the City;

   ☒ *Meets* ☐ *Does not meet*

b) Coordinating streets and roads within proposed subdivisions with the City's planned street system, and with other public facilities;
☒ *Meets* ☐ *Does not meet*

c) Providing right-of-way easements for streets and utilities;
☒ *Meets* ☐ *Does not meet*

d) Avoiding congestion and overcrowding, and encouraging the proper arrangement of streets in relation to existing or planned streets;
☒ *Meets* ☐ *Does not meet*

e) Ensuring there is adequate open space and recreation facilities to serve development;
☒ *Meets* ☐ *Does not meet*

f) Ensuring there is proper recordation of landownership records;
☒ *Meets* ☐ *Does not meet*

g) Installation of any public improvements including water, sewer, storm sewer or detention, parkway trees, and sidewalks;
☒ *Meets* ☐ *Does not meet*

h) Burial of overhead utility lines and all new lines and services in appropriate easements; and
☒ *Meets* ☐ *Does not meet*

i) Ensuring the provision of such other matters as the City Council may deem necessary in order to protect the general health, safety, and welfare of the City
☒ *Meets* ☐ *Does not meet*

Comprehensive Land Use Plan 2030 Vision Summary Review:

Land Use: Residential
The Comprehensive Plan designates the subject property as Commerce. The proposed amendment is for High Density Residential. The goal of a Residential designation is as follows:

Encourage a diversity of high quality housing in appropriate locations throughout the city that supports a variety of lifestyles and invigorates community character.

The Comprehensive Plan indicates this can be accomplished with the following supporting action:

Supporting Action: Encourage a diversity of housing types throughout the city, which satisfy wide-range needs for all persons regardless of age, race, religion, national origin, physical ability and economic level for existing and future city residents.

Three Oaks Recreation Area PUD Overlay District:

Section 1-700(P)(1) states, "the positive impacts of Three Oaks help to enhance and maintain property values within this district. It is in the intent of the Three Oaks PUD Overlay District to promote orderly and high-quality development that is compatible with the character and use of Three Oaks, consistent with and complementary of the area's recreational uses and amenities, and supportive of a strong and stable tax base."

- ✓ The proposed development will strengthen the district by improving the underdeveloped property.
- ✓ The proposed development is walkable to the Water's Edge development, which is adding restaurants and retail.
- ✓ The addition of the multi-use path/bike path helps achieve one of the goals for Three Oaks Recreation Area.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
   B. Site Plan (Gary R. Weber Associates, Inc., dated 12/18/2024)
   C. Final Plat of Subdivision (Mackie Consultants, LLC, dated 12/18/2024)
   D. Final Engineering Plans (Mackie Consultants, LLC, dated 12/17/2024)
   E. Elevations (Lennar Corporation, received 01/06/2025)
   F. Color Renderings (Lennar Corporation, received 01/03/2025)
   G. Landscape Plans (Gary R. Weber Associates, Inc., dated 12/19/2024)
   H. Fire Truck Turning Exhibit (Mackie Consultants, LLC, dated 12/18/2024)
   I. Stormwater Report (Mackie Consultants, LLC, dated 09/12/2024, revised 11/25/2024)
   J. Traffic Study (Gewalt Hamilton, dated 12/03/2024)

2. Elevations:
   A. Add windows to the side elevations to meet the 10% glazing requirement.
   B. All units are to be constructed with premium vinyl siding (0.044 or greater) and installed properly with long runs in order to allow for movement during temperature changes.

3. Site Plan:
   A. Extend the sidewalk from pod 20 to the 8-foot path to allow a second access point to the Three Oaks Recreation Area trail for the residents.

B. Per the traffic study, the proposed crosswalk with pedestrian sign head upgrades on the north leg of the intersection of Main Street and Berkshire Drive will need to be installed as part of the townhouse development.

C. A variance is required for the 650-4-100D(v) for the northern horizontal curve radii which is proposed at 100 feet instead of the Code requirement of 150 feet is approved.

D. Parking is permitted on the east side of the new road along the straightaway only. Post no-parking signs accordingly.

4. Work with city staff to finalize the Landscape Plan.

5. Utilize the street lighting standard that was approved for the Water's Edge development along the new public street (Halophane GBLF3).

6. Install the multi-use path as part of the first phase of construction.

7. Plat of Subdivision:

   A. Work with staff to finalize easement language for the stormwater conveyance to the basin on the City's property.

   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

City of Crystal Lake
Development Application

Office Use Only
File # _____

Project Title: Waterside at Three Oaks

Action Requested

- ___ Annexation
- X Comprehensive Plan Amendment
- ___ Conceptual PUD Review
- X Final PUD
- ___ Final PUD Amendment
- X Final Plat of Subdivision
- X Preliminary PUD
- ___ Preliminary Plat of Subdivision
- X Rezoning
- ___ Special Use Permit
- X Variation
- ___ Other

Petitioner Information

Name: CalAtlantic Group, LLC
Address: 1700 E. Golf Rd., Suite 1100
Schaumburg, IL 60173
Phone: 224-293-3115
Fax: _____
E-mail: richard.murphy@lennar.com

Owner Information (if different)

Name: Curran Group, Inc.
Address: 286 Memorial Court
Crystal Lake, IL 60014
Phone: 815-455-5100
Fax: _____
E-mail: tcurran@currangroup.com

Property Information

Project Description: Project is a townhome development of 20 buildings with a total of 107 units on a vacant 10.5 acre parcel. Buiildings will have from 4 to 6 units.

Project Address/Location: Project is located on the northeast corner of the intersection of Berkshire Drive and Main Street on the shore of the Three Oaks Recreation Area. The Site Address is 7502 S. Main Street, Crystal Lake.

PIN Number(s): 19-09-100-029, 19-09-100-028

Development Team

Please include address, phone, fax and e-mail

Developer: CalAtlantic Group, LLC , 1700 E. Golf Road, Suite 1100, Schaumburg, IL 60173; 224-293-3100

Architect: CalAtlantic Group, LLC , 1700 E. Golf Road, Suite 1100, Schaumburg, IL 60173; 224-293-3100

Attorney: Lisa M. Waggoner, Four North Walkup Ave, Crystal Lake, IL 60014; 815-477-0830; (FAX) 815-477-0834; lwaggoner@waggonerlawfirm.com

Engineer: Mackie Consultants, LLC, 9575 W. Higgins Rd, #500, Rosemont, IL 60018; 847-696-1400

Landscape Architect: Gary R. Weber Associates, Inc. 402 W. Liberty Dr, Wheaton, IL 60187; 630-668-7197

Planner: Gary R. Weber Associates, Inc. 402 W. Liberty Dr, Wheaton, IL 60187; 630-668-7197

Surveyor: Mackie Consultants, LLC, 9575 W. Higgins Rd, #500, Rosemont, IL 60018; 847-696-1400

Other:

Signatures CalAtlantic Group, LLC

By: Richard L. Murphy Richard L. Murphy 9/16/24

PETITIONER: Print and Sign name (*if different from owner*) **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.

Curran Group, Inc. by: Timothy J. Curran Exec. V.P. 9/16/24

OWNER: Print and Sign name **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

CRYSTAL LAKE PLANNING AND ZONING COMMISSION
WEDNESDAY, JANUARY 15, 2025
HELD AT THE CRYSTAL LAKE CITY COUNCIL CHAMBERS

The meeting was called to order by Mr. Greenman at 7:00 p.m.

CALL TO ORDER

On roll call, members Greenman, Gronow, Mason, Repholz, Skluzacek, Smith, and Teetsov were present.

Kathryn Cowlin, Director of Community Development and Elizabeth Maxwell, City Planner was present from Staff.

Mr. Greenman said this meeting is being recorded for broadcast and future playback on the City's cable channel. He led the group in the Pledge of Allegiance.

2024-180 – WATERSIDE – 775 MAIN STREET – COMPREHENSIVE LAND USE PLAN MAP AMENDMENT, REZONING, PRELIMINARY AND FINAL PLANNED UNIT DEVELOPMENT AND FINAL PLAT OF SUBDIVISION

Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential, Rezoning from M PUD Manufacturing to R-3B PUD Multi-Family Residential, Preliminary and Final Planned Unit Development for a 107-unit townhome development, and Final Plat of Subdivision.

Lisa Waggoner, attorney, Rick Murphy, developer with Lennar, and Rich Olson, land planner with Gary Webber, and Madeline Larman, engineer with Mackie Consultants.

Rick Murphy said that CalAtlantic Homes, Lennar, is doing well here. Their goal is to get people in home in good communities. He said these will be around $400,000. He went through the rendered plan and explained how it is a good transition use to the park.

Rich Olson talked about the layout and they highlighted the facades will face the outside loop of the street. There are homes adjacent to the courtyards. The balcony view is into the green space. These are all rear loaded. He showed a better rendering of the park space. He noted it looks small on the plan, but it is very large. They have added a lot of landscape around the buildings.

Mr. Murphy went through the architecture.

Ms. Waggoner went through the request and the Findings of Fact. She said you cannot see the side elevations so to put windows there is not needed. They have a lot of windows on the front and back elevations.

Madeline Larman explained the horizontal curve variation to the roadway. Ms. Waggoner also noted they have a variation from the growth management plan.

Mr. Greenman opened the public hearing. There being no one in the audience wishing to speak, Mr. Greenman closed the public hearing.

Ms. Cowlin summarized the request. She explained the location and use of the City's property for the detention. The petitioner would be improving it and the City would retain ownership. She noted the work they have done since the conceptual meeting. She discussed the conditions of approval noting the need to enhance the side elevations. They need to add another connection to the trail that will be around the City's Three Oaks Recreation Area. There will also be a safer crossing at the signalized intersection. In addition the street lights along the road will match the Three Oaks roadway lights.

Mr. Smith said he is excited for the development of this parcel. He had some questions about the horizontal curve variation and if vehicles can park along the roadways. Ms. Larman said that there is still enough room for emergency vehicles and parked cars along the straight sections of the roadway. Mr. Smith wants to make sure the parking is appropriately located.

Mr. Skluzacek likes what is planned and is in support of the project.

Ms. Repholz asked how many units were proposed during the conceptual. There was 108 units proposed and now there are a107 units. She wanted to know if their outside space was just the balcony area. She said the bay window is an indicator of a well done project and make the home look custom. She can only see that the additional windows or a larger bay window would add to the value. This will be a small investment with a big return.

Ms. Teetsov said she is glad not all the color schemes are grey. They need to do something with the side elevations. She suggested a black railing on the rear balcony to match the front railing.

Ms. Mason asked what size evergreens are being planted. They will be at the code standard of six (6) feet. Mr. Murphy said they could look at a larger size. Some along Main Street are upsizedto eight (8) feet. The two windows on the side will be covered up by landscape.

Ms. Repholz said these two little windows are on the other projects. Mr. Murphy said the larger windows would be detrimental to buyers. There will be many pitfalls and they will need to discount these units. Ms. Repholz said you should not just want to mass produce these.

Ms. Mason said to make sure that cars cannot drive into the park space. Mr. Olson said there is a ring of evergreen trees there as a buffer from the road to the playground area.

Mr. Gronow is generally in favor of the request. He thinks the density is okay. What is the size of these units? They are similar to the Preston Pines units. He said the end elevations are a concern and why are they unable to add windows to the second story. Mr. Murphy said it would block where furniture could go. Mr. Gronow noted that that they can have windows to the sides that still leaves space for the bed or furniture.

Acknowledgement Form

Regarding **Waterside at Three Oaks Project.** Please check one of the choices and sign below.

- [X] I hereby acknowledge that I have read, understand, and agree to the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable).

- [ ] I hereby acknowledge that I have read, understand, and agree to most of the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable) but have concerns with the following items:

_____

_____

_____

_____

_____

_____

CalAtlantic Group, LLC

Petitioner's Name: Richard J. Murphy Date: 1/29/25

Signature

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
   B. Site Plan (Gary R. Weber Associates, Inc., dated 12/18/2024)
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   J. Traffic Study (Gewalt Hamilton, dated 12/03/2024)

2. Elevations:
   A. ~~Add windows to the side elevations to meet the 10% glazing requirement~~. **Work with staff on City desired mitigation measures that would meet the intent of the 10% glazing requirement. (Amended by PZC)**
   B. All units are to be constructed with premium vinyl siding (0.044 or greater) and installed properly with long runs in order to allow for movement during temperature changes.

3. Site Plan:
   A. Extend the sidewalk from pod 20 to the 8-foot path to allow a second access point to the Three Oaks Recreation Area trail for the residents.
   B. Per the traffic study, the proposed crosswalk with pedestrian sign head upgrades on the north leg of the intersection of Main Street and Berkshire Drive will need to be installed as part of the townhouse development.
   C. A variance is required for the 650-4-100D(v) for the northern horizontal curve radii which is proposed at 100 feet instead of the Code requirement of 150 feet is approved.
   D. Parking is permitted on the east side of the new road along the straightaway only. Post no-parking signs accordingly.

4. Work with city staff to finalize the Landscape Plan.

5. Utilize the street lighting standard that was approved for the Water's Edge development along the new public street (Halophane GBLF3).

6. Install the multi-use path as part of the first phase of construction.

7. Plat of Subdivision:
   A. Work with staff to finalize easement language for the stormwater conveyance to the basin on the City's property.
   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

Mr. Greenman recapped the discussion. He appreciates that they did work on the site. He wants them to have a great product and be highly successful. He wants them to go back and figure out how to meet the glazing requirements on the side elevations. There are some creative opportunities out there are they are missing out. The trees would need to be 16 feet high to break up the façade.

Mr. Smith made a motion to approve the Comprehensive Land Use Plan Map Amendment from Commerce to High Density Residential, Rezoning from M PUD Manufacturing to R-3B PUD Multi-Family Residential, Preliminary and Final Planned Unit Development for a 107-unit townhome development, and Final Plat of Subdivision with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Lennar Corporation, dated 09/16/2024, received 09/17/2024)
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   B. The City will work with the petitioner to dedicate right-of-way and transfer ownership of outlot A.

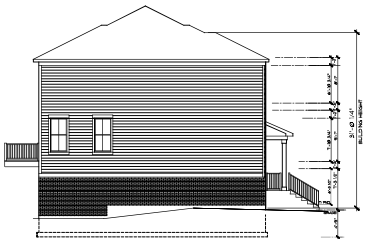
8. Provide Covenants, Codes and Restrictions for staff review.

9. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Public Works and Engineering, and Community Development Departments in addition to those of the City's stormwater consultant and traffic consultant.

Ms. Repholz seconded the motion. On roll call vote Members Greenman, Gronow, Mason, Repholz, Skluzacek, Smith, and Teetsov voted aye. Motion passed.

ADJOURNMENT

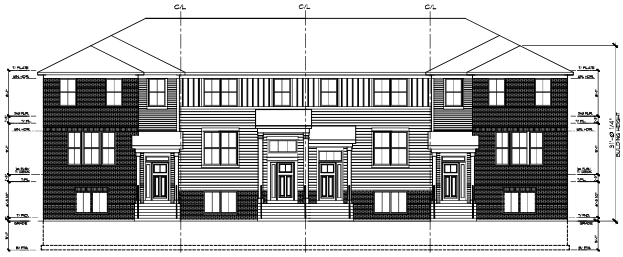
Ms. Teetsov made a motion to adjourn the meeting. Ms. Mason seconded the motion. On voice vote, all members voted aye. The meeting was adjourned at 9:56 p.m.



SIDE ELEVATION

LEFT CONTROL ELEVATION

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



CHELSEA ELEVATION "A"

AMHERST ELEVATION "B"

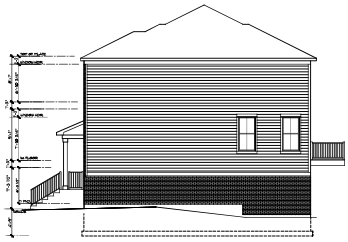
AMHERST ELEVATION "B"

CHELSEA ELEVATION "A"

FRONT CONTROL ELEVATION

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

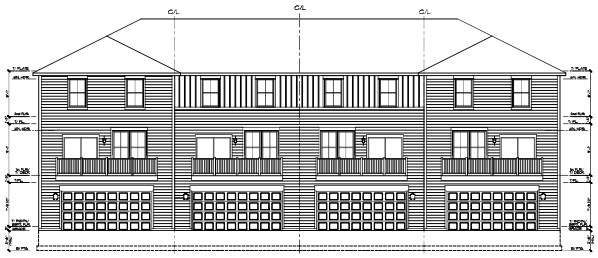
SEE INDIVIDUAL UNIT ELEVATIONS FOR MORE DETAILED DIMENSIONS AND INFORMATION.



SIDE ELEVATION

RIGHT CONTROL ELEVATION

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



CHELSEA

AMHERST

AMHERST

CHELSEA

REAR CONTROL ELEVATION

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

REVNS.	DATE	REMARKS

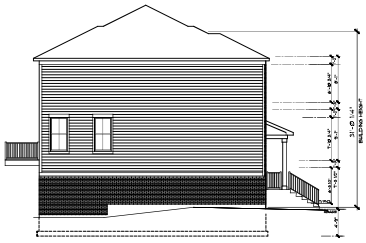
THREE OAKS
4-UNIT BLDG.

LENNAR claims copyright and other property rights to these plans and they may not be reproduced or copied in any manner.

LENNAR

JOB NO.	
DRAWN BY	DJH
DATE	07/09/10

FILE NAME	
SHEET	
MODEL	4-UNIT BUILDING
SHEET NO.	C3
SHEET DESCRIPTION	CONTROL ELEVATIONS



LEFT CONTROL ELEVATION

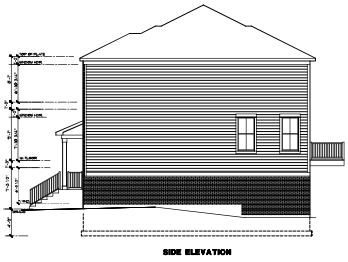
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FRONT CONTROL ELEVATION

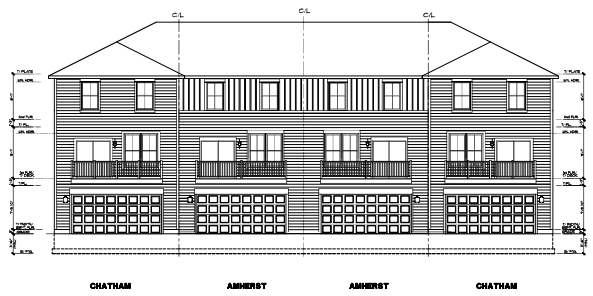
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SEE INDIVIDUAL UNIT ELEVATIONS FOR MORE DETAILED DIMENSIONS AND INFORMATION.



RIGHT CONTROL ELEVATION

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



REAR CONTROL ELEVATION

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

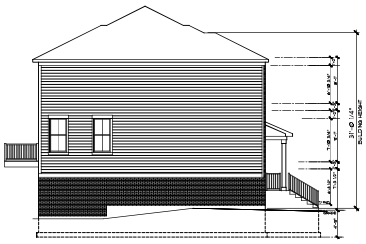
REVNS.	DATE	REMARKS

THREE OAKS
4-UNIT BLDG.

LENNAR retains copyright and other property rights to these plans and they may not be reproduced or copied in any manner.

LENNAR

MODEL: ALT. 4-UNIT BUILDING
SHEET TITLE: CONTROL ELEVATIONS
SHEET NO.: C3a
DRAWN BY: DJH
JOB NO.:
OPTION DESCRIPTION:
SELECTIONS:
FILE NAME:
DATE:



LEFT CONTROL ELEVATION

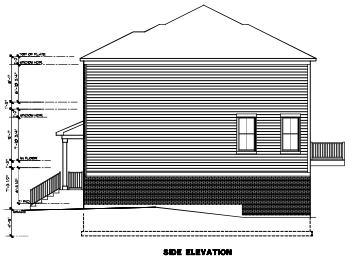
SCALE: 1/8" = 1'-0"



FRONT CONTROL ELEVATION

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

SEE: INDIVIDUAL UNIT ELEVATIONS FOR MORE DETAILED DIMENSIONS AND INFORMATION.



RIGHT CONTROL ELEVATION

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



REAR CONTROL ELEVATION

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

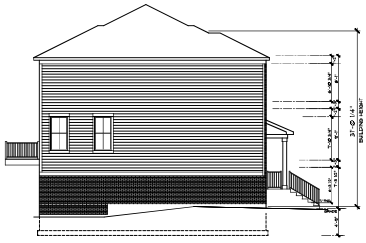
REVNS.	DATE	REMARKS

THREE OAKS
5-UNIT BLDG.

LENNAR Homes considers its drawings and designs to be proprietary and the property rights to these drawings are not to be reproduced or copied in any manner.

LENNAR

JOB NO.	
MODEL	5-UNIT BUILDING
SHEET TITLE	CONTROL ELEVATIONS
DRAWN BY	DAN
OPTION NO.	
OPTION DESCRIPTION	
FILE NAME	
SHEET	
SHEET NO.	C8



LEFT CONTROL ELEVATION

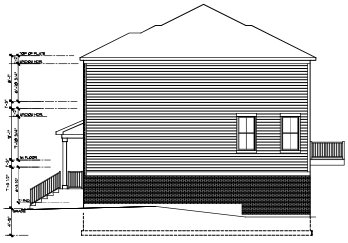
SCALE: 1/8" = 1'-0"



FRONT CONTROL ELEVATION

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

SEE: INDIVIDUAL UNIT ELEVATIONS FOR MORE DETAILED DIMENSIONS AND INFORMATION.



RIGHT CONTROL ELEVATION

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



REAR CONTROL ELEVATION

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

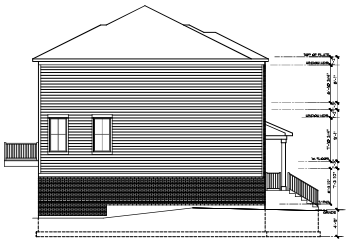
REVNS. | DATE | REMARKS

THREE OAKS
5-UNIT BLDG.

LENNAR Homes considers its plans to be copyrighted, and owns the property rights to these plans. These plans are not to be reproduced or copied in any manner whatsoever.

LENNAR

MODEL: ALT. 5-UNIT BUILDING
SHEET TITLE: CONTROL ELEVATIONS
SHEET NO.: C6a
DRAWN BY: DJH
JOB NO.:
DATE:
FILE NAME:
PLOT:



SIDE ELEVATION

LEFT CONTROL ELEVATION

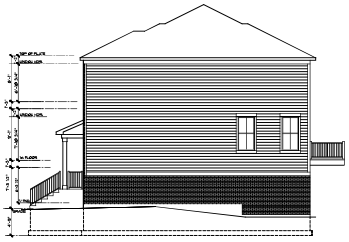
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FRONT CONTROL ELEVATION

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

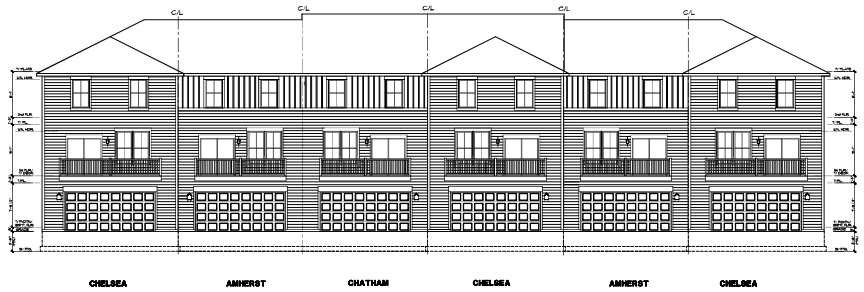
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SIDE ELEVATION

RIGHT CONTROL ELEVATION

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



REAR CONTROL ELEVATION

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

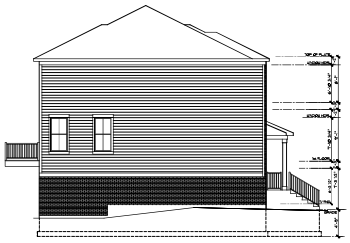
REVIS.	DATE	REMARKS

THREE OAKS
6-UNIT BLDG.

LENNAR retains all copyright and other property rights to these plans. These plans are not to be reproduced or copied in any manner whatsoever.

LENNAR

MODEL: 6-UNIT BUILDING
SHEET TITLE: CONTROL ELEVATIONS
SHEET NO.: C9
DRAWN BY: DJH
JOB NO.:
OPTION DESCRIPTION:
FILE NAME:
PLOT:



SIDE ELEVATION

LEFT CONTROL ELEVATION

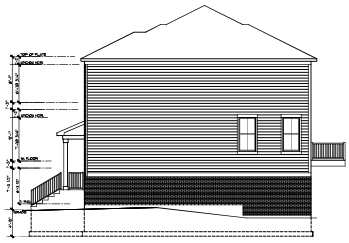
SCALE: 1/8" = 1'-0"



FRONT CONTROL ELEVATION

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

SEE: INDIVIDUAL UNIT ELEVATIONS FOR MORE DETAILED DIMENSIONS AND INFORMATION.



SIDE ELEVATION

RIGHT CONTROL ELEVATION

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



REAR CONTROL ELEVATION

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

REVIS.	DATE	REMARKS

THREE OAKS
6-UNIT BLDG.

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LENNAR

JOB NO.	
MODEL	6-UNIT BUILDING
SHEET TITLE	CONTROL ELEVATIONS
SHEET NO.	C9a
DRAWN BY	DJH
CHECKED BY	
DATE	
FILE NAME	
PLOT DESCRIPTION	



Waterside at Three Oaks

Floorplan	Amherst	Chatham	Chelsea
Square Footage	1,764	1,894/2,039	2,221/2,175
Bedrooms	3.0	3.0	3.0
Bathrooms	2.5	2.5	2.5
Garage	2.0	2.0	2.0

Building Materials

- .042/.044 Vinyl Siding per plan
- Band Boards & Window Grids per plan
- Brick veneer on front and side elevation per plan (multiple colors available)
- Cultured stone on front elevations per plan
- Front elevations with dormers, porch columns, pillars, shutters etc.
- 30-year architectural shingles
- Fully sodded front, side, and rear yards
- 13D Sprinkler system

Designer Spec Level

- Vinyl Plank Flooring at all hard surfaces
- Standard 42” kitchen cabinet height
- Single-bowl large kitchen sink
- Quartz countertops throughout
- Double bowl sinks in owner’s bathroom
- 9’ ceiling height for first floor (standard)
- Oak rail and metal spindle
- Deluxe shower and bathroom – Ceramic base with ceramic wall tile to ceiling, brushed nickel trim on shower door
- Stainless steel kitchen equipment

Waterside at Three Oaks

Six-unit townhomes

Six-unit townhomes – Color option A



Six-unit townhomes (A) – Rear Right



Six-unit townhomes (A) – Rear Left



Six-unit townhomes – Color Option B



Six-unit townhomes (B) – Rear Right



Six-unit townhomes (B) – Rear Left



Waterside at Three Oaks

Five-unit townhomes

Five-unit townhomes – Color Option ‘A’



Five-unit townhomes – Rear Left (A)



Five-unit townhomes – Rear Right (A)



Five-unit townhomes – Color Option ‘B’



Five-unit townhomes – Rear Left (B)

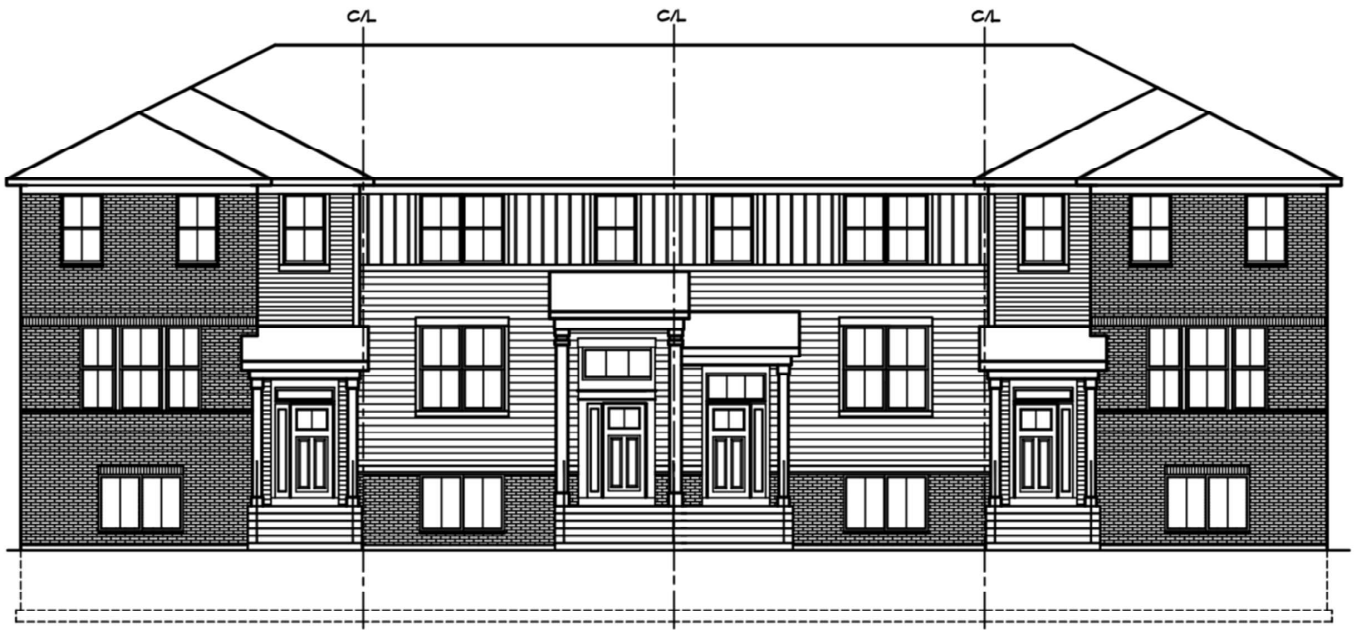


Five-unit townhomes – Rear Right (B)



Waterside at Three Oaks

Four-unit townhomes



*Renderings do not capture front porch elevation difference.

Four-unit townhomes – Color Option ‘A’



*Renderings do not capture front porch elevation difference. See previous slide

Four-unit townhomes – Rear Left (A)



Four-unit townhomes – Rear Right (A)



Four-unit townhomes – Color Option ‘B’



*Renderings do not capture front porch elevation difference. See B&W slide

Four-unit townhomes – Rear Left (B)



Four-unit townhomes – Rear Right (B)



Waterside at Three Oaks

Glazing Exhibit

WATERSIDE AT THREE OAKS EXHIBIT

OVERALL GLAZING PERCENTAGES TO MEET STANDARD - ALL TYPES OVER 10%

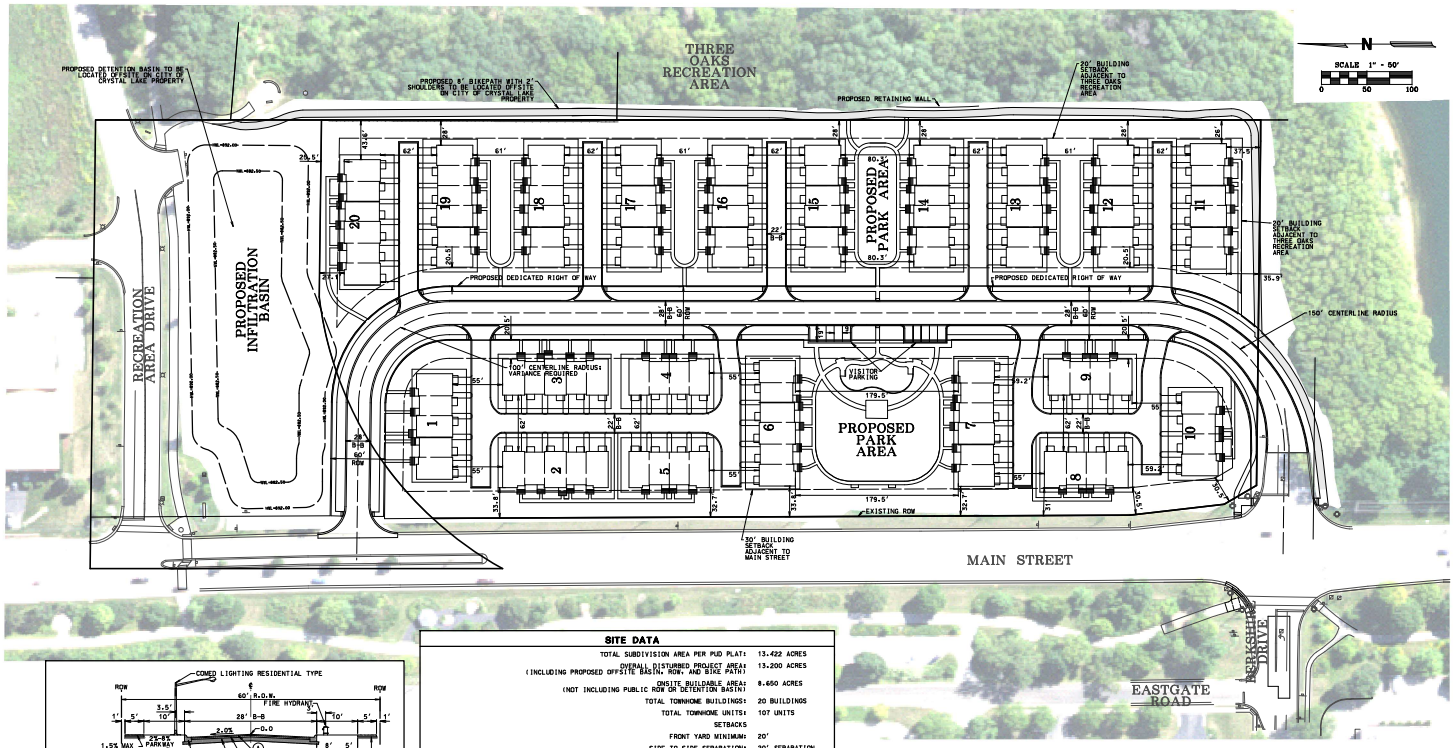
4 UNIT	Glazing		Front			Rear			Side			OVERALL		
			Glazed	Total	%	Glazed	Total	%	Glazed	Total	%	GLAZED	TOTAL	%
1	Chelsea	End	117	516	22.7%	106	543	19.5%	36	1035	3.5%	259	2094	12.4%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Chelsea	End	117	516	22.7%	106	543	19.5%	36	1035	3.5%	259	2094	12.4%
													OVERALL	15.4%

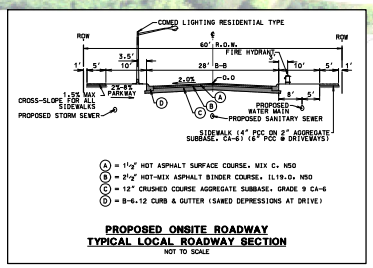
5 UNIT	Glazing		Front			Rear			Side			OVERALL		
			Glazed	Total	%	Glazed	Total	%	Glazed	Total	%	GLAZED	TOTAL	%
1	Chelsea	End	117	516	22.7%	106	543	19.5%	36	1035	3.5%	259	2094	12.4%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Chelsea	Interior	117	516	22.7%	106	543	19.5%				223	1059	21.1%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Chelsea	End	117	516	22.7%	106	543	19.5%	36	1035	3.5%	259	2094	12.4%
													OVERALL	16.2%

6 UNIT	Glazing		Front			Rear			Side			OVERALL		
			Glazed	Total	%	Glazed	Total	%	Glazed	Total	%	GLAZED	TOTAL	%
1	Chatham	End	117	464	25.2%	106	489	21.7%	36	1035	3.5%	259	1988	13.0%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Chelsea	Interior	117	516	22.7%	106	543	19.5%				223	1059	21.1%
1	Chatham	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Amherst	Interior	105	468	22.4%	106	489	21.7%				211	957	22.0%
1	Chatham	End	117	464	25.2%	106	489	21.7%	36	1035	3.5%	259	1988	13.0%
													OVERALL	17.4%

Glazing ratio is simply the ratio of window to wall in a building. It affects the energy utilization of a home.

End units naturally have a lower glazing ratio due to a higher wall surface area. However, Lennar's end units have a ratio above the minimum 10%





PROPOSED ONSITE ROADWAY
TYPICAL LOCAL ROADWAY SECTION
NOT TO SCALE

SITE DATA

TOTAL SUBDIVISION AREA PER PUD PLAT:	13.422 ACRES
OVERALL DISTURBED PROJECT AREA: (INCLUDING PROPOSED OFFSITE BASIN, ROW, AND BIKE PATH)	13.200 ACRES
ONSITE BUILDABLE AREA: (NOT INCLUDING PUBLIC ROW OR DETENTION BASIN)	8.650 ACRES
TOTAL TOWNHOME BUILDINGS:	20 BUILDINGS
TOTAL TOWNHOME UNITS:	107 UNITS
SETBACKS	
FRONT YARD MINIMUM:	20'
SIDE TO SIDE SEPARATION:	30' SEPARATION
FRONT TO SIDE SEPARATION:	55' SEPARATION
REAR TO REAR SEPARATION:	60' SEPARATION
FRONT TO FRONT SEPARATION:	60' SEPARATION
MINIMUM YARD ABUTTING MAIN STREET SETBACK:	30'
MINIMUM HORIZONTAL CURVE:	100'
BUILDING 4 AND 5 (4-UNIT) DIMENSION:	40' x 88.5'
BUILDING 8, 9, AND 10 (4-UNIT) DIMENSION:	40' x 92.5'
BUILDING 1, 2, AND 3 (5-UNIT) DIMENSION:	40' x 116.5'
BUILDING 6, 7, 11-20 (6-UNIT) DIMENSION:	40' x 134.5'
BUILDING 10-19 (6-UNIT) DIMENSION:	40' x 138.5'
TYPICAL PARKING STALL DIMENSION:	9' x 19'
TYPICAL DRIVEWAY DIMENSION:	16.25' x 21'
MAXIMUM NET DENSITY USING ONSITE BUILDABLE AREA (DU/ACRE):	12.37 DU/ACRE
MAXIMUM BUILDING COVERAGE:	30%
MAXIMUM IMPERVIOUS SURFACE COVERAGE:	65%
FLOOR AREA RATIO:	0.60

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9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

CLIENT:
LENNAR
1700 E. GOLF ROAD, SUITE 100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

DATE	DESCRIPTION OF REVISION	BY
12-18-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/13/2024
SCALE	1" = 50'

PUD SITE PLAN
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 1 OF 1

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000984

Final Landscape Plan

WATERSIDE AT THREE OAKS

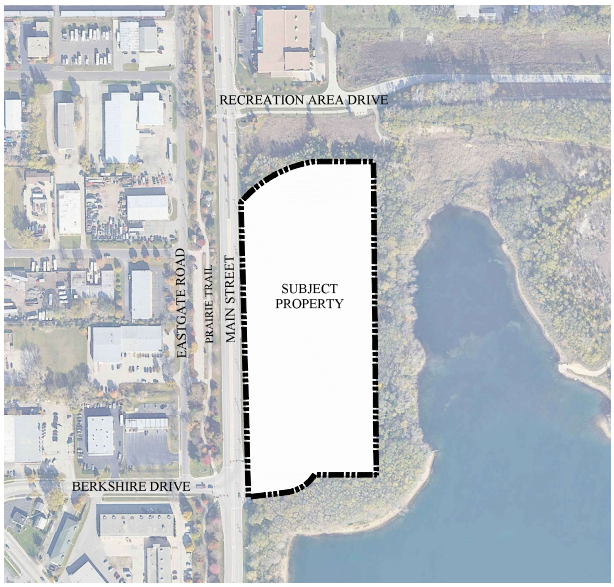
Crystal Lake, Illinois

December 19, 2024

CONSULTANTS:

LANDSCAPE ARCHITECT:
GARY R. WEBER ASSOCIATES, INC
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187

CIVIL ENGINEER:
MACKIE CONSULTANTS, LLC.
9575 W. HIGGINS ROAD, SUITE 500
ROSEMONT, ILLINOIS 60018

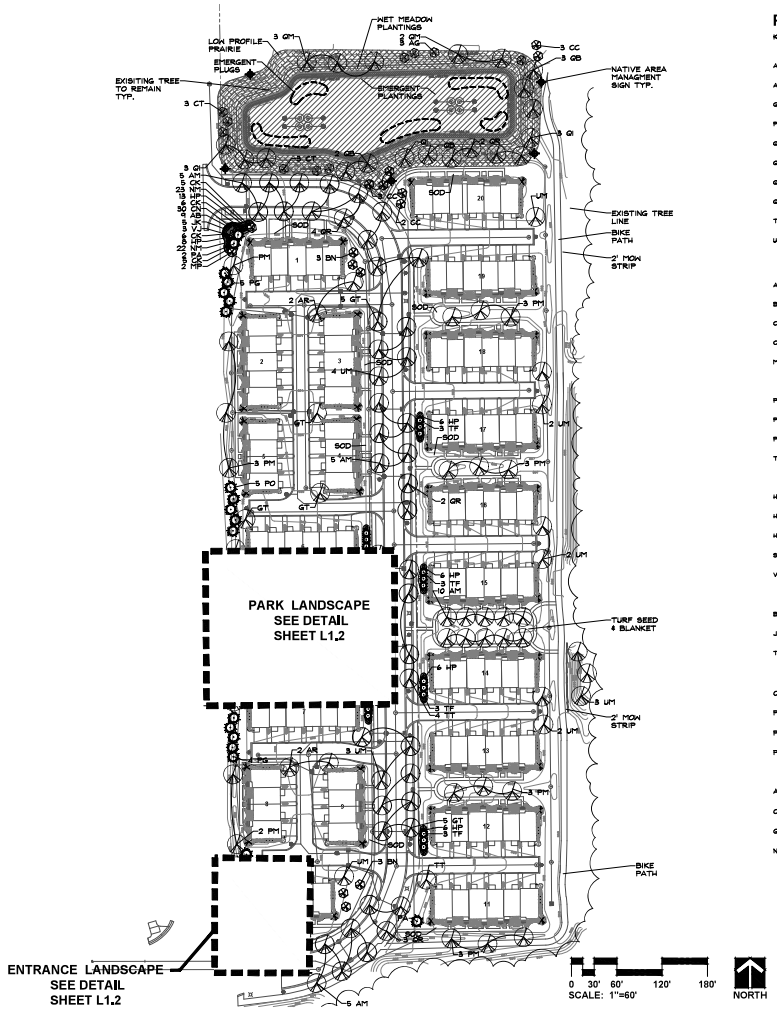


LOCATION MAP
SCALE: 1"=150'

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
L1.0	COVER SHEET
L1.1	OVERALL LANDSCAPE PLAN
L1.2	LANDSCAPE DETAILS
L1.3	AMENITY LAYOUT PLAN
L1.4	AMENITY CALLOUT PLAN
L1.5	AMENITY DETAILS
L1.6	TYPICAL TOWNHOME FOUNDATION PLANS
L1.7	TYPICAL TOWNHOME FOUNDATION PLANS
L1.8	MONUMENT DETAILS
L1.9	TREE PRESERVATION PLAN
L1.10	TREE INVENTORY
L1.11	SEED & SOD EXHIBIT
L1.12	SPECIFICATIONS
L1.13	SPECIFICATIONS

LENNAR®



NATIVE LEGEND

Key	Qty	Description
	.7 AC.	LOW PROFILE PRAIRIE SEED MIX
	.7 AC.	EMERGENT SEED MIX
	.1 AC.	WET MEADOW SEED MIX
	5	NSMA SIGN
	.1 AC.	EMERGENT PLUG LIMITS

GENERAL LANDSCAPE NOTES

1. Contractor shall verify underground utility lines and is responsible for any damage.
2. Contractor shall verify all existing conditions in the field prior to construction and shall notify landscape architect of any variance.
3. Material quantities shown are for contractors convenience only. The Contractor must verify all material and supply sufficient materials to complete the job per plan.
4. The landscape architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements of variety, size and quality.
5. Work shall conform to American Standard for Nursery Stock, State of Illinois Horticultural Standards, and Local Municipal requirements.
6. Contractor shall secure and pay for all permits, fees, and inspections necessary for the proper execution of this work and comply with all codes applicable to this work.
7. See General Conditions and Specifications for landscape work for additional requirements.

PLANT LIST

Key	Qty	Botanical/Common Name	Size	Remarks
		SHADE TREES		
AR	15	Acer x freemanii 'Redpointe' REDPOINTE MAPLE	2 1/2" Cal.	
AM	25	Acer miyabei 'Morton' STATE STREET MAPLE	2 1/2" Cal.	
GT	13	Gleditsia triacanthos var. inermis 'Skycole' SKYLINE HONEYLOCUST	2 1/2" Cal.	
PM	15	Platanus x acerifolia 'Morton Circle' EXCLAMATION! LONDON PLANETREE	2 1/2" Cal.	
QB	6	Quercus bicolor SWAMP WHITE OAK	2 1/2" Cal.	
QI	7	Quercus imbricaria SHINGLE OAK	2 1/2" Cal.	
QM	5	Quercus macrocarpa BURR OAK	2 1/2" Cal.	
QR	15	Quercus rubra RED OAK	2 1/2" Cal.	
TT	7	Tilia tomentosa 'Sterling' STERLING SILVER LINDEN	2 1/2" Cal.	
UM	14	Ulmus 'Morton Glossy' TRIUMPH ELM	2 1/2" Cal.	
		ORNAMENTAL TREES		
AG	6	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Clump Form
BN	6	Betula nigra 'Cully' HERITAGE RIVER BIRCH	6' Ht.	Multi-Stem
CC	14	Cercis canadensis EASTERN REDBUD	6' Ht.	Multi-Stem
CT	6	Crataegus crusgalli var. inermis THORNLESS COCKSPUR HAWTHORN	2" Cal.	Single Stem
MP	5	Malus 'Prairifire' PRAIRIFIRE CRABAPPLE	6' Ht.	Multi-Stem
		EVERGREEN TREES		
PA	11	Picea abies NORWAY SPRUCE	8' Ht.	
PG	16	Picea glauca var. densata BLACK HILLS SPRUCE	8' Ht.	
PO	13	Picea omorika SERBIAN SPRUCE	8' Ht.	
TF	21	Thuja occidentalis 'Fairview' FAIRVIEW ARBORVITAE	8' Ht.	
		DECIDUOUS SHRUBS		
HA	27	Hydrangea arborescens 'Abetwo' INCREDIBALL HYDRANGEA	24" Tall	4' O.C.
HJ	7	Hydrangea paniculata 'Jane' LITTLE LIME HYDRANGEA	24" Tall	4' O.C.
HP	57	Hydrangea paniculata 'SMHPLQF' LITTLE QUICK FIRE HYDRANGEA	24" Tall	5' O.C.
SM	12	Syringa meyeri 'Palibin' DWARF KOREAN LILAC	24" Tall	4' O.C.
VJ	3	Viburnum x juddii JUDD VIBURNUM	36" Tall	4' O.C.
		EVERGREEN SHRUBS		
BG	6	Buxus 'Green Velvet' GREEN VELVET BOXWOOD	18" Wide	30" O.C.
JK	10	Juniperus chinensis 'Kallays Compact' KALLAYS COMPACT PFITZER JUNIPER	24" Wide	4' O.C.
TM	10	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		ORNAMENTAL GRASSES		
CK	35	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
PV	42	Panicum virgatum 'Northwind' NORTHWIND SWITCHGRASS	#1	30" O.C.
PB	24	Pennisetum alopecuroides 'Dwarf Burgundy' DWARF BURGUNDY BUNNY FOUNTAIN GRASS	#1	24" O.C.
PE	64	Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS	#1	24" O.C.
		PERENNIALS		
AB	121	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
CN	138	Calamintha nepeta ssp. nepeta LESSER CALAMINT	#1	18" O.C.
GM	97	Geranium macrorrhizum 'Bevan's Variety' BEVAN'S BIGROOT GERANIUM	#1	18" O.C.
NM	48	Nepeta racemosa 'Walker's Low' WALKER'S LOW CATMINT	#1	18" O.C.
		MISC. MATERIALS		
	87	SHREDDED HARDWOOD MULCH	C.Y.	
	12,021	SOD	S.Y.	
	1.2	TURF SEED & EROSION CONTROL BLANKET	AC.	

GARY R. WEBER ASSOCIATES, INC.
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SUITE 600
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WATERSIDE AT THREE OAKS

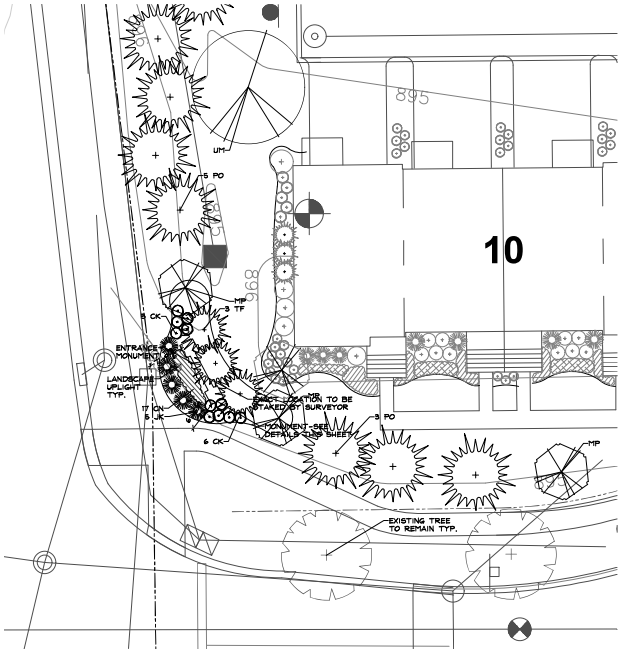
CRYSTAL LAKE, ILLINOIS

OVERALL LANDSCAPE PLAN

2	12.19.2024
1	11.25.2024

REVISIONS

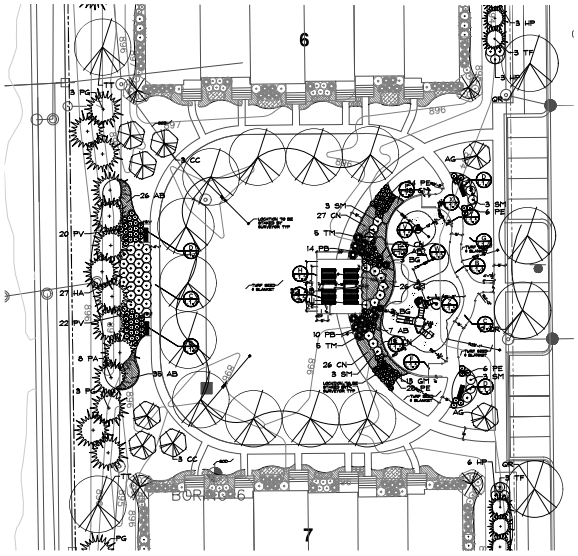
DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.1



ENTRANCE PLANTING DETAIL

0 10' 10' 20' 30'
SCALE: 1"=10'

NORTH



PARK PLANTING DETAIL

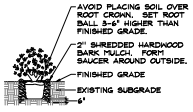
0 10' 20' 40' 60'
SCALE: 1"=20'

NORTH

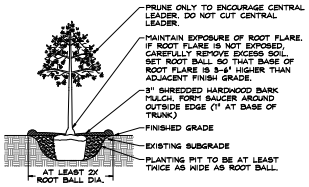
PLANTING DETAILS



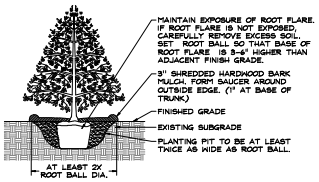
PERENNIALS AND GROUNDCOVERS
NOT TO SCALE



DECIDUOUS AND EVERGREEN SHRUBS
NOT TO SCALE



DECIDUOUS TREES
NOT TO SCALE



EVERGREEN TREES
NOT TO SCALE

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WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

LANDSCAPE DETAILS

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.2

NATIVE PLANTING LIST

Emergent Wetland Plant Mix

Shoreline Emergent
Stormwater basin bottoms from NWL to 4" below NWL

Botanical Name	Common Name	lbs / AC	Plugs / AC.
Alisma subcordatum	Water Plantain	1.250	494
Carex comosa	Bristly Sedge	0.125	494
Carex vulpinoidea	Fox Sedge	0.250	988
Eleocharis obtusa	Blunt Spike Rush	0.250	494
Iris virginica shrevei	Blue Flag	0.500	988
Juncus effusus	Common Rush	0.500	494
Juncus torreyi	Torreys Rush	0.125	494
Leersia oryzoides	Rice Cut Grass	1.250	494
Pontederia cordata	Pickerel Weed	0.250	988
Sagittaria latifolia	Common Arrowhead	1.250	494
	Total Emergent Wetland Mix	**5.750**	**6422**

Deep Water Emergent
Stormwater basin bottoms from 4" to 12" below NWL

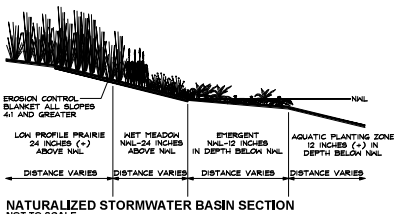
Botanical Name	Common Name	Plugs / AC.
Acorus americanus	Sweet Flag	988
Scirpus acutus	Hardstem Bulrush	988
Scirpus fluviatilis	River Bulrush	988
Schoenoplectus pungens	Chairmakers Rush	988
Schoenoplectus tabernaemontani	Softstem Bulrush	988
Sparganium eurycarpum	Bur Reed	988
	Total Emergent Wetland Mix	**5930**

Wet Meadow Seed Mixture
Lower slopes of basin

Botanical Name	Common Name	lbs / AC
Grasses / Sedges		
Carex bebbii	Bebbs Oval Sedge	0.250
Carex bicknellii	Bicknells Sedge	0.125
Carex brevior	Plains Oval Sedge	0.250
Carex crinitella	Crested Oval Sedge	0.050
Carex molesta	Field Oval Sedge	0.250
Carex normalis	Spreading Oval Sedge	0.045
Carex scoparia	Pointed Broom Sedge	0.190
Carex stipata	Common Fox Sedge	0.060
Carex vulpinoidea	Brown Fox Sedge	0.250
Elymus virginicus	Virginia Wild Rye	3.000
Glyceria striata	Fowl Manna Grass	0.130
Juncus dudleyi	Dudleys Rush	0.020
Juncus torreyi	Torreys Rush	0.031
Panicum virgatum	Switch Grass	3.000
Scirpus atrovirens	Dark Green Bulrush	0.060
Scirpus cyperinus	Wool Grass	0.030
	Total Grasses / Sedges	**7.721**
Wildflowers/Broadleaves		
Asclepias incarnata	Swamp Milkweed	0.125
Bidens cernua	Nodding Bur Marigold	0.190
Boltonia asteroids	False Aster	0.031
Chamaecrista fasciculata	Partridge pea	0.188
Eutrochium grandiflola	Grasslleaved Goldenrod	0.300
Eupatorium perfoliatum	Common Boneset	0.015
Helenium autumnale	Sneezeweed	0.063
Iris virginica shrevei	Blue Flag Iris	1.000
Lobelia siphilica	Great Blue Lobelia	0.031
Mimulus ringens	Monkey Flower	0.031
Symphyotrichium novae-angliae	New England Aster	0.250
Pycnanthemum virginianum	Common Mountain Mint	0.063
Ratibecka fulgida var. sullvantii	Showy Black-Eyed Susan	0.250
Zizia aurea	Golden Alexanders	0.500
	Total Forbs	**3.037**
	Total Wet Meadow Seed Mix	**10.758**

Low Profile Prairie with Flowers Seed Mix
lower basin slopes

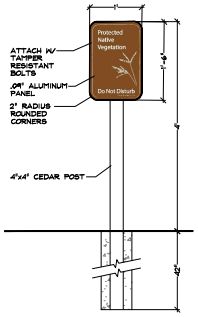
Botanical Name	Common Name	lbs / AC
Grasses		
Bouteloua curtipendula	Side Oats Grama	5.000
Panicum virgatum	Prairie Switch Grass	0.125
Elymus trachycaulus	Slender Wheatgrass	2.000
Elymus canadensis	Prairie Wild Rye	1.000
Schizachyrium scoparium	Little Bluestem	5.000
	Total Grasses	**17.125**
Wildflowers/Broadleaves		
Allium cernuum	Nodding Wild Onion	0.190
Amorpha canscens	Lead Plant	0.125
Asclepia canadensis	Whorled Milkweed	0.063
Asclepias tuberosa	Butterflyweed	0.500
Astragalus canadensis	Canada Milk Vetch	0.063
Coreopsis palmata	Prairie Coreopsis	0.025
Echinacea pallida	Pale Purple Coneflower	1.000
Echinacea purpurea	Purple Coneflower	0.500
Eryngium yuccifolium	Rattlesnake Master	0.125
Lespedeza capitata	Round-Headed Bush Clover	0.125
Liatris aspera	Rough Blazing Star	0.250
Liatris pycnostachya	Prairie Blazing Star	0.188
Monarda fistulosa	Rattlesnake Master	0.063
Parthenium integrifolium	Wild Quinine	0.010
Penstemon digitalis	Foxglove Beard Tongue	0.125
Petalostemum candidum	White Prairie Clover	0.125
Petalostemum purpureum	Purple Prairie Clover	0.155
Potentilla arguta	Prairie Cinquefoil	0.031
Pycnanthemum tenuifolium	Slender Mountain Mint	0.031
Ratibida pinnata	Yellow Coneflower	0.125
Ratibecka fulgida var. sullvantii	Showy Black-Eyed Susan	0.500
Ratibecka hirta	Black-Eyed Susan	0.500
Ratibecka subtomentosa	Sweet Black-Eyed Susan	0.063
Symphyotrichum laeve	Smooth Blue Aster	0.063
Tradescantia ohiensis	Common Spiderwort	0.063
Verbena stricta	Hoary Vervain	0.125
Zizia aurea	Golden Alexanders	0.500
	Total Forbs	**5.640**
	Total Low Profile Prairie Seed Mix	**22.765**



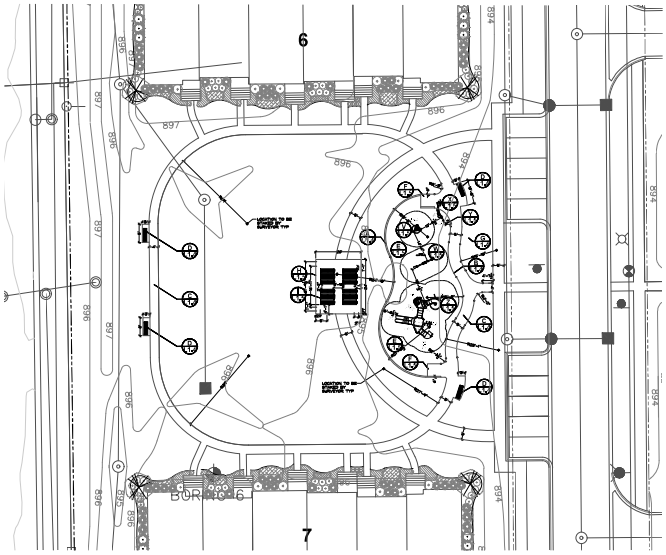
NATURALIZED STORMWATER BASIN SECTION
NOT TO SCALE

SIGN NOTES:

1. SIGN BACKGROUND COLOR: C=40, M=70, Y=100, K=28 SIGN FONT AND GRAPHIC COLOR: WHITE
2. FONT STYLE: MYRIAD PRO FONT SIZE: 116 PT.
3. SIGN ARTWORK SHALL BE PROVIDED BY GARY R. WEBER ASSOCIATES, INC.
4. CONTRACTOR TO SUBMIT SHOP DRAWING AN COLOR SAMPLE FOR THE PROTECTED NATIV VEGETATION SIGN FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO FABRICATION AND INSTALLATION.



NATIVE AREA SIGN DETAIL



PARK LAYOUT PLAN
SCALE: 1"=20'
NORTH

PLAY LOT GENERAL NOTES:

1. CONCRETE WALK. SCORE WALK IN 5' MODULES OR AS SHOWN AND PROVIDE 1/2" EXPANSION JOINTS AT 30' INTERVALS OR AS SHOWN.
2. CONCRETE WALK. EXCAVATE TO SUBGRADES INDICATED AND INSTALL NEW CONC. PITCH WALKWAY AT A MIN. 2% IN THE DIRECTION OF THE DRAINAGE PATTERN SHOWN. BACKFILL WALK WITH TOPSOIL & BLEND INTO SURROUNDING GRADE.
3. ALL CONCRETE CURVES SHALL BE SMOOTH AND CONTINUOUS AS SHOWN IN THE DRAWINGS. SHARP BENDS OR KINKS IN THE PAVEMENT SHALL BE REMOVED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
4. DASHED LINE AROUND APPARATUS COMPONENTS AND INDEPENDENT PLAY COMPONENTS REPRESENTS THE MINIMUM REQUIRED SAFETY ZONE (USE ZONE) CLEARANCE OF 6'-0" UNLESS OTHERWISE NOTED.
5. THE REQUIRED USE ZONE IN FRONT OF ALL SLIDE EXIT CHUTES SHALL EXTEND A MINIMUM DISTANCE OF THE HEIGHT OF THE SLIDE (ABOVE THE PLAYGROUND SURFACE) + 4'-0".
6. FOR PLAY APPARATUS CLUSTERS AND INDEPENDENT PLAY COMPONENTS, SEE THE APPARATUS SCHEDULE FOR ITEM DESCRIPTIONS.
7. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LINES AND IS RESPONSIBLE FOR ANY DAMAGE.
8. CONTRACTER SHALL SURVEY AND LAYOUT SIDEWALK AND CURB.
9. CONTRACTER SHALL INSTALL TEMPORARY PROTECTION FENCING WHILE UNDER CONSTRUCTION
10. CONTRACTER SHALL GRADE AND EXCAVATE AREAS NECESSARY TO INSTALL THE HARDSCAPE AND PLAY EQUIPMENT AS DETAILED.
11. CONTRACTOR SHALL GUARANTEE ALL CONCRETE FOR TWO YEARS.
12. CONTRACTOR TO VERIFY POSITIVE DRAINAGE IN ALL AREAS WITHIN LIMITS OF WORK.

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ROSEMONT, IL 60018

WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

PARK LAYOUT PLAN

REVISIONS	
1	11.25.2024
2	12.19.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.3

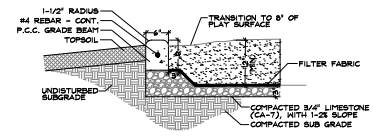
SITE FURNISHINGS SCHEDULE

ITEM	MODEL	MANUFACTURER	QUANTITY	COMMENTS/CONTACT
CONCRETE CURB			190 LF	
THICKENED EDGE			87 LF	
CONCRETE WALK & BENCH PADS			3158 SF	
6' BENCH	165-60TMR	DUMOR	4	SLATS: THERMALLY MODIFIED RED OAK COLOR: TEXTURED CHARCOAL
ENGINEERED WOOD FIBER SURFACE			9857 SF	
CONCRETE RAMP			2	
TURF DRAIN			2	
SHADE STRUCTURE	MAR-20X24	POLIGON	1	ROOF COLOR: SLATE FRAME COLOR: WHITE ROOF TYPE: MULTI-RIB
6' PICNIC TABLE	475-60TMR	DUMOR	4	SLATS: THERMALLY MODIFIED RED OAK COLOR: TEXTURED CHARCOAL

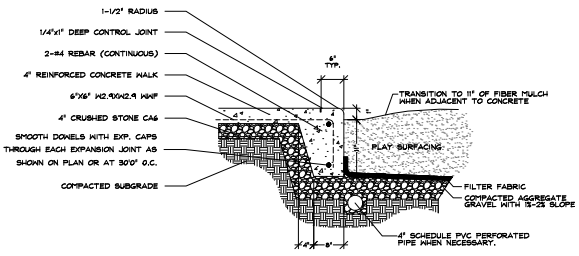
PLAY APPARATUS SCHEDULE

NOTE: INSTALL PER MANUFACTURER'S SPECIFICATION

DESCRIPTION	MODEL	MANUFACTURER	QUANTITY	COMMENTS/CONTACT
2-12 YR OLD PLAY EQUIPMENT	SEE DETAIL SHEET L1.5	LANDSCAPE STRUCTURES	1	
NAVIGATOR REACH PANEL	SEE DETAIL SHEET L1.5	LANDSCAPE STRUCTURES	1	
BONGO REACH PANEL	SEE DETAIL SHEET L1.5	LANDSCAPE STRUCTURES	1	
SEESAW 2-SEAT	SEE DETAIL SHEET L1.5	LANDSCAPE STRUCTURES	1	
WEE PLANET CLIMBER	SEE DETAIL SHEET L1.5	LANDSCAPE STRUCTURES	1	

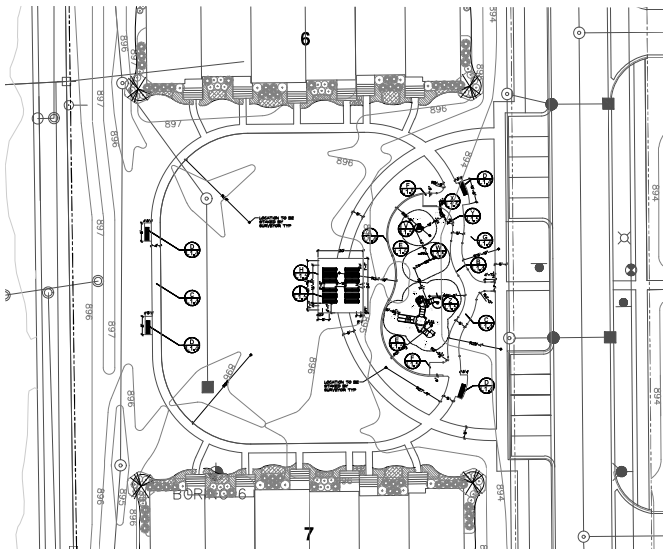


A L1.4 **CONCRETE CURB DETAIL**
SCALE: 1" = 1'-0"

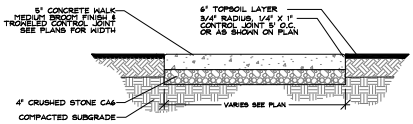


NOTE: THICKENED EDGE TO BE USED ADJACENT TO ALL PLAY AREAS

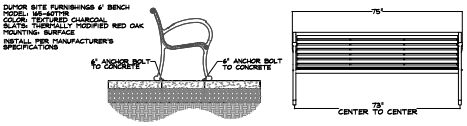
B L1.4 **THICKENED EDGE DETAIL**
SCALE: 1" = 1'-0"



PARK CALL OUT PLAN
SCALE: 1"=20'
0 10' 20' 40' 60'
NORTH



C L1.4 **CONCRETE WALK DETAIL**
SCALE: 1" = 1'-0"



D L1.4 **BENCH DETAIL**
NOT TO SCALE

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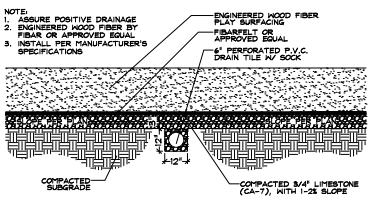
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WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

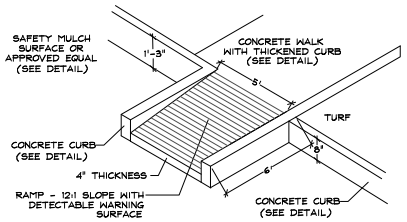
PARK PLAN

REVISIONS	
2	12.19.2024
1	11.25.2024

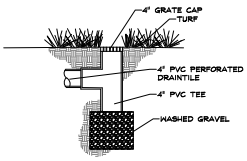
DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.4



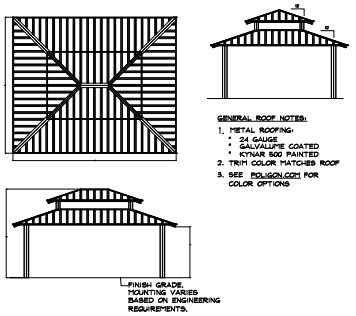
E L1.5 **ENGINEERED WOOD FIBER SURFACING DETAIL**
NOT TO SCALE



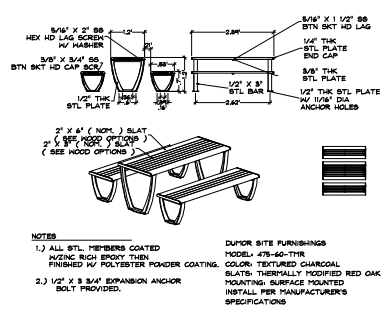
F L1.5 **RAMP DETAIL**
NOT TO SCALE



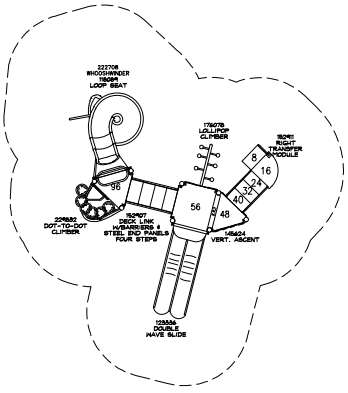
G L1.5 **TURF DRAIN DETAIL**
NOT TO SCALE



H L1.5 **SHADE STRUCTURE DETAIL**
NOT TO SCALE



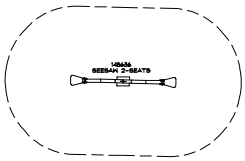
I L1.5 **PICNIC TABLE DETAIL**
NOT TO SCALE



Z L1.5 **2-12 PLAY EQUIPMENT DETAIL**
NOT TO SCALE



V L1.5 **WEE PLANET CLIMBER**
NOT TO SCALE



W L1.5 **SEE SAW DETAIL**
NOT TO SCALE



X L1.5 **BONGO REACH PANEL**
NOT TO SCALE

Y L1.5 **NAVIGATOR REACH PANEL**
NOT TO SCALE

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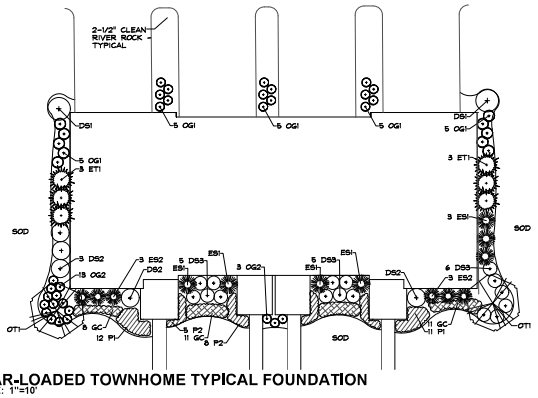
WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

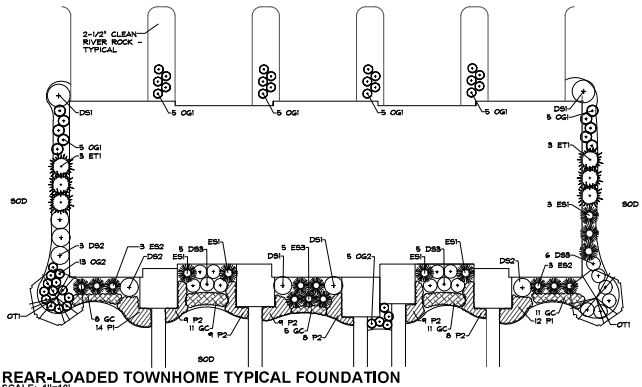
AMENITY DETAILS

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.5



REAR-LOADED TOWNHOME TYPICAL FOUNDATION
SCALE: 1"=10'



REAR-LOADED TOWNHOME TYPICAL FOUNDATION
SCALE: 1"=10'

4-UNIT TOWNHOME PLANT LIST- A
(BLDG. 5,8)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	4	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	5' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	2	Hydrangea paniculata 'Bulk' QUICK FIRE HYDRANGEA	30" Tall	5' O.C.
DS2	5	Cornus sericea 'Farrow' ARCTIC FIRE DOGWOOD	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Min	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Min	4' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Min	4' O.C.
		ORNAMENTAL GRASSES		
OG1	25	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	16	Sporobolus heterolepis PRAIRIE DROPSEED	#1	24" O.C.
		PERENNIALS		
P1	28	Hemerocallis 'Ruby Returns' RUBY RETURNS DAYLILY	#1	18" O.C.
P2	15	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
		GROUNDCOVER		
GC	30	Pachysandra terminalis 'Green Carpet' GREEN CARPET JAPANESE SPURGE	#SP4	12" O.C.
		MISC. MATERIALS		
	7	SHREDDED HARDWOOD MULCH	C.Y.	
	3	2-1/2" CLEAN RIVER ROCK	C.Y.	

4-UNIT TOWNHOME PLANT LIST- A
(BLDG. 4,9 AND 10)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Syringa patonensis 'Morton' CHINA SNOW PEKING LILAC	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	6	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	5' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	2	Syringa 'SMJBURT' DARK PURPLE BLOOMERANG LILAC	30" Tall	5' O.C.
DS2	5	Weigela florida 'Bramwell' FINE WINE WEIGELA	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Min	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Min	4' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Min	4' O.C.
		ORNAMENTAL GRASSES		
OG1	25	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	16	Pennisetum alopecuroides 'Desert Plains' PRAIRIE KINGS FOUNTAIN GRASS	#1	24" O.C.
		PERENNIALS		
P1	28	Hemerocallis 'Ruby Returns' RUBY RETURNS DAYLILY	#1	18" O.C.
P2	15	Nepeta racemosa 'Blue Wonder' BLUE WONDER CATMINT	#1	18" O.C.
		GROUNDCOVER		
GC	30	Liriope spicata CREEPING LILYTURF	#SP4	12" O.C.
		MISC. MATERIALS		
	7	SHREDDED HARDWOOD MULCH	C.Y.	
	3	2-1/2" CLEAN RIVER ROCK	C.Y.	

5-UNIT TOWNHOME PLANT LIST - A
(BLDGS. 1,2)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	6	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	5' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	4	Hydrangea paniculata 'Bulk' QUICK FIRE HYDRANGEA	30" Tall	5' O.C.
DS2	5	Cornus sericea 'Farrow' ARCTIC FIRE DOGWOOD	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Min	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Min	4' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Min	4' O.C.
		ORNAMENTAL GRASSES		
OG1	35	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	15	Sporobolus heterolepis PRAIRIE DROPSEED	#1	24" O.C.
		PERENNIALS		
P1	26	Hemerocallis 'Ruby Returns' RUBY RETURNS DAYLILY	#1	18" O.C.
P2	92	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
		GROUNDCOVER		
GC	45	Pachysandra terminalis 'Green Carpet' GREEN CARPET JAPANESE SPURGE	#SP4	12" O.C.
		MISC. MATERIALS		
	8	SHREDDED HARDWOOD MULCH	C.Y.	
	4	2-1/2" CLEAN RIVER ROCK	C.Y.	

5-UNIT TOWNHOME PLANT LIST - B
(BLDGS. 3)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Syringa patonensis 'Morton' CHINA SNOW PEKING LILAC	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	6	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	5' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	4	Syringa 'SMJBURT' DARK PURPLE BLOOMERANG LILAC	30" Tall	5' O.C.
DS2	5	Weigela florida 'Bramwell' FINE WINE WEIGELA	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Min	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Min	4' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Min	4' O.C.
		ORNAMENTAL GRASSES		
OG1	35	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	15	Pennisetum alopecuroides 'Desert Plains' PRAIRIE KINGS FOUNTAIN GRASS	#1	24" O.C.
		PERENNIALS		
P1	26	Hemerocallis 'Ruby Returns' RUBY RETURNS DAYLILY	#1	18" O.C.
P2	92	Nepeta racemosa 'Blue Wonder' BLUE WONDER CATMINT	#1	18" O.C.
		GROUNDCOVER		
GC	45	Liriope spicata CREEPING LILYTURF	#SP4	12" O.C.
		MISC. MATERIALS		
	8	SHREDDED HARDWOOD MULCH	C.Y.	
	4	2-1/2" CLEAN RIVER ROCK	C.Y.	

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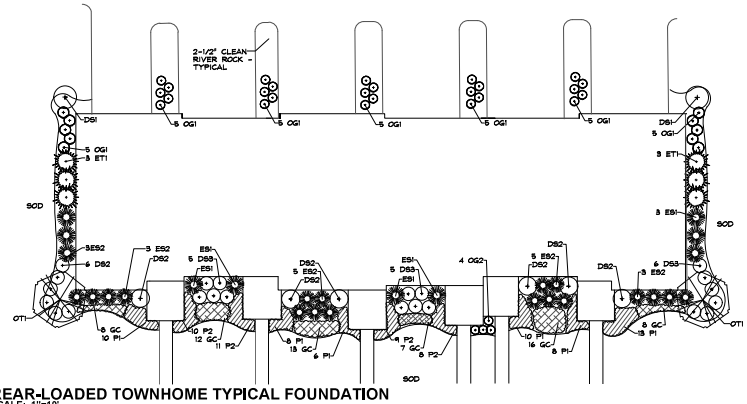
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WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

TYPICAL TOWNHOME FOUNDATION PLANS

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.6



REAR-LOADED TOWNHOME TYPICAL FOUNDATION
SCALE: 1"=10'

6-UNIT TOWNHOME PLANT LIST - A
(BLDGS. 7,12,14,16,18 AND 20)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	6	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	9' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	2	Hydrangea paniculata 'Bulk' QUICK FIRE HYDRANGEA	30" Tall	5' O.C.
DS2	12	Cornus sericea 'Farrow' ARCTIC FIRE DOGWOOD	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Wide	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Wide	4' O.C.
ES2	17	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		ORNAMENTAL GRASSES		
OG1	35	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	4	Sporobolus heterolepis PRAIRIE DROPSEED	#1	24" O.C.
		PERENNIALS		
P1	55	Hemerocallis 'Stella Returns' ROSY RETURNS DAYLILY	#1	18" O.C.
P2	39	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
		GROUNDCOVER		
GC	64	Pachysandra terminalis 'Green Carpet' GREEN CARPET JAPANESE SPURGE	#SP4	12" O.C.
		MISC. MATERIALS		
	4	SHREDDED HARDWOOD MULCH	C.Y.	
	5	2-1/2" CLEAN RIVER ROCK	C.Y.	

6-UNIT TOWNHOME PLANT LIST - B
(BLDGS. 6,11,13,15,17 AND 19)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	2	Syringa pekinensis 'Morton' CHINA SNOW PEKING LILAC	6' Ht.	Multi-Stem
		EVERGREEN TREES		
ET1	6	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	9' Ht.	4' O.C.
		DECIDUOUS SHRUBS		
DS1	2	Syringa 'SMSJEFF' DARK PURPLE BLOOMERANG LILAC	30" Tall	5' O.C.
DS2	12	Weigela florida 'Brunnwell' FINE WINE WEIGELA	24" Tall	3'-6" O.C.
DS3	16	Rhus aromatica 'Gro-Low' GRO-LOW FRAGRANT SUMAC	24" Wide	3'-6" O.C.
		EVERGREEN SHRUBS		
ES1	7	Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER	24" Wide	4' O.C.
ES2	17	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		ORNAMENTAL GRASSES		
OG1	35	Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
OG2	4	Pennisetum alopecuroides 'Desert Plains' PRAIRIE WINDS FOUNTAIN GRASS	#1	24" O.C.
		PERENNIALS		
P1	55	Hemerocallis 'Stella Returns' ROSY RETURNS DAYLILY	#1	18" O.C.
P2	39	Nepeta racemosa 'Blue Wonder' BLUE WONDER CATMINT	#1	18" O.C.
		GROUNDCOVER		
GC	64	Liriope spicata CREEPING LILYTURF	#SP4	12" O.C.
		MISC. MATERIALS		
	4	SHREDDED HARDWOOD MULCH	C.Y.	
	5	2-1/2" CLEAN RIVER ROCK	C.Y.	

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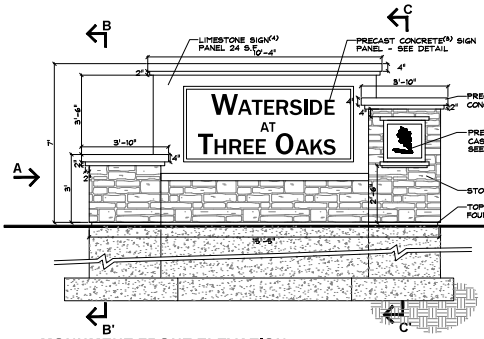
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WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

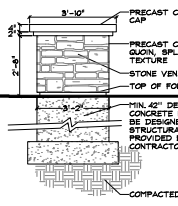
TYPICAL TOWNHOME FOUNDATION PLANS

REVISIONS	
2	12.19.2024
1	11.25.2024

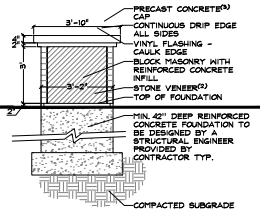
DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.7



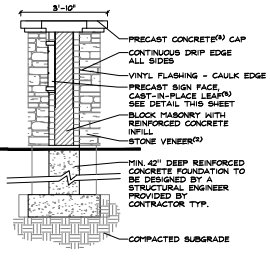
MONUMENT FRONT ELEVATION
SCALE: 1/2"=1'-0"



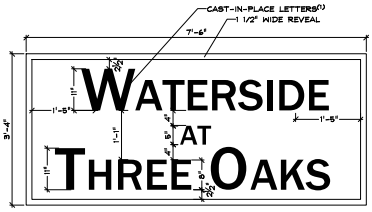
ELEVATION A



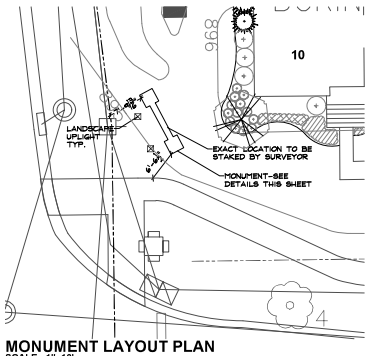
SECTION B-B'



SECTION C-C'



SIGN PANEL DETAILS
SCALE: 1"=1'-0"



MONUMENT LAYOUT PLAN
SCALE: 1"=10'

(1) FONT: FRANKLIN GOTHIC MEDIUM
"T" AND "O": 12" HEIGHT
"HREE": 10" HEIGHT
"AKS": 10" HEIGHT
ETCHED AND PAINTED BLACK

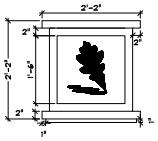
(2) STONE VENEER: BARNWOOD BLUE TAILORED FIELDLEDGE BUECHEL STONE CORP. OR APPROVED EQUAL
SUBMIT COLOR & GROUT SAMPLE TO DEVELOPER & LANDSCAPE ARCHITECT.

(3) PRE-CAST CONCRETE COLOR: WHITE BY CUSTOM CAST STONE OR APPROVED EQUAL.
CAPS AND PANEL: SMOOTH FACE
SUBMIT COLOR SAMPLE TO DEVELOPER & LANDSCAPE ARCHITECT.

(4) LIMESTONE PANEL, FINISH: BRUSH HAMMER
COLOR: INDIANA LIMESTONE
SUBMIT COLOR SAMPLE TO DEVELOPER & LANDSCAPE ARCHITECT

(5) CAST-IN-PLACE LEAF, COLOR: BENJAMIN MOORE CLASSICS 'WARMED COGNAC'
MONUMENT LEAF HEIGHT: 15'
SUBMIT COLOR SAMPLE TO LANDSCAPE ARCHITECT & DEVELOPER
REQUEST ARTWORK FROM LANDSCAPE ARCHITECT

(6) UPLIGHTS: KIM LIGHTING MICRO-FLOOD MODEL#: EL216FS 8LBK UV DB FH215
TOTAL OF 2
UPLIGHTS TO BE CONNECTED TO STREET LIGHT CIRCUIT.
GFI DUPLEX OUTLET WITH IN-USE COVER TO BE PROVIDED AT LEFT UPLIGHT.



LEAF DETAIL
SCALE: 1"=1'-0"

ENTRANCE MONUMENT SPECIFICATIONS

1.0 DESCRIPTION OF WORK

A. The work consists of all labor, materials, work and equipment necessary and required to complete monuments, fence and foundations as shown on drawings or specified herein, including, but not limited to:
1. Submission of color and material samples
2. Submission of shop drawings
3. Submission of construction schedule
4. Verification of existing conditions and underground utilities
5. Secure and pay for all permits, fees, inspections and schedule all inspections related to work, including J.U.L.I.E. tickets.
6. Comply with all applicable codes

2.0 QUALITY ASSURANCE

A. Construction shall conform to @Building Code Requirements for Engineered Brick Masonry," BIA, latest edition.
B. All brick and stone shall be finest architectural grade free of cracks, chips, defects, etc.
C. Installation shall be by a company continuously and regularly employed in the installation of brick and stone monuments for a period of at least 5 consecutive years.
D. No masonry shall be laid when the temperature is expected to fall below 40 degrees F, unless suitable means, submitted in writing to the owner, are provided to heat materials and protect the work. Protect work from cold and frost and insure that mortar will harden without freezing. If admixtures shall be used, unless approved in writing by the owner.
E. All corners of monuments and piers are to be stoked by engineer and verified by the contractor.

3.0 JOB CONDITIONS

A. Examine and evaluate grades, and soils. Provide soil testing and verify soils structural integrity. Observe the conditions under which work is to be performed and notify the owner of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
B. Utilities: Review underground utility location maps and plans; Notify J.U.L.I.E.; demonstrate an awareness of utility locations; and certify acceptance of liability for the protection of utilities during course of work. Contractor shall be responsible for any damage to utilities or property.
C. All streets and curbs must be cleaned at the end of each working day.
D. All OSHA requirements for safety must be adhered to at all times.

4.0 GUARANTEES

A. Guarantee monuments 1 year from final acceptance on owner's representative on workmanship and materials.
B. Where failures have occurred resulting from the concrete not meeting the specified design strength, or workmanship, it shall be the responsibility of the subcontractors in connection with the supplier to take whatever corrective actions are necessary to eliminate the problem. In addition, it shall be their responsibility to make restitution for their resulting repair work created by the problem.

5.0 SUBMITTALS

A. Construction Schedules: After award of the Contract, the Contractor shall prepare and submit to the owner or an owner authorized representative an estimated construction progress schedule for the work, including sub-schedules of related activities which are essential to its progress, as well as lead-time for materials.
1. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Schedule to represent a continuous flow of construction activities so that there are no days of non-activity on site.
B. Product Samples: Submit samples of stone, architectural pre-cast, mortars and sealants, slate, light fixtures, tile, and ornamental fencing for the owner's design conformance review prior to delivery to site.
C. Product Data: Submit product data for stone, limestone, architectural pre-cast, mortars and joint sealants, slate, tile, light fixtures, and ornamental fencing.
D. Provide certificate of insurance per the owner's requirements.
E. Provide names and contact information for any subcontractors and suppliers.
F. Shop Drawings:
1. Prepare and submit to the Owner's Representative for design conformance review complete cutting and setting drawings for all masonry work.
2. Submit one (1) set prints with following items in detail:
a) Elevations
b) Sections
c) Dimensions and numbering of stone and brick.
d) Arrangements of joints and bond.
3. Show jointing as indicated on the contract drawings, unless modification is reviewed for design conformance by Owner's Representative prior to preparation of shop drawings.
4. Establish jointing in accordance with industry standards and practices where not indicated on contract drawings.

6.0 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Loading and Shipment:
1. Pack carefully for transportation, with provision of all customary and reasonable precautions against damage in transit, all brick, and limestone to be used for the work.
2. Load and ship all brick and cut stone in a sequence mutually agreed upon by the General Contractor and the material supplier.
B. Unloading and Storage:
1. Receive and unload at site all brick and stone with necessary care in handling to avoid damage or soiling.
2. Store brick and stone clear of ground on non-staining skids. Wood containing tannin, chemical treatment, or excessive amounts of resin shall not be used.
3. Cover brick and stone with waterproof, clean canvas, or polyethylene for protection from construction or natural elements.

7.0 INSTALLATION

A. Mortar:
1. Cement: white, non-staining masonry cement, conforming to ASTM-C91.
2. Sand: Clean, sharp, and washed, capable of passing a No. 16 sieve, and in conformance with ASTM-C144. Carefully select sand for use in pointing mortar for color to match limestone. For pointing mortar, select a white sand.
3. Lime: Hydrated, conforming to ASTM-C207, Type S.
4. Water: Clear, non-alkaline, potable and free of oils, salts, and other harmful elements.
B. Foundation
Concrete mix air entrainment, compressive strength at twenty-eight (28) days, and slump are to be designed and specified by the contractor's structural engineer.
C. Mortar Beds:
1. Lay brick with full mortar coverage on horizontal and vertical joints in all courses.
2. Provide sufficient mortar on ends of brick to completely fill head joints.
3. Rock closure into place with head joints thrown against two adjacent bricks in place.
D. Mortar Joints: Horizontal and vertical face joints:
1. Nominal thickness 3/8 inch.
2. Construct uniform joints.
3. Shove vertical joints tight.
4. Tool concave joints in exposed surfaces when thumbprint hard.
5. Width, depth, and tooling of all mortar joints shall be consistent and shall not vary more than 1/8".
6. Movement Joints: Keep clean of all mortar and debris.
E. Flashing:
1. Install complete and continuous under stone copings and other projections.
2. Lap joints 6". Seal entire contact surface with mastic.
3. Provide a mortar wash at the base of the cavity, underneath the through-wall flashing, sloping out.
4. Cover flashing with mortar.
F. Weepholes:
1. Provide 3/8 cotton rope weeps. Rope weeps shall extend thru the veneer face and inside the cavity, lying on top and along the bottom length of the flashing. Cut rope flush with wall face.
2. Maximum spacing rope weeps 16 inches o.c., at wall base; 16 inches o.c. at lintels above openings.
3. Keep weepholes and area above flashing free of mortar droppings.

8.0 CLEAN UP AND PROTECTION

A. All material shall be washed with fiber brushes, soap powder, and clean water or Owner reviewed mechanical cleaning process.
B. Sand blasting, wire brushes, or acids shall not be used. Exceptions may be considered if reviewed by the Owner or an Owner authorized representative.
C. During work, store materials and equipment as directed by the owner.
D. Protect work and materials from damage due to operations by other trades and tradesmen. Maintain protection during installation.

9.0 INSPECTION AND ACCEPTANCE

A. The Owner and or the Owner's representative reserves the right to inspect materials and workmanship at the site prior to, during construction, or at the time of inspection for compliance with these specifications.
B. Notify the Owner's representative when completed, for final design conformance review.

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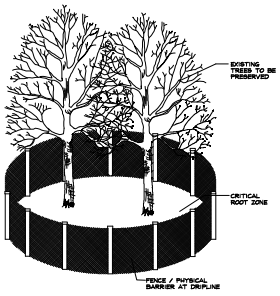
CIVIL ENGINEER
MACKIE CONSULTANTS, LLC
9575 W. HIGGINS ROAD
SUITE 600
ROSEMONT, IL 60018

WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS
MONUMENT DETAILS

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.8

Rating	Description	Criteria
1	Excellent	Less than 10% dead wood, typical growth for species, no observed defects
2	Good	Less than 20% dead wood, minor defects, sound structure, no decay
3	Fair	Less than 30% dead wood, minor crown die-back, minor trunk damage or cavities
4	Fair to Poor	Approximately 30-50% dead wood, lacking full crown, minor disease evidence, trunk damage
5	Poor	Over 50% dead wood, lacking full crown, disease or decay evident, structural damage/cavities
6	Dead	Less than 10% living wood, greater than 50% missing bark, adventitious growth only, decay

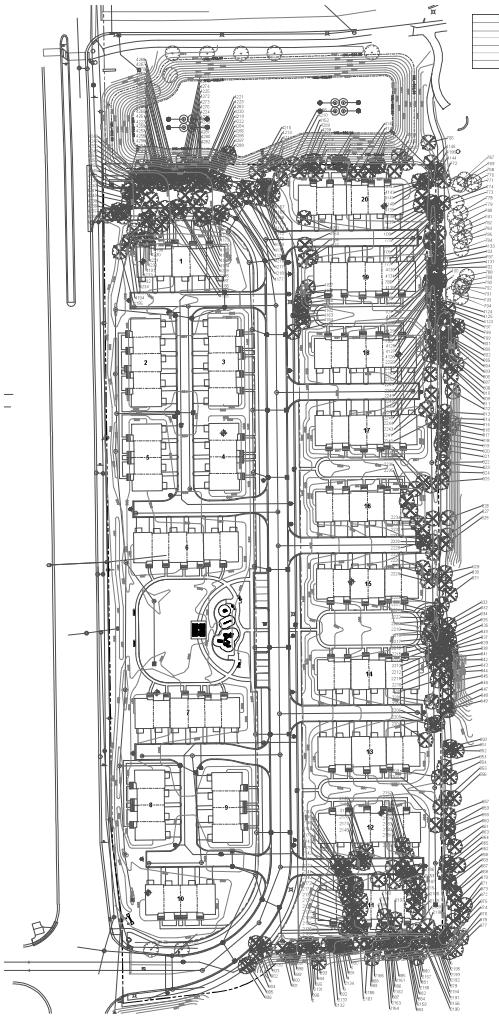


TREE PRESERVATION DETAIL

(NOT TO SCALE)
SEE NOTES

TREE PRESERVATION NOTES

1. 48" high snow fence or wood barriers shall extend to the dripline of the tree or tree mass whenever possible, shall be installed before construction begins, and should not be removed until the completion of construction.
2. All accidental damage to existing trees that are to be preserved shall be promptly treated as required in accordance with recognized horticultural practices and the instructions of the professional Arborist, Landscape Architect or Horticulturist.
3. Broken or badly bruised branches shall be removed with a clean cut. If recommended by the professional Arborist, Landscape Architect or Horticulturist.
4. Care shall be exercised by the contractors to protect all overhead limbs and branches from damage by contact with material, machinery or equipment and by damage from engine exhaust.
5. Contractors shall protect trees and vegetation against spills or discharge of fuels,lubricating oils, hydraulic fluids, anti-freeze and coolants, calcium chloride, lime and all other similar hydrocarbons, organic chemicals, and other materials which can be harmful.
6. When underground utilities are proposed within 5' of a preserved tree trunk, they must be augered if possible.



LEGEND

TREE TO BE PRESERVED

TREE TO BE REMOVED

0 50' 100' 200' 300'

SCALE: 1"=100'

NORTH

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Civil Engineer
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ROSEMONT, IL 60018

WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

TREE PRESERVATION PLAN

REVISIONS	
1	11.25.2024
2	12.19.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.9

Rating	Description	Criteria
1	Excellent	Less than 10% dead wood, typical growth for species, no observed defects
2	Good	Less than 20% dead wood, minor defects, sound structure, no decay
3	Fair	Less than 30% dead wood, minor crown die-back, minor trunk damage or cavities
4	Fair to Poor	Approximately 30-50% dead wood, lacking full crown, minor disease evidence, trunk damage
5	Poor	Over 50% dead wood, lacking full crown, disease or decay evident, structural damage/cavities
6	Dead	Less than 10% living wood, greater than 50% missing bark, adventitious growth only, decay

TAG NO.	SCIENTIFIC NAME	COMMON NAME	DBH (inches)	CONDITION	STRUCTURE	HEALTH	PROPOSED ACTION
1	*Populus deltoides*	Eastern Cottonwood	12	3 - Fair	Unbalanced|Crowded	Barbed wire girdling	Remove
2	*Populus deltoides*	Eastern Cottonwood	6	3 - Fair	Lean		Remove
3	*Ulmus americana*	American Elm	7	3 - Fair	Unbalanced	Barbed wire damage	Remove
4	*Populus deltoides*	Eastern Cottonwood	10	3 - Fair	Crown Lean|Crowded		Remove
5	*Ulmus americana*	American Elm	7	4 - Fair/Poor	Crown Lean	Trunk Scar|Callus|Fence girdling	Remove
6	*Ulmus pumila*	Siberian Elm	10,5	4 - Fair/Poor	V-shaped joint|Lean|Unbalanced	20% dead wood	Remove
7	*Populus deltoides*	Eastern Cottonwood	20,20	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean	Included bark	Remove
8	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
100	*Ulmus pumila*	Siberian Elm	5	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
101	*Ulmus pumila*	Siberian Elm	4	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
102	*Juniperus virginiana*	Red Cedar	5.25'tall	5 - Poor	Crown Lean|Crowded	50% dead wood	Remove
103	*Ulmus pumila*	Siberian Elm	17	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood|Dead Limbs	Remove
104	*Populus deltoides*	Eastern Cottonwood	28	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood|Dead Limbs	Remove
105	*Populus deltoides*	Eastern Cottonwood	38	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Unbalanced|Crown Lean		Remove
106	*Juniperus virginiana*	Red Cedar	7	5 - Poor	Crown Lean|Crowded	>50% dead wood	Remove
107	*Ulmus pumila*	Siberian Elm	6	5 - Poor	Strong lean|Crown Lean|Crowded	40% dead wood	Remove
108	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Crown Lean|Crowded	30% dead wood|Dead Limbs	Remove
109	*Ulmus pumila*	Siberian Elm	22	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
766	*Populus deltoides*	Eastern Cottonwood	7	3 - Fair	Lean|Crowded	10% dead wood	Remove
767	*Populus deltoides*	Eastern Cottonwood	11	3 - Fair	Lean|Unbalanced|Crowded		Preserve
768	*Populus deltoides*	Eastern Cottonwood	9	3 - Fair	Unbalanced|Crown Lean|Crowded		Preserve
769	*Salix nigra*	Black Willow	11,7	4 - Fair/Poor	U-shaped joint|Double Leader|Lean|Unbalanced	10% dead wood	Preserve
770	*Populus deltoides*	Eastern Cottonwood	23	3 - Fair	Lean|Unbalanced	10% dead wood	Preserve
771	*Ulmus pumila*	Siberian Elm	10,9,6,5,3,3	5 - Poor	Multi Leader|Split Risk|Lean	20% dead wood|Dead Leader|Cavi	Preserve
772	*Prunus virginiana*	Choke Cherry	7,3	4 - Fair/Poor	Double Leader|Strong lean|Crown Lean|Crowded	20% dead wood	Remove
773	*Populus deltoides*	Eastern Cottonwood	12	3 - Fair	Lean|Crown Lean|Crowded	10% dead wood	Preserve
774	*Ulmus americana*	American Elm	7	4 - Fair/Poor	Crown Lean|Crowded	30% dead wood|Dead Leader	Remove
775	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Lean|Crown Lean|Crowded	30% dead wood|Dead Leader	Remove
776	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
777	*Juniperus virginiana*	Red Cedar	6	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	40% dead wood	Remove
778	*Robinia pseudoacacia*	Black Locust	12	3 - Fair		20% dead wood	Preserve
779	*Robinia pseudoacacia*	Black Locust	9	3 - Fair	Unbalanced	10% dead wood	Preserve
780	*Populus deltoides*	Eastern Cottonwood	12	3 - Fair	Lean|Unbalanced	10% dead wood	Preserve
781	*Populus deltoides*	Eastern Cottonwood	11	4 - Fair/Poor	Lean|Unbalanced	40% dead wood|Trunk Scar	Preserve
782	*Populus deltoides*	Eastern Cottonwood	6	3 - Fair	Lean|Unbalanced|Crowded		Preserve
783	*Robinia pseudoacacia*	Black Locust	16	4 - Fair/Poor		20% dead wood|Fungus-Stem|Trun	Preserve
784	*Robinia pseudoacacia*	Black Locust	14	3 - Fair		30% dead wood	Preserve
785	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Crown Lean|Crowded	10% dead wood	Preserve
786	*Ulmus pumila*	Siberian Elm	12,6	4 - Fair/Poor	Double Leader|Strong lean|Unbalanced|Crown L	20% dead wood|Trunk Scar	Remove
787	*Ulmus pumila*	Siberian Elm	16	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood|Dead Leader	Remove
788	*Robinia pseudoacacia*	Black Locust	10,10	5 - Poor	V-shaped joint|Double Leader|Split Risk|Lean	30% dead wood	Preserve
789	*Robinia pseudoacacia*	Black Locust	15	3 - Fair	Crown Lean	20% dead wood	Preserve
790	*Acer negundo*	Box Elder	8	3 - Fair	Lean|Unbalanced|Crown Lean|Crowded	10% dead wood	Preserve
791	*Acer negundo*	Box Elder	7	3 - Fair	Lean|Unbalanced|Crowded		Preserve
792	*Acer negundo*	Box Elder	7	3 - Fair	Lean|Unbalanced|Crowded		Preserve
793	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced|Crown Lean|Crowded	10% dead wood	Preserve
794	*Robinia pseudoacacia*	Black Locust	14	3 - Fair		20% dead wood	Preserve
795	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
796	*Ulmus pumila*	Siberian Elm	6	3 - Fair	Lean|Crown Lean|Crowded	20% dead wood	Remove
797	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Lean|Unbalanced	10% dead wood	Remove
798	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
799	*Ulmus pumila*	Siberian Elm	7	3 - Fair		10% dead wood	Remove
800	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced	20% dead wood	Remove
801	*Ulmus pumila*	Siberian Elm	7	3 - Fair	Lean|Unbalanced	10% dead wood	Remove
802	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
803	*Ulmus pumila*	Siberian Elm	7	3 - Fair	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
804	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced|Crown Lean	20% dead wood|Trunk Scar	Remove
805	*Ulmus pumila*	Siberian Elm	9	3 - Fair	Unbalanced|Crown Lean		Remove
806	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
807	*Robinia pseudoacacia*	Black Locust	9,9	5 - Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
808	*Acer negundo*	Box Elder	14	5 - Poor	Unbalanced|Crown Lean	50% dead wood|Dead Leader	Remove
809	*Ulmus americana*	American Elm	6	3 - Fair	Unbalanced|Crown Lean|Crowded		Remove
810	*Acer negundo*	Box Elder	13	4 - Fair/Poor	Unbalanced|Crown Lean|Broken Limb	20% dead wood|Cavity	Remove
811	*Ulmus pumila*	Siberian Elm	23	4 - Fair/Poor	Unbalanced|Crown Lean	40% dead wood|Dead Leader	Remove
812	*Acer negundo*	Box Elder	19	3 - Fair	U-shaped joint|Double Leader|Unbalanced|Crow	20% dead wood	Remove
813	*Acer negundo*	Box Elder	9,8	4 - Fair/Poor	V-shaped joint|Double Leader|Strong lean|Crown Lean		Remove
814	*Acer negundo*	Box Elder	10	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean	30% dead wood|Dead Leader	Remove
815	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Lean|Crown Lean|Crowded	30% dead wood|Dead Leader|Cavi	Remove
816	*Ulmus pumila*	Siberian Elm	22,18,18	5 - Poor	V-shaped joint|Multi Leader|Split Risk	30% dead wood|Dead Leader	Remove
817	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean|Crowded	Cavity	Remove
818	*Acer negundo*	Box Elder	12	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean|Crowded		Remove
819	*Acer negundo*	Box Elder	10	4 - Fair/Poor	Strong lean|Crown Lean|Crowded		Remove
820	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
821	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Lean|Unbalanced|Crown Lean|Crowded	30% dead wood	Remove
822	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Unbalanced|Crown Lean	40% dead wood	Remove
823	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean|Horizontal G	Growing in fence	Remove
824	*Acer negundo*	Box Elder	20	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk	30% dead wood|Dead Leader	Remove
825	*Acer negundo*	Box Elder	17,16	5 - Poor	Unbalanced|Crown Lean	>50% dead wood|Dead Leader|Cav	Remove
826	*Prunus serotina*	Black Cherry	12	3 - Fair		30% dead wood	Remove
827	*Prunus serotina*	Black Cherry	8	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean	20% dead wood	Remove
828	*Morus alba*	White Mulberry	7	3 - Fair	Lean|Unbalanced|Crowded		Remove
829	*Acer negundo*	Box Elder	12,11	6 - Dead	Lean|Unbalanced|Crown Lean|Broken Leader	>50% dead wood|Dead Leader	Remove
830	*Acer negundo*	Box Elder	24	3 - Fair	U-shaped joint|Double Leader|Lean|Unbalanced|Crown Lean		Remove
831	*Ulmus pumila*	Siberian Elm	9	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
832	*Robinia pseudoacacia*	Black Locust	13,12	5 - Poor	V-shaped joint|Double Leader|Split Risk|Lean		Remove
833	*Ulmus pumila*	Siberian Elm	9	3 - Fair	Lean|Unbalanced|Crowded		Remove
834	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Lean|Unbalanced		Remove
835	*Ulmus pumila*	Siberian Elm	11	3 - Fair	Unbalanced|Crown Lean	Dead Limbs	Remove
836	*Ulmus pumila*	Siberian Elm	12	3 - Fair	Crown Lean		Remove
837	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced|Crown Lean		Remove
838	*Robinia pseudoacacia*	Black Locust	10	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
839	*Robinia pseudoacacia*	Black Locust	11,3,3	4 - Fair/Poor	Multi Leader|Unbalanced|Crown Lean	40% dead wood|Dead Leader	Remove
840	*Robinia pseudoacacia*	Black Locust	10	3 - Fair	Lean|Unbalanced|Crown Lean		Remove
841	*Robinia pseudoacacia*	Black Locust	8	4 - Fair/Poor	Crown Lean|Crowded	40% dead wood	Remove
842	*Robinia pseudoacacia*	Black Locust	10	4 - Fair/Poor	Crown Lean	20% dead wood|Fungus-Stem	Remove
843	*Robinia pseudoacacia*	Black Locust	12	3 - Fair	Unbalanced|Crown Lean		Remove
844	*Robinia pseudoacacia*	Black Locust	12	3 - Fair	Unbalanced		Remove
845	*Robinia pseudoacacia*	Black Locust	10	3 - Fair	Lean|Unbalanced		Remove
846	*Robinia pseudoacacia*	Black Locust	13,8	4 - Fair/Poor	V-shaped joint|Multi Leader|Crown Lean	20% dead wood|Fungus-Stem	Remove
847	*Robinia pseudoacacia*	Black Locust	8	3 - Fair	Unbalanced|Crown Lean|Crowded		Remove
848	*Robinia pseudoacacia*	Black Locust	9	3 - Fair	Lean|Unbalanced		Remove
849	*Robinia pseudoacacia*	Black Locust	8	3 - Fair	Unbalanced|Crown Lean|Crowded		Remove
850	*Ulmus pumila*	Siberian Elm	8,7	5 - Poor	V-shaped joint|Double Leader|Split Risk|Lean	30% dead wood|Dead Leader	Remove
851	*Ulmus pumila*	Siberian Elm	12	3 - Fair	Unbalanced|Crown Lean		Remove
852	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor		30% dead wood|Trunk Scar	Remove
853	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood|Trunk Scar	Remove
854	*Ulmus pumila*	Siberian Elm	42,18,14	4 - Fair/Poor	Multi Leader|Split Risk|Fused Leaders|Lean	30% dead wood	Remove
855	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced|Crown Lean		Remove
856	*Ulmus pumila*	Siberian Elm	11,11	5 - Poor	V-shaped joint|Double Leader|Split Risk|Lean|Cr	20% dead wood	Remove
857	*Ulmus pumila*	Siberian Elm	16	5 - Poor	V-shaped joint|Double Leader|Split Risk|Fused L	20% dead wood	Remove
858	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Lean|Unbalanced|Crown Lean		Remove
859	*Ulmus pumila*	Siberian Elm	7	6 - Dead		>50% dead wood|Resprouts only	Remove
860	*Ulmus pumila*	Siberian Elm	11,8	5 - Poor	V-shaped joint|Double Leader|Split Risk|Crown L	30% dead wood|Dead Leader|Trun	Remove
861	*Ulmus pumila*	Siberian Elm	13	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
862	*Robinia pseudoacacia*	Black Locust	8	3 - Fair	Unbalanced|Crown Lean|Crowded		Remove
863	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Lean|Crown Lean|Crowded		Remove
864	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced|Crown Lean|Crowded		Remove
865	*Ulmus pumila*	Siberian Elm	22	3 - Fair	Unbalanced	20% dead wood	Remove
866	*Robinia pseudoacacia*	Black Locust	8	3 - Fair	Unbalanced|Crown Lean		Remove
867	*Robinia pseudoacacia*	Black Locust	8	3 - Fair	Lean|Unbalanced		Remove
868	*Robinia pseudoacacia*	Black Locust	7	3 - Fair	Unbalanced|Crown Lean		Remove
869	*Robinia pseudoacacia*	Black Locust	7	3 - Fair	Lean|Unbalanced	10% dead wood	Remove
870	*Ulmus pumila*	Siberian Elm	20	3 - Fair	Unbalanced	20% dead wood	Remove
871	*Acer negundo*	Box Elder	6	3 - Fair	Lean|Unbalanced|Crowded		Remove
872	*Ulmus pumila*	Siberian Elm	6	3 - Fair	Crowded		Remove
873	*Ulmus pumila*	Siberian Elm	10	3 - Fair		20% dead wood	Remove
874	*Acer negundo*	Box Elder	6	3 - Fair	Lean|Unbalanced|Crowded		Remove
875	*Acer negundo*	Box Elder	8	3 - Fair	Lean|Crown Lean|Crowded		Remove
876	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
877	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Crown Lean	20% dead wood	Remove
878	*Acer negundo*	Box Elder	7	3 - Fair	Unbalanced|Crown Lean		Remove
879	*Acer negundo*	Box Elder	7	3 - Fair	Lean|Unbalanced		Remove
880	*Ulmus pumila*	Siberian Elm	12	3 - Fair		10% dead wood	Remove
881	*Acer negundo*	Box Elder	8	6 - Dead	Broken Leader	>50% dead wood|Resprouts only	Remove
882	*Ulmus pumila*	Siberian Elm	10	3 - Fair		Trunk Scar	Remove
883	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood|Trunk Scar	Remove
884	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean|Crowded		Remove
885	*Acer negundo*	Box Elder	8	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
886	*Ulmus americana*	American Elm	10	3 - Fair	Lean|Unbalanced		Remove
887	*Acer negundo*	Box Elder	9,7	3 - Fair	U-shaped joint|Double Leader|Lean|Crown Lean	20% dead wood	Remove
888	*Acer negundo*	Box Elder	6,4	4 - Fair/Poor	U-shaped joint|Double Leader|Strong lean|Unbal	30% dead wood|Dead Leader|Trun	Remove
889	*Acer negundo*	Box Elder	8,4	4 - Fair/Poor	U-shaped joint|Double Leader|Lean	30% dead wood|Dead Leader	Remove
890	*Ulmus americana*	American Elm	8	4 - Fair/Poor	Unbalanced|Crown Lean	Trunk Scar	Remove
891	*Populus deltoides*	Eastern Cottonwood	12	3 - Fair	Unbalanced	Trunk Scar	Remove
892	*Ulmus americana*	American Elm	7	3 - Fair	Crown Lean	20% dead wood	Remove
893	*Acer negundo*	Box Elder	7	3 - Fair	Unbalanced|Crown Lean	20% dead wood	Remove
894	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Strong lean|Unbalanced|Crown Lean		Remove
895	*Acer negundo*	Box Elder	6,3	3 - Fair	U-shaped joint|Double Leader|Lean|Unbalanced|Crown Lean		Remove
896	*Populus deltoides*	Eastern Cottonwood	8	3 - Fair	Crown Lean		Remove
897	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Crown Lean|Crowded	Trunk Scar	Remove
898	*Acer negundo*	Box Elder	8	6 - Dead		>50% dead wood|Resprouts only	Remove
899	*Ulmus pumila*	Siberian Elm	6	3 - Fair	Unbalanced|Crown Lean	20% dead wood	Remove
900	*Ulmus pumila*	Siberian Elm	13	3 - Fair		20% dead wood	Remove
901	*Ulmus pumila*	Siberian Elm	9	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood	Remove
902	*Populus deltoides*	Eastern Cottonwood	13	4 - Fair/Poor		30% dead wood|Growing around ba	Remove
903	*Ulmus americana*	American Elm	6	3 - Fair	Crowded	20% dead wood	Remove
904	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Lean|Unbalanced	40% dead wood	Remove
905	*Populus deltoides*	Eastern Cottonwood	9	3 - Fair	Unbalanced|Crown Lean		Remove
906	*Populus deltoides*	Eastern Cottonwood	11	3 - Fair	Lean|Crown Lean|Crowded		Remove
2128	*Gymnocladus dioicus*	Kentucky Coffee	4	2 - Good			
2129	*Ulmus sp.*	Elm Cultivar	8	3 - Fair		Trunk Scar|Callus	
2130	*Ulmus americana*	American Elm	7	4 - Fair/Poor		Callus|Girdling from fence, growing	Remove
2131	*Ulmus americana*	American Elm	7	6 - Dead			Remove
2132	*Populus deltoides*	Eastern Cottonwood	5	4 - Fair/Poor	Lean|Crown Lean	Trunk Scar|Callus	Remove
2133	*Populus deltoides*	Eastern Cottonwood	7	3 - Fair		Trunk Scar|Callus	Remove
2134	*Populus deltoides*	Eastern Cottonwood	12	4 - Fair/Poor	Crown Lean	20% dead wood|Grown around fenc	Remove
2135	*Populus deltoides*	Eastern Cottonwood	6	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	Concete piled at base	Remove
2136	*Populus deltoides*	Eastern Cottonwood	6	3 - Fair	Lean|Unbalanced		Remove
2137	*Populus deltoides*	Eastern Cottonwood	10	2 - Good			Remove
2138	*Populus deltoides*	Eastern Cottonwood	9	3 - Fair	Crown Lean	Dead Leader	Remove
2139	*Populus deltoides*	Eastern Cottonwood	7,7	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean		Remove
2140	*Populus deltoides*	Eastern Cottonwood	8,4	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
2141	*Populus deltoides*	Eastern Cottonwood	8	3 - Fair	Unbalanced|Crown Lean		Remove
2142	*Ulmus pumila*	Siberian Elm	9	4 - Fair/Poor	V-shaped joint	Trunk Scar|Callus	Remove
2143	*Ulmus pumila*	Siberian Elm	6,6	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk		Remove
2144	*Populus deltoides*	Eastern Cottonwood	12	4 - Fair/Poor		30% dead wood|Trunk Scar	Remove
2145	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
2146	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Strong lean|Crown Lean	20% dead wood	Remove
2147	*Populus deltoides*	Eastern Cottonwood	8	3 - Fair	Unbalanced	20% dead wood	Remove
2148	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
2149	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
2150	*Ulmus pumila*	Siberian Elm	7,4	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean	Cavity	Remove
2151	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
2152	*Ulmus pumila*	Siberian Elm	8,2	4 - Fair/Poor	V-shaped joint|Double Leader	20% dead wood	Remove
2153	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Unbalanced	30% dead wood	Remove
2154	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced	20% dead wood	Remove
2155	*Populus deltoides*	Eastern Cottonwood	12	4 - Fair/Poor	Lean|Unbalanced	30% dead wood	Remove
2156	*Populus deltoides*	Eastern Cottonwood	6	6 - Dead			Remove
2157	*Acer negundo*	Box Elder	8	6 - Dead			Remove
2158	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Crown Lean	30% dead wood	Remove
2159	*Acer negundo*	Box Elder	8	6 - Dead			Remove
2160	*Acer negundo*	Box Elder	10	4 - Fair/Poor	V-shaped joint|Unbalanced	30% dead wood	Remove
2161	*Acer negundo*	Box Elder	6	5 - Poor		40% dead wood	Remove
2162	*Acer negundo*	Box Elder	6	6 - Dead		>50% dead wood	Remove
2163	*Acer negundo*	Box Elder	8	5 - Poor	Lean|Unbalanced	40% dead wood	Remove
2164	*Acer negundo*	Box Elder	6	5 - Poor		>50% dead wood	Remove
2165	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Lean|Unbalanced	30% dead wood	Remove
2166	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Crown Lean	30% dead wood	Remove
2167	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	V-shaped joint|Lean|Unbalanced	30% dead wood	Remove
2168	*Ulmus americana*	American Elm	7	4 - Fair/Poor	Lean|Crown Lean	20% dead wood	Remove
2169	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced	30% dead wood	Remove
2170	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Unbalanced	30% dead wood	Remove
2171	*Ulmus americana*	American Elm	8	4 - Fair/Poor	Lean|Crown Lean	20% dead wood	Remove
2172	*Ulmus pumila*	Siberian Elm	8	3 - Fair	Unbalanced	20% dead wood	Remove
2173	*Morus alba*	White Mulberry	7,6	5 - Poor	V-shaped joint|Double Leader|Split Risk|Strong le	40% dead wood	Remove
2174	*Ulmus pumila*	Siberian Elm	12,7,7	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean|Crown Lean		Remove
2175	*Populus deltoides*	Eastern Cottonwood	10,8,6	4 - Fair/Poor	V-shaped joint|Multi Leader|Split Risk|Lean		Remove
2176	*Ulmus americana*	American Elm	8	3 - Fair	Lean|Crown Lean	20% dead wood	Remove
2177	*Ulmus americana*	American Elm	8	3 - Fair	Unbalanced	20% dead wood	Remove
2178	*Ulmus pumila*	Siberian Elm	7,7	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk		Remove
2179	*Ulmus americana*	American Elm	8	4 - Fair/Poor	V-shaped joint|Double Leader|Lean|Unbalanced	30% dead wood	Remove
2180	*Acer negundo*	Box Elder	9	4 - Fair/Poor	Strong lean|Unbalanced		Remove
2181	*Ulmus pumila*	Siberian Elm	8,8	4 - Fair/Poor	V-shaped joint|Double Leader	30% dead wood	Remove
2182	*Ulmus pumila*	Siberian Elm	10	3 - Fair	Unbalanced	20% dead wood	Remove
2183	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Strong lean	30% dead wood	Remove
2184	*Ulmus americana*	American Elm	6	4 - Fair/Poor	Unbalanced	30% dead wood	Remove
2185	*Populus deltoides*	Eastern Cottonwood	12	6 - Dead			Remove
2186	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	V-shaped joint	30% dead wood|Adventitious Growt	Remove
2187	*Ulmus americana*	American Elm	10	3 - Fair	Unbalanced	30% dead wood	Remove
2188	*Acer negundo*	Box Elder	7	5 - Poor	Strong lean	30% dead wood	Remove
2189	*Acer negundo*	Box Elder	10	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
2190	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Strong lean|Crown Lean	30% dead wood	Remove
2191	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Lean|Crown Lean	20% dead wood	Remove
2192	*Acer negundo*	Box Elder	6	4 - Fair/Poor		30% dead wood|Adventitious Growt	Remove
2193	*Acer negundo*	Box Elder	6	5 - Poor		>50% dead wood	Remove
2194	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
2195	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
2196	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Strong lean	30% dead wood	Remove
2197	*Ulmus americana*	American Elm	10	3 - Fair	Unbalanced|Crown Lean	20% dead wood	Remove
2198	*Populus deltoides*	Eastern Cottonwood	15	6 - Dead			Remove
2199	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	V-shaped joint|Unbalanced	30% dead wood	Remove
2200	*Populus deltoides*	Eastern Cottonwood	12	6 - Dead			Remove
2201	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
2202	*Juniperus virginiana*	Eastern Red Cedar	10, 25' tall	5 - Poor	Lean|Unbalanced	>50% dead wood	Remove
2203	*Ulmus pumila*	Siberian Elm	11	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood	Remove
2204	*Populus deltoides*	Eastern Cottonwood	10	4 - Fair/Poor	Unbalanced	30% dead wood	Remove
2205	*Ulmus pumila*	Siberian Elm	8	5 - Poor	Strong lean	>50% dead wood|Dead Leader	Remove
2206	*Ulmus pumila*	Siberian Elm	13	4 - Fair/Poor	Lean|Unbalanced	30% dead wood	Remove
2207	*Acer platanoides*	Norway Maple	20	3 - Fair	Lean	Cavity	Remove
2208	*Robinia pseudoacacia*	Black Locust	12	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
2209	*Robinia pseudoacacia*	Black Locust	12	3 - Fair	Unbalanced	20% dead wood	Remove
2210	*Robinia pseudoacacia*	Black Locust	12	4 - Fair/Poor	V-shaped joint|Double Leader|Unbalanced	20% dead wood	Remove
2211	*Ulmus pumila*	Siberian Elm	23	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood	Remove
2212	*Ulmus pumila*	Siberian Elm	12	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	30% dead wood	Remove
2213	*Acer negundo*	Box Elder	6	5 - Poor	Strong lean|Unbalanced|Crown Lean|Crowded	30% dead wood	Remove
2214	*Robinia pseudoacacia*	Black Locust	6	5 - Poor		>50% dead wood	Remove
2215	*Robinia pseudoacacia*	Black Locust	10	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	Trunk Scar|Fence girdling	Remove
2216	*Robinia pseudoacacia*	Black Locust	8	6 - Dead			Remove
2217	*Robinia pseudoacacia*	Black Locust	24	3 - Fair		20% dead wood|Trunk Scar	Remove
2218	*Ulmus pumila*	Siberian Elm	16	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood	Remove
2219	*Robinia pseudoacacia*	Black Locust	7	5 - Poor		>50% dead wood	Remove
2220	*Robinia pseudoacacia*	Black Locust	11	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
2221	*Robinia pseudoacacia*	Black Locust	12	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
2222	*Ulmus americana*	American Elm	5	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
2223	*Acer platanoides*	Norway Maple	5	2 - Good	Crowded		Remove
2224	*Robinia pseudoacacia*	Black Locust	16	2 - Good		20% dead wood|Trunk Scar	Remove
2225	*Juniperus virginiana*	ERC	12, 30' tall	3 - Fair		30% dead wood	Remove
2226	*Juniperus virginiana*	ERC	18	4 - Fair/Poor		40% dead wood	Remove
2227	*Ulmus americana*	American Elm	18	4 - Fair/Poor	Unbalanced	30% dead wood|Dead Limbs|Cavity	Remove
2228	*Ulmus americana*	American Elm	10	2 - Good	Unbalanced		Remove
2229	*Acer negundo*	Box Elder	8	5 - Poor	Strong lean|Unbalanced|Crown Lean	30% dead wood	Remove
2230	*Ulmus americana*	American Elm	18	3 - Fair	Unbalanced	20% dead wood	Remove
2231	*Acer negundo*	Box Elder	8,6	5 - Poor	Strong lean	30% dead wood|Dead Leader|Cavit	Remove
2232	*Ulmus americana*	American Elm	8,6	4 - Fair/Poor	Lean|Unbalanced|Crowded	30% dead wood|Cavity	Remove
2233	*Ulmus pumila*	Siberian Elm	7	5 - Poor	Unbalanced|Crown Lean	40% dead wood	Remove
2234	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	Lean	40% dead wood	Remove
2235	*Ulmus pumila*	Siberian Elm	18	4 - Fair/Poor	V-shaped joint|Split Risk|Unbalanced	30% dead wood	Remove
2236	*Ulmus americana*	American Elm	11	5 - Poor	Strong lean	20% dead wood|Cavity|Trunk Scar	Remove
2237	*Juniperus virginiana*	ERC	4, 12' tall	4 - Fair/Poor		40% dead wood	Remove
2238	*Juniperus virginiana*	ERC	4, 15' tall	3 - Fair		30% dead wood	Remove
2239	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Strong lean|Unbalanced|Crowded	30% dead wood	Remove
2240	*Juniperus virginiana*	ERC	8, 30' tall	5 - Poor		>50% dead wood|Cavity	Remove
2241	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Unbalanced|Crowded	30% dead wood|Adventitious Growt	Remove
2243	*Acer negundo*	Box Elder	10, 7	5 - Poor	Strong lean	>50% dead wood|Dead Leader|Holl	Remove
2244	*Populus deltoides*	Eastern Cottonwood	10	4 - Fair/Poor	Crown Lean	20% dead wood|Trunk Scar|Callus	Remove
2245	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced	30% dead wood	Remove
2246	*Acer negundo*	Box Elder	10	4 - Fair/Poor	Strong lean	20% dead wood|Cavity|Trunk Scar	Remove
2247	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Lean	Adventitious Growth|Trunk Scar|Fen	Remove
2248	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
2249	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Lean|Unbalanced	30% dead wood|Adventitious Growt	Remove
2250	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Strong lean	20% dead wood	Remove
2251	*Acer negundo*	Box Elder	12,12,8,8	5 - Poor	Multi Leader|Strong lean|Crowded	40% dead wood|Adventitious Growt	Remove
2252	*Ulmus pumila*	Siberian Elm	6	5 - Poor	Crowded	>50% dead wood	Remove
2253	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood|Adventitious Growt	Remove
2254	*Ulmus pumila*	Siberian Elm	24	4 - Fair/Poor	V-shaped joint|Unbalanced	>50% dead wood|Hollow|Cavity	Remove
2255	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
2256	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Lean|Unbalanced|Crowded	30% dead wood	Remove
4123	*Ulmus pumila*	Siberian Elm	5	4 - Fair/Poor	Crown Lean|Crowded|Broken Limb	Dead Limbs	Remove
4124	*Ulmus pumila*	Siberian Elm	5,4	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown L	20% dead wood|Cavity|Trunk Scar	Remove
4125	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
4126	*Ulmus pumila*	Siberian Elm	5	5 - Poor	Crown Lean|Crowded	20% dead wood|Dead Leader	Remove
4127	*Populus deltoides*	Eastern Cottonwood	19,16	4 - Fair/Poor	V-shaped joint|Double Leader|Lean|Crown Lean	20% dead wood	Remove
4128	*Ulmus pumila*	Siberian Elm	5	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
4129	*Ulmus pumila*	Siberian Elm	8	5 - Poor	Crown Lean|Crowded	Growing in fence	Remove
4130	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Lean|Crowded	20% dead wood	Remove
4131	*Ulmus pumila*	Siberian Elm	11	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
4132	*Ulmus pumila*	Siberian Elm	9,7	5 - Poor	Lean|Crown Lean|Crowded	Growing in fence	Remove
4133	*Populus deltoides*	Eastern Cottonwood	9	5 - Poor	Lean|Crown Lean|Crowded	Trunk Scar|Growing in fence	Remove
4134	*Ulmus pumila*	Siberian Elm	12,10	4 - Fair/Poor	U-shaped joint|Double Leader|Lean|Crown Lean	20% dead wood|Growing in fence	Remove
4135	*Populus deltoides*	Eastern Cottonwood	10	5 - Poor	Lean|Crown Lean|Crowded	30% dead wood|Cavity|Growing in f	Remove
4136	*Juniperus virginiana*	Red Cedar	6	5 - Poor	Crown Lean|Crowded	50% dead wood	Remove
4137	*Ulmus pumila*	Siberian Elm	22,20,17	5 - Poor	V-shaped joint|Double Leader|Multi Leader|Broke	40% dead wood|Dead Limbs|Cavity	Remove
4138	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Unbalanced|Crown Lean	30% dead wood	Remove
4139	*Acer negundo*	Box Elder	22,13,12	4 - Fair/Poor	U-shaped joint|Multi Leader|Lean|Unbalanced	20% dead wood|Cavity	Remove
4140	*Ulmus pumila*	Siberian Elm	11	5 - Poor	Strong lean|Unbalanced|Crown Lean	20% dead wood|Wood rot|Cavity	Remove
4141	*Acer negundo*	Box Elder	7	5 - Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
4142	*Quercus macrocarpa*	Bur Oak	6,6	6 - Dead	Double Leader|Lean|Broken Leader	>50% dead wood|Cavity|Peeling Ba	Remove
4143	*Ulmus pumila*	Siberian Elm	16,14	4 - Fair/Poor	U-shaped joint|Double Leader|Unbalanced|Crow	30% dead wood	Remove
4144	*Acer negundo*	Box Elder	22,9	5 - Poor	U-shaped joint|Double Leader|Strong lean|Crown Lean		Remove
4145	*Populus deltoides*	Eastern Cottonwood	15	3 - Fair	Lean		Remove
4146	*Robinia pseudoacacia*	Black Locust	5	4 - Fair/Poor	Lean|Unbalanced|Crown Lean		Remove
4147	*Acer negundo*	Box Elder	4	4 - Fair/Poor	Lean|Unbalanced|Crowded		Remove
4148	*Ulmus pumila*	Siberian Elm	10	5 - Poor	Lean|Crown Lean|Crowded	Trunk Damage|Trunk Scar|Peeling	Remove
4149	*Ulmus pumila*	Siberian Elm	12,7	4 - Fair/Poor	V-shaped joint|Double Leader|Lean|Crown Lean		Remove
4150	*Juniperus virginiana*	Red Cedar	9,25' Tall	4 - Fair/Poor	Crowded	30% dead wood	Remove
4151	*Ulmus pumila*	Siberian Elm	14	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood|Trunk Scar	Remove
4152	*Acer negundo*	Box Elder	11	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4153	*Populus deltoides*	Eastern Cottonwood	32,30,30,28,16	4 - Fair/Poor	Multi Leader|Lean|Crown Lean|Broken Limb	20% dead wood|Dead Leader	Remove
4154	*Populus deltoides*	Eastern Cottonwood	32	4 - Fair/Poor	Unbalanced|Crown Lean|Broken Limb	30% dead wood|Dead Limbs	Remove
4155	*Ulmus pumila*	Siberian Elm	12	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown L	20% dead wood	Remove
4156	*Populus deltoides*	Eastern Cottonwood	20	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	10% dead wood	Remove
4157	*Juniperus virginiana*	Red Cedar	11,25' Tall	3 - Fair	Unbalanced		Remove
4158	*Populus deltoides*	Eastern Cottonwood	20,15	4 - Fair/Poor	Double Leader|Lean|Unbalanced|Crown Lean	20% dead wood	Remove
4159	*Acer negundo*	Box Elder	4,2,2	5 - Poor	Strong lean|Crown Lean|Crowded	40% dead wood|Dead Leader	Remove
4160	*Acer negundo*	Box Elder	9	5 - Poor	Lean|Crown Lean|Crowded	40% dead wood|Dead Leader	Remove
4161	*Acer negundo*	Box Elder	9	5 - Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
4162	*Ulmus americana*	American Elm	12	3 - Fair	Unbalanced		Remove
4163	*Juniperus virginiana*	Red Cedar	7,20' Tall	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded		Remove
4164	*Acer negundo*	Box Elder	8	5 - Poor	Split Leaders|Unbalanced|Crown Lean	Hollow|Cavity|Trunk Damage	Remove
4165	*Populus deltoides*	Eastern Cottonwood	28	4 - Fair/Poor	Lean|Unbalanced	Large dead roots	Remove
4166	*Acer negundo*	Box Elder	12	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood|Fungus|Trunk Dam	Remove
4167	*Ulmus pumila*	Siberian Elm	6,5	4 - Fair/Poor	U-shaped joint|Double Leader	20% dead wood|Cavity	Remove
4168	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood|Trunk Scar	Remove
4169	*Ulmus pumila*	Siberian Elm	4	4 - Fair/Poor	Crown Lean|Crowded	Trunk Scar	Remove
4170	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood|Trunk Scar	Remove
4171	*Acer negundo*	Box Elder	8	6 - Dead	Broken Leader	>50% dead wood|Cavity|Adventitious Growth|Peeling Bark	Remove
4172	*Ulmus pumila*	Siberian Elm	9	5 - Poor	V-shaped joint|Double Leader|Split Risk|Crown L	30% dead wood|Roots washed out	Remove
4173	*Acer negundo*	Box Elder	5	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4174	*Acer negundo*	Box Elder	4,3	5 - Poor	Strong lean	Wood rot|Cavity|Trunk Damage	Remove
4175	*Acer negundo*	Box Elder	7,4,3,3	5 - Poor	Multi Leader|Strong lean	20% dead wood|Wood rot|Cavity	Remove
4176	*Morus alba*	White Mulberry	4	4 - Fair/Poor	Crown Lean|Crowded	30% dead wood|Dead Limbs	Remove
4177	*Morus alba*	White Mulberry	10	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	30% dead wood	Remove
4178	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Unbalanced|Crown Lean		Remove
4179	*Acer negundo*	Box Elder	4	4 - Fair/Poor	Lean|Unbalanced|Crown Lean		Remove
4180	*Salix nigra*	Black Willow	6	3 - Fair	Unbalanced|Crown Lean		Remove
4181	*Acer negundo*	Box Elder	4	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
4182	*Salix nigra*	Black Willow	8	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
4183	*Acer negundo*	Box Elder	4	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4184	*Populus deltoides*	Eastern Cottonwood	12	3 - Fair	Unbalanced	20% dead wood	Remove
4185	*Morus alba*	White Mulberry	4	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
4186	*Celtis occidentalis*	Hackberry	5	3 - Fair	Unbalanced|Crown Lean		Remove
4187	*Celtis occidentalis*	Hackberry	8	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
4188	*Malus sp.*	Crabapple	8,4	5 - Poor	Strong lean|Crown Lean|Crowded		Remove
4189	*Ailanthus altissima*	Tree of Heaven	7,7	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
4190	*Ailanthus altissima*	Tree of Heaven	4	5 - Poor		>50% dead wood	Remove
4191	*Morus alba*	White Mulberry	4,2	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean|Cr	20% dead wood	Remove
4192	*Ulmus americana*	American Elm	12	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4193	*Juniperus virginiana*	Red Cedar	6	5 - Poor	Unbalanced|Crowded	>50% dead wood	Remove
4194	*Juniperus virginiana*	Red Cedar	8	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	40% dead wood	Remove
4195	*Ulmus pumila*	Siberian Elm	14,11,10	4 - Fair/Poor	U-shaped joint|Multi Leader|Lean|Unbalanced|Cr	20% dead wood	Remove
4196	*Juniperus virginiana*	Red Cedar	6	5 - Poor	Crowded	>50% dead wood	Remove
4197	*Juniperus virginiana*	Red Cedar	14,15' Tall	5 - Poor	Crown Lean|Crowded|Broken Leader	50% dead wood	Remove
4198	*Robinia pseudoacacia*	Black Locust	10	4 - Fair/Poor	Unbalanced	20% dead wood|Dead Limbs	Remove
4199	*Juniperus virginiana*	Red Cedar	18,40' Tall	3 - Fair	U-shaped joint|Double Leader	30% dead wood	Remove
4200	*Juniperus virginiana*	Red Cedar	11,40' Tall	4 - Fair/Poor	Lean|Crowded		Remove
4201	*Juniperus virginiana*	Red Cedar	14,40 tall	4 - Fair/Poor	Lean|Crowded	30% dead wood|Sapsucker damag	Remove
4202	*Juniperus virginiana*	Red Cedar	12,40' Tall	4 - Fair/Poor	Lean|Crowded	30% dead wood	Remove
4203	*Juniperus virginiana*	Red Cedar	8,35' Tall	4 - Fair/Poor	Crowded	40% dead wood	Remove
4204	*Juniperus virginiana*	Red Cedar	12,40' Tall	4 - Fair/Poor	Unbalanced|Crowded	30% dead wood	Remove
4205	*Juniperus virginiana*	Red Cedar	11	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
4206	*Juniperus virginiana*	Red Cedar	6,25' Tall	4 - Fair/Poor	Lean|Crown Lean|Crowded	30% dead wood	Remove
4207	*Juniperus virginiana*	Red Cedar	6,15' Tall	5 - Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
4208	*Ulmus pumila*	Siberian Elm	10	4 - Fair/Poor	Crown Lean|Crowded|Broken Leader	20% dead wood	Remove
4209	*Juniperus virginiana*	Red Cedar	9,30' Tall	4 - Fair/Poor	Crowded	30% dead wood	Remove
4210	*Ulmus pumila*	Siberian Elm	30,20	5 - Poor	V-shaped joint|Double Leader|Split Risk	40% dead wood|Dead Leader	Remove
4211	*Juniperus virginiana*	Red Cedar	9,30' Tall	4 - Fair/Poor	Crowded	50% dead wood	Remove
4212	*Juniperus virginiana*	Red Cedar	9,30' Tall	4 - Fair/Poor	Lean|Crowded	30% dead wood	Remove
4213	*Acer negundo*	Box Elder	8	4 - Fair/Poor	Strong lean|Crown Lean|Crowded	20% dead wood	Remove
4214	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor	Unbalanced|Crown Lean|Broken Limb		Remove
4215	*Ulmus pumila*	Siberian Elm	11	4 - Fair/Poor	Unbalanced|Crown Lean|Broken Limb	30% dead wood|Dead Limbs|Dead	Remove
4216	*Acer negundo*	Box Elder	20	3 - Fair	Unbalanced	20% dead wood	Remove
4217	*Acer negundo*	Box Elder	11	4 - Fair/Poor	U-shaped joint|Double Leader|Strong lean|Crown	20% dead wood	Remove
4218	*Acer negundo*	Box Elder	9	5 - Poor	Strong lean|Crown Lean|Crowded	20% dead wood|Dead leaning on	Remove
4219	*Ulmus pumila*	Siberian Elm	6	4 - Fair/Poor		20% dead wood	Remove
4220	*Ulmus pumila*	Siberian Elm	9	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4221	*Ulmus pumila*	Siberian Elm	5	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
4222	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Lean|Crown Lean	30% dead wood	Remove
4223	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor		20% dead wood|Cavity	Remove
4224	*Acer negundo*	Box Elder	4	4 - Fair/Poor	Crown Lean	30% dead wood|Trunk Scar	Remove
4225	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4226	*Prunus serotina*	Black Cherry	12	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
4227	*Acer negundo*	Box Elder	7,4	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean	30% dead wood|Dead Limbs	Remove
4228	*Morus alba*	White Mulberry	11	4 - Fair/Poor	V-shaped joint|Split Risk|Unbalanced|Crown Lea	20% dead wood	Remove
4229	*Juniperus virginiana*	Red Cedar	13,20' Tall	5 - Poor	Crown Lean|Broken Leader	40% dead wood	Remove
4230	*Acer negundo*	Box Elder	7,5,3	4 - Fair/Poor	U-shaped joint|Multi Leader|Crown Lean	Wood rot|Cavity	Remove
4231	*Juniperus virginiana*	Red Cedar	5,30' Tall	5 - Poor		50% dead wood|Cavity	Remove
4232	*Juniperus virginiana*	Red Cedar	9,30' Tall	4 - Fair/Poor	Lean|Crowded	30% dead wood	Remove
4233	*Prunus serotina*	Black Cherry	26	3 - Fair	Unbalanced|Crown Lean	10% dead wood	Remove
4234	*Juniperus virginiana*	Red Cedar	13,30' Tall	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
4235	*Prunus serotina*	Black Cherry	7	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4236	*Celtis occidentalis*	Hackberry	11	2 - Good		10% dead wood	Remove
4237	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Lean|Crown Lean|Crowded	Trunk Damage	Remove
4238	*Malus sp.*	Crabapple	6	4 - Fair/Poor	Crown Lean|Crowded	20% dead wood	Remove
4239	*Juniperus virginiana*	Red Cedar	7	4 - Fair/Poor	Unbalanced|Crown Lean	Under power lines	Remove
4240	*Prunus serotina*	Black Cherry	8	5 - Poor	Crowded|Horizontal Growth	Wood rot|Trunk Damage	Remove
4241	*Juniperus virginiana*	Red Cedar	8	3 - Fair		20% dead wood	Remove
4242	*Ailanthus altissima*	Tree of Heaven	12	4 - Fair/Poor	Crown Lean|Crowded	40% dead wood|Dead Limbs	Remove
4243	*Ulmus pumila*	Siberian Elm	12	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded|Broken Limb	20% dead wood	Remove
4244	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4245	*Acer negundo*	Box Elder	5	5 - Poor	Strong lean|Crown Lean|Crowded	30% dead wood	Remove
4246	*Populus deltoides*	Eastern Cottonwood	9	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
4247	*Morus alba*	White Mulberry	6	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
4248	*Ulmus pumila*	Siberian Elm	7	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4249	*Populus deltoides*	Eastern Cottonwood	7,6	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk		Remove
4250	*Populus deltoides*	Eastern Cottonwood	12,6	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Lean|Crown Lean		Remove
4251	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded		Remove
4252	*Acer negundo*	Box Elder	6	4 - Fair/Poor	Strong lean|Crowded	20% dead wood	Remove
4253	*Ulmus americana*	American Elm	4	4 - Fair/Poor	Lean|Crown Lean|Crowded	30% dead wood	Remove
4254	*Populus deltoides*	Eastern Cottonwood	10	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood|Dead Limbs	Remove
4255	*Ulmus americana*	American Elm	5	3 - Fair	Unbalanced|Crowded	20% dead wood	Remove
4256	*Ulmus pumila*	Siberian Elm	8	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4257	*Populus deltoides*	Eastern Cottonwood	13	4 - Fair/Poor	Lean|Unbalanced|Crown Lean		Remove
4258	*Populus deltoides*	Eastern Cottonwood	13	3 - Fair	Unbalanced	10% dead wood	Remove
4259	*Populus deltoides*	Eastern Cottonwood	9	4 - Fair/Poor	Lean|Crown Lean|Crowded	40% dead wood	Remove
4260	*Populus deltoides*	Eastern Cottonwood	9,6	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown L	20% dead wood	Remove
4261	*Populus deltoides*	Eastern Cottonwood	8	4 - Fair/Poor	Lean|Unbalanced	20% dead wood|Trunk Scar	Remove
4262	*Populus deltoides*	Eastern Cottonwood	8	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4263	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove
4264	*Populus deltoides*	Eastern Cottonwood	8	4 - Fair/Poor	Lean|Unbalanced|Crown Lean|Crowded		Remove
4265	*Ailanthus altissima*	Tree of Heaven	5	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded		Remove
4266	*Ulmus pumila*	Siberian Elm	5	4 - Fair/Poor	Unbalanced|Crown Lean	20% dead wood	Remove
4267	*Salix nigra*	Black Willow	6	4 - Fair/Poor	Lean|Crown Lean	Dead Limbs	Remove
4268	*Populus deltoides*	Eastern Cottonwood	8	4 - Fair/Poor	Lean|Unbalanced|Crowded		Remove
4269	*Ailanthus altissima*	Tree of Heaven	8	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4270	*Ailanthus altissima*	Tree of Heaven	7,5	4 - Fair/Poor	V-shaped joint|Double Leader|Split Risk|Crown Lean		Remove
4271	*Acer negundo*	Box Elder	7	4 - Fair/Poor	Lean|Unbalanced|Crowded	20% dead wood	Remove
4272	*Populus deltoides*	Eastern Cottonwood	6	4 - Fair/Poor	Unbalanced|Crown Lean		Remove
4273	*Populus deltoides*	Eastern Cottonwood	9	4 - Fair/Poor	Lean|Unbalanced|Crowded	20% dead wood	Remove
4274	*Populus deltoides*	Eastern Cottonwood	11	3 - Fair	Lean|Unbalanced		Remove
4275	*Populus deltoides*	Eastern Cottonwood	9	4 - Fair/Poor	Lean|Crown Lean|Crowded	20% dead wood	Remove
4276	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Strong lean|Crown Lean|Crowded		Remove
4277	*Ulmus pumila*	Siberian Elm	11	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded	20% dead wood	Remove
4278	*Ulmus pumila*	Siberian Elm	4	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
4279	*Prunus serotina*	Black Cherry	7	4 - Fair/Poor	Unbalanced|Crown Lean|Crowded		Remove
4280	*Salix nigra*	Black Willow	7	5 - Poor	Strong lean|Crown Lean	Trunk Damage|Leaning against tre	Remove
4281	*Populus deltoides*	Eastern Cottonwood	4	5 - Poor	Strong lean|Crown Lean|Crowded|Horizontal Gro	30% dead wood	Remove
4282	*Populus deltoides*	Eastern Cottonwood	6	4 - Fair/Poor	Lean|Unbalanced		Remove
4283	*Populus deltoides*	Eastern Cottonwood	9	3 - Fair		20% dead wood	Remove
4284	*Populus deltoides*	Eastern Cottonwood	6	4 - Fair/Poor	Lean|Unbalanced	Trunk Scar	Remove
4285	*Ulmus pumila*	Siberian Elm	6	3 - Fair	Unbalanced|Crown Lean		Remove
4286	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Lean|Crown Lean|Crowded		Remove
4287	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Lean|Unbalanced|Crown Lean	20% dead wood	Remove
4288	*Populus deltoides*	Eastern Cottonwood	7	4 - Fair/Poor	Lean|Unbalanced	20% dead wood	Remove

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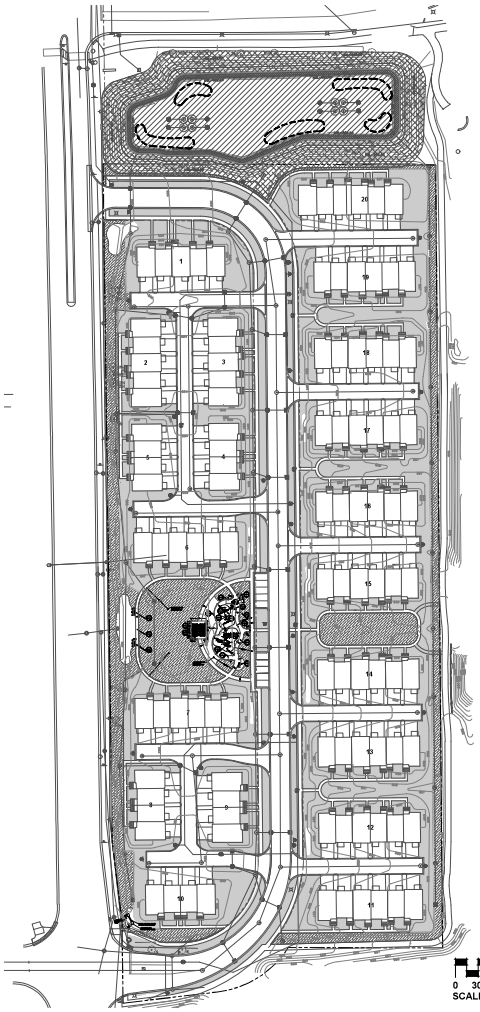
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

TREE INVENTORY

2	12.19.2024
1	11.25.2024
REVISIONS	

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.10

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



LEGEND

Key	Description	Description
	TURF SEED & BLANKET	
	SOD	
	LOW PROFILE PRAIRIE SEED MIX	
	EMERGENT SEED & PLUG MIX	
	WET MEADOW SEED MIX	
	EMERGENT PLUG LIMITS	

0 30' 60' 120' 180'
SCALE: 1"=60'

NORTH

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WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

SEED & SOD EXHIBIT

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.11

I. GENERAL SPECIFICATIONS

A. Scope of Work

1. This work shall consist of preparing the planting beds, seedbed or ground surface, and furnishing, transporting and placing plants, mulch, seed, sod, fertilizer and other materials required in the specified operations.
2. Planting required for this work is indicated on the Landscape Plans and, in general consists of the following:
   a. The establishment of trees, shrubs, perennials, annuals, lawn and natural areas as shown on the Landscape Plans.
   b. The provision of post-planting management as specified herein;
   c. Any remedial operations necessary for conformance with The Landscape Plans as specified in this document;
   d. The design, furnishing and installation of a complete underground sprinkler system at locations noted on plan.

B. General

1. Permits

   The Landscape Contractor shall be responsible for obtaining any permits required for the completion of the work and shall be responsible for the cost of the same.

2. Field Verification

   Upon notice to begin work the Landscape Contractor shall verify all existing conditions of the site and shall report any conditions that will impede the beginning of work to the Landscape Architect in writing. The Landscape Contractor shall examine areas, conditions, grades, soils and water levels under which work is to be performed and notify the Landscape Architect of conditions detrimental to the proper and timely completion of the work.

3. Existing Utilities

   The Landscape Contractor shall verify location of all underground utilities before construction. Contact J.U.L.I.E. at 1.800.892.0123, 48 hours prior to digging. Notification of any disturbance of existing utilities shall be given to the Landscape Architect immediately. Should uncharted or incorrect utilities be encountered, notify the Landscape Architect immediately.

4. Inspections of Project

   During the construction period, all phases of work shall be available for inspections by the Landscape Architect. All plant material shall be subject to inspection and approval, and the Landscape Architect reserves the right to reject any plants which fail to meet the standards of this Inspection. The Landscape Architect reserves the right to inspect nursery stock either at place of growth or at site for compliance with requirements of variety, size and quality.

C. Quality Assurance

1. The Landscape Contractor shall provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this Section and shall comply with work size requirements.
2. The Landscape Contractor must verify with the Landscape Architect at the commencement of work that he has the most current set of plans for the project and that one set of the current plans, clearly marked "Field Set", must be on the jobsite at all times.
3. The Landscape Contractor shall provide protection for structures, utilities, roads, trees and vegetation from damages caused by settlement, undermining, washout and other hazards created by landscape operations.
4. The Landscape Contractor shall provide and maintain fences, planking, guard lights, barricades, warning signs and guards as necessary for protection of material storage, curbs, sidewalks, streets, drives and adjoining property.
5. Any damage to utilities, structures, plantings, or lawns which result from the Landscape Contractor's course of work will be repaired at the Landscape Contractor's expense, to the satisfaction of the Landscape Architect, in a reasonably timely manner with as little inconvenience to the Owner as possible.
6. Existing trees, shrubs and plant material to remain shall be protected. Damage to existing plants which result from the Landscape Contractor's course of work shall be repaired by a qualified nurseryman or replaced with approved material per village ordinance at the expense of the Landscape Contractor.
7. All planting techniques and methods shall be consistent with the latest edition of "Horticulture Standards of Nurserymen" and as detailed on the drawings.
8. Landscape Contractor shall maintain all relevant erosion control devises destroyed or disrupted during landscape installation. Erosion control devises include measures shown on the approved erosion control plans, plus any additional measures deemed necessary by the Owner or public agency having jurisdiction over erosion control. Erosion control devices include, but are not limited to, silt fence, straw bales, erosion control logs, filter fabric in storm structures, filter baskets ditch checks and siltation basins.

D. Substitutions

1. Substitution from the approved plans will be accepted only when satisfactory evidence in writing is submitted to the Landscape Architect showing that the plant specified is not available.
2. Landscape Contractor shall submit request for approved to substitute plant material available and shall include Common and Botanical names and size of substitute material.
3. Only those substitutions of equivalent size and having essential characteristics similar to the originally specified material will be approved.
4. Acceptance or rejection of substitute plant materials will be issued in writing by the Landscape Architect, following approval by Lennar and the governing Municipality or Regulatory Agency.
5. Any unauthorized substitutions will be removed and replaced by the Landscape Contractor at the expense of the Landscape Contractor.

E. Submittals

1. Nursery List: In Bid Proposal Form Landscape Contractor shall identify a list of area nurseries from where nursery stock for the job will be obtained.
2. Materials List: Before any plant materials are delivered to the job site, submit to the Landscape Architect a complete list of all plants and other items to be installed and the nursery sources.
3. Certification of Inspection: Shall accompany each shipment of plants as may be required by law for transportation. File certificates with the Landscape Architect prior to acceptance of the material. Inspection by Federal or State authorities at place of growth does not preclude rejection of the plants at the site.
4. Planting Schedule: Submit proposed planting schedule with dates for review and inspection of plants by the Landscape Architect prior to planting.
5. Soil Tests: Submit two (2) copies of soils test of existing topsoil with recommendations for soil amendments for Landscape Architect's review.
6. Seed: Submit seed vendor's certification for required grass seed mixture, indicating percentage by weight, and percentage of purity, germination, and weed seed for each grass species and date tested.
7. Sod: Submit sod grower's certification of grass species. Identify source location in Bid Proposal Form.
8. Mulch and Erosion Control Blankets: Submit two (2) samples of shredded hardwood bark mulch, erosion control blankets, and all other products and materials as specified on plans to Landscape Architect for review and written approval.
9. Maintenance Instructions: Submit to the Landscape Architect typewritten instructions recommending procedures to be established by the Owner for the maintenance of landscape work after preliminary acceptance of plantings and turf areas. Submit prior to beginning of warranty period. Instructions shall include: watering, fertilizing, spraying, mulching and pruning for plant material and trimming groundcover. Instructions for watering, fertilizing and mowing grass areas shall be submitted prior to request for preliminary inspection for acceptance.

F. Product Handling

1. Delivery and Storage
   a. Deliver all items to the site in their original containers with all labels intact and legible at the time of inspection.
   b. Immediately remove from the site all plants which are not true to name and all materials which do not comply with the provisions of these Specifications.
   c. Use all means necessary to protect plant materials before, during, and after installation and to protect the installed work and materials of all other trades.
   d. Cover all plant material transported in open vehicles with a protective covering to prevent windburn.
2. Time of Planting
   a. All planting shall be performed during favorable weather conditions and only during normal and accepted planting seasons when satisfactory growing conditions exist.
   b. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by the Landscape Architect. The Landscape Contractor assumes full and complete responsibility for such plantings and operations.

G. Materials

1. Plant Material

   Provide plants typical of their species or variety with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces.
   a. Balled and burlapped plants shall have a firm natural ball of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls are not acceptable
   b. Tree spade transplanting is acceptable for plants 6" caliper and larger after acceptance of plant by the Landscape Architect. Tree spade must be of a size generally accepted in the trade to safely move the tree size.
   c. Container grown stock shall be grown in a container for a sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
      (i) No plants shall be loose in the container.
      (ii) Container stock shall not be pot bound.
      (iii) All container plants used on the project shall conform to the sizes indicated on the plant list and on the drawings.
   d. No evidence of wounds and/or pruning cuts shall be permitted unless approved by the Landscape Architect.
   e. When specified by caliper, provide shade and ornamental trees with a single main trunk. When specified by height, provide shade and ornamental trees as multi-stemmed plants with not less than three main trunks and side branches that are generous and well budged.
   f. Evergreen trees shall be branched to the ground unless otherwise specified and accepted.
   g. Provide plants matched in form when arranged in groups.
   h. All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of two years. Comply with sizing and grading standards of the latest edition of "American Standards of Nursery Stock" A plant shall be dimensioned as it stands in its natural position. No plants shall be loose in the container.
      (i) Shade Tree and Ornamental Tree caliper shall be measured at a point on the trunk six (6) inches above natural ground line for trees up to and including four (4) inches in diameter, and at a point twelve (12) inches above the natural ground line for trees over four (4) inches in diameter.
      (ii) Height of Evergreen Trees is measured from the natural ground line to the first lateral branch closest to the top.
      (iii) Height of Clump Ornamental Trees is measured from the natural ground line to the beginning last year's growth.
      (iv) Shrub and small plants shall meet the requirements for spread and/or height indicated on the plant list and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required.
2. Sub-drainage Systems
   a. Provide piping types and sizes indicated. Provide matching reducers, adapters, couplings, fittings and accessory components to ensure continuity of the sub-drainage system.
      i. Plastic tubing shall be ASTM F405, corrugated Polyethylene drainage tubing, perforated or solid as required.
      ii. Sub-drainage fill shall be AASHTO M43 (3/8" to 3/4") clean uniformly graded stone or gravel.
      iii. Sub-drainage filter fabric shall be DuPont "Typar" or other non-woven porous polypropylene fabric approved by the Landscape Architect.
3. Grass Seed
   a. All seeds shall be guaranteed by the vendor to be true to name and variety.
   b. Seed mixtures shall be fresh, clean new crop with a tolerance for purity and germination established by the Official Seed Analysts of North America. Seed will not contain any noxious weed seeds.
   c. Seed mixtures shall be proportioned by weight and shall be as specified on the drawings. If no seed mix is specified, the following mixture shall be used:

      65% Improved Kentucky Bluegrass (minimum three (3) varieties)

      25% Improved Perennial Ryegrass (minimum two (2) varieties with endophytes)

      10% Creeping Red Fescue

      If this general turf seed mix is used, the Landscape Contractor must submit the vendor's seed varieties, composition and application rate to the Landscape Architect for approval prior to ordering.
4. Erosion Control Blanket
   a. North American Green seed blanket matting shall be used. Secure with 4" biostakes.
5. Sod

   Sod used shall be an approved blend of improved Kentucky Bluegrass (such as: Midnight, Allure, Viva, Washington and Liberty) with a mineral back that is adapted to the locality of work. It shall be either nursery grown or field grown and be well rooted. The consistency of adherent soil shall be such that it will not break, crumble, or tear during handling and placing of the sod. Landscape Architect reserves the right to reject unacceptable sod.
   a. Each piece of sod shall be well covered with turf grass, shall not be less than two (2) years old, shall be free from noxious weeds and other objectionable plants, and shall not contain substances injurious to growth.
   b. All sod used shall comply with state and federal laws with respect to inspection for plant diseases and insect infestation.
   c. Each sod shipment shall be accompanied by an invoice from the vendor giving quantity and certifying that the sod received meets all requirements contained in these specifications.
6. Seed Fertilizer
   a. Fertilizer for seeded areas shall be a granular non-burning product from a commercial source composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer, uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer types and ratios shall be as follows:
      i) Starter fertilizer with an approximate analysis of 13-25-12 at the rate of 4 lbs. per 1,000 S.F. or similar composition approved by the Landscape Architect.
      ii) Post emergent fertilizer with an approximate analysis of 25-5-5 at a rate of 4 lbs. per 1,000 S.F. or similar composition approved by the Landscape Architect.
7. Sod Fertilizer
   a. Fertilizer for sod areas shall be a granular non-burning professional product from a commercial source, uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer ratio shall be a ratio of 13-25-12 at the rate of 4 lbs. per 1,000 S.F.
8. Plant Fertilizer
   a. Fertilizer for plants shall be a granular non-burning standard commercial grade product, uniform in composition, free flowing and suitable for application with approved equipment and an analysis of 16-4-14 at the rate of 6 lbs. per 1,000 S.F.
9. Native Planting Mixtures

   Provide fresh, clean, new crop of the species and proportions as specified. Native seed and live plant material shall be obtained from a reputable supplier (approved by Landscape Architect) that has collected from sources west of the Mississippi River within the same EPA Level III Ecoregion as the project site (Central Corn Belt Plains). Any material sourced from outside this ecoregion must be approved by the Landscape Architect prior to installation.

   For each species, the amount of seed indicated on the specifications shall mean the total amount of pure live seed (PLS) per acre. Seed tags and PLS testing information shall be provided to the Landscape Architect prior to seeding.

   It is the sole responsibility of the Native Landscape Contractor to provide approved seed that meets industry-standard PLS requirements.
10. Mulch
    a. Mulch for tree and shrub planting beds shall be dark shredded hardwood bark mulch, six month old, not larger than 4" in length and 1/2" in width, free of woodchips and sawdust. Submit sample to Landscape Architect for approval.
    b. Mulch for perennial flower, annual flower and groundcover planting beds shall be pinebark fines. Submit sample to Landscape Architect for approval.
11. Topsoil
    a. Topsoil shall be available adjacent to the community site for use on project or in backfill mixes as specified. Initial fine grading to be done by Excavation Contractor.
    b. Touch up movement and placement of this topsoil shall be at the sole expense of the Landscape Contractor.
    c. Topsoil stockpile placement will be coordinated with Excavator to ensure easy access to Contractor.
12. Planting Bed Soil Mixture (Perennial, Annual and Groundcover Beds)
    a. Provide planting soil mixture consisting of equal parts cooled mushroom compost and pinebark fines (Same as Midwest Trading CM30 min) at 1 C.Y. per 100 S.F. incorporated into all perennial, annual and groundcover areas. Planting pits shall be excavated and filled with friable topsoil (stockpiled at site) to a depth of 8" prior to adding and incorporating planting bed soil mixture.
13. Accessories
    a. Water: Water provided by the Landscape Contractor shall be free of substances harmful to plant growth. All necessary hose piping, tank truck and other methods of transportation shall be supplied by the Landscape Contractor.
    b. Downspout Splash Areas:
       i) Downspout splash areas in lawns shall be 24" concrete splash blocks.
       ii) Downspout splash areas in mulch shall be washed gravel sub-base 0.5-0.75" diameter and 3-4" diameter granite cobblestone surface with geotextile filter fabric lining sides and bottom of trench.
    c. Sand: Sand shall be coarse "torpedo" sand.
    d. Pea gravel: Pea gravel shall be 1/8" to 1/4" washed gravel.
    e. Retaining Walls: Retaining walls must always be installed in strict compliance with manufacturer's recommendations for siting and reinforcement
       i) Retaining wall material shall be as specified on the drawings or as approved by the Landscape Architect
    f. Anti-Desiccant: Anti-Desiccant shall be an applicable emulsion which forms a transparent protective film over plant surface, permeable enough to permit transpiration, (Wilt-Pruf, manufactured by Nursery Specialty Products, Inc. or approved equal).
    g. Herbicide: Herbicide shall be a granular form of herbicide applied in shrub and ground cover beds in strict accordance with the manufacturer's directions and recommendations. Acceptable products are "Treflan", "Ronstar" or approved equal.

H. Installation and Execution

1. Inspection
   a. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that such work is complete to the point where this installation may properly commence. Verify that planting may be completed in accordance with the original design and the referenced standards. Work will commence only when satisfactory conditions exist.
   b. Check that grading, including spreading of topsoil and all other sub-surface work in lawn areas have been completed and accepted by Lennar. Start of work in this section shall constitute acceptance of grade. Lawn irrigation system must be completed and in operation before seeding and sodding begins.
   c. Saturate and fill tree and shrub pits with water to test drainage before planting. Provide gravel drains and venting tubes at pits, which are more than half full of water after 24 hours.
   d. Landscape Contractor shall notify the Landscape Architect prior to plant installation. The Landscape Architect, at his discretion, may inspect all plant material and layout prior to planting.
2. Preparation

   Trees, Shrubs, Perennials, Annuals and Groundcovers
   a. Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.
   b. Locate plants as indicated or as approved in the field by the Landscape Architect after staking by the Landscape Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate locations have been selected by the Landscape Architect.
   c. Excavate circular plant pits with tapered sides as shown on the drawing details. In general, all plant pits shall have a rounded bottom with the depth of the pit equal to the depth of the ball to be planted. The diameter of the pit shall be a minimum of two (2) times the width of the ball.
   d. Excavate all clay and debris to 8" depth beneath all perennial, ornamental grass, annual flower, and groundcover beds. Backfill with 12" amended topsoil, thus resulting in all these areas being elevated or crowned by 4" wherever site drainage allows.

   Seeding and Sodding
   a. Seed and sod bed preparation shall not be started until all stones, boulders, debris, and similar material larger than 1 inch in diameter have been removed. The area to be seeded shall be worked to a minimum depth of 6 inches with a disk or other equipment, reducing all soil particles to a size not larger than 1 inch in the largest dimension. Bed prep shall occur on the contour, where possible. The prepared surface shall be relatively free from all weeds, stones, roots, sticks, rivulets, gullies, crusting and caking. Do not overwork or powder final seedbed.
   b. Upon completion of the above, any rocks or stones larger than one (1) inch in diameter shall be removed from the surface prior to seeding. If excessive amount of rocks are present in native soil Contractor should contact the Landscape Architect immediately.
   c. Landscape Contractor shall remove all debris and dispose of such material legally off-site.
   d. The areas to be seeded shall be assumed to be at final grades established by Excavator. The Landscape Contractor, however, shall be responsible for the proper drainage of the entire area. The Landscape Contractor shall fine grade all turf areas including any grading necessary to eliminate ponding of water, ruts or ridges. Limit preparation to areas which will be grassing within 48 hours.
   e. Immediately prior to the seed and sod bed preparation, specified fertilizer nutrients shall be uniformly spread at the following rate:
      i) 5 lbs. per 1000 S.F.
   f. Final surface of topsoil immediately before seeding shall be within plus or minus 1/2" of required elevation, with no pockets or low spots in which water can collect. Restore prepared areas to specific condition if eroded, settled, or otherwise disturbed after fine grading and prior to seeding or sodding. Finish grade surface with a drag or rake. Round out all breaks in grade, smooth down all lumps and ridges, fill in all holes and crevices.
   g. In the event of settlement, re-adjust the work to required finish grade.
3. Planting

   Plant nursery stock immediately upon delivery to the site and approval by the Landscape Architect. If immediate planting is not possible a holding area on-site must be established in a location approved by Lennar. All plant material in the holding area must have the rootball heeled in damp mulch and be protected from excessive sun and wind. The Landscape Contractor must operate and maintain the holding area in a neat and orderly appearance.

   All planting shall be performed during favorable weather conditions and only during normal and accepted planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by the Landscape Architect. The Contractor assumes full and complete responsibility for such plantings and operations.

   Trees and Shrubs
   a. Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb and faced to give best appearance or relationship to each other or adjacent structure. Set plant material 2" above the adjacent grade. The Contractor is responsible for planting to correct grades and alignment and all plants shall be set so that when settled will bear the same relationship to finished grade as they did before being transported.
   b. Remove all non-biodegradable strings and twine from top of ball. Remove non-biodegradable burlap from to 1/3 of ball after the tree is set in the planting hole. The wire basket should remain. Fold the top portion of the wire basket into the hole.
   c. Any topsoil excavated from plant pits shall be used in the backfill soil mixture. No filling will be permitted around trunks or stems. Backfill the pit with topsoil. Do not use frozen or muddy mixture for backfilling. Form a ring of soil around the edge of each planting pit to retain water.
   d. After setting plants in pit to proper grade compact 6" of soil around base of ball. Fill the entire planting hole with water and allow to soak in. Gradually backfill remaining space around the ball or roots and compact the soil thoroughly using water to eliminate all voids and thoroughly soak the plant root ball.
   e. Within 24 hours of planting slowly re-water the plant thoroughly soaking the root ball again.
   f. Install enough topsoil to insure finished grades are met after settling.
   g. All excess soil, other than topsoil, excavated from pits, shall be removed from the holes and left on site in locations designated by Lennar.
   h. After planting apply specified commercial pre-emergent herbicide per manufacturer's directions to all shrub beds.

   Perennials, Ornamental Grasses, Annual Flowers and Groundcovers
   a. Where perennials, ornamental grasses, annual flowers and groundcovers are specified on the plans, prepare entire plant bed incorporating a 1 C.Y. layer of planting soil mixture per 100 S.F. Incorporate commercial 14-14-14 fertilizer into prepared soil mixture at a approximate rate of 6 lbs. per 1000 S.F.
   b. Space plants in accordance with dimensions indicated on the plans. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant it within 18" of the trunks of trees and shrubs or at edge of plant ball whichever is closest. Plant to within 12" of edge of bed.
   c. After planting apply specified commercial pre-emergent herbicide per manufacturer's directions to all planting beds. Confirm herbicide compatibility with all plant material in beds and notify the Landscape Architect immediately if a conflict exists.

   Seeding
   a. Install seed under favorable weather conditions unless approved by the Landscape Architect. The conditions of the guarantee apply regardless of the date of installation. The generally accepted times for seeding are:

      Spring – April 1st to June 15th

      Fall - September 15th to just before first frost
   b. Sodded areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
   c. Seed with specified seed mix at rate specified on the drawings or at a rate of 5 lbs. per 1000 S.F.
   d. Broadcast Seeding: Using a broadcast seeder, sow seed evenly over entire area by sowing equal quantities in two directions at right angles to each other. Do not seed when wind speed exceeds five (5) miles per hour. Seeding by hand is not allowed.
   e. Following seeding the area shall be lightly raked to incorporate seed into top 1/8" to 1/4" of soil. Remove all stones and other debris greater than 1 inch in any dimension which are visible shall be removed and disposed of legally off-site. Areas shall then be smoothed by rolling with a hand roller.
   f. Mechanical Seeding: Using a "Brillion-type" seeder and cultipacker, sow seed evenly over entire area sowing equal quantities in two directions at right angles to each other. Using this method raking and rolling is not required.
   g. Following seeding, all seed areas will be covered with specified erosion control seed matting and stapled in place.
   h. Following seeding, raking and matting, the entire area shall be watered by use of lawn sprinklers or other means approved by the Landscape Architect. Landscape Contractor shall assure initial watering continues until the equivalent of two inches of water has been applied to entire seed surface, at a rate which will not dislodge the seed.
   i. Landscape Contractor shall assure watering is repeated thereafter as frequently as required to prevent drying of the surface and to ensure proper establishment.
   j. Landscape Contractor shall mow the lawn area as soon as top growth reaches a 3 inch height. Cut back to 2 inch height. Not more than 33% of grass leaf shall be removed at any single mowing. The contract shall include a minimum of 3 (three) mowings. Repeat mowing as required to maintain specific height until Landscape Architect issues preliminary acceptance of completed work.
   k. It shall be the Landscape Contractor's responsibility to determine and implement whatever procedures deemed necessary to establish the turf as part of the work. Reseed bare areas and provide erosion control as necessary until complete establishment achieved.
   l. Areas of seed installation will not be accepted until it meets the growth coverage specifications detailed by Illinois Department of Transportation.

   Sodding
   a. Transport sod in either a closed van or in properly covered open trucks.
   b. Maintain sod in a moist condition from cutting until placement. Any sod that has dried out, or excessively heated will be rejected and shall be immediately removed and legally disposed of off-site by the Landscape Contractor. Replacement of rejected sod shall be at the expense of the Landscape Contractor.
   c. Sod shall be placed within 24 hours of cutting. Do not use sod cut for more than 24 hours without the approval of the Landscape Architect.
   d. Sod shall be placed when the ground is in a workable condition and temperatures are less than 90oF. Do not lay dormant sod or install sod on saturated or frozen soil or during an extended drought.
   e. The sod shall be placed on the prepared surface with the edges in close contact and alternate courses staggered. Lay sod to form a solid mass with tightly-jointed joints. Butt ends and sides of sod strips. Do not overlap edges. Stagger strips to offset joints in adjacent courses. Remove excess sod to avoid smothering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains, and seeded areas.
   f. In ditches, the sod shall be placed with the longer dimension perpendicular to the flow of water in the ditch. On slopes, install preliminary row of sod in a straight line, starting at the bottom of the slope, the sod shall be placed with the longer dimension parallel to the contours of the ground. Place subsequent rows parallel to and tightly against previously installed row. The exposed edges of sod shall be buried flush with the adjacent soil.
   g. All sod shall be rolled with a light drum roller to ensure contact with sub-grade, uniformity and foster root knitting.
   h. The sod shall be staked on all slopes of 3:1 or steeper to prevent slippage. Sod shall be staked with ±2 stakes per square yard of sod as necessary to stabilize with at least one stake for each piece of sod.
   i. Sodded areas shall be watered to ensure proper establishment. Sod shall be watered thoroughly with fine spray immediately after laying and not be allowed to dry out. Any sod that has shrunk shall be replaced. Landscape Contractor shall assure initial watering continues until the equivalent of two inches of water has been applied to entire sod surface, at a rate which will not dislodge the sod.
   j. Landscape Contractor shall assure watering is repeated thereafter as frequently as required to prevent drying of the surface and watering shall continue through preliminary acceptance to ensure proper establishment.
   k. Landscape Contractor shall mow the lawn area as soon as top growth reaches a 3 inch height. Cut back to 2 inch height. Not more than 40% of grass leaf shall be removed at any single mowing. The contract shall include a minimum of 3 (three) mowings. Repeat mowing as required to maintain specific height until Landscape Architect issues preliminary acceptance of completed work.

   Native Seeding and Planting
   a. The period for planting prairie seed shall be between April 1st and June 15th, or as soon thereafter as the soil is free of frost and in workable condition, and from September 15 to freeze up. If these dates are adjusted, it shall be the responsibility of the Landscape Contractor to ensure establishment of the seed.
   b. Remove existing grass, vegetation and turf. Dispose of such material legally off-site. Do not turn over into soil being prepared for lawns.
   c. If present, compacted soils shall be disked or raked prior to seeding. Remedial measures for the access area may at the direction of the Wetland Consultant, involve ripping from 12-18 inches of the soil horizon prior to disking.
   d. Prior to seeding, planting areas shall have at least twelve inches of clean un-compacted topsoil. Clumps, clods, stones of 2" diameter, roots and other extraneous matter shall be removed and disposed of legally offsite.
   e. Granular mycorrhizal inoculants shall be installed with the seed mix at a rate of 40 lbs/acre. Inoculant can be banded under seed, worked into seed or added into spray tanks. NATIVE AREAS SHALL NOT RECEIVE FERTILIZER.
   f. Contractor shall be solely responsible for the proper handling and storage of the seed according to the best seed handling and storage practices, including fungicide treatments and stratification considerations. Owner shall make no compensation for damage to the seed because of improper storage, cleaning, threshing or screening operations.

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WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

LANDSCAPE SPECIFICATIONS

REVISIONS	
2	12.19.2024
1	11.25.2024

DATE	9.4.2024
PROJECT NO.	LN22128
DRAWN	GEH
CHECKED	ZML
SHEET NO.	L1.12

I. GENERAL SPECIFICATIONS CONTINUED

g. Seeding operations, including installation of erosion control matting, must be accomplished within 24 hours of any area which is fine graded. Fine grade, plant and cover only areas small enough to be completed within the required time frame.

h. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for the installation of native seed. For areas where site conditions preclude the use of specialized equipment, seed may be installed through hand broadcasting and followed by light raking. Hand broadcast seed shall be spread at twice the specified rate. Other methods of seed installation may be used with prior approval from the Landscape Architect.

i. Do not seed when wind velocity exceeds five (5) miles per hour. Equipment shall be operated in a manner to insure even distribution of seed and complete coverage of the entire area to be seeded.

j. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. In general, the optimum seeding depth is 0.25 inch below the soil surface. Areas where the seed has not been incorporated into the soil to the proper depths will not be accepted, and no compensation for materials or labor for the rejected work will be made by the owner.

k. Seed mixture shall be as specified on the drawings or the specified Prairie planting mixture. Sow not less than specified rate.

l. If a broadcast method of seeding is used, the following requirements shall be met. Within twelve hours, if conditions permit or as soon thereafter as is practical rake prairie seed lightly into top 1/4" of soil, roll at right angles to the run-off with an approved type roller to compact the seedbed and place the seed in contact with the soil.

m. If a drill-seed method is used, rolling of the seedbed will not be required.

n. After the seeding, raking and rolling operations are completed, water with a fine spray and install specified erosion control blanket per manufacturer's specifications over the entire prairie area.

o. The Landscape Contractor shall monitor all seeded areas to insure at least one inch of water per week from a combination of watering and natural rainfall and shall mow plantings to a height of 6-10 inches for the enhancement of native species until preliminary acceptance by the Landscape Architect.

p. It shall be the Landscape Contractor's responsibility to determine and implement whatever procedures deemed necessary to establish the turf as part of the work.

q. Wet mesic and emergent areas shall be planted and seed allowed to germinate (if possible), prior to the flooding with significant amounts of water. Any areas of significant permanent water located within the planting area will receive live plugs in lieu of seed.

r. After seeding operation is completed, install erosion control blanket per manufacturer's specifications.

s. Emergent plugs, if used, shall be planted in natural groupings within designed areas containing saturated soils or inundation. Plants within groupings shall be planted at 2 foot centers.

t. Emergent plugs shall not be planted less than the specified rate and shall be protected with goose enclosures surrounding all natural groupings of plugs.

4. Preparation of Reconditioned Naturalized Areas

The Contractor chosen for the enhancement and maintenance of native areas must be experienced in the restoration, installation, and management of said areas. They must have a minimum of five years' experience in the field and shall be able to identify non-native and native plants by genus and species. It is imperative that a qualified Native Landscape Contractor perform the initial installation and maintenance.

A basic work procedure is outlined below. The contractor is required to evaluate all existing conditions prior to bidding the work. Any proposed changes to the work plan shall be submitted to the Landscape Architect as required under Section 1.3 (A)(B)

a. Woody Vegetation Removal

i. All woody, non-planted species shall be removed from basin slopes and bottoms for existing ponds

ii. Contractor will cut all woody species to be removed with hand tools including, but not, limited to gas powered chainsaws, gas powered clearing saws, bow saws, and loppers.

iii. All stumps shall be cut flat with no sharp points and to within two inches of surrounding grade. Stumps shall be painted with Garlon 4, or equivalent, immediately after cutting.

iv. A supply of chemical absorbent shall be kept on-site. Spills shall be properly cleaned up and reported immediately to the owner.

v. The contractor shall maintain copies at the project site of all current pesticide applicator's licenses, herbicide labels, and MSDS's (Material Safety Data Sheets) for all chemicals utilized during completion of work.

vi. Cut brush piles shall be disposed of off site legally. No cut brush shall be burned within city limits.

vii. A prescribed burn can be conducted on existing basins as per the Maintenance Section 3.4. Following burn, over-seed lower slopes and bottoms of existing basins with Wet Meadow species as necessary (see section 2.4B)

viii. Spot treat invasive and undesirable herbaceous species on existing basin slopes with glyphosphate to remove undesirable species in planted areas. Undesirable species are included, but not limited to, species list in 1.5C Guarantees.

ix. Over-seed slopes of existing basins with low profile prairie grasses (see section 2.4C) as necessary. Seeding protocol should follow Section 3.2D B-4.2 noted below.

x. If adequate top soil is not present, top soil can be added to slopes with approval of Landscape Architect.

Repair: Repair any damages caused by Contractor during completion of the work. Said damages may include but are not limited to tire ruts in the ground, damage to lawn areas, damage to trails, etc. In the event any vegetation to be preserved is damaged, notify the owner within 24 hours. The Contractor will be liable for remedying damages to plant materials to the satisfaction of the owner.

5. Reconditioning Existing Turf

a. Recondition existing turf damaged by Contractor's operations, including storage of materials or equipment and movement of construction vehicles.

b. Provide fertilizer, seed and soil amendments as specified for new lawns and as required to provide a satisfactory reconditioned lawn. Provide topsoil as required to fill low areas and meet new finished grades.

c. Prior to over-seeding cultivate or rototill bare and compacted areas thoroughly to a depth of four (4) inches. Remove all rocks, stones, turf clumps and other debris larger than one (1) inch in diameter and rake smooth.

d. Remove diseased or unsatisfactory lawn areas. Do not bury into soil. Remove topsoil containing foreign materials resulting from contractor's operations, including oil droppings, stone, gravel and other construction materials.

e. Where substantial, but thin lawn remains, rake, aerate if compacted, and cultivate soil, fertilize and seed.

f. Water newly seeded areas, Maintain adequate soil moisture as specified for new lawns, until new grass is established.

6. Mulching

Trees and Shrubs

a. Apply the specified mulch to a depth of two (2) inches, evenly spread over the entire area of each tree basin and shrub bed. Maintain exposed root flair at all times. Thoroughly water mulched bed areas. After watering, rake mulch to provide a uniform finished surface.

Perennials, Ornamental Grasses, Annual Flowers and Groundcovers

a. Apply the specified mulch to a depth of one (1) inch, evenly spread over the entire area of each planting bed using care to keep foliage exposed. Thoroughly water mulched bed areas.

7. Pruning

a. Prune branches of deciduous stock, after planting, to preserve the natural character appropriate to the particular plant requirements. Remove or cut back dead and badly bruised branches, broken and tangled branches, damaged and unsymmetrical growth of the new wood, suckers, water sprout growth and unnatural growth habits. No plants will be sheared for any reason.

b. Prune with clean, sharp tools.

c. Prune trees and evergreens at the direction of the Landscape Architect and in accordance with standard horticulture practice to preserve the natural character of the plant.

d. In general, tree pruning requires removing 1/4 to 1/3 of the leaf bearing buds. Prune multiple leader plants to preserve the leader which best promote the symmetry of the plant. Do not apply paint to pruning marks.

8. Care of Existing Trees

a. Selectively prune existing trees in construction limits as required, at the direction of the Landscape Architect. Remove shoots, dead, rubbing and damaged branching.

b. Clean up miscellaneous organic debris within construction limits and dispose of legally off-site.

9. Clean-up

a. The Landscape Contractor shall store materials and equipment, during landscape work, where directed by the landscape architect.

b. The Landscape Contractor shall thoroughly clean the project area daily during the progress of work and upon completion of the work.

c. Landscape Contractor shall keep pavement clean and all work areas and adjoining areas in an orderly condition. The Landscape Contractor shall remove and clean any excess dirt or mud left on the streets adjacent to the site as a result of this work daily. The Landscape Contractor shall be liable for any future charges incurred to clean streets affected by his work.

d. No storing of rubbish or debris will be allowed on the site.

e. No debris shall be buried at the site.

f. No landscaping debris is allowed on the site dumpsters.

g. The Landscape Contractor shall protect the property of the owner and the work of other contractors.

h. The Landscape Contractor shall be directly responsible for all damage caused by the Landscape Contractor's activities and shall remove and properly dispose of all resultant dirt, rubbish, debris and other waste materials resulting from the work daily.

10. Inspections

In addition to normal progress inspections, the Landscape Contractor shall schedule and conduct the following inspections, giving the Landscape Architect at least 48 hours prior notice of readiness for inspection.

a. Inspection of plants and containers prior to planting.

b. Inspection of plant locations to verify compliance with the current revisions of the Landscape Plans and As-Built Drawings.

c. Preliminary acceptance inspection after completion of planting. Schedule this inspection sufficiently in advance and in cooperation with the Landscape Architect so that the inspection may be conducted in a timely manner.

d. Final acceptance inspection at the end of the maintenance period provided that all previous deficiencies have been corrected.

e. All other inspections necessary for replacement warranty work and completion of the project.

I. Maintenance and Monitoring

1. Traditional Landscaping: Landscape Contractor shall maintain all planting, starting with the planting operations and continuing until all planting for that portion of the project is complete and through preliminary acceptance in writing from the Landscape Architect.

a. Maintenance of plants and planting beds shall include resetting plants to proper grades or upright position, restoring planting saucers, tightening and repair of guy wires and stakes, weeding, cultivating, pruning, application of appropriate insecticides and fungicides necessary to keep the plant materials in a healthy growing condition and to keep the planted areas neat and attractive.

b. Maintenance of lawn areas shall be as specified, including spot weeding, mowing, application of weed and insect controls and reseeding necessary to promote proper establishment the lawn areas.

c. Contractor shall water all sod and plantings for the first two weeks following installation.

2. Native Planting Areas: The Owner shall notify the City upon completion of plantings. The Owner's Environmental Specialist shall inspect the plantings and provide the City with a copy of the planting locations, species, and quantities for verification by applicable regulatory authority.

a. Native planting areas shall be maintained as specified below, continue for the three full (3) years after preliminary installation acceptance, and meet annual establishment performance criteria:

i. First Season –With the exception of the emergent area, native seeding areas should be mowed to a height of 6" to control annual nonnative and invasive species early in the growing season. Mowing, including weed whipping, should be conducted during prior to weed seed production. Mowing height and timing may need to be adjusted per target species. Small quantities of undesirable plant species, shall be controlled by hand pulling prior to the development and maturity of the plant. Hand removal shall include the removal of all above-ground and below-ground stems, roots and flower masses prior to development of seeds. Herbicide should be applied as necessary by a trained and licensed operator that is competent in the identification of native and nonnative herbaceous plants. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

ii. Second Season – Control of undesirable species during the second growing season shall consist primarily of precise herbicide application. Mowing and weed whipping shall be conducted as needed during the early season to maintain the vegetation at a height of 6 to 8 inches to prevent annual weeds from producing seed. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

ii. Third Year – Seasonal mowing and herbicide will continue as above but should be reduced over time. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary. At the completion of the third growing season (dependent on fuel availability, dominance of graminoid species, and favorable weather conditions), fire may be introduced to the planted areas as a management tool.

b. General performance criteria is outlined below. Contractor is responsible to ensure native areas meet Federal, County and local requirements as necessary.

i. 1st Full Growing Season: 80% of cover crop shall be established. There shall be no bare areas greater than two (2) square feet in seeded areas. At least 25% of vegetation coverage shall be native, non-invasive species. At least 50% of the emergent species, if planted as plugs shall be alive and apparent.

ii. 2nd Full Growing Season: All areas with the exception of emergent zones shall exhibit full vegetative cover. At least 50% of the vegetation coverage shall be native, non-invasive species.

iii. 3rd Full Growing Season: At least 75% of vegetation coverage shall be native, non-invasive species. Non-native species shall constitute no more than 25% relative aerial coverage of the planted area. Invasive species for this project shall include the following: Ambrosia artemisiifolia, S. trifida (Common & Giant Ragweed), Cirsium arvense (Canada Thistle), Dipsacus laciniatus (Cut-leaved Teasel), Dipsacus sylvestris (Common Teasel), Lythrum salicaria (Purple Loosestrife), Melilotus sp., (Sweet Clover), Phalaris arundinacea (Reed Canary Grass), Phragmites australis (Giant Reed), Fallopia japonica (Japanese Knotweed), Rhamnus cathartica & frangula (Common & Glossy Buckthorn), Typha sp. (Broadleaf, Narrowleaf, and Hybrid Cattail) Lonicera sp. (Honeysuckle).

c. Long Term Wetland and Prairie Management/Maintenance

A Long –Term Operation and Maintenance Plan is included in the Home Owner's Association covenants with guidelines and schedules for burning, mowing, application of herbicide, debris/litter removal and inspection schedule for storm structures and sediment removal.

i. State and local permits shall be required prior to controlled burning. Burning shall be conducted by trained professionals experienced in managing smoke in urban environments. Prior to a controlled burn, surrounding property owners as well as local fire and police departments shall be notified. A burn plan detailing preferred wind direction and speed, location of fire breaks, and necessary personnel and equipment shall be prepared and utilized in planning and burn implementation.

ii. The initial burn shall be dependent on fuel availability which is directly related to the quantity and quality of grasses contained within the plant matrix. Timing of the burn shall be determined based on results of the annual monitoring including species composition of the management area and other analysis of management goals. Generally, burns shall be scheduled from spring to fall on a rotational basis. Burn frequency shall also be dependent on the species composition within the management area. Generally, a new prairie restoration area shall be burned annually for two years after the second or third growing season after planting and then every 2-3 years thereafter, burning 50-75% of the area.

iii. Owner to provide all supervised watering and proper care and maintenance of all plant materials, seed and sod areas (except for native planting areas) after preliminary acceptance of the Landscape Contractor's work.

J. Preliminary Acceptance

1. When the preliminary landscape work is completed, including maintenance, the Landscape Architect will, upon request, make a preliminary inspection of initial installation to determine acceptability.

2. The inspection for preliminary acceptance of the initial installation will be for general conformance to establishment of turf areas, specified size, character and quality of plant materials, workmanship and maintenance and shall not relieve the Landscape Contractor of responsibility for full conformance of the contract documents, including correct species.

3. It shall be the responsibility of the Landscape Contractor to verify all work is completed for the initial installation and maintained as per plan prior to notifying the Landscape Architect for preliminary inspection.

4. For preliminary acceptance of the initial installation all plant material shall be in a healthy growing condition. Any plants, lawn areas, workmanship, etc. not meeting the standards will be rejected and the Landscape Contractor will be instructed to make the necessary corrections immediately before preliminary acceptance of the initial installation will be granted.

5. Seeded areas will be inspected for acceptance after the first mowing by the Landscape Contractor and will be satisfactory provided requirements, including maintenance, have been complied with and a uniform healthy grass stand of the specified grass is established, free of weeds, bare spots exceeding 5 by 5 inches, undesirable grass species, disease, insects and surface irregularities.

6. Sodded areas will be inspected for acceptance after the first mowing by the Landscape Contractor and will be satisfactory provided requirements, including maintenance, have been complied with and when all areas show a uniform stand of the specified grass in a healthy, well-rooted, even-colored, viable lawn condition, free of weeds, undesirable grass species, open joints, bare areas, disease, insects and irregular surfaces.

7. The Landscape Contractor shall assume liability for the correction of his work and liability for any other charges incurred due to the correction of his work. The cost of follow-up inspections of the initial installation required to receive acceptance will be charged to the Landscape Contractor.

8. Upon the receipt of written acceptance of the preliminary inspection of the initial installation the Owner will be responsible for maintenance.

9. The warranty period will begin upon receipt of written acceptance of the preliminary inspection for initial installation from the Landscape Architect.

10. After preliminary acceptance of the initial installation and receipt of notification in writing from the Landscape Architect, the Landscape Architect will recommend the release of payment, less retainers deemed necessary by the Owner, for the completed work.

11. The release of all fees will be at the discretion of Lennar upon receipt of written invoice from the Landscape Contractor.

K. Warranty Agreement

1. The Landscape Contractor shall provide a replacement warranty for all plant material and shall guarantee all work free of any defect in quality or workmanship for a minimum period of one (1) year or until final inspection and written acceptance by the Landscape Architect.

a. Warranties of native plantings are excluded from this section and shall conform to the specified establishment performance criteria.

2. The warranty period will be from the date of the Landscape Architect's written preliminary acceptance of the initial installation and will continue through the end of the following years growing season upon the final inspection and written acceptance of the work.

3. The warranty shall provide against defects including death, unsatisfactory growth, and provides the material to be in good, healthy and flourishing condition, except for defects resulting from neglect by the owner, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Contractor's control. For verification of such defects, neglect, abuse or damage by others the Landscape Contractor must notify the Landscape Architect in writing immediately upon identifying said occurrences.

4. Annual increases in the size of required replacements shall serve to maintain the continuity of the landscape design. At the time of the scheduled replacements, the required landscape replacement material shall be increased in size from the original plan to match the new growth size of the surrounding plants.

5. The Landscape Contractor shall make as many periodic inspections as necessary, at no extra cost to the Owner during the warranty period to determine what changes, if any, should be made to the Owner's maintenance program. The Landscape Contractor shall submit, in writing to the Landscape Architect, any recommended changes.

6. During the warranty period, should the appearance of any plant die, indicate weakness and/or probability of dying, the Landscape Contractor shall immediately begin replacement of said plants with new and healthy plants of the same type and size as soon as weather conditions permit and within a specified planting period after notification of such occurrences from the Landscape Architect without additional cost to the Owner.

7. The Landscape Contractor shall make all necessary repairs of damage due to plant replacements. Such repairs shall be done at no extra cost to the Owner.

8. Replacements shall be in accordance with and subject to all requirements of landscape installation, mulching, maintenance, warranty and acceptance procedures.

9. The Contractor is responsible for the watering and maintenance necessary to ensure establishment of the replacement plants until the Landscape Architect inspects the replacement plants and issues preliminary acceptance in writing.

10. The Landscape Contractor, prior to notifying Landscape Architect for preliminary acceptance, shall maintain the replacement plants for a period of 45 days at no additional cost to the owner.

11. The Landscape Contractor shall notify the Landscape Architect in writing, upon completion of replacements and extended maintenance period, for preliminary acceptance and written notification of new warranty period.

12. The Landscape Contractor, upon written preliminary acceptance of the replacements, shall warranty all replacements until the end of the following growing season and written final acceptance. The Landscape Contractor shall notify the Landscape Architect in writing at the end of the warranty period of replacement plants for final inspection and acceptance.

13. The Landscape Contractor shall remove tree wrapping, tree guy wires, stakes and tags from all established plants prior to contacting the Landscape Architect for final acceptance inspection. Tags, tree wrap, guy wires and stakes shall remain on all replacements until completion of additional warranty period.

14. All subsequent inspections required due to unacceptability of the replacements will be at the cost of the Contractor.

L. Final Acceptance

1. Inspection of all work will be made by the Landscape Architect at the end of the warranty periods upon written request of the Landscape Contractor.

2. The Landscape Architect shall prepare and submit, to Lennar and the Landscape Contractor, a list of warranty replacement items to be completed before final acceptance shall be deemed to have occurred. The failure to include any items on such list does not alter the responsibility of the Landscape Contractor to complete all work in accordance with the contract.

3. The Landscape Contractor shall complete all warranty replacement work as deemed necessary by the Landscape Architect, shall verify completion of all work required to satisfy the contract and shall notify the Landscape Architect upon completion of all work for review and final acceptance.

4. The Landscape Architect will perform a final inspection of the completed work with the Landscape Contractor and a representative from Lennar. At that time if all work is satisfactory, a written statement will be issued by the Landscape Architect that will constitute final acceptance of completed work to date.

5. After the final inspection and acceptance of the work, the Landscape Architect will notify Lennar in writing and will recommend release of fiscal retention for the completed work, except for retention fees deemed necessary by Lennar and the Landscape Architect for work still under additional warranty.

6. The Landscape Architect will make a follow-up inspection of all additional warranty replacements at the written request of the Landscape Contractor and issue a written report accepting satisfactory completion of the warranty obligations and request release of the remaining retention fees.

7. The release of all retention fees will be at the discretion of Lennar after receipt of written notification from the Landscape Architect and upon receipt of written invoice from the Landscape Contractor.

8. The written final acceptance of all work following any necessary replacements shall terminate the Landscape Contractor's plant warranty period.

M. DAMAGES: STREET AND SITE

1. The Landscape Contractor shall be responsible for any damages to streets, curbs or site improvements as a result of his work or his employees. The Landscape Contractor shall be responsible for any future charges resulting from the repair/replacement of damage.

2. Curb damage will be billed to the contractor at fault at a rate of $25.00/lineal foot with a ten foot minimum

3. Subcontractor shall not park on any asphalt or concrete driveways at any time. Violators will be fined $500 per occurrence.

IV. TRADITIONAL LANDSCAPE MAINTENANCE

A. Turf Maintenance

1. Mowing

a. All litter (i.e. paper, cans and bottles) will be removed from turf and plant bed areas prior to mowing.

b. All lawn areas will be mowed weekly to a height of 3" from April through November, or as needed. No more than 1/3 of the grass blade is to be removed per cutting. Mowing height may be seasonally adjusted depending upon weather conditions in order to reduce stress and promote healthy turf.

c. Mowing patterns shall be altered on a weekly basis wherever possible. Mowing patterns shall create straight lines for a more manicured appearance.

d. Clippings shall be bagged and removed when clipping buildup is such that the excess clipping lay in an unsightly matted condition on the lawn.

e. The turf shall be cut in such a manner as to avoid blowing clippings toward structures, patios, air conditioners, and planting beds.

f. If the turf could potentially be damaged by equipment due to weather, mowing should not be performed.

g. Turf bordering vertical surfaces such as foundations, fences, and utility boxes shall be trimmed to match the mowing height.

h. Clippings shall be removed from all pavement areas.

2. Edging

a. Turf areas adjacent to walks, driveways and curbing will be mechanically edged monthly in a uniform manner.

b. Shrub beds and tree rings shall be neatly and uniformly edged twice per year; once during the spring cleanup, and again in August or September weather permitting.

3. Fertilizer & Weed Control

a. Pesticides must be applied by a licensed individual.

b. Notice shall be given to the homeowners association or owner's representative 1 week prior to any pesticide application.

c. The lawn shall be fertilized three (3) times with a high quality granular or liquid formula. The applications should be made approximately in April, May and September. Timing, frequency and rate of application shall be adjusted to meet the development's current needs and conditions

d. A pre-emergent weed control application for annual grass prevention shall be incorporated into the first turf fertilization in spring.

e. The entire turf area will be treated one (1) time with a post emergent broad leaf weed control at the appropriate time of year. Spot treatment should be done as necessary.

f. Flags shall be posted throughout the community following each fertilizer application. Remove flags once the application is dry or as directed by the product's label.

B. Planting Bed Maintenance

1. Pruning

a. Trees, shrubs and evergreens should be pruned, trimmed or sheared at the appropriate time for each species to maintain the plant's proper form. Methods and timing shall conform to standard horticultural practices. The initial spring pruning will include:

1. Removal of dead or injured limbs.

2. Removal of branches that are touching structures.

3. Shaping and internal thinning of the plant to allow for its natural form and habit.

b. Shrubs will be pruned two (2) additional times at the appropriate time so as not to interfere with flowering.

c. Trees over 6" in diameter will not be pruned other than removal of low branches hazardous to pedestrian traffic and sucker growth which may occur.

d. Groundcovers should be pruned twice during the season to maintain a neat appearance.

e. Ornamental grasses should be trimmed during the spring cleanup.

f. All pruning debris shall be removed from the site by the contractor immediately after the work is complete.

2. Fertilizer & Weed Control

a. Pesticides must be applied by a licensed individual.

b. Notice shall be given to the homeowner's association 1 week prior to any pesticide application.

c. Pre-emergent weed control shall be applied at the beginning of the growing season.

d. Post emergent applications or hand pulling shall be used on any weeds that appear throughout the season.

e. Trees, shrubs and groundcover shall be fertilized one (1) time during the season. The application rate will be determined by the specific needs of the plant material.

C. Spring & Fall Cleanup

1. Spring Cleanup

a. Lawn areas and planting beds will be raked as necessary to remove leaves, dead branches, litter and debris.

b. All mulch beds shall be cultivated to break up any existing compaction in the mulch.

c. Fresh mulch should be applied to any bare spots in the planting beds.

d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.

e. Debris generated during the cleanup shall be disposed of legally off site.

2. Fall Cleanup

a. All lawn areas will have leaves removed either by raking or through the mowing process so as to prevent leaf buildup on the turf on a weekly basis.

b. All planting beds will have leaves and debris removed at the end of the season.

c. Perennials without winter interest shall be cut back.

d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.

e. Debris generated during the cleanup shall be disposed of legally off site.

IV. PERSONAL CONDUCT / SAFETY

1. Consumption of alcoholic beverages or drugs on the job site is strictly prohibited.

2. Any offensive or obnoxious behavior (loud radio, profanity, etc.) is strictly prohibited.

3. Reckless operation of vehicles or equipment by Subcontractor's employees while in the subdivision will not be tolerated.

4. Hard hats to be worn by all employees at all times.

5. Failure to comply with Lennar's Safety Policy, OSHA or any other presiding safety institution could result in fines starting at $100.00 per occurrence.

6. Subcontractor to provide a competent person trained in OSHA requirements on site at all times.

Landscape Contractor Name _____

Landscape Contractor Company _____

Landscape Contractor Signature _____ Date _____

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WATERSIDE AT THREE OAKS

CRYSTAL LAKE, ILLINOIS

LANDSCAPE SPECIFICATIONS

2	12.19.2024
1	11.25.2024

REVISIONS

DATE	9.4.2024
PROJECT NO.	LAN22128
DRAWN	GEH
CHECKED	ZML

SHEET NO.

L1.13

FINAL ENGINEERING PLANS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

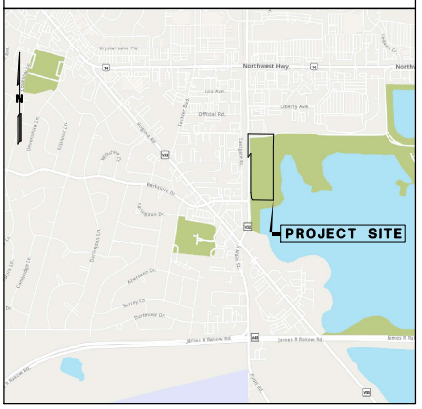
LEGEND

	EXISTING	PROPOSED
SANITARY SEWER	8" PVC	8" PVC
FORCE MAIN	FM	FM
STORM SEWER	12" RCP	12" RCP
UNDERDRAIN	UD	UD
MANHOLE	⊙	⊙
CATCH BASIN	○	●
INLET	▭	■
CLEANOUT	⊕	●
WATER MAIN	W	W
VALVE VAULT	⊙	⊙
VALVE BOX	○	⊡
FIRE HYDRANT	⬡	⬢
FLARED END SECTION	⏢	▬
COMBINED SEWER	CS	CS
STREET LIGHT/PARKING LOT LIGHT	☼	☼
POWER POLE	⊡	⊡
STREET SIGN	▭	▬
FENCE		
GAS MAIN	G	G
OVERHEAD LINE	OH	OH
TELEPHONE LINE	T	T
ELECTRIC LINE	E	E
CABLE TV LINE	CATV	CATV
HIGH WATER LEVEL	HWL XXX	HWL XXX
NORMAL WATER LEVEL	NWL XXX	NWL XXX
CONTOUR LINE	XXX.XX	XXX.XX
TOP OF CURB ELEVATION	TC XXX.XX	TC XXX.XX
TOP OF DEPRESSED CURB	TDC XXX.XX	TDC XXX.XX
PAVEMENT ELEVATION	P XXX.XX	P XXX.XX
SPOT ELEVATION	XXX.XX	XXX.XX
FINISHED FLOOR ELEVATION	FF = XXXXX	FF = XXXXX
TOP OF FOUNDATION	TF = XXXXX	TF = XXXXX
GRADE AT FOUNDATION	GF = XXXXX	GF = XXXXX
HIGH OR LOW POINT		Ⓛ = Ⓗ
OVERLAND FLOOD ROUTE		
PAVEMENT FLOW DIRECTION		2.0%
SWALE FLOW DIRECTION		
DEPRESSED CURB AND GUTTER		
REVERSE CURB AND GUTTER		

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18 CONSTRUCTION DETAILS
19 CONSTRUCTION DETAILS
20 CONSTRUCTION DETAILS
21 CONSTRUCTION DETAILS
22 CONSTRUCTION DETAILS
23 PROJECT SPECIFICATIONS

LOCATION MAP



THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION, DIRECTION AND MEANS & METHODS OF CONSTRUCTION

ABBREVIATIONS

AC	ACRE	HWL	HIGH WATER ELEVATION	SAN	SANITARY SEWER
BC	BACK OF CURB	INL	INLET	SMH	SANITARY MANHOLE
BTM	BOTTOM	INV	INVERT	STA	STATION
CB	CATCH BASIN	LF	LINEAL FEET/FOOT	STM	STORM SEWER
CFS	CUBIC FEET PER SECOND	LP	LIGHT POLE	SY	SQUARE YARD
CY	CUBIC YARD	LT	LEFT	SWPP	STORMWATER POLLUTION PREVENTION PLAN
DIA	DIAMETER	L/W	LOWEST GRADE ADJACENT TO RETAINING WALL	TDC	TOP OF DEPRESSED CURB
DIWM	DUCTILE IRON WATER MAIN	MAX	MAXIMUM	TC	TOP OF CURB
EL	ELEVATION	MH	STORM MANHOLE	TF	TOP OF FOUNDATION
EP	EDGE OF PAVEMENT	MIN	MINIMUM	T/W	TOP OF RETAINING WALL
FF	FINISHED FLOOR	NWL	NORMAL WATER ELEVATION	TYP	TYPICAL
FES	FLARED END SECTION	OCS	OUTLET CONTROL STRUCTURE	VB	VALVE BOX
FT	FOOT/FEET	P	PAVEMENT ELEVATION	VC	VERTICAL CURVE
G	GUTTER ELEVATION	PVC	POLYVINYL CHLORIDE PIPE	VV	VALVE VAULT
GF	GRADE AT FOUNDATION	R	RADIUS	W	WALK ELEVATION
GR	GRADE RING ELEVATION	RCP	REINFORCED CONCRETE PIPE	WM	WATER MAIN
HDPE	HIGH DENSITY POLYETHYLENE PIPE	RIM	RIM ELEVATION	VPI	VERTICAL POINT OF INTERSECTION
HYD	FIRE HYDRANT	RT	RIGHT		
HMA	HOT MIX ASPHALT	ROW	RIGHT OF WAY		

BENCHMARKS

SITE BENCHMARK #1:
CROSS CUT ON NORTHEAST CORNER OF DOUBLE TRAFFIC SIGNAL MAST ARM FOUNDATION ON NORTHEAST CORNER OF SOUTH MAIN STREET AND BERGEARING DRIVE
ELEVATION = 897.48

SITE BENCHMARK #2:
TAB FLANGE BOLT ON FIRE HYDRANT AT THE SOUTHEAST CORNER OF SOUTH MAIN STREET AND THREE OAKS RECREATION CENTER DRIVE
ELEVATION = 897.64

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
Call 48 hours before you dig
Excluding Sat, Sun, & Holidays!
1-800-892-0123

NOTES:
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT-SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION.
- STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (GSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION.
- STANDARD SPECIFICATIONS AND DETAILS PER THE CITY OF CRYSTAL LAKE UNIFIED DEVELOPMENT ORDINANCE

IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

DRAINAGE CERTIFICATION

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SAID IMPROVEMENTS OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREA, OR DRAINS WHICH THE SUBDIVIDER HAS A RIGHT TO USE AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE IMPROVEMENTS.

LICENSED ENGINEER

ENGINEER'S SEAL

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Rosemont, IL 60018
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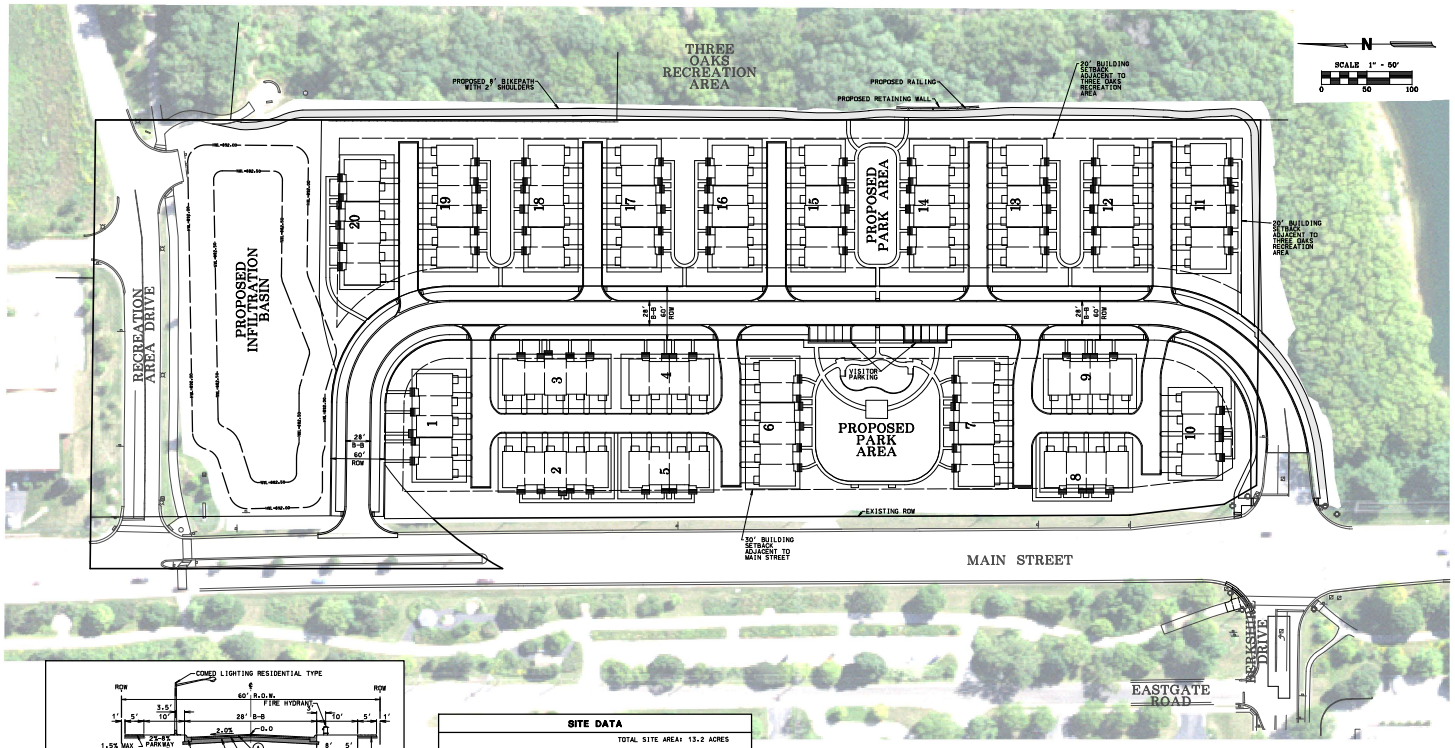
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12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

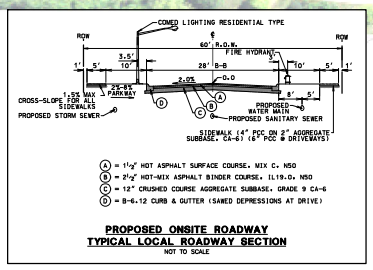
DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

COVER SHEET
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 1 OF 23
PROJECT NUMBER: 4782
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ILLINOIS FIRM LICENSE 184-000894

BY ACCEPTING AND/OR USING THESE PLANS, YOU AGREE TO THE FOLLOWING: THESE PLANS ARE THE PROPERTY OF MACKIE CONSULTANTS, LLC AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED. THEY ARE NOT TO BE LOANED, COPIED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF MACKIE CONSULTANTS, LLC. ALL RIGHTS, INCLUDING COPYRIGHT, ARE RESERVED.





PROPOSED ONSITE ROADWAY
TYPICAL LOCAL ROADWAY SECTION
NOT TO SCALE

SITE DATA

TOTAL SITE AREA:	13.2 ACRES
TOTAL TOWNHOME BUILDINGS:	20 BUILDINGS
TOTAL TOWNHOME UNITS:	107 UNITS
SETBACKS	
FRONT YARD MINIMUM:	20'
SIDE TO SIDE SEPARATION:	20' SEPARATION
FRONT TO SIDE SEPARATION:	55' SEPARATION
REAR TO REAR SEPARATION:	60' SEPARATION
FRONT TO FRONT SEPARATION:	60' SEPARATION
MINIMUM YARD ABUTTING MAIN STREET SETBACK:	30'
BUILDING 4 AND 5 (4-UNIT) DIMENSION:	40' x 88.5'
BUILDING 8, 9, AND 10 (4-UNIT) DIMENSION:	40' x 92.5'
BUILDING 1, 2, AND 3 (5-UNIT) DIMENSION:	40' x 116.5'
BUILDING 6, 7, 11-20 (6-UNIT) DIMENSION:	40' x 134.5'
BUILDING 10-19 (6-UNIT) DIMENSION:	40' x 138.5'
TYPICAL PARKING STALL DIMENSION:	9' x 19'
TYPICAL DRIVEWAY DIMENSION:	16.25' x 21'

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OVERALL SITE PLAN
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 2 OF 23
PROJECT NUMBER: 4782
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DEMOLITION LEGEND	
EXISTING CONCRETE TO BE REMOVED	
EXISTING HMA PAVEMENT TO BE REMOVED	
EXISTING CURB TO BE REMOVED	
EXISTING UTILITY TO BE REMOVED	
EXISTING UTILITY TO BE ABANDONED	
EXISTING UTILITY TO BE REMOVED OR ABANDONED AS NEEDED	
EXISTING STRUCTURE, TREE, MISCELLANEOUS OBJECT TO BE REMOVED	

DEMOLITION PLAN GENERAL NOTES:

1. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR DEMOLITION WORK AND ASSOCIATED UTILITY DISCONNECT FEES.
3. THE MUNICIPALITY AND THE OWNER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. THIS PLAN WAS PREPARED FROM TOPOGRAPHIC SURVEY PREPARED BY MACKIE CONSULTANTS, LLC, DATED 06/05/2024 AND AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES SHOWN AND NOT SHOWN BEFORE COMMENCING WORK AND NOTIFY THE ENGINEER OR OWNER OF ANY DISCREPANCIES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO BEGINNING DEMOLITION WORK FOR THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL ARRANGE FOR THE DISCONNECTION, PROTECTION OR RELOCATION OF ANY EXISTING UTILITY SERVICES, INCLUDING WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE.
6. THE CONTRACTOR IS REQUIRED TO ASSURE HIMSELF OF LOCATION AND DEPTH OF EXISTING UTILITIES AND RELATED FEATURES AND SHALL REPORT AT ONCE TO THE OWNER OR ENGINEER ANY DISCREPANCIES WITH RESPECT TO INFORMATION INDICATED IN THE CONTRACT DOCUMENTS.
7. ALL HMA PAVEMENT MATERIALS SHALL BE REMOVED TO AN OFFSITE LOCATION. GRAVEL BASE MATERIALS SHALL BE STOCKPILED ONSITE AND USED FOR TEMPORARY ROADS OR GENERAL FILL AS APPROVED BY THE OWNER OR DEVELOPER. ANY BASE MATERIALS REMAINING UPON COMPLETION OF THE PROPOSED IMPROVEMENTS SHALL BE HAULED TO AN OFFSITE LOCATION.
8. ALL UTILITIES TO REMAIN AS NOTED SHALL BE ADJUSTED TO THE FINAL GRADES AS PROVIDED ON THE UTILITY PLANS.
9. GAS, TELEPHONE AND ELECTRIC DISTRIBUTION SYSTEM REMOVALS AND ADJUSTMENTS SHALL BE DONE BY RESPECTIVE UTILITY AND PAID FOR SEPARATELY BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT. ALL ENVIRONMENTAL REMEDIATION WILL BE COMPLETED BY OWNER PRIOR TO START OF CONSTRUCTION.
10. ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE UNLESS SPECIFICALLY SHOWN TO BE REMOVED.
11. ALL UTILITIES AND STRUCTURES LOCATED WITHIN 10 FEET OF THE PROPOSED BUILDING LOCATION SHALL BE COMPLETELY REMOVED AND THE EXCAVATION BACKFILLED WITH SELECT GRANULAR MATERIAL. ALL REMAINING UTILITIES AND STRUCTURES LOCATED WITHIN THE PROJECT AREA SHALL BE REMOVED TO A DEPTH OF 2-FEET BELOW PROPOSED FINISHED GRADE.
12. ALL PIPES TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FEET NON-SHRINK CONCRETE MORTAR PLUGS. ANY STRUCTURES TO REMAIN SHALL HAVE THE BOTTOM BROKEN TO FACILITATE DRAINAGE AND FILLED WITH SAND OR PEA GRAVEL.
13. ALL EXISTING TREES, BRUSH, AND MISCELLANEOUS APPURTENANCES, SUCH AS FENCES, WHEEL STOPS, POLES LIGHTS AND MISCELLANEOUS DEBRIS SHALL BE HAULED TO AN OFFSITE LOCATION.
14. ANY EXISTING PAVEMENT TO REMAIN SHALL BE BROKEN UP IN PLACE TO PROVIDE ADEQUATE DRAINAGE.
15. THE CONTRACTOR SHALL ENSURE THAT ALL ADJOINING AREAS, INCLUDING ADJACENT STREETS AND DRIVEWAYS, SHALL BE FREE OF DEBRIS AT ALL TIMES.
16. PAVEMENT, CURB AND GUTTER AND SIDEWALK SHALL BE SAWCUT FULL DEPTH AT THE LIMITS OF REMOVAL.
17. ALL TREES TO REMAIN SHALL BE PROTECTED WITH SILT FENCE OR ORANGE CONSTRUCTION FENCES. PROTECTIVE FENCING SHALL BE PLACED AT THE DRIP LINE OF THE TREE TO BE SAVED. CONSTRUCTION WITHIN THE FENCE WITHOUT PERMISSION FROM THE OWNER OR MUNICIPALITY IS STRICTLY PROHIBITED.
18. ANY DAMAGE DONE TO EXISTING STRUCTURES OR OBJECTS NOT SHOWN TO BE REMOVED OR REPLACED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
19. CONTRACTOR TO FIELD VERIFY. DISCONNECT AND PLUG EXISTING SERVICE CONNECTION AT CITY MAIN.

ALL ROADS SHALL REMAIN FREE OF DIRT AND DEBRIS AT ALL TIMES

REFER TO SHEETS 8-10 FOR EROSION CONTROL DETAILS, SPECIFICATIONS, CONSTRUCTION SEQUENCING, AND GENERAL NOTES

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DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	1" = 50'

EXISTING CONDITIONS AND DEMOLITION PLAN
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 3 OF 23

PROJECT NUMBER: 4782

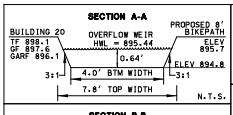
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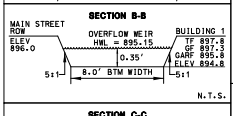
GRADING PLAN GENERAL NOTES

1. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS ON 06/05/2024. CONTRACTOR SHALL FIELD CHECK EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
2. ALL DISTURBED AREAS SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDED.
3. EXCAVATION AND EMBANKMENT SHALL BE PERFORMED PER THE DETAILED SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. ALL CURB ELEVATIONS ARE TO BE TOP OF CURB. ALL GUTTER ELEVATIONS ARE 0.5' BELOW TOP OF CURB ELEVATION UNLESS OTHERWISE NOTED.
5. DRIVEWAY SLOPES FROM THE RIGHT-OF-WAY SHALL BE A MINIMUM OF 2% AND A MAXIMUM OF 10%.
6. GRADING INDICATED MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH FIELD CONDITIONS PRIOR TO FINE GRADING.
7. CONTRACTOR SHOULD TAKE SPECIAL NOTE THAT THERE ARE VARYING SETBACKS. THE LOCATION OF THE BUILDING PAD MUST BE CONSTRUCTED TO CORRESPOND TO THE LOCATIONS INDICATED.
8. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING/UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED IN RECORD DRAWINGS.
9. OVERFLOW DRAINAGE ROUTES AND SWALES MUST BE INSTALLED AT THE ELEVATION AND LOCATION SHOWN.
10. DO NOT INTERRUPT DRAINAGE FROM OFF SITE DURING CONSTRUCTION OPERATIONS. PROVIDE TEMPORARY DRAINAGE DITCHES WHERE REQUIRED.
11. CONTRACTOR SHALL MEET EXISTING GROUND ELEVATIONS AT PROPERTY LINE, UNLESS OTHERWISE NOTED AND THE APPROPRIATE EASEMENTS OR PERMISSION HAS BEEN OBTAINED.

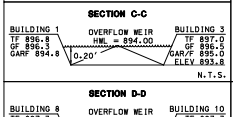
SECTION A-A



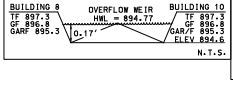
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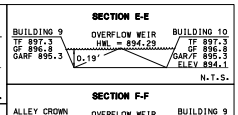
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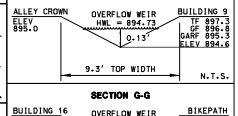
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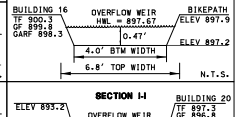
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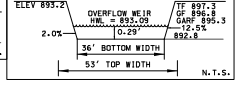
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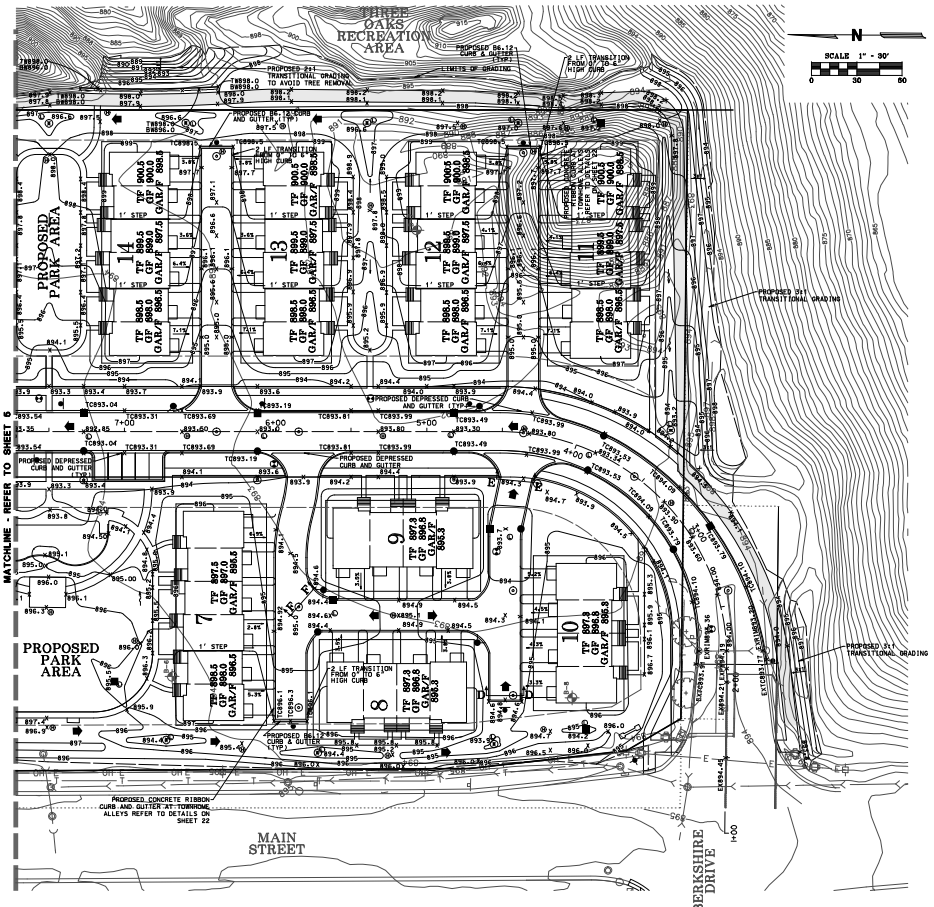


SECTION G-G



SECTION I-I





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SCALE	1" = 30'

GRADING PLAN - SOUTH
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

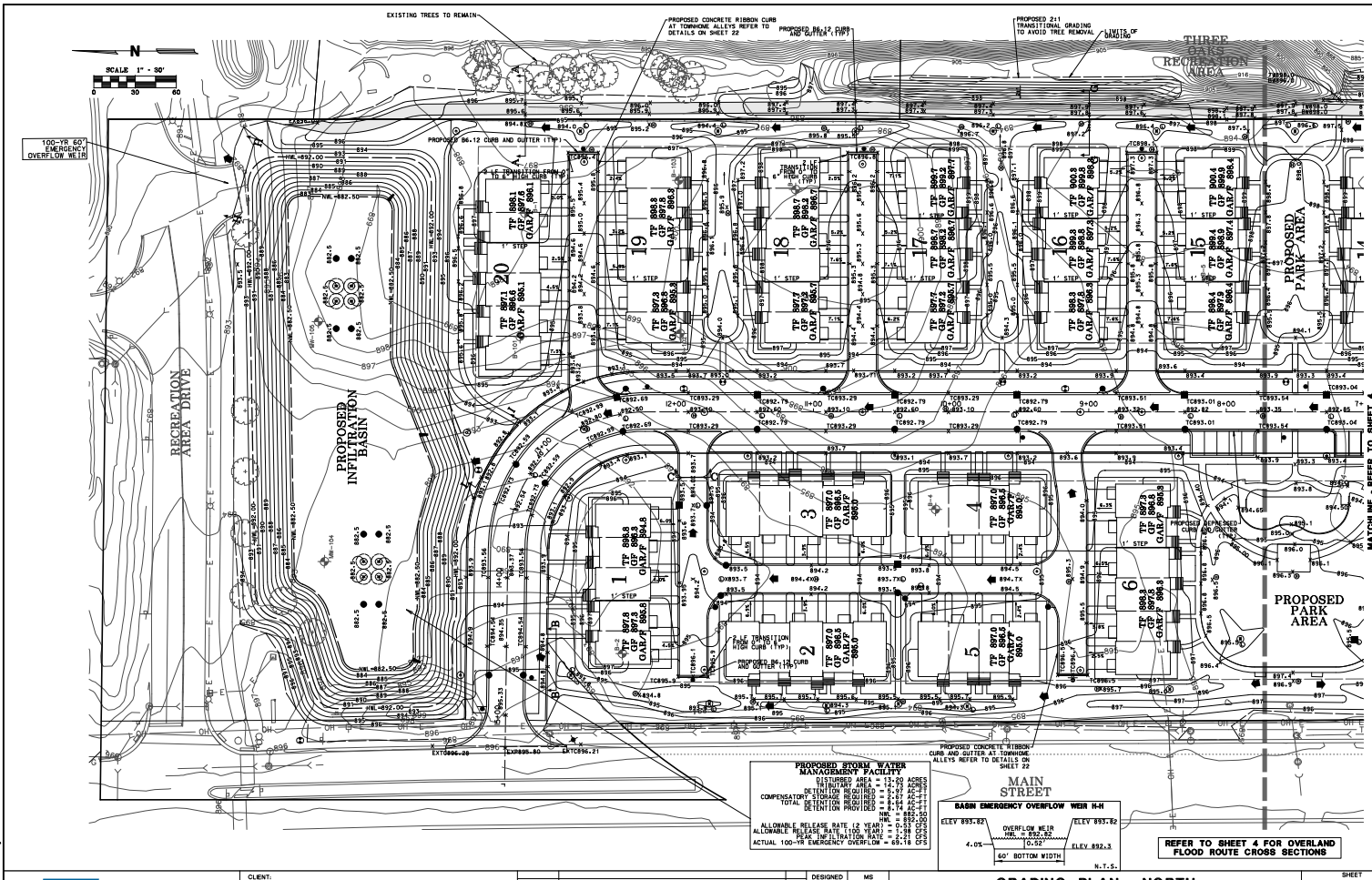
SHEET 4 OF 23

PROJECT NUMBER: 4782

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8/19/2024 - 8:57:41 AM
C:\Users\jdavis\Documents\4782_Waterside_Grading_Plan_-_South_R21.dwg



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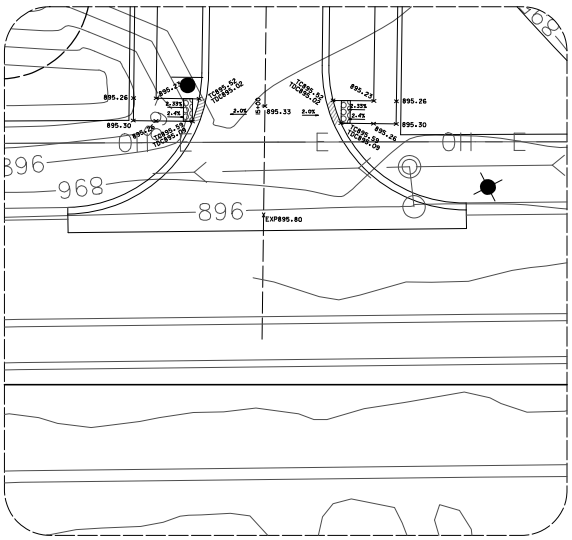
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SCALE	1" = 30'

GRADING PLAN - NORTH
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

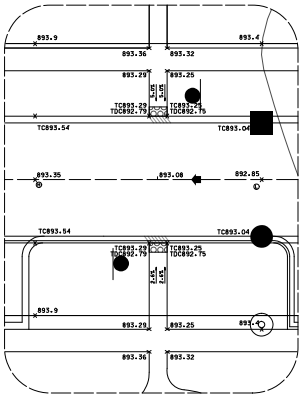
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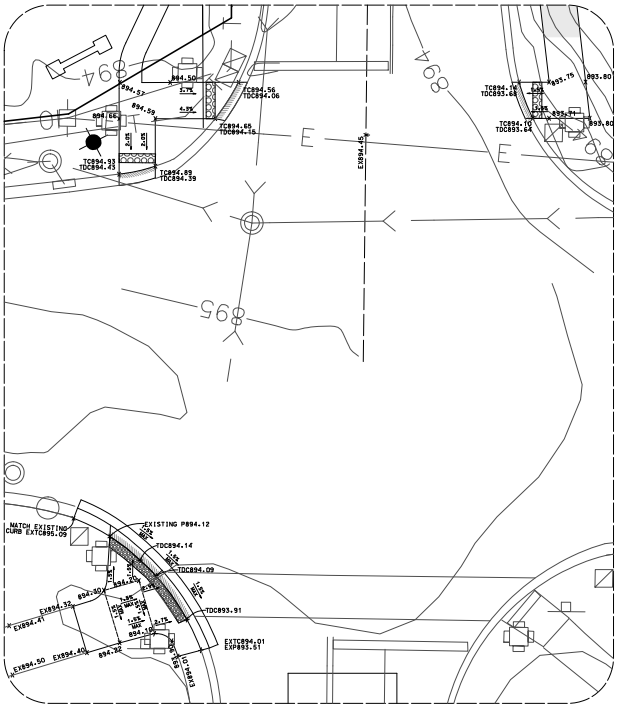
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ADA SECTION
MAIN STREET AND
ROAD A (NORTH)



ADA SECTION
PARKSITE



ADA SECTION
MAIN STREET AND
ROAD A (SOUTH)

N

SCALE 1" = 10'
0 10 20

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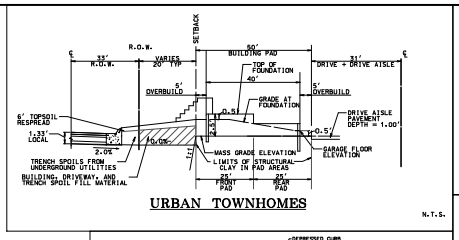
GRADING DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET
6 OF 23

PROJECT NUMBER: 4782

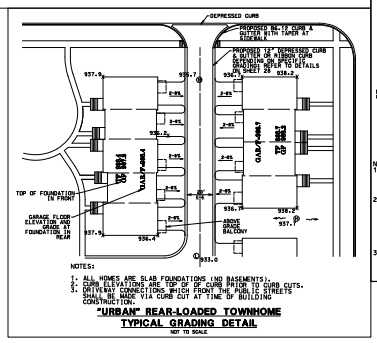
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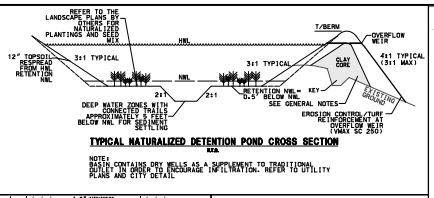
URBAN TOWNHOMES

N.T.S.



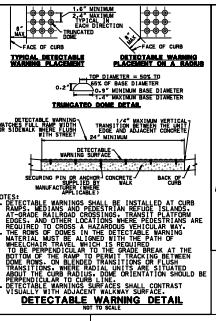
NOTES:
1. ALL HOMES ARE SLAB FOUNDATIONS (NO BASEMENTS).
2. CURB ELEVATIONS ARE TOP OF OF CURB PRIOR TO CURB CUTS.
3. DRIVEWAY CONNECTIONS WHICH FRONT THE PUBLIC STREETS SHALL BE MADE VIA CURB CUT AT TIME OF BUILDING CONSTRUCTION.

"URBAN" REAR-LOADED TOWNHOME
TYPICAL GRADING DETAIL
NOT TO SCALE



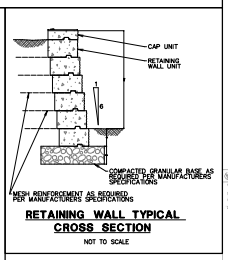
TYPICAL NATURALIZED DETENTION POND CROSS SECTION
N.T.S.

NOTE:
BASIN CONTAINS DRY WELLS AS A SUPPLEMENT TO TRADITIONAL OUTLET IN ORDER TO ENCOURAGE INFILTRATION. REFER TO UTILITY PLANS AND CITY DETAIL

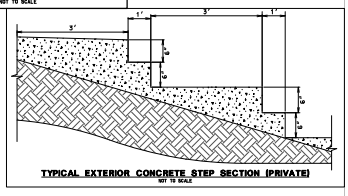


NOTES:
1. DETECTABLE WARNINGS SHALL BE INSTALLED AT CURB RAMPS, BLENDED TRANSITIONS, ISLAND CUT-THROUGH LEVEL AREAS, AND CROSSWALKS WHERE PEDESTRIAN TRAVEL PATHWAYS CROSS AND OTHER LOCATIONS WHERE PEDESTRIANS ARE REQUIRED TO CROSS A HAZARDOUS VEHICULAR WAY.
2. THE RUNS OF DOMES IN THE DETECTABLE WARNING MATERIAL MUST BE ALIGNED WITH THE PATH OF WHEELCHAIR TRAVEL WHICH IS REQUIRED TO BE PERPENDICULAR TO THE GRADE BREAK AT THE BOTTOM OF CURB RAMPS, AT BLENDED TRANSITIONS WHEN DOME RUNS, OR BLENDED TRANSITIONS OF HIGH TRANSITIONS. WHERE RADIAL UNITS ARE SITUATED ABOUT THE CURB RADIUS, DOME ORIENTATION SHOULD BE PERPENDICULAR TO CURB LINE.
3. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACE.

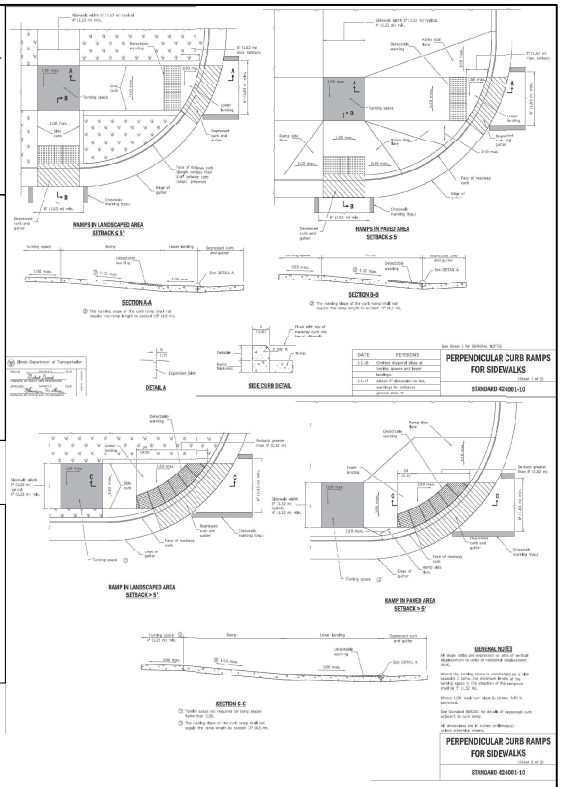
DETECTABLE WARNING DETAIL
NOT TO SCALE



RETAINING WALL TYPICAL CROSS SECTION
NOT TO SCALE



TYPICAL EXTERIOR CONCRETE STEP SECTION (PRIVATE)
NOT TO SCALE



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DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

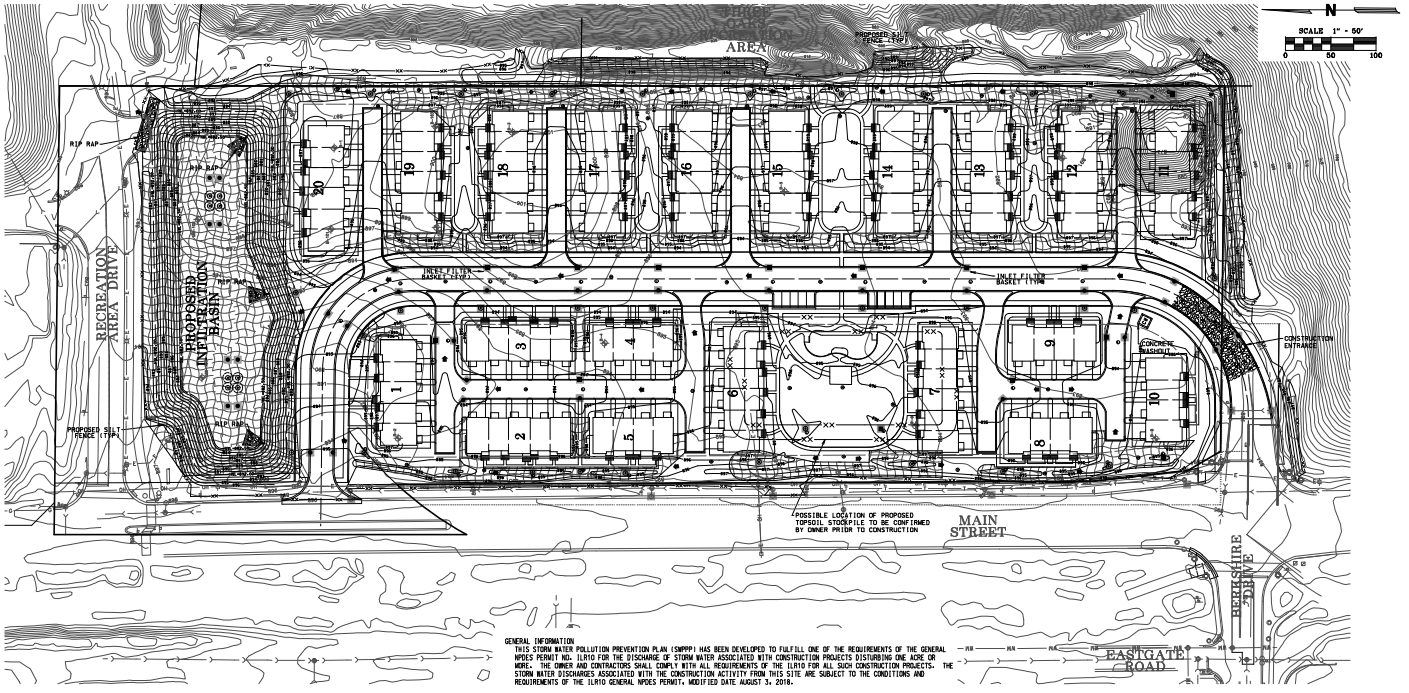
GRADING DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 7 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000994



SWPPP LEGEND

INLET PROTECTION - FILTER BASKET	
CONCRETE WASH-OUT	CW
STABILIZED CONST. ENTRANCE	
SILT FENCE	—XX—
RIP-RAP	
EROSION CONTROL BLANKET	
TREE PROTECTION FENCE	
TOPSOIL STOCKPILE	

THE FOLLOWING ITEMS HAVE NOT BEEN SPECIFICALLY SHOWN BUT ARE REQUIRED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MUST BE INCORPORATED DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED:
- TEMPORARY AND/OR PERMANENT STABILIZATION
- WASTE MANAGEMENT
- CONCRETE WASTE MANAGEMENT (CONCRETE WASH-OUT FACILITY)
- SEDIMENT TRAPS
- DITCH CHECKS
- ALLOWABLE DEWATERING OPERATIONS.

DETAILS AND INFORMATION REGARDING THESE MEASURES HAVE BEEN PROVIDED ON SHEET 9.

THE OWNER AND CONTRACTORS SHALL ALSO REVIEW ALL APPLICABLE OPERATIONS TO DETERMINE POTENTIAL IMPACTS TO STORMWATER DISCHARGES FROM THE SITE. SPECIFIC CONSIDERATIONS ARE PROVIDED ON PAGE 9 FOR THE FOLLOWING ACTIVITIES:
- CONCRETE CUTTING
- VEHICLE STORAGE AND MAINTENANCE
- MATERIAL STORAGE
- WASTE MANAGEMENT
- SPILL PREVENTION

GENERAL INFORMATION
THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL NPDES PERMIT NO. ILR10 FOR THE DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE ILR10 FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE ILR10 GENERAL NPDES PERMIT, MODIFIED DATE AUGUST 3, 2018.

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "PROCEDURES AND STANDARDS FOR URBAN SOIL AND EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" AND THE "ILLINOIS URBAN MANUAL."

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED SWPPP.

SWPPP AVAILABILITY
THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT
THE PERMITTEE SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS
THE OWNER SHALL RETAIN COPIES OF THIS PLAN AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

ILR10 NOTICE OF TERMINATION GUIDANCE
WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE ILR10 PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH PART II.F.1.c (SIGNATORY REQUIREMENTS) OF THE PERMIT.

BEST MANAGEMENT PRACTICES FOR POST CONSTRUCTION STORMWATER MANAGEMENT
THE FOLLOWING POST-CONSTRUCTION PRACTICES HAVE BEEN INCLUDED WITHIN THIS STORMWATER POLLUTION PREVENTION PLAN TO CONTROL POLLUTION UPON COMPLETION OF CONSTRUCTION ACTIVITIES:
- WATER-QUALITY DETENTION BASIN WITH EMERGENT AND NATIVE PLANTINGS;
- POND INLET/OUTLET DESIGN TO PREVENT SHORT-CIRCUITING OF FLOW
- SEDIMENT POOLS AT DISCHARGE POINTS IN WATER QUALITY PONDS;
- VEGETATED SWALES WITH TURF GRASSES;
- INFILTRATION BASINS;
- INFILTRATION TRENCHING;
- CDS OR EQUAL MANUFACTURED STORMWATER TREATMENT SYSTEM;
- DRY WELLS
- RIP RAP AT STORMWATER DISCHARGE POINTS;
- HOUSE DOWNSPOUTS POSITIONED TO DISCHARGE ON GRADE VEGETATED/PERVIOUS GROUND COVER.

SEDIMENT ACCUMULATED DURING CONSTRUCTION MUST BE CLEANED OUT BEFORE FINAL STABILIZATION TO ENSURE THAT THE PROPOSED STORMWATER FEATURES AND SOIL EROSION AND SEDIMENT CONTROL FEATURES REMAIN FUNCTIONAL

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE CONSTRUCTION DUMPSTERS AND DEBRIS ARE CONTINUOUSLY MANAGED AS TO NOT BLOCK ACCESS FOR FIREFIGHTING OR EMERGENCY MEDICAL SERVICES

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DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	1" = 50'

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 8 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000994

DRAWING ISSUED FOR PERMITTING AND CONSTRUCTION PURPOSES ONLY

GENERAL INFORMATION

SITE DESCRIPTION

A. THIS PLAN COVERS THE DEVELOPMENT OF THE THREE OAKS RESIDENTIAL COMMUNITY.

B. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF CONSTRUCTION ACTIVITIES:
1. INSTALL PERIMETER SOIL EROSION AND SEDIMENT CONTROL MEASURES
   - SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
   - PERIMETER SILT FENCE
   - CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
   - STABILIZED CONSTRUCTION ENTRANCE
   - INLET FILTER BASKETS AND INLET SILT FENCE BOXES ON ADJACENT SITE AREAS
2. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB).
3. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS).
5. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE.
6. TEMPORARY STABILIZE TOPSOIL STOCKPILES (INCLUDING SEED AND SILT FENCE AROUND THE PERIMETER).
7. INSTALL STORM SEWER, SANITARY SEWER, AND WATER MAIN.
8. INSTALL INLET PROTECTION WITHIN ALL STORM STRUCTURES WITH OPEN GRATES.
9. PERMANENTLY STABILIZE DETENTION BASIN WITH SEED AND EROSION CONTROL BLANKET OR AS SHOWN ON APPROVED LANDSCAPE PLAN.
10. TEMPORARY STABILIZE ALL AREAS INCLUDING AREAS THAT HAVE REACHED TEMPORARY GRADE WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA.
11. INSTALL ROADWAYS.
12. PERMANENTLY STABILIZE GRASSY AREAS.
13. REMOVAL ALL TEMPORARY CONTROL MEASURES AFTER SITE IS STABILIZED AND RE-SEED AREAS DISTURBED BY THEIR REMOVAL.

C. THE SITE HAS A TOTAL ACREAGE OF APPROXIMATELY 13.2 ACRES. CONSTRUCTION ACTIVITY WILL DISTURB APPROXIMATELY 13.2 ACRES OF THE SITE.

D. THE RUNOFF COEFFICIENT FOR THE SITE FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES IS COMPOSITE "C"= 0.70. THE EXISTING SOILS FROM THE SITE MAINLY CONSIST OF SAND, GRAVEL, AND CLAY.

E. PLEASE REFER TO PAGE 4 & 5 FOR A MAP INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFFSITE SEDIMENT TRACKING, AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATIONS OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS), AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO A SURFACE WATER.

F. THE RECEIVING WATER OF THE PROPOSED DEVELOPMENT IS THE EXISTING DETENTION BASIN NORTHEAST OF THE SITE AND, ULTIMATELY, VULCAN LAKE.

G. POTENTIAL SOURCES OF POLLUTION ASSOCIATED WITH THIS CONSTRUCTION ACTIVITY MAY INCLUDE:
- SEDIMENT FROM DISTURBED SOILS
- FUEL TANKS
- WASTE CONTAINERS
- OIL OR OTHER PETROLEUM PRODUCTS
- TAR
- DETERGENTS
- PAINTS
- CONSTRUCTION DEBRIS
- CONCRETE AND CONCRETE TRUCKS
- SANITARY STATIONS
- STAGING AREAS
- RAW MATERIALS (IE BAGGED PORTLAND CEMENT)
- ADHESIVES
- SOLVENTS
- FERTILIZERS
- LITTER
- LANDSCAPE WASTE

ADDITIONAL MEASURES REQUIRED:

1. STABILIZATION: STABILIZATION PRACTICES MUST BE INITIATED WITHIN ONE (1) WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN ANY AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED AS PROVIDED BELOW:
   A. WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   B. ON AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD CAN BE USED.
   C. THE FOLLOWING PRACTICES ARE ACCEPTABLE STABILIZATION MEASURES:
      - PERMANENT SEEDING: IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
      - TEMPORARY SEEDING: MAY CONSIST OF SPRING OATS (100 LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150 LBS/ACRE).
      - MULCHING
      - GEOTEXTILES
      - SODDING
      - VEGETATIVE BUFFER STRIPS
      - PROTECTION OF TREES
      - PRESERVATION OF MATURE VEGETATION
      - STAGED OR STAGGERED DEVELOPMENT

   THE APPROPRIATE STABILIZATION MEASURE SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME THE CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE.

2. WASTE MANAGEMENT

   NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT. ALL WASTE MATERIALS SHOULD BE COLLECTED AND STORED IN APPROVED RECEPTACLES. NO WASTES SHOULD BE PLACED IN ANY LOCATION OTHER THAN IN THE APPROVED CONTAINERS APPROPRIATE FOR THE MATERIALS BEING DISCARDED. THERE SHOULD BE NO LIQUID WASTES DEPOSITED INTO DUMPSTERS OR OTHER CONTAINERS WHICH MAY LEAK. RECEPTACLES WITH DEFICIENCIES SHOULD BE REPLACED AS SOON AS POSSIBLE AND THE APPROPRIATE CLEAN-UP PROCEDURE SHOULD TAKE PLACE, IF NECESSARY. CONSTRUCTION WASTE MATERIAL IS NOT TO BE BURIED ONSITE. WASTE DISPOSAL SHOULD COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS

   ONSITE HAZARDOUS MATERIAL STORAGE SHOULD BE MINIMIZED AND STORED IN LABELED, SEPARATE RECEPTACLES FROM NON-HAZARDOUS WASTE. ALL HAZARDOUS WASTE SHOULD BE STORED AND DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND FEDERAL REGULATION OR BY THE MANUFACTURER.

3. CONCRETE WASTE MANAGEMENT

   CONCRETE WASTE OR WASHOUT SHOULD NOT BE ALLOWED IN THE STREET OR ALLOWED TO REACH A STORM WATER DRAINAGE SYSTEM OR WATERCOURSE. A SIGN SHOULD BE POSTED AT EACH LOCATION TO IDENTIFY THE WASHOUT. TO THE EXTENT PRACTICABLE, CONCRETE WASHOUT AREAS SHOULD BE LOCATED A REASONABLE DISTANCE FROM A STORM WATER DRAINAGE INLET OR WATERCOURSE. CONCRETE WASHOUT AREAS SHOULD BE LOCATED AT LEAST 10 FEET BEHIND THE CURB, IF THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD. A STABILIZED ENTRANCE THAT MEETS ILLINOIS URBAN MANUAL STANDARDS SHOULD BE INSTALLED AT EACH WASHOUT AREA.

   THE CONTAINMENT FACILITIES SHOULD BE OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND CONCRETE WASTE MATERIALS INCLUDING ENOUGH CAPACITY FOR ANTICIPATED LEVELS OF RAINWATER. THE DRIED CONCRETE WASTE MATERIAL SHOULD BE PICKED UP AND DISPOSED OF PROPERLY WHEN 75% CAPACITY IS REACHED. HARDENED CONCRETE CAN BE PROPERLY RECYCLED AS APPROVED BY THE MUNICIPALITY AND USED AGAIN ONSITE OR HAULED OFFSITE TO AN APPROPRIATE LANDFILL.

4. DEWATERING OPERATIONS

   DURING DEWATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). DISCHARGES SHALL BE TREATED TO MINIMIZE DISCHARGE OF POLLUTANTS. INLET HOSES SHOULD BE PLACED IN A STABILIZED SUMP PIT OR FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. DISCHARGE OF VISIBLE SOLIDS OR FOAMS IS NOT PERMITTED. PUMPING OPERATIONS SHOULD BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (I.E. STONE, SEDIMENT FILTER BAG, OR BOTH). WHEN NECESSARY, STABILIZED CONVEYANCE CHANNELS SHOULD BE INSTALLED TO DIRECT WATER TO THE DESIRED LOCATION. ADDITIONAL BMP'S MAY BE REQUIRED AT THE OUTLET AREA AS REQUESTED BY THE MUNICIPALITY, OR OTHER REVIEWING AGENCY.

5. DUST CONTROL

   DUST SHALL BE MINIMIZED ON AREAS OF EXPOSED SOILS THROUGH THE APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES AS LISTED BELOW:
   - SPRINKLING/IRRIGATION
   - MULCH
   - TILLAGE
   - WATER TRUCK
   - VEGETATIVE COVER
   - SPRAY-ON SOIL TREATMENTS
   - STONE

6. OFF-SITE VEHICLE TRACKING

   STABILIZED CONSTRUCTION ENTRANCE(S) SHOULD BE INSTALLED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS, TO REDUCE EXCESS SEDIMENT, DIRT OR STONE TRACKED FROM THE SITE. SEDIMENT TRACKED OFFSITE ONTO ADJACENT ROADWAYS SHALL BE CLEANED BY THE END OF THE SAME BUSINESS DAY IN WHICH THE TRACK-OUT OCCURS OR BY THE END OF THE NEXT BUSINESS DAY IF TRACK-OUT OCCURS ON A NON-BUSINESS DAY. ACCUMULATED SEDIMENT AND STONE SHOULD BE REMOVED FROM THE STABILIZED ENTRANCE AS NEEDED. VEHICLES HAULING ERODIBLE MATERIAL TO AND FROM THE CONSTRUCTION SITE SHOULD BE COVERED WITH A TARP. HOSING OR SWEEPING SEDIMENT INTO THE STORMWATER SYSTEM OR WATERS OF THE U.S. IS NOT PERMITTED.

7. CONCRETE CUTTING

   CONCRETE WASTE MANAGEMENT SHOULD BE IMPLEMENTED TO CONTAIN AND DISPOSE OF SAW-CUTTING SLURRIES. CONCRETE CUTTING SHOULD NOT TAKE PLACE DURING OR IMMEDIATELY AFTER A RAINFALL EVENT. WASTE GENERATED FROM CONCRETE CUTTING SHOULD BE CLEANED-UP AND DISPOSED INTO THE CONCRETE WASHOUT FACILITY AS DESCRIBED ABOVE.

8. VEHICLE STORAGE AND MAINTENANCE

   WHEN NOT IN USE, VEHICLES UTILIZED IN THE DEVELOPMENT OPERATIONS OF THE SITE SHOULD BE STORED IN A DESIGNATED UPLAND AREA AWAY FROM ANY NATURAL OR CREATED WATERCOURSE, POND, DRAINAGE-WAY OR STORM DRAIN. WHENEVER POSSIBLE VEHICLE MAINTENANCE, FUELING, AND WASHING SHOULD OCCUR OFFSITE. IF ALLOWED ON-SITE; VEHICLE MAINTENANCE (INCLUDING BOTH ROUTINE MAINTENANCE AS WELL AS ON-SITE REPAIRS) SHOULD BE MADE WITHIN THE DESIGNATED AREA TO PREVENT THE MIGRATION OF MECHANICAL FLUIDS (OIL, ANTIFREEZE, ETC.) INTO WATERCOURSES, WETLANDS OR STORM DRAINS. DRIP PANS OR ABSORBENT PADS SHOULD BE USED FOR ALL VEHICLE AND EQUIPMENT MAINTENANCE ACTIVITIES THAT INVOLVE GREASE, OIL, SOLVENTS, OR OTHER VEHICLE FLUIDS. CONSTRUCTION VEHICLES SHOULD BE INSPECTED FREQUENTLY TO IDENTIFY ANY LEAKS; LEAKS SHOULD BE REPAIRED IMMEDIATELY OR THE VEHICLE SHOULD BE REMOVED FROM SITE. DISPOSE OF ALL USED OIL, ANTIFREEZE, SOLVENTS AND OTHER AUTOMOTIVE-RELATED CHEMICALS ACCORDING TO MANUFACTURER OR MSDS INSTRUCTIONS. CONTRACTORS SHOULD IMMEDIATELY REPORT SPILLS TO THE OWNER FOR PROPER REMEDIATION.

   WASH WATERS, FROM EQUIPMENT OR VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS, MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

9. MATERIAL STORAGE

   MATERIALS AND OR CONTAMINANTS SHOULD BE STORED IN A MANNER THAT MINIMIZES THE POTENTIAL TO DISCHARGE INTO STORM DRAINS OR WATERCOURSES. AN ONSITE AREA SHOULD BE DESIGNATED FOR MATERIAL DELIVERY AND STORAGE. ALL MATERIALS KEPT ONSITE SHOULD BE STORED IN THEIR ORIGINAL CONTAINERS WITH LEGIBLE LABELS, AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE. LABELS SHOULD BE REPLACED IF DAMAGED OR DIFFICULT TO READ. BERMED-OFF STORAGE AREAS ARE AN ACCEPTABLE CONTROL MEASURE TO PREVENT CONTAMINATION OF STORM WATER. MSDS SHEETS SHOULD BE AVAILABLE FOR REFERENCING CLEAN UP PROCEDURES. ANY RELEASE OF CHEMICALS OR CONTAMINANTS SHOULD BE IMMEDIATELY CLEANED UP AND DISPOSED OF PROPERLY. CONTRACTORS SHOULD IMMEDIATELY REPORT ALL SPILLS TO THE OWNER, WHO SHOULD NOTIFY THE APPROPRIATE AGENCIES, IF NEEDED.

   TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS ONSITE, HAZARDOUS PRODUCTS SHOULD BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RE-SEALABLE. THE ORIGINAL LABELS AND MSDS DATA SHOULD BE RETAINED ONSITE AT ALL TIMES. HAZARDOUS MATERIALS AND ALL OTHER MATERIAL ONSITE SHOULD BE STORED IN COVERED OR DESIGNATED CONTAINMENT AREAS IN ACCORDANCE WITH MANUFACTURER OR MSDS SPECIFICATIONS. WHEN DISPOSING OF HAZARDOUS MATERIALS, FOLLOW MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS.

10. SANITARY STATIONS

   TO THE EXTENT PRACTICABLE, PORT-A-POTTIES SHOULD BE LOCATED AT A MINIMUM 8 FEET BEHIND THE CURB AND GUTTER OF THE INTERNAL ROADS AND BE LOCATED IN AN AREA THAT DOES NOT DRAIN TO ANY PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR STORM WATER STRUCTURES AND SHOULD BE ANCHORED TO THE GROUND TO PREVENT FROM TIPPING OVER. PORT-A-POTTIES LOCATED ON IMPERVIOUS SURFACES SHOULD BE PLACED ON TOP OF A SECONDARY CONTAINMENT DEVICE, OR BE SURROUNDED BY A CONTROL DEVICE (I.E. GRAVEL-BAG BERM).

11. SPILL PREVENTION

   DISCHARGES OF A HAZARDOUS SUBSTANCE OR OIL CAUSED BY A SPILL (E.G., A SPILL OF OIL INTO A SEPARATE STORM SEWER OR WATERS OF THE STATE) ARE NOT AUTHORIZED BY THIS PERMIT. IF A SPILL OCCURS, NOTIFY THE OWNER IMMEDIATELY. THE CONSTRUCTION SITE SHOULD HAVE THE CAPACITY TO CONTROL, CONTAIN, AND REMOVE SPILLS IF THEY OCCUR. SPILLS SHOULD BE CLEANED IMMEDIATELY AFTER DISCOVERY IN ACCORDANCE WITH MSDS AND NOT BURIED ON SITE OR WASHED INTO STORM DRAINS OR WATERS OF THE STATE.

   SPILLS IN EXCESS OF FEDERAL REPORTABLE QUANTITIES (AS ESTABLISHED UNDER 40 CFR PARTS 110 ,117, OR 302), SHOULD BE REPORTED TO THE NATIONAL RESPONSE CENTER BY CALLING (800) 424-8802. MSDS OFTEN INCLUDE INFORMATION ON FEDERAL REPORTABLE QUANTITIES FOR MATERIALS. SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHOULD BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE. WHEN CLEANING UP A SPILL, THE AREA SHOULD BE KEPT WELL VENTILATED AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT SHOULD BE USED TO MINIMIZE INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

   IN ADDITION TO PROPER WASTE MANAGEMENT, CONCRETE WASTE MANAGEMENT, CONCRETE CUTTING, VEHICLE STORAGE AND MAINTENANCE, MATERIAL STORAGE, AND SANITARY STATION PROTECTION, THE FOLLOWING MINIMUM PRACTICES SHOULD BE FOLLOWED TO REDUCE THE RISK OF SPILLS:
   - ON-SITE VEHICLES SHOULD BE MONITORED FOR LEAKS AND SHOULD RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.
   - PETROLEUM PRODUCTS SHOULD BE STORED IN TIGHTLY SEALED AND CLEARLY LABELED CONTAINERS.
   - ALL PAINT CONTAINERS SHOULD BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHOULD BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS, AND SHOULD NOT BE DISCHARGED TO THE STORM SEWER.
   - CONTRACTORS SHOULD FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL OF MATERIALS.

MAINTENANCE

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT SHOULD BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATION CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES STORMWATER UTILITY STRUCTURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN AND STANDARD SPECIFICATIONS.

STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCES SHOULD BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC STREETS. MAINTENANCE INCLUDES TOP DRESSING WITH ADDITIONAL STONE AND REMOVING TOP LAYERS OF STONES AND SEDIMENT. THE SEDIMENT RUN-OFF ONTO THE PUBLIC RIGHT OF WAY SHOULD BE REMOVED IMMEDIATELY.

RIPRAP OUTLET PROTECTION: RIPRAP SHOULD BE INSPECTED FOR ANY SCOUR BENEATH THE RIPRAP OR FOR STONES THAT HAVE BEEN DISLODGED. SEDIMENT ACCUMULATION IN THE OUTFALL AREA SHOULD BE REMOVED AS NEEDED.

CONCRETE WASHOUT AREA: EXISTING FACILITIES SHOULD BE CLEANED OUT, OR NEW FACILITIES SHOULD BE CONSTRUCTED AND OPERATIONAL ONCE THE EXISTING WASHOUT IS 75% FULL. WASHOUTS SHOULD BE INSPECTED FREQUENTLY TO ENSURE THAT PLASTIC LININGS ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. WHEN THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD, THE PAVED ROAD SHOULD BE INSPECTED FOR ACCUMULATED CONCRETE WASTE. ANY ACCUMULATED CONCRETE WASTE ON THE ROAD, CURB, OR GUTTER SHOULD BE REMOVED AND PROPERLY DISPOSED.

EROSION CONTROL BLANKET: THE BLANKET AND STAPLES SHOULD BE INSPECTED FREQUENTLY AND SHALL BE INSTALLED TO THE ILLINOIS URBAN MANUAL, UNLESS OTHERWISE INSTRUCTED BY THE MANUFACTURER. EROSION OCCURRING UNDERNEATH THE BLANKET SHOULD BE BACK-FILLED AND SEEDED WITH THE APPROPRIATE SEED MIX. ADDITIONAL BMP'S MAY NEED TO BE INSTALLED TO REDUCE EROSION UNDER THE BLANKET.

SILT FILTER FENCE: SILT FENCES SHOULD BE INSPECTED REGULARLY FOR UNDERCUTTING WHERE THE FENCE MEETS THE GROUND, OVERTOPPING, AND TEARS ALONG THE LENGTH OF THE FENCE. DEFICIENCIES SHOULD BE REPAIRED IMMEDIATELY. REMOVE ACCUMULATED SEDIMENTS FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-HALF THE FENCE HEIGHT. DURING FINAL STABILIZATION, PROPERLY DISPOSE OF ANY SEDIMENT THAT HAS ACCUMULATED ON THE SILT FENCE. INSTANCES WHEN AREAS OF SILT FENCE CONTINUALLY FAIL, REPLACE SILT FENCE WITH ANOTHER BMP AS SEEN FIT.

INLET PROTECTION: INLET FILTERS SHOULD BE INSPECTED FOR PROPER FILTERING. STORMWATER INLET STRUCTURE PROTECTION MEASURES SHALL BE CLEANED OR REMOVED AND REPLACED AS SEDIMENT ACCUMULATES, FILTERS BECOME CLOGGED, FILTER BAGS ARE MORE THAN 50% FILLED, OR PERFORMANCE IS COMPROMISED. SEDIMENT ACCUMULATIONS ADJACENT TO INLET PROTECTION MEASURES SHALL BE CLEANED BY THE END OF THE SAME BUSINESS DAY ON WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING BUSINESS DAY IF REMOVAL IN THE SAME BUSINESS DAY IS NOT FEASIBLE. DO NOT PUNCTURE HOLES IN FILTERS IF PONDING OCCURS.

SEDIMENT BASIN: SEDIMENT BASINS SHALL BE CLEANED WHEN ACCUMULATED SEDIMENT HAS REACHED 50% CAPACITY. POST CONSTRUCTION CLEANING OF ACCUMULATED SEDIMENT SHALL BE CONDUCTED IF THE BASIN IS TO REMAIN AFTER CONSTRUCTION IS COMPLETE.

INSPECTIONS

THE OWNER SHALL DESIGNATE A QUALIFIED PERSONNEL TO BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL OBSERVATION REPORTING. THIS QUALIFIED PERSONNEL SHALL MEET THE REQUIREMENTS NOTED IN THE ILR10 PERMIT CONDITIONS AND LOCAL CODES. SITE OBSERVATIONS SHOULD OCCUR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OR BY THE END OF THE FOLLOWING BUSINESS OR WORK DAY THAT IS 0.5 INCHES OR GREATER, OR EQUIVALENT SNOWFALL. OBSERVATIONS MAY BE REDUCED TO ONCE A MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS. WEEKLY OBSERVATIONS SHOULD RECOMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS 0.5" OR GREATER RAIN EVENT, OR A DISCHARGE DUE TO SNOWMELT OCCURS. AREAS INACCESSIBLE DURING INSPECTIONS DUE TO FLOODING OR OTHER UNSAFE CONDITIONS SHALL BE INSPECTED WITHIN 72 HOURS OF BECOMING ACCESSIBLE.

SITE OBSERVATION REPORTS SHOULD BE MAINTAINED ONSITE AS PART OF THE SWPPP. EACH SITE OBSERVATION SHALL INCLUDE THE FOLLOWING COMPONENTS:

A. DISTURBED AREAS AND AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE CHECKED FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY HAVE BEEN INSTALLED AND ARE OPERATING CORRECTLY. WHERE DISCHARGE POINTS ARE ACCESSIBLE, THEY SHOULD BE CHECKED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHOULD BE CHECKED FOR OFF-SITE SEDIMENT TRACKING. ALL PUMPING OPERATIONS AND ALL OTHER POTENTIAL NON-STORM WATER DISCHARGES SHOULD BE OBSERVED.

B. BASED ON THE RESULTS OF THE SITE OBSERVATION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED, AND THE POLLUTION PREVENTION MEASURES DESCRIBED IN THIS PLAN SHALL BE REVISED AS APPROPRIATE, AS SOON AS PRACTICABLE AFTER THE OBSERVATION. THE MODIFICATIONS, IF ANY, SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITHIN 7 CALENDAR DAYS FOLLOWING THE SITE OBSERVATION.

C. A REPORT SUMMARIZING THE SCOPE OF THE OBSERVATION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE OBSERVATION, THE DATE(S) OF THE OBSERVATION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH B ABOVE SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE OF FINAL STABILIZATION OR PERMIT COVERAGE IS TERMINATED. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THE ILR10 NPDES PERMIT.

D. THE OWNER SHALL NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE BY EMAIL AT EPA.SWNONCOMP@ILLINOIS.GOV, TELEPHONE, OR FAX WITHIN 24 HOURS OF ANY INCIDENCE OF NONCOMPLIANCE FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING A SITE OBSERVATION, OR FOR VIOLATIONS OF ANY CONDITION OF THE PERMIT. THE OWNER SHALL COMPLETE AND SUBMIT WITHIN 5 DAYS AN INCIDENCE OF NONCOMPLIANCE(ION) REPORT FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING AN INSPECTION CONDUCTED. SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT, WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE.

E. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY AS DEFINED IN PART VI.G OF THE ILR10 NPDES PERMIT (SIGNATORY REQUIREMENTS).

F. ALL REPORTS OF NONCOMPLIANCE SHALL BE MAILED TO THE AGENCY AT THE FOLLOWING ADDRESS:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

NON-STORM WATER DISCHARGES

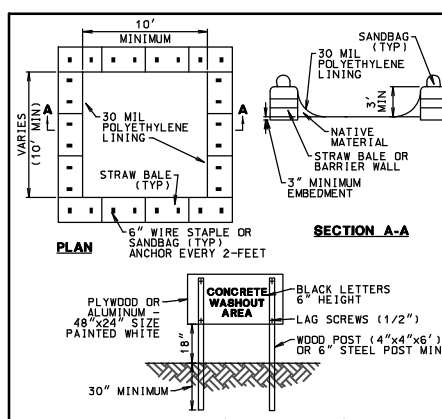
NON-STORM WATER FLOWS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE INCLUDED WITHIN THIS PLAN. THESE DISCHARGES INCLUDE: DISCHARGES FROM FIRE FIGHTING ACTIVITIES; FIRE HYDRANT FLUSHINGS; WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED; WATERS USED TO CONTROL DUST; POTABLE WATER SOURCES INCLUDING UNCONTAMINATED WATERLINE FLUSHINGS; LANDSCAPE IRRIGATION DRAINAGES; ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT USE DETERGENTS; PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED; UNCONTAMINATED AIR CONDITIONING CONDENSATE; UNCONTAMINATED SPRING WATER; UNCONTAMINATED GROUND WATER; AND FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.

THE FOLLOWING NON-STORM WATER DISCHARGES ARE PROHIBITED: CONCRETE AND WASTEWATER FROM WASHOUT OF CONCRETE (UNLESS MANAGED BY AN APPROPRIATE CONTROL), WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS, FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE, SOAPS, SOLVENTS, OR DETERGENTS, TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE, OR ANY OTHER POLLUTANT THAT COULD CAUSE OR TEND TO CAUSE WATER POLLUTION.

DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING TRENCHES AND EXCAVATIONS ARE ALLOWABLE IF MANAGED BY APPROPRIATE CONTROLS.

NATURAL BUFFERS

PROJECTS WITHIN 50 FEET OF WATERS OF THE UNITED STATES MUST PROVIDE AN UNDISTURBED NATURAL 50 FOOT BUFFER OR OTHER EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED OR OTHERWISE COORDINATED WITH APPLICABLE LOCAL AND STATE PERMITTING AGENCIES.



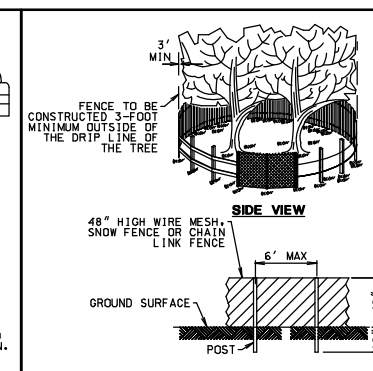
NOTES:

1. LAYOUT AND LOCATION AS SHOWN ON ENGINEERING PLANS OR FIELD LOCATED AS APPROVED BY MUNICIPALITY OR AUTHORIZED AGENT.
2. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING FACILITY TO A FUNCTIONAL CONDITION.
3. FACILITY SHALL BE CLEANED OR RE-CONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.

CONCRETE WASHOUT FACILITY

NOT TO SCALE

REFER TO SHEET 22 FOR ADDITIONAL SPECIFICATIONS



GENERAL NOTES

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO IMPLEMENTING CONSTRUCTION ACTIVITIES.
2. NO TREE CUTTING AND/OR PRUNING SHALL BE ALLOWED UNLESS ABSOLUTELY NECESSARY. ANY NECESSARY PRUNING SHALL BE IN ACCORDANCE WITH ANSI A300 STANDARDS.
3. THE FENCE SHALL BE LOCATED A MINIMUM OF 3 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
4. FENCE POSTS SHALL BE EITHER 6-FOOT STEEL POSTS AT 1.33 LBS/FOOT OR 2"X2" WOOD POSTS.
5. THE FENCE MAY BE EITHER 48" HIGH SNOW FENCE, PLASTIC WEB FENCING (SNOW FENCE) OR ANY OTHER MATERIAL AS APPROVED BY THE ENGINEER.
6. AS NECESSARY TO INDICATE TREE PRESERVATION AREAS, SIGNAGE INDICATING "TREE PRESERVATION AREA, DO NOT ENTER" SHALL BE PLACED ON THE FENCING.
7. TREE PROTECTION FENCING SHALL BE CONTINUOUSLY MONITORED AND ANY NECESSARY MAINTENANCE REPAIRS SHALL BE MADE IMMEDIATELY.

INSTALLATION

1. PLACE BARRIERS AROUND PROTECTED AND PRESERVED AREAS TO PREVENT THE APPROACH OF EQUIPMENT AT THE DRIP LINE OF TREES TO BE RETAINED.
2. NO TREE ROOTS SHALL BE CUT INSIDE THE TREE DRIP LINE.
3. DO NOT PLACE EQUIPMENT, CONSTRUCTION MATERIALS, TOPSOIL, OR FILL DIRT WITHIN THE LIMIT OF THE DRIP LINE OF THE TREES TO BE SAVED.
4. TREE PROTECTION BARRIERS SHALL BE REMOVED DURING FINAL SITE CLEANUP.

TREE PROTECTION FENCE DETAIL

NOT TO SCALE

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A →	→	→	*	*	→	→			
DORMANT SEEDING	B →	→	→								B →	→
TEMPORARY SEEDING			C →	→	→	→	D →	→	→			
SODDING			E** →	→	→	→	→	→	→			

A WETLAND GRASS AND SEDGE MIXTURE TO BE DETERMINED BY THE CONTRACTOR
B KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE
C SPRING OATS 100 LBS/ACRE
D WHEAT OR CEREAL RYE 150 LBS/ACRE
E SOD
F STRAW MULCH 2 TONS/ACRE

* IRRIGATION NEEDED DURING JUNE AND JULY.
** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.

NOTE: ALL SEEDING SHALL BE PERFORMED IN ACCORDANCE TO IDOT STANDARD SPECIFICATIONS SECTION 250: SEEDING.

SOIL PROTECTION CHART AND APPLICATION GUIDELINES

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FAX: 224-293-3101

DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

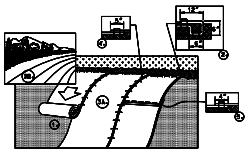
DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

SWPPP SPECIFICATIONS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

PROJECT NUMBER: 4782

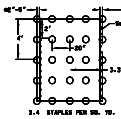
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EROSION CONTROL BLANKET DETAILS



EROSION CONTROL BLANKET SPECIFICATIONS:

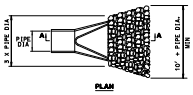
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE TRENCH.
3. ROLL THE BLANKETS (OR FLAT) DOWN OR (OR) HORIZONTALLY ACROSS THE SLOPE. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES/STAKES 4" APART TO SECURE BLANKETS. REFER TO MANUFACTURER'S GUIDELINES FOR STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES/STAKES 4" APART TO SECURE BLANKETS. REFER TO MANUFACTURER'S GUIDELINES FOR STAPLE PATTERN. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
6. BURY TOP OF BECP'S IN TRENCH 6" WIDE BY 6" DEEP.



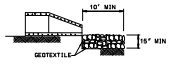
3.4 STAPLES PER SQ. YD.

EROSION CONTROL BLANKET STAPLE PATTERN DETAIL
NOT TO SCALE

1. STAPLES SHALL BE PLACED IN A STAGGERED PATTERN AT 4.5FT PER SQUARE YARD AS SHOWN. USE ATTACHED BLANKETS WITH 4 STAPLES PER 1 SQUARE FOOT.
2. PLACEMENT OF STAPLES SHALL BE ADJUSTED BASED ON SOIL TYPE & SLOPE AS RECOMMENDED BY MANUFACTURER.
3. ALL BLANK ENDS SHALL BE STAPLED AT APPROXIMATELY 12-INCH INTERVALS.



PLAN

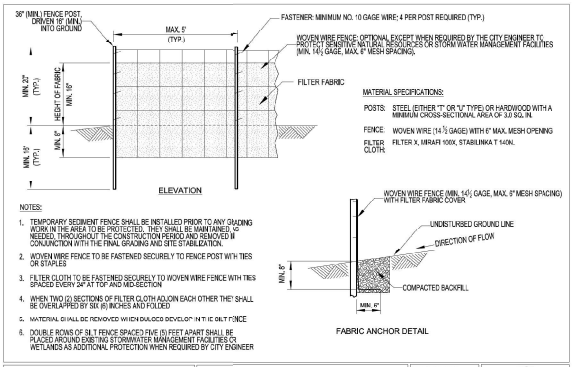


SECTION A-A

NOTES:
REFER TO CITY OF CRYSTAL LAKE DETAILS FOR SPECIFICS

RIP RAP AT STORM OUTLET DETAIL
NOT TO SCALE

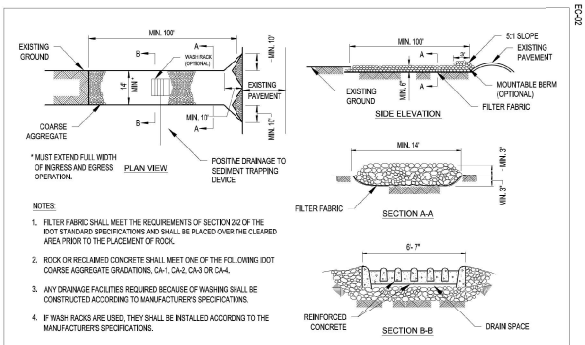
EC-01



Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	SILT FENCE	EC-01	City of Crystal Lake Illinois
2.		Date: 12/4/2012	
3.		Drawn DD / Checked AW	
4.			

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EC-02



NOTES:
1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 212 OF THE IDOT STANDARD SPECIFICATIONS AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACEMENT OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
4. IF WASH RACKS ARE USED, THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	CONSTRUCTION ENTRANCE	EC-02	City of Crystal Lake Illinois
2.		Date: 07/31/2012	
3.		Drawn DD / Checked AW	
4.			

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UD-02e

ROCK RIPRAP SPECIFICATIONS AND BEDDING

IDOT GRADATION	MAXIMUM ROCK SIZE (lb)*	EQUIVALENT DIAMETER (SPHERICAL)(in)*	MINIMUM BEDDING THICKNESS (in)	MINIMUM THICKNESS (in)
RR-3	50	10	-	8
RR-4	150	15	6	16
RR-5	400	21	8	22
RR-6	600	24	10	26
RR-7	1000	28	12	30

*ASSUMES A MINIMUM SPECIFIC GRAVITY OF 2.450 AND A MINIMUM UNIT WEIGHT OF 153 lb/cf

NOTES:
1. RIPRAP SHALL CONFORM TO SECT. 281 OF THE STANDARD SPECIFICATIONS.
2. INSTALL FILTER FABRIC UNDER ALL RIPRAP AND BEDDING. FILTER FABRIC SHALL CONFORM TO SECT. 282 OF THE STANDARD SPECIFICATIONS.

ROCK RIPRAP SIZE REQUIREMENTS AND THICKNESS

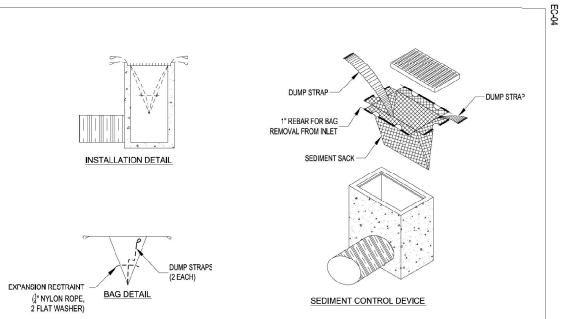
CULVERT DIAMETER (in)	MINIMUM TAILWATER		MAXIMUM TAILWATER	
	MAX CONDUIT VELOCITY = 5 fps	MAX CONDUIT VELOCITY = 10 fps	MAX CONDUIT VELOCITY = 5 fps	MAX CONDUIT VELOCITY = 10 fps
	IDOT GRADATION / APRON LENGTH (ft)	IDOT GRADATION / APRON LENGTH (ft)	IDOT GRADATION / APRON LENGTH (ft)	IDOT GRADATION / APRON LENGTH (ft)
12	RR-3 / 10	RR-3 / 12	RR-3 / 12	RR-3 / 16
18	RR-3 / 14	RR-4 / 16	RR-3 / 12	RR-3 / 16
24	RR-3 / 16	RR-4 / 20	RR-3 / 14	RR-4 / 17
30	RR-3 / 18	RR-4 / 22	RR-3 / 16	RR-4 / 20
36	RR-4 / 20	RR-5 / 24	RR-3 / 16	RR-4 / 22
48	RR-4 / 24	RR-6 / 28	RR-4 / 20	RR-4 / 24
60	RR-5 / 32	RR-6 / 36	RR-4 / 22	RR-5 / 28
72	RR-6 / 40	RR-6 / 44	RR-5 / 24	RR-5 / 29
96	RR-7 / 50	RR-7 / 54	RR-5 / 26	RR-5 / 32

NOTES:
1. IF TAILWATER DEPTH FROM THE PIPE INVERT IS LESS THAN HALF THE DIAMETER OF THE PIPE, THEN MINIMUM TAILWATER CONDITIONS EXIST.
2. ADAPTED FROM THE ILLINOIS URBAN MANUAL

Revised:	Drawing Name	Drawing Number	
1.	RIPRAP DETAILS	UD-02e	City of Crystal Lake Illinois
2.		Date: 08/27/2015	
3.		Drawn DD / Checked AW	
4.			

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EC-04



Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	INLET SEDIMENT CONTROL DEVICE	EC-04	City of Crystal Lake Illinois
2.		Date: 11/2/2007	
3.		Drawn EM / Checked AW	
4.			

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FAX: 224-293-3101

DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

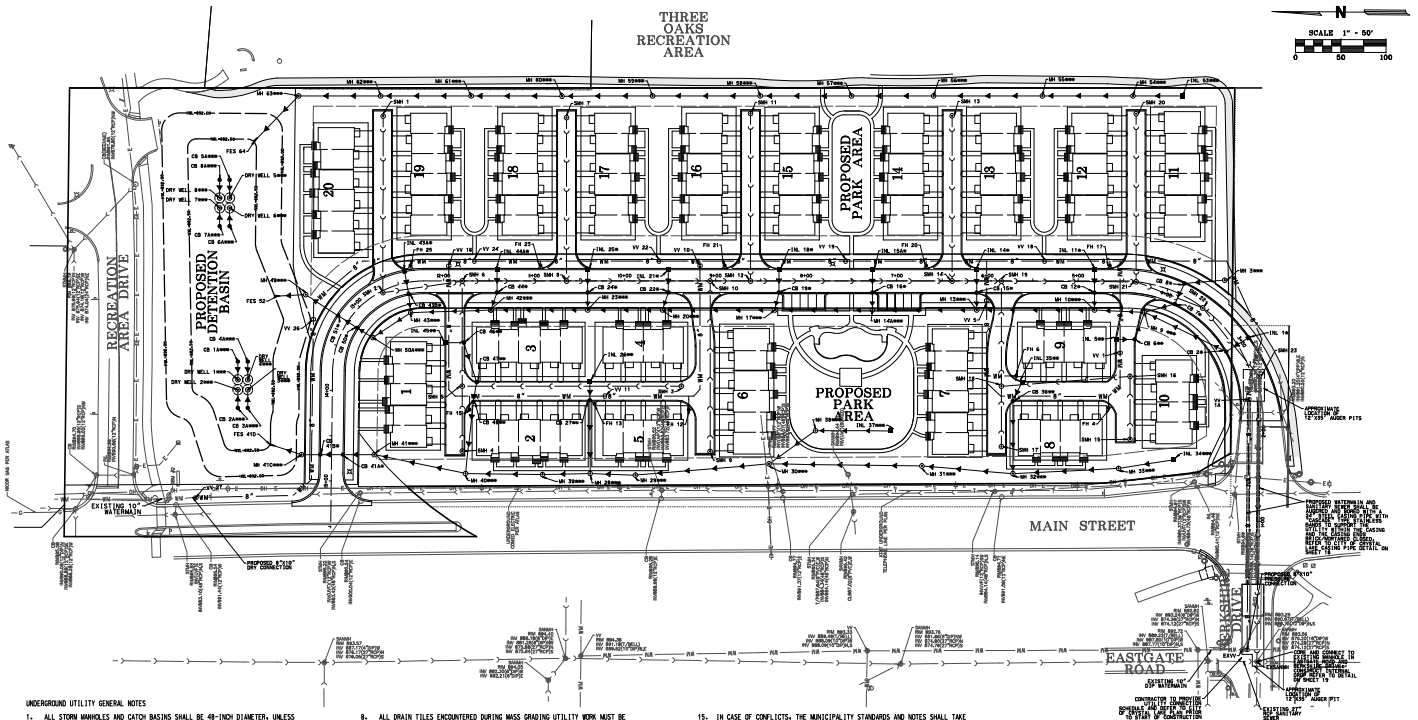
DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

SWPPP DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 10 OF 23

PROJECT NUMBER: 4782
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ILLINOIS FIRM LICENSE 184-000894

BY ACCEPTING THIS PLAN, YOU AGREE TO COMPLY WITH ALL OF THE REQUIREMENTS CONTAINED HEREIN



UNDERGROUND UTILITY GENERAL NOTES

1. ALL STORM MANHOLES AND CATCH BASINS SHALL BE 48-INCH DIAMETER, UNLESS OTHERWISE INDICATED.
2. ALL SANITARY SEWER, LESS THAN 15 FEET DEEP, SHALL BE PVC, SDR 26, UNLESS OTHERWISE INDICATED OR APPROVED EQUAL LISTED WITHIN THE CONSTRUCTION SPECIFICATIONS AS APPROVED BY THE MUNICIPALITY. PVC SANITARY SEWER SHALL HAVE ELASTOMERIC JOINTS IN CONFORMANCE WITH ASTM D-3212.
3. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE, CLASS 52, AWWA C-600 WITH "PUSH-ON" TYPE JOINTS, UNLESS OTHERWISE INDICATED. ALL WATER MAIN SHALL HAVE A MINIMUM OF 5' OF COVER FROM TOP OF WATERMAIN TO FINISHED GRADE.
4. ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE, MINIMUM CLASS III, WITH ASTM C76 PIPE AND C443 JOINTS, UNLESS OTHERWISE INDICATED. ALL STORM SEWERS WHICH ARE LOCATED IN THE SIDE YARD SHALL HAVE "O" -RING GASKETED JOINTS. ALL OTHER SEWERS SHALL HAVE BITUMINOUS MASTIC JOINTS.
5. GRANULAR TRENCH BACKFILL (IDA-6) SHALL BE PROVIDED FOR ALL SANITARY, WATER AND STORM UTILITIES WHEN THE TRENCH LIMITS FALL WITHIN TWO FEET OF PAVEMENT.
6. OVERHEAD SANITARY SEWER IS REQUIRED FOR ALL HOMES.
7. ALL WATERMAIN AND WATER SERVICE LINES SHALL BE PROTECTED FROM OTHER UTILITIES IN ACCORDANCE WITH SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.
8. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT, OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED WITH THE RECORD DRAWINGS.
9. ALL UNDERGROUND UTILITY INFORMATION NOTED ON THE PLANS IS BASED ON INFORMATION OBTAINED FROM THE MUNICIPALITY, UTILITY COMPANIES OR FIELD MEASUREMENTS. THIS INFORMATION, WHILE BELIEVED TO BE COMPLETE AND ACCURATE, CANNOT BE GUARANTEED.
10. CONTRACTOR SHALL VERIFY ALL BUILDING SERVICE LOCATIONS AND SIZES WITH ARCHITECTURAL PLANS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES.
11. CONTRACTOR SHALL CONTACT JULIE (1-800-892-0123) PRIOR TO START OF CONSTRUCTION TO LOCATE ALL UTILITIES WITHIN THE RIGHT-OF-WAY.
12. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AT ALL PROPOSED CONNECTIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES.
13. FIELD LOCATION OF ALL HOUSE SERVICES TO BE VISIBLY DEMARKED, SUPPLIED BY CONTRACTOR AND SHOWN ON RECORD DRAWINGS. SEE GENERAL SPECIFICATIONS SHEET FOR MARKING WATER AND SANITARY SERVICES ON CURB.
14. A TEN (10) FOOT MINIMUM SEPARATION SHALL BE PROVIDED BETWEEN THE WATERMAIN SERVICE AND THE SANITARY OR STORM SEWER SERVICES.
15. IN CASE OF CONFLICTS, THE MUNICIPALITY STANDARDS AND NOTES SHALL TAKE PRECEDENCE.
16. PLUMBING CONTRACTOR TO MAKE ALL CONNECTIONS WITH BUILDING SERVICES CONSTRUCTED BY UTILITY CONTRACTOR. SITE UTILITY CONTRACTOR TO CONSTRUCT SERVICES TO 5 FEET PAST THE RIGHT OF WAY OR WITHIN 20 FEET OF THE BUILDING.
17. EXISTING PAVEMENT REMOVED FOR PRIVATE UTILITY CONSTRUCTION SHALL BE DONE BY THE RESPECTIVE UTILITY COMPANY AND PAID FOR SEPARATELY BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT.
18. EXISTING OR PROPOSED MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS REQUIRING OVER 12-INCHES OF ADJUSTMENT RINGS SHALL USE AN ADDITIONAL BARREL SECTION TO MAINTAIN A MAXIMUM OF 12-INCH TOTAL ADJUSTMENT RING DEPTH.
19. CONTRACTOR SHALL CORE AND BOOT ALL PIPE ENTRANCES TO EXISTING SANITARY MANHOLES.
20. CONTRACTOR SHALL PRESSURE TEST ALL EXISTING WATERMAIN VALVES.
21. ALL VALVE VAULTS SHALL BE 60" DIAMETER STRUCTURES WHEN PLACED ON 8" WATERMAIN.

FRAME AND GRATE SCHEDULE	
■	NEENAH R-3261-A TYPE C
■■	NEENAH R-3506-A2 TYPE C
■■■	NEENAH R-2535 TYPE C

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DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	1" = 50'

OVERALL UTILITY PLAN
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

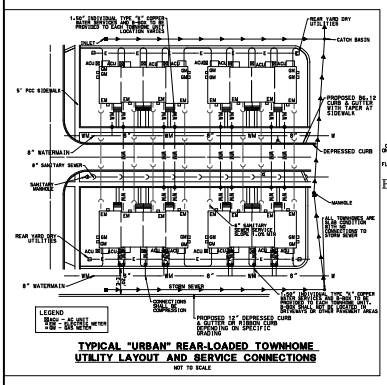
SHEET 11 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000694

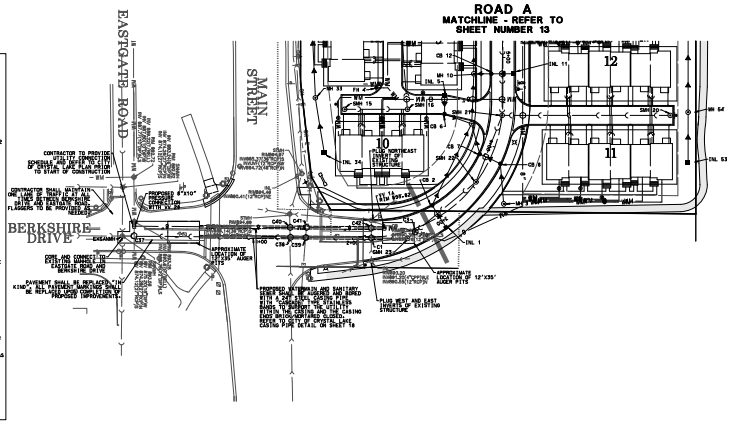
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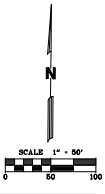
ALL EXISTING AND PROPOSED CATCH BASINS IN THE PAVEMENT ARE TO BE PROVIDED SNOUTS AND BIOSKIRTS PER DETAIL ON SHEET 16



TYPICAL "URBAN" REAR-LOADED TOWNHOME UTILITY LAYOUT AND SERVICE CONNECTIONS

NOT TO SCALE



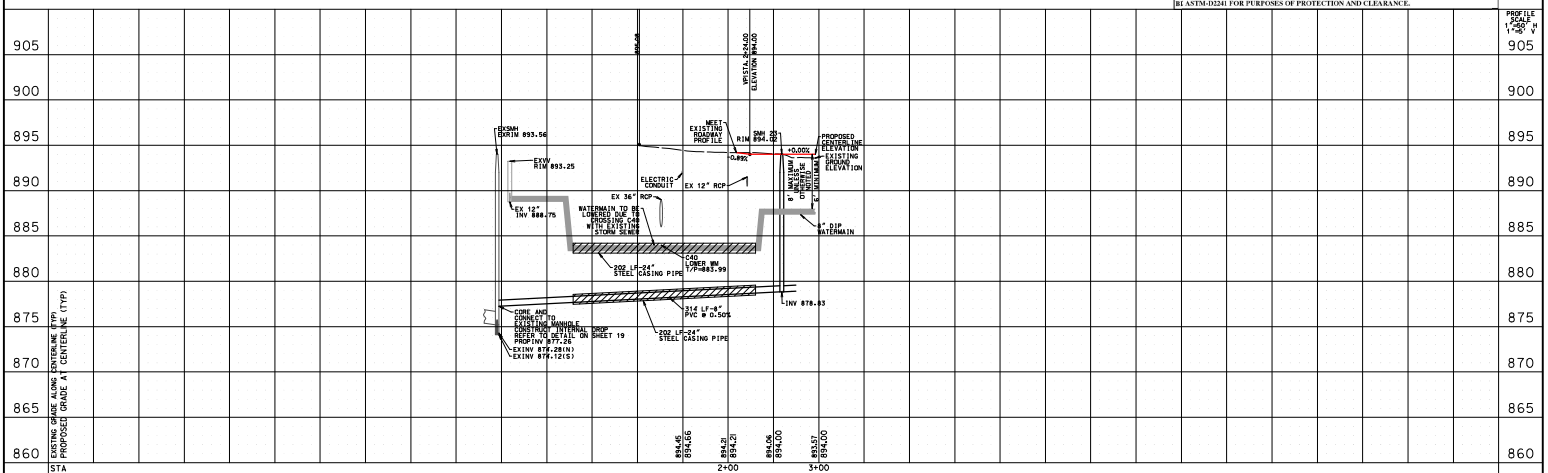


CROSSING	BTM OF PIPE		TOP OF PIPE		SEPARATION
C1	EXSTM	890.13	SAN	879.32	10.81
C3	WTR	888.00	SAN	878.86	9.14
C37	WTR	888.75	SAN	877.92	10.83
C38	STM	885.74	SAN	878.88	6.86
C39	ELEC	891.95	SAN	878.96	12.99
C40	EXSTM	885.99	WTR	883.99	2.00 *
C41	ELEC	891.80	WTR	883.99	7.81
C42	EXSTM	890.13	WTR	888.00	2.13
C43	ELEC	893.00	STM	890.39	2.61

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

"WMQ" INDICATES THE STORM OR SANITARY SEWER MUST BE CONSTRUCTED PER SPECIFICATIONS SHEET IK THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR WHERE LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE. STORM OR SANITARY SEWER SHALL BE CONSTRUCTED WITH WATER QUALITY PIPE OR VIA CASING PIPE TO PROVIDE ADEQUATE PROTECTION/CLEARANCE. "WMQ" STORM PIPE SHOULD BE TYPE 3, CLASS 4 OR HIGHER RCP AND SANITARY SEWER SHOULD BE ASTM-D2241 FOR PURPOSES OF PROTECTION AND CLEARANCE.



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DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	1" = 50'

ROAD A - STA. 1+00 - 3+00
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

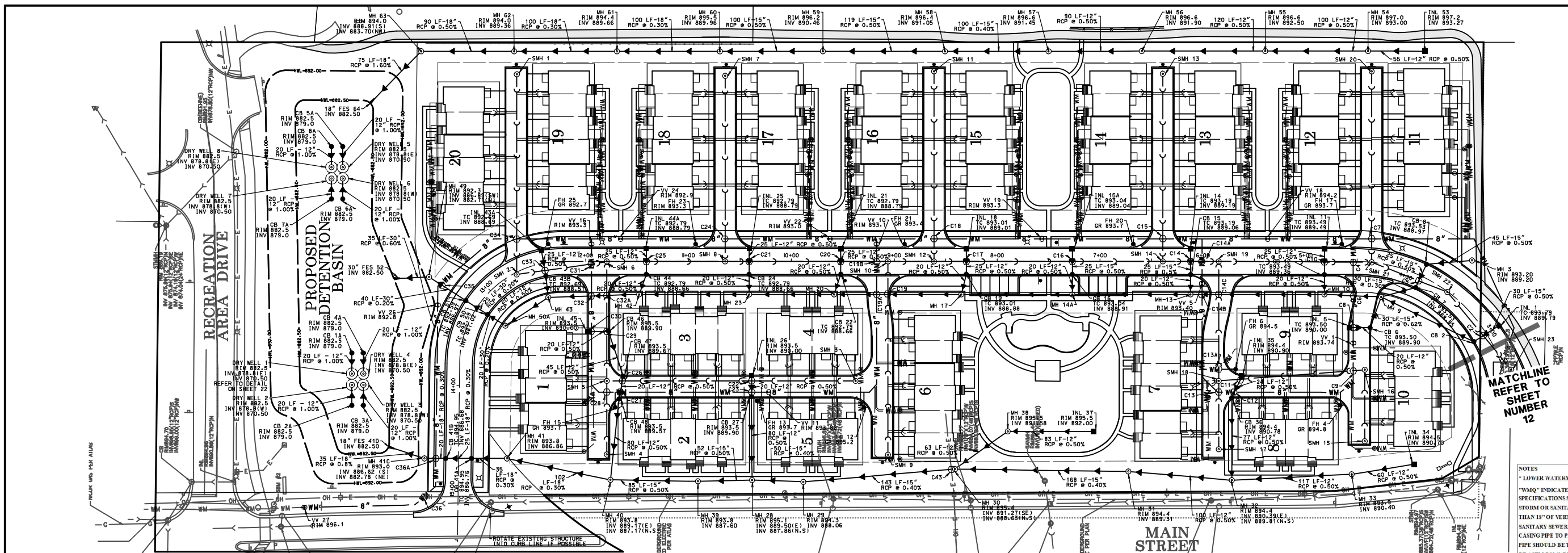
SHEET 12 OF 23

PROJECT NUMBER: 4782

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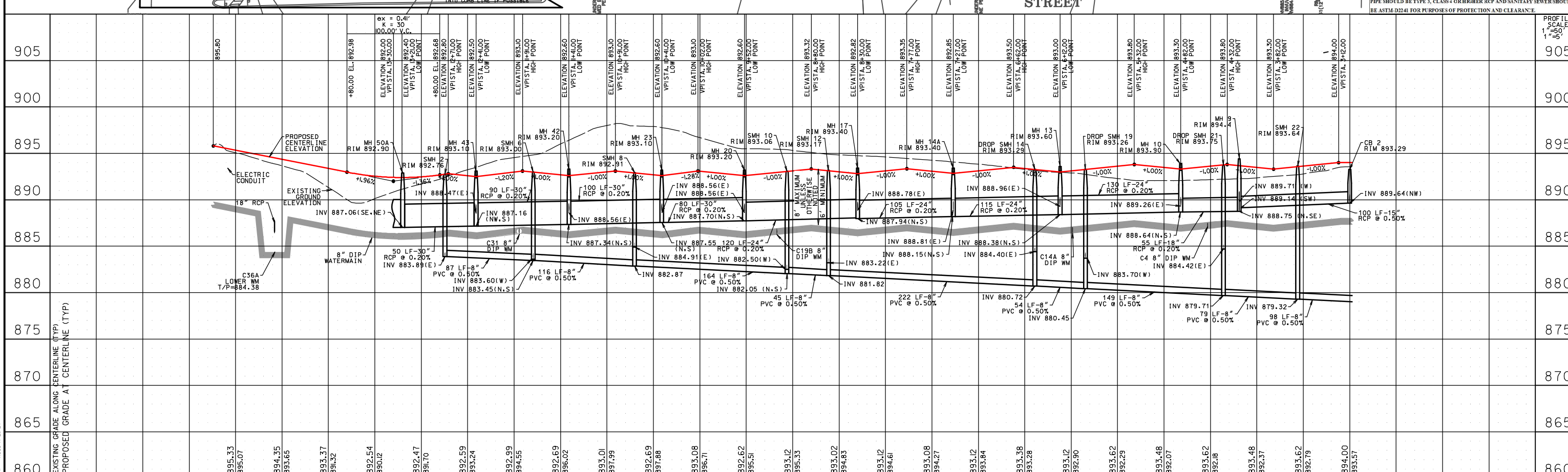
ILLINOIS FIRM LICENSE 184-000894

Plotted: 12/17/2024 - 10:19AM - Xref: A-GRADING PLAN.dwg



CROSSING	BTM OF PIPE	TOP OF PIPE	SEPARATION
C2	STM 889.47	SAN 879.73	9.74
C3	WTR 888.00	SAN 878.86	9.14
C4	WTR 887.58	SAN 878.49	9.09
C5	STM 888.60	SAN 880.15	8.45
C6	STM 888.34	WTR 886.34	2.00 *
C7	WTR 887.23	SAN 885.51	1.72
C8	STM 889.75	WTR 887.54	2.21
C9	WTR 887.67	SAN 885.63	2.04
C10	STM 889.19	SAN 880.63	8.56
C11	STM 890.64	SAN 885.08	5.56
C12	STM 890.58	WTR 888.56	2.02
C13	WTR 888.23	SAN 886.23	2.00
C14	STM 888.89	SAN 881.27	7.62
C15	WTR 887.13	SAN 885.43	1.70
C16	STM 888.74	SAN 881.84	6.90
C17	STM 888.71	SAN 882.13	6.58
C18	WTR 888.00	SAN 884.20	3.80
C19	STM 887.50	SAN 884.40	3.10
C20	STM 887.50	SAN 883.00	4.50
C21	STM 888.50	SAN 883.45	5.05
C22	STM 887.28	SAN 886.90	0.38
C23	STM 889.69	WTR 887.60	2.09
C24	WTR 887.50	SAN 885.90	1.60
C25	STM 888.50	SAN 883.95	4.55
C26	STM 889.41	SAN 886.20	3.21
C27	STM 889.36	WTR 887.36	2.00 *
C28	WTR 886.93	SAN 884.93	2.00
C29	STM 889.67	SAN 885.88	3.79
C30	STM 889.75	WTR 887.58	2.17
C31	WTR 886.28	SAN 884.22	2.06
C32	STM 886.75	WTR 884.75	2.00 *
C33	STM 888.43	SAN 884.28	4.15
C34	WTR 887.20	SAN 884.90	2.30
C35	STM 886.56	WTR 884.56	2.00 *
C36	ELEC 893.43	WTR 889.93	3.50
C36A	STM 886.38	WTR 884.38	2.00 *
C43	ELEC 893.00	STM 890.39	2.61

NOTES
* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION
"WMQ" INDICATES THE STORM OR SANITARY SEWER MUST BE CONSTRUCTED PER SPECIFICATIONS SHEET 18. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR WHERE LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE. STORM OR SANITARY SEWER SHALL BE CONSTRUCTED WITH WATER QUALITY PIPE OR VIA CASING PIPE TO PROVIDE ADEQUATE PROTECTION/CLEARANCE. "WMQ" STORM PIPE SHOULD BE TYPE 3, CLASS 4 OR HIGHER RCP AND SANITARY SEWER SHOULD BE ASTM-D2241 FOR PURPOSES OF PROTECTION AND CLEARANCE.



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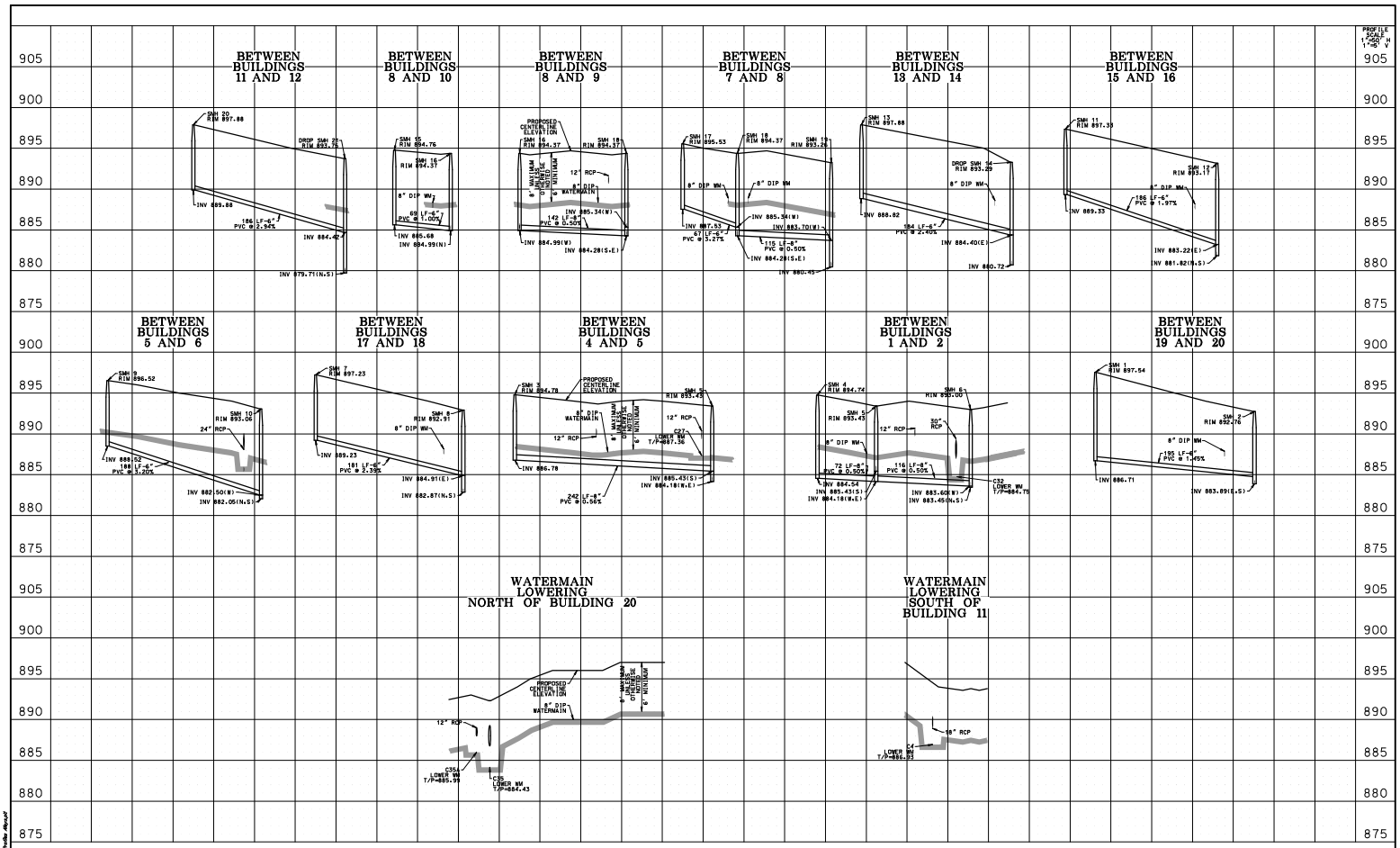
DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	1" = 50'

ROAD A - STA. 3+00 - 15+51
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 13 OF 23
PROJECT NUMBER: 4782

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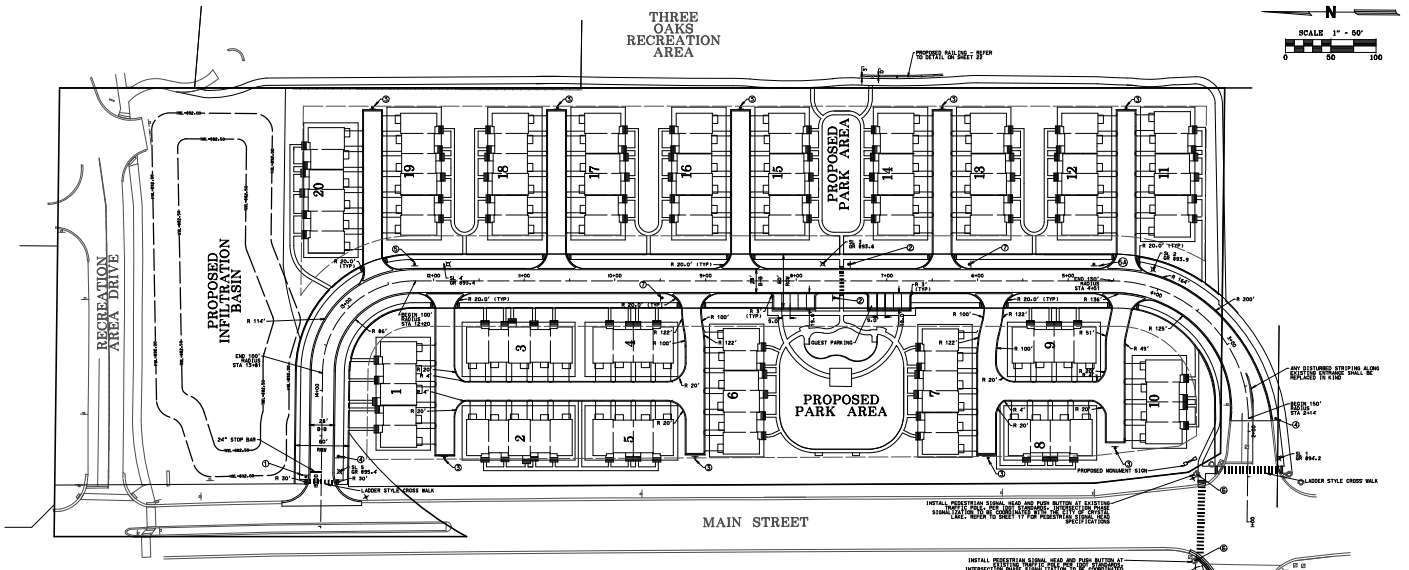
PROFILES - ALLEYWAYS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 14 OF 23

PROJECT NUMBER: 4782

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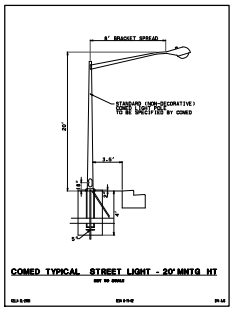
ILLINOIS FIRM LICENSE 184-000994



STREET NAME SIGN (D3-1) (REFER TO DETAIL TR-01 ON SHEET 13)

24" STOP BAR

1. R1-1 STOP SIGN 30"x30" RED
2. W11-2 PEDESTRIAN CROSSING 30"x30" FLUORESCENT YELLOW
   R16-7P ARROW INDICATOR 24"x12" FLUORESCENT YELLOW
3. R8-3A NO PARKING 24"x30" WHITE
4. R8-2 NO PARKING EXCEPT IN DESIGNATED AREAS 24"x30" WHITE
5. R7-1G PARKING PERMITTED 12"x6" WHITE
5A. R7-1G PARKING PERMITTED (MIRRORED) 12"x6" WHITE
6. R10-3T PUSH BUTTON SIGN 12"x6" WHITE
7. W11-2 PEDESTRIAN CROSSING 30"x30" FLUORESCENT YELLOW
   W16-9P AHEAD 24"x12" FLUORESCENT YELLOW



STREET LIGHTING, SIGNAGE, AND STRIPING GENERAL NOTES

1. TYPICAL STREET LIGHTS SHALL CONFORM TO LATEST COMED RESIDENTIAL STANDARDS:
2. THE MOUNTING HEIGHT SHALL BE 20 FEET.
3. THE DEVELOPER SHALL COORDINATE SITE CONSTRUCTION WITH THE PUBLIC WORKS AND COMED TO ALLOW ELECTRIC FACILITIES TO BE INSTALLED PRIOR TO PAVING AND CURBING.
4. STOP BARS SHALL BE INSTALLED AT ALL STOP LOCATIONS IN ACCORDANCE WITH THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
5. ALL STOP SIGNS SHALL CONFORM TO THE CITY DETAIL TR-03 AND INSTALLED PER THE MUTCD.
6. CROSSWALKS TO BE 2' WHITE PAINT LADDER STYLE STRIPING (2' APART).

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12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED MS
DRAWN JD
APPROVED MTL
DATE 09/12/2024
SCALE 1" = 50'

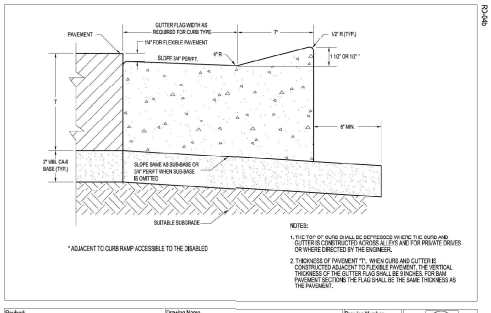
SIGNAGE AND LIGHTING PLAN
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 15 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000984

RD-04b



* ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED

NOTES:

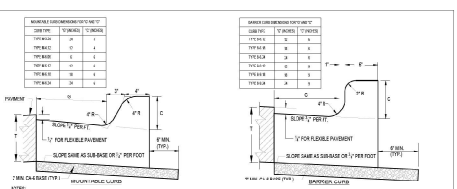
1. THE TOP OF GUTS SHALL BE DEPRESSED 10 (ON) TO BE GUTS AND GUTTER IS CONSTRUCTED ACROSS ALL DRIVEWAYS FOR PRIVATE DRIVES OR WHERE DIRECTED BY THE ENGINEER.
2. THICKNESS OF PAVEMENT "T", WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE 9 INCHES. FOR RIGID PAVEMENT SECTIONS THE FLAG SHALL BE THE SAME THICKNESS AS THE PAVEMENT.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	DEPRESSED CURB: DETAIL	RD-04b
2.		Date: 01/30/15
3.		Drawn: DD / Checked: AW
4.		City of Crystal Lake Illinois

RD-05

MOUNTABLE CURB DIMENSIONS "D" TO "E"		
CURB TYPE	"D" (INCHES)	"E" (INCHES)
TYPE M-6.12	24	7
TYPE M-6.24	12	4
TYPE B-6.12	6	6
TYPE B-6.24	12	6
TYPE B-6.36	18	6
TYPE B-6.24	24	6

BARRIER CURB DIMENSIONS "D" TO "E"		
CURB TYPE	"D" (INCHES)	"E" (INCHES)
TYPE B-6.12	12	6
TYPE B-6.24	24	6
TYPE B-6.36	36	6
TYPE B-6.24	24	6
TYPE B-6.36	36	6
TYPE B-6.24	24	6



NOTES:

THICKNESS - T - THICKNESS OF PAVEMENT WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE OR RIGID PAVEMENT. THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL BE 9". ALSO, TIE BARS SHALL BE OMITTED.

DRAINAGE OPENINGS - AT ALL LOCATIONS WHERE METAL CASTINGS ARE TO BE INCORPORATED IN THE CURB AND GUTTER, A 1" THICK PRE-FORMED EXPANSION JOINT FILLER CONFORMING TO THE CROSS SECTION OF THE CURB AND GUTTER SHALL BE INSTALLED IN THE CURB AND GUTTER A DISTANCE OF 6 FT. FROM EACH SIDE OF THE OPENING AND EXTENDED FROM THE SUBGRADE TO THE TOP OF THE CURB AND GUTTER. NO REBARS OR TIE BARS SHALL BE INCORPORATED IN THE CONFINES OF CONCRETE GUTTER OPENING. "D" SHALL BE INCORPORATED IN THE CONFINES OF CONCRETE GUTTER IN FRONT OF THE CASTING.

TRANSITIONS - THE TRANSITION FROM FULL HEIGHT CURB TO DEPRESSED CURB SHALL BE MADE AT THE RATE OF 3' PER FOOT OF LENGTH OR FLATTER.

D - NO. 3 STEEL REINFORCING BARS SHALL BE INCORPORATED OVER TRENCH OVERSIZE IF REQUIRED BY THE CITY ENGINEER.

JOINTS - IN ADDITION TO THE REQUIREMENTS OF ARTICLE 606.06 OF THE STANDARD SPECIFICATIONS, JOINTS SHALL BE CONSTRUCTED AS FOLLOWS:

CONTRACTION JOINTS AND EXPANSION JOINTS SHALL BE INSTALLED IN THE CURB OR CURB AND GUTTER IN RESPONDENTION WITH JOINTS IN ADJACENT P.C.C. PAVEMENT OR BASE COURSE.

WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, A 1" THICK PRE-FORMED EXPANSION JOINT FILLER CONFORMING TO THE CROSS SECTION OF THE CURB AND GUTTER SHALL BE INSTALLED AT POINTS OF CONNECTION TO ANY TYPE OF RIGID PAVEMENT. CONTRACTION JOINTS SHALL BE PLACED AT 10' INTERVALS AND SHALL BE CONSTRUCTED AS SHOWN ON THE STANDARD DRAWINGS. EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 100 FEET.

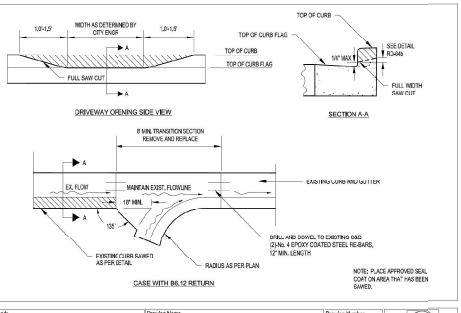
ALL EXPANSION JOINTS SHALL BE PROVIDED WITH A 1" DIA. #18 SMOOTH DOWEL EXTENDING 12" INTO EACH ADJACENT SLAB AT MID-DEPTH OF THE SLAB AS SPECIFIED IN THE STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PROVIDED STOP THAT WILL PROVIDE 1" OF EXPANSION.

ALL CONTRACTION JOINTS SHALL BE PROVIDED WITH 1" DIA. DEFORMED STEEL TIE BARS AT MID-DEPTH OF THE SLAB AS SPECIFIED. TIE BARS SHALL BE ACCESSIBLE AT CENTERS MINIMUM 1 FOOT APART.

EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT TO EXCEED 100 FEET.

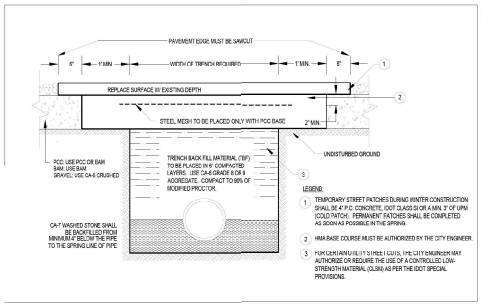
Revised:	Drawing Name	Drawing Number
1. 06/12/2015	CURB: CONCRETE CURB AND GUTTER	RD-05a
2. KL 1/25/2021 M.4.12 ADDED		Date: 06/21/2016
3.		Drawn: DD / Checked: AW
4.		City of Crystal Lake Illinois

RD-04a



Revised:	Drawing Name	Drawing Number
1. 06/12/2015	DEPRESSED CURB: ENTRANCE BY SAWING	RD-04a
2.		Date: 01/30/15
3.		Drawn: DD / Checked: AW
4.		City of Crystal Lake Illinois

RD-06

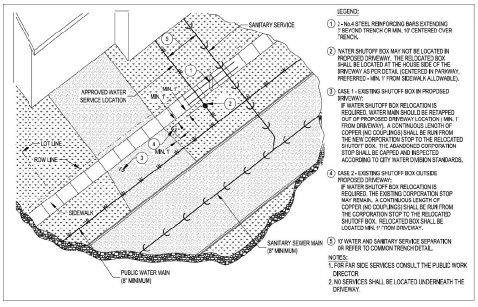


LEGEND:

1. TEMPORARY STREET PATCHES DURING WINTER CONSTRUCTION SHALL BE 6" P.C. CONCRETE, DOT CLASS SI OR A MIN. 3" OF HMA (COLD PATCH). PERMANENT PATCHES SHALL BE COMPLETED AS SOON AS POSSIBLE IN THE SPRING.
2. HMA BASE COURSE MUST BE AUTHORIZED BY THE CITY ENGINEER.
3. FOR LEAN MIX UTILITY STREET CUTS, THE CITY ENGINEER MAY AUTHORIZE OR REQUIRE THE USE OF A CONTROLLED LOW-STRENGTH MATERIAL (CLSM) AS PER THE IDOT SPECIAL PROVISIONS.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	PAVEMENT CUT AND REPLACEMENT	RD-06
2. 9/6/2021 KL - CA-7 TO SPRING LINE OF PIPE		Date: 05/19/2015
3.		Drawn: JH / Checked: AW
4.		City of Crystal Lake Illinois

UG-05



LEGEND:

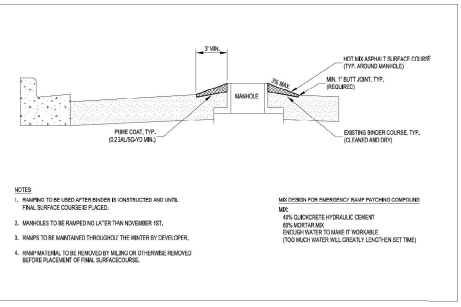
1. 1 - No.4 STEEL REINFORCING BARS EXTENDING 1' BEYOND TRENCH OR MIN. 10' CENTERED OVER TRENCH.
2. WATER SHUTOFF BOX MAY NOT BE LOCATED IN PROPOSED DRIVEWAY. THE RELOCATED BOX SHALL BE LOCATED AT THE HOUSE SIDE OF THE DRIVEWAY AS FOR DETAIL (CENTERED IN PARKWAY, PREFERRED - MIN. 1' FROM SIDEWALK ALLOWABLE).
3. CASE 1 - EXISTING SHUTOFF BOX IN PROPOSED DRIVEWAY:
   IF WATER SHUTOFF BOX RELOCATION IS REQUIRED, WATER MAIN SHOULD BE RETAPPED OUT OF PROPOSED DRIVEWAY LOCATION (MIN. 1' FROM DRIVEWAY). A CONTINUOUS LENGTH OF COPPER (NO COUPLINGS) SHALL BE RUN FROM THE CORPORATION STOP TO THE RELOCATED SHUTOFF BOX. RELOCATED BOX SHALL BE LOCATED MIN. 1' FROM DRIVEWAY. CORPORATION STOP SHALL BE CAPPED AND INSPECTED ACCORDING TO CITY WATER DIVISION STANDARDS.
4. CASE 2 - EXISTING SHUTOFF BOX OUTSIDE PROPOSED DRIVEWAY:
   IF WATER SHUTOFF BOX RELOCATION IS REQUIRED, THE EXISTING CORPORATION STOP MAY REMAIN. A CONTINUOUS LENGTH OF COPPER (NO COUPLINGS) SHALL BE RUN FROM THE CORPORATION STOP TO THE RELOCATED SHUTOFF BOX. RELOCATED BOX SHALL BE LOCATED MIN. 1' FROM DRIVEWAY.
5. 12" WATER AND SANITARY SERVICE SEPARATION OR REFER TO COMMON TRENCH DETAIL.

NOTES:

1. FOR FAR SIDE SERVICES CONSULT THE PUBLIC WORK DIRECTOR.
2. NO SERVICES SHALL BE LOCATED UNDERNEATH THE DRIVEWAY.

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	TYPICAL WATER AND SANITARY SERVICE LOT LOCATION	UG-05
2. 08/18/2023 JRG No Services Under Driveways		Date: 04/16/2007
3.		Drawn: EM / Checked: AW
4.		City of Crystal Lake Illinois

RD-07



NOTES

1. RAMPING TO BE USED AFTER BINDER IS CONSTRUCTED AND UNTIL FINAL SURFACE COURSE IS PLACED.
2. MANHOLES TO BE RAMPED NO LATER THAN NOVEMBER 1ST.
3. RAMPS TO BE MAINTAINED THROUGHOUT THE WINTER BY DEVELOPER.
4. RAMP MATERIAL TO BE REMOVED BY MILLING OR OTHERWISE REMOVED BEFORE PLACEMENT OF FINAL SURFACE COURSE.

MIX DESIGN FOR EMERGENCY RAMP PATCHING COMPOUND

MIX:
- 40% QUIKCRETE HYDRAULIC CEMENT
- 60% MORTAR MIX
- ENOUGH WATER TO MAKE IT WORKABLE (TOO MUCH WATER WILL GREATLY LENGTHEN SET TIME)

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	TEMPORARY MANHOLE AND CURB RAMPING	RD-07
2.		Date: 05/19/2015
3.		Drawn: JH / Checked: AW
4.		City of Crystal Lake Illinois

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DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET
16 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000894

D:\4782\4 ENGR\4 ENGR\4782 ENGR 16 Construction Details.dwg

PEDESTRIAN SIGNAL HEAD NOTES

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	CURB AND GUTTER, COMPLETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/UNDER-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM (ASPHALT SEE NOTE 2)	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) (ALL NOTE 2)
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 2.

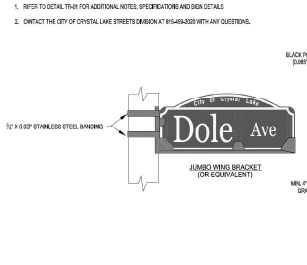
NOTES:

1. CONTACT THE *AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER* FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD AFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

TR-02

NOTES:

1. REFER TO DETAIL TR-01 FOR ADDITIONAL NOTES, SPECIFICATIONS AND SIGN DETAILS
2. CONTACT THE CITY OF CRYSTAL LAKE STREETS DIVISION AT 815-459-2020 WITH ANY QUESTIONS.

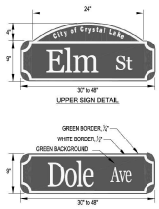


Revised:	Drawing Name	Drawing Number	Crystal Lake
1. 09/12/2015	SIGN POST AND BRACKET	TR-02	
2.		Date: 04/15/2008	
3.		Drawn: JH / Checked: AW	
4.			

TR-01

NOTES:

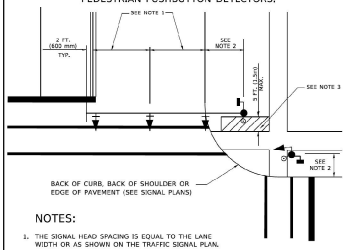
1. ALL SIGNS AND POSTS ARE TO BE FURNISHED BY THE DEVELOPER, THE DEVELOPER SHALL INSTALL ALL TRAFFIC CONTROL SIGNS, INCLUDING STREET NAME SIGNS, AND PROVIDE THE CITY WITH TWO (2) SPARE PLATES PER STREET NAME PER INTERSECTION.
2. STREET NAME SIGNS
   FOR MOUNTING ON ORNAMENTAL OR DECORATIVE STREET LIGHT POLES.
   - JUMBO WING BRACKETS OR EQUIVALENT SHALL BE USED, WITH EXTENSIONS IF NEEDED, FOR FLAT ALUMINUM SIGN BLANKS, TO ACCOMMODATE STREET NAME SIGNS FROM 30" TO 54" IN LENGTH
   - ¾" x 0.020" STAINLESS STEEL BANDING, EMBOSTED ¾" STAINLESS STEEL "VALUE CLIPS", BAND-IT BRACKET 1264 STAINLESS STEEL ½" BRACKETS, TWO (2) ⅝" x ½" - 18 SEMS BOLTS, AND STREET NAME PLATES.
   - SINGLE STREET NAME SIGNS INSTALLATION USING THE JUMBO WING BRACKETS SHALL HAVE SIGN WITH BONNET.
3. SIGNS AND POSTS SHALL BE AND PAINTED PRIOR TO EQUIPMENT AND SHALL BE AND PAINTED ACCORDING TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
   A. SIGN PANELS (4 PER POST) SHALL BE CUT STANDARD 0.080" ALUMINUM BLANKS, 9" HIGH BY 30", 36", 42", 48" OR 54" IN LENGTH WITH A 1" RADIS ON ALL CORNERS.
   B. SIGN FACE MATERIAL SHALL BE 3M 3430 REFLECTORIZE SHEETING (ASTM PROPOSED TYPE 11, ILLINOIS TYPE IX) WITH WHITE LETTERING ON GREEN BACKFIELD.
   C. A ½" GREEN BORDER SHALL ENCOMPASS THE FRAME OF THE SIGN WITH A ½" WHITE BORDER UNCOMPASSING THE MAIN SIGN (SHEET 2E3, 2003 EDITION, SECTION 2A-15, PAGE 2A-6 "SIGN REFERENCE").
   D. FONT STYLE IS GEORGIA REGULAR.
   E. MAIN LETTERING SHALL BE 6" HIGH AND ALL ABBREVIATIONS (STREET, AVENUE, ROAD, ETC.) SHALL BE 3" HIGH (MUTCD, 2003 EDITION, SECTION 2E.08, PAGE 2E-17 "STREET NAME SIGNS"). LETTERING SHALL UTILIZE BOTH UPPER AND LOWER CASE LETTERS.
   F. THE TOP SIGN SHALL HAVE A BONNET THAT IS 24" LONG x 4" HIGH INCORPORATED WITH THE WORDING "CITY OF CRYSTAL LAKE" USING 2" HIGH LETTERING ARCHED IN THE BONNET AREA.
4. REFER TO DETAIL TR-03 FOR POST SPECIFICATIONS.
5. FOR MOUNTING ON A 2 ½" X 10' O.D. BLACK POWDERED COATED PIPE:
   A. POSTS SHALL BE 2 ½" X 10' O.D.0.080" THIN WALL, HEAVY DUTY GALVANIZED PRIME COAT AND A SURFACE COAT OF HIGH GLOSS BLACK POWDER COAT.
   B. HARDWARE SHALL INCLUDE THE FASXBRACKET FOR SIGN INSTALLATION ON 2 ½" O.D. PIPE TO ACCOMMODATE TWO (2) 9" AND TWO (2) 12" STREET SIGN BLANKS.
   C. STREET SIGNS INSTALLED ON THE 2 ½" O.D ROUND POST SHALL BE A FOUR (4) SIGN INSTALLATION. THE PRIMARY STREET SHALL BE THE TOP SIGN AND INCLUDE THE BONNET AND THE SECONDARY STREET SHALL BE LOWER SIGN WITHOUT THE BONNET.



Revised:	Drawing Name	Drawing Number	Crystal Lake
1. 09/12/2015	STREET NAME SIGNS	TR-01	
2.		Date: 04/15/2008	
3.		Drawn: EM / Checked: AW	
4.			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

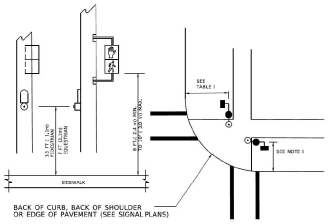
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA, INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

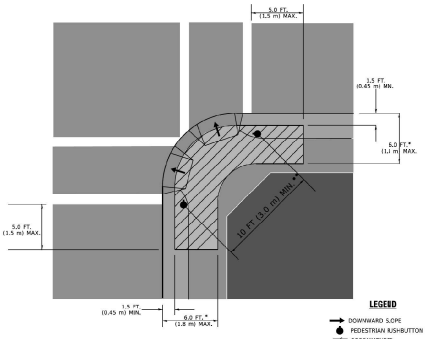
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

PEDESTRIAN SIGNAL HEAD NOTES

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 15 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT, (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

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DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

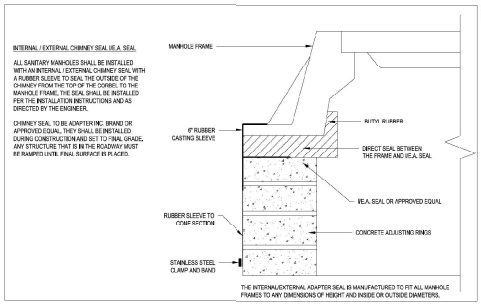
SHEET 17 OF 23

PROJECT NUMBER: 4782

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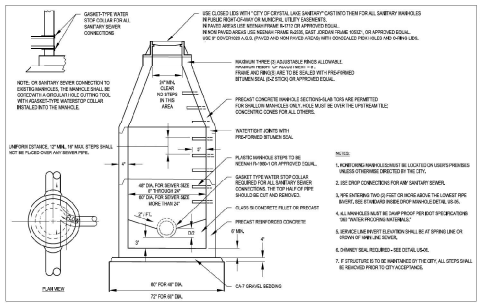
ILLINOIS FIRM LICENSE 184-000894

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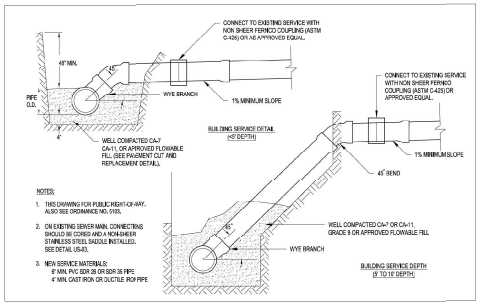
US-06

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	INTERNAL / EXTERNAL CHIMNEY SEAL	US-06	City of Crystal Lake Illinois
2.		Date: 09/25/2015	
3.		Drawn JH	Checked VR
4.			



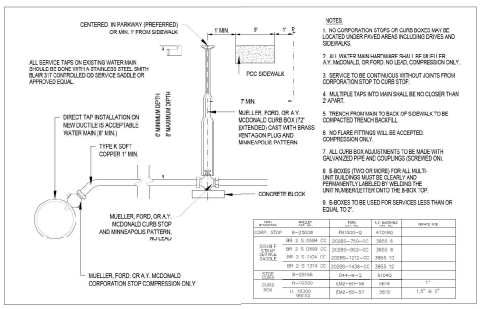
US-04

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STANDARD SANITARY AND MONITORING MANHOLE	US-04	City of Crystal Lake Illinois
2. 08/21/2018		Date: 09/12/2015	
3. JNG NOTE 7. 8-10-2023		Drawn JH	Checked VR
4.			



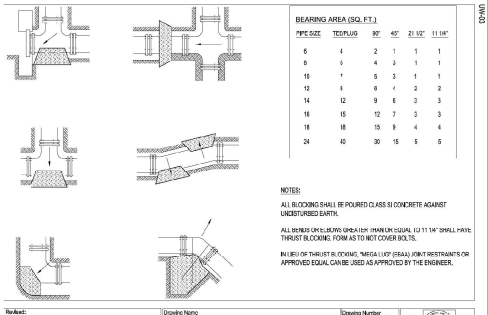
US-01

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	SANITARY SERVICE RISER (DEPTH <10')	US-01	City of Crystal Lake Illinois
2.		Date: 09/10/2015	
3.		Drawn JH	Checked VR
4.			



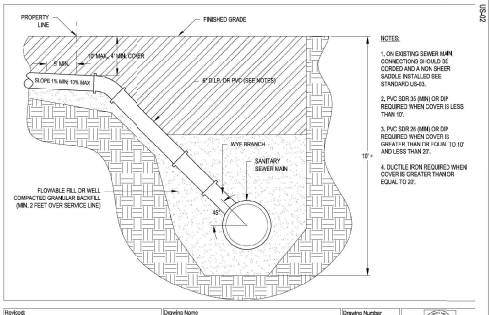
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CORP. STOP	B-25008	FB1000-Q	4701BQ	
SQUARE TOP CURB BOX	BR 2 S 5584 CC	20285-750-CC	3855 8	
	BR 2 S 0569 CC	20285-950-CC	3858 8	
	BR 2 S 1074 CC	20285-1072-CC	3859 10	
	BR 2 S 1274 CC	20285-1436-CC	3853 12	
STOP BOX	B-25156	CH44-6-Q	6104Q	
CURB STOP	H-10300	KMQ-400-36	5614	1"
	H-10350	KMQ-400-37	5615	1.5" & 2"

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	WATER SERVICE INSTALLATION FOR DUCTILE AND CAST IRON WATER MAIN	UW-04	City of Crystal Lake Illinois
2. 01/05/2021 Kl. Eliminate 1.25" Services		Date: 03/17/2014	
3.		Drawn DD	Checked VR
4.			



UW-03

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	THRUST BLOCK INSTALLATION	UW-03	City of Crystal Lake Illinois
2.		Date: 05/26/2015	
3.		Drawn JH	Checked VR
4.			



US-02

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	SANITARY SERVICE RISER (DEPTH >= 10')	US-02	City of Crystal Lake Illinois
2.		Date: 05/29/2015	
3.		Drawn JH	Checked VR
4.			

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DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

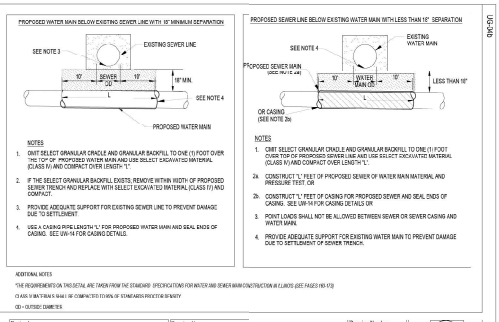
CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 18 OF 23

PROJECT NUMBER: 4782

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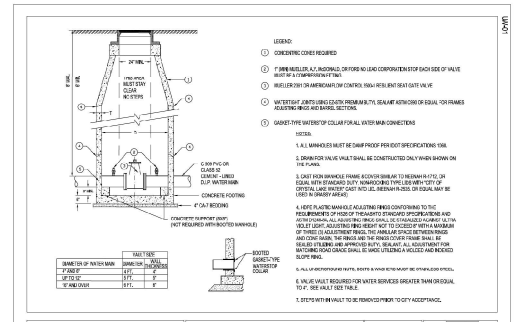
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By: Mike Mackie
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US-04b

Revised:	Drawing Name	Drawing Number
1. 09/12/2015	WATER AND SEWER SEPARATION REQUIREMENTS	UG-04b
2. 8/30/2021 KL - SEWER AND WATER 2014 UPDATE		Date: 04/15/2007
3.		Drawn: EM Checked: AW
4.		City of Crystal Lake Illinois

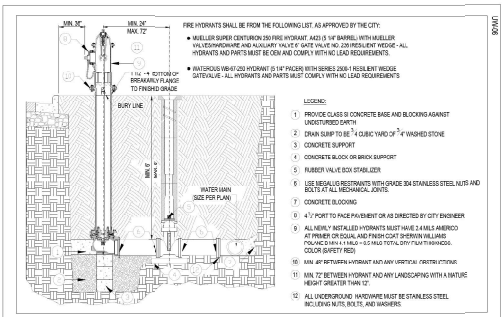
LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS



UW-01

Revised:	Drawing Name	Drawing Number
1. 09/12/2015	STANDARD VALVE VAULT	UW-01
2. 08/18/2003 - JRG 1" CORP AND STEPS REMOVED		Date: 05/20/2016
3.		Drawn: JH Checked: VR
4.		City of Crystal Lake Illinois

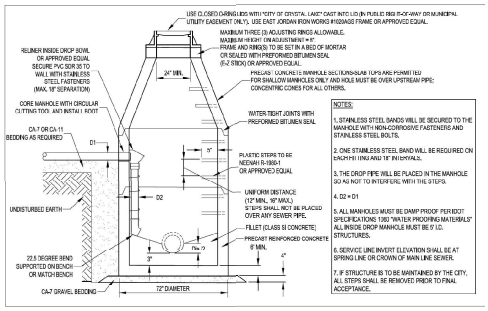
LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS



UW-06

Revised:	Drawing Name	Drawing Number
1. 09/12/2015	FIRE HYDRANT	UW-06
2. 01/20/2021 KL Mueller Super Centurion 250 FH Specifiacse		Date: 06/01/2015
3.		Drawn: JH Checked: VR
4.		City of Crystal Lake Illinois

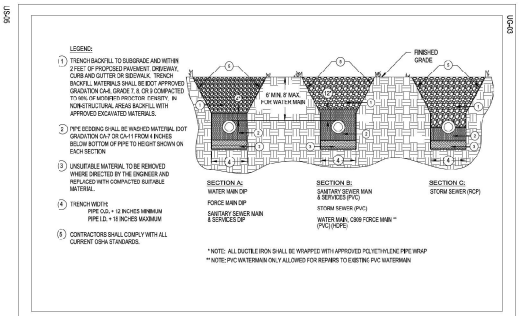
LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS



US-05

Revised:	Drawing Name	Drawing Number
1. 09/12/2015	STANDARD INSIDE DROP SANITARY MANHOLE	US-05
2. 08/19/2003 JRG NOTE 7		Date: 04/15/2007
3.		Drawn: EM Checked: VR
4.		City of Crystal Lake Illinois

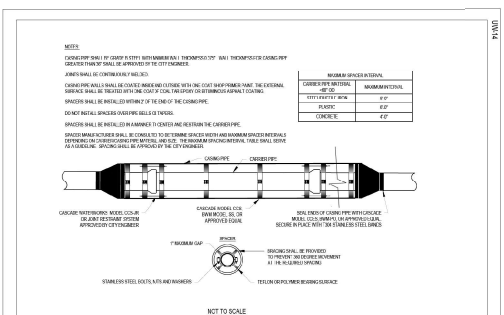
LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS



US-03

Revised:	Drawing Name	Drawing Number
1. 09/12/2015	TYPICAL TRENCH CROSS SECTION	UG-03
2. 02/04/2021 KL CA-7 WASHED STONE		Date: 05/29/2015
3. 07/14/2003 JRG PVC ALLOWED ONLY AS STATED		Drawn: JH Checked: AW
4.		City of Crystal Lake Illinois

LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS



UW-14

Revised:	Drawing Name	Drawing Number
1.	CASING PIPE	UW-14
2.		Date: 01-29-2021
3.		Drawn: KI Checked: PW
4.		City of Crystal Lake Illinois

LICENSED DESIGN AND BUILDING ENGINEERING DETAILS AND STANDARDS

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

CLIENT:
LENNAR

1700 E. GOLF ROAD, SUITE 100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

		DESIGNED	MS
		DRAWN	JD
		APPROVED	MTL
		DATE	09/12/2024
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM	
DATE	DESCRIPTION OF REVISION	BY	SCALE: N.T.S.

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

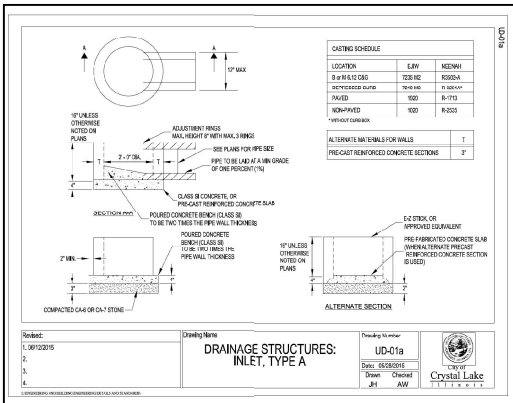
SHEET 19 OF 23

PROJECT NUMBER: 4782

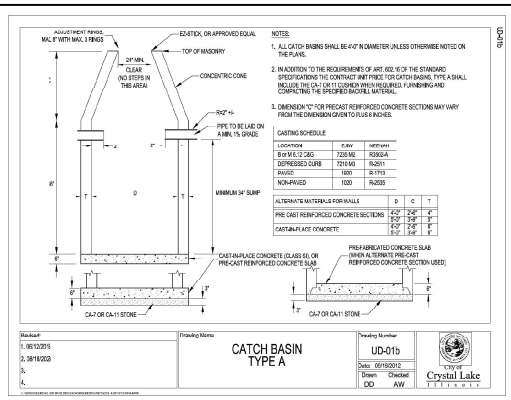
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ILLINOIS FIRM LICENSE 184-000894

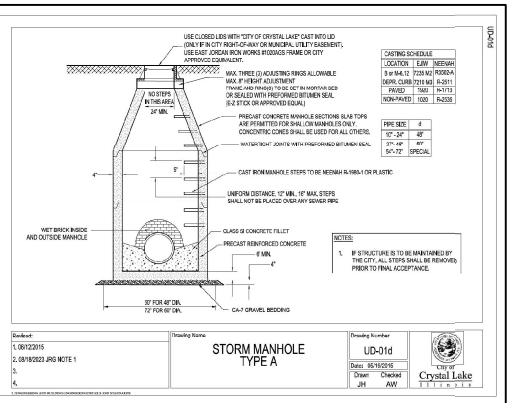
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Last Saved By: JD
File Name: C:\Projects\4782 Waterside at Three Oaks\Civil\Construction Details.dwg



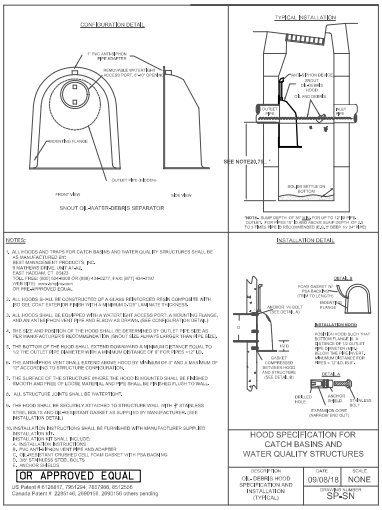
Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	DRAINAGE STRUCTURES: INLET, TYPE A	UD-01a	City of Crystal Lake Illinois
2.		Date: 06/08/2015	
3.		Drawn: JH Checked: AW	
4.			



Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	CATCH BASIN TYPE A	UD-01b	City of Crystal Lake Illinois
2. 08/18/2023		Date: 09/19/2012	
3.		Drawn: DD Checked: AW	
4.			



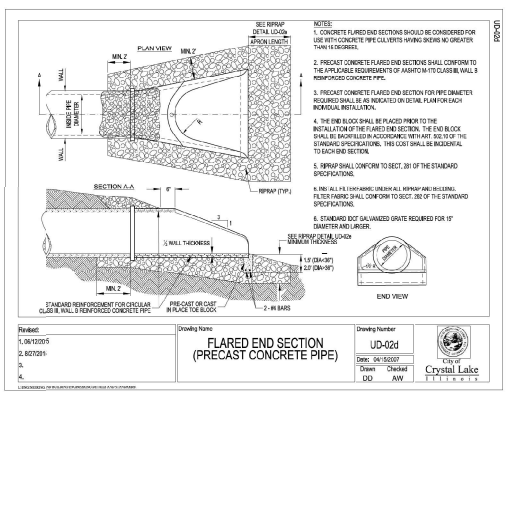
Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STORM MANHOLE TYPE A	UD-01d	City of Crystal Lake Illinois
2. 08/18/2023 JRG NOTE 1		Date: 05/18/2016	
3.		Drawn: JH Checked: AW	
4.			



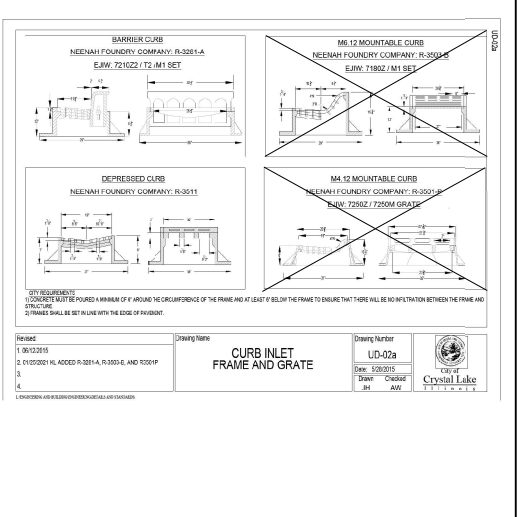
NOTES:
1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS SHALL INCLUDE BY: BEST MANAGEMENT PRODUCTS, INC. 1 CHERRY HILL DRIVE, UNIT A-1 EAST HADDAM, CT. 06423 TOLL FREE: (800) 784-4808 OR (860) 434-0277, FAX: (877) 434-4797 WEBSITE: www.bmpinc.com OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH 300 SQ. COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN EMERGENCY VENT PIPE AND BLADDER ASSEMBLY (SEE CONFIGURATION DETAIL).
4. THE DEPTH AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PERFORMANCE AND PIPE RECONFIGURATION (GROUT AND ALIGN CLASSES) WHEN PIPE SIZES.
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 8" FOR PIPES <12" DIA.
6. THE SAMPLING VENT SHALL EXTEND ABOVE HOOD BY A MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF EXCESS MATERIAL AND PITS SHALL BE FILLED FLUSH TO WALL.
8. ALL STRUCTURE JOINTS SHALL BE WATERTIGHT.
9. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND 4" DIAMETER WASHERS AS SUPPLIED BY MANUFACTURER (SEE INSTALLATION DETAIL)
10. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE:
A. INSTALLATION INSTRUCTIONS
B. 3/8" STAINLESS STEEL BOLTS AND ADHESIVE
C. OIL-ABSORBENT CONTAINED COIL, FOAM GASKET WITH PSA BACKING
D. 3/8" STAINLESS STEEL BOLTS
E. ANCHOR BOLTS

HOOD SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
OIL-DEBRIS HOOD SPECIFICATION AND INSTALLATION (TYPICAL)	09/08/18	NONE
	DRAWN BY: SPSN	



Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	FLARED END SECTION (PRECAST CONCRETE PIPE)	UD-02d	City of Crystal Lake Illinois
2. 8/27/2015		Date: 04/15/2007	
3.		Drawn: DD Checked: AW	
4.			



Revised:	Drawing Name	Drawing Number	
1. 06/12/2015	CURB INLET FRAME AND GRATE	UD-02a	City of Crystal Lake Illinois
2. 01/20/2021 KL ADDED R-3261-A, R-3503-B, AND R3501P		Date: 5/28/2015	
3.		Drawn: JH Checked: AW	
4.			

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CLIENT:
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SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

		DESIGNED	MS
		DRAWN	JD
		APPROVED	MTL
		DATE	09/12/2024
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM	
DATE	DESCRIPTION OF REVISION	BY	SCALE: N.T.S.

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET
20 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000894

BY PLOTTED: 9/24/2024 - 8:57 AM
DWG: C:\Users\jdavis\Mackie Consultants, LLC\IE Of Construction - Documents\4782 Waterside at Three Oaks\Engineering\Plan Sheets\4782 UD-02d.dwg

STORMWATER MANAGEMENT

595 Attachment 2

City of Crystal Lake

Appendix 2
Standard Soil Erosion and Sediment Control Notes

1. Control measures shall meet the minimum standards and specifications of the Illinois Urban Manual unless stated otherwise. **[Amended 11-17-2020 by Ord. No. 7671]**
2. Soil disturbance shall be conducted in such a manner as to minimize erosion. Areas of the development site that are not to be disturbed shall be protected from construction traffic or other disturbance until final stabilization is achieved.
3. Soil stabilization measures shall consider the time of year, development site conditions and the use of temporary or permanent measures.
4. Stabilization by seeding shall include topsoil placement and fertilization, as necessary.
5. Native seed mixtures shall include rapid-growing annual grasses or small grains to provide initial, temporary soil stabilization.
6. Off-site property shall be protected from erosion and sedimentation. Velocity dissipation devices shall be placed at concentrated discharge locations and along the length of any outfall channel, as necessary to prevent erosion.
7. Sediment control measures shall be installed prior to the disturbance of tributary areas.
8. Stabilization of disturbed areas shall be initiated immediately whenever any clearing, grading, excavating or other earth-disturbing activities have permanently ceased on any portion of the development site, or temporarily ceased on any portion of the development site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas shall be initiated within one working day of permanent or temporary cessation of earth-disturbing activities and shall be completed as soon as possible, but not later than 14 calendar days from the initiation of stabilization work in an area. Exceptions to these time frames are specified below:
   a. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable; and
   b. In areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method may be used.
9. Disturbance of steep slopes shall be minimized. Areas or embankments having slopes steeper than 3:1 shall be stabilized with staked/pegged sod, erosion control blankets in combination with seeding, or an equivalent control measure.
10. Perimeter control measures shall be provided downslope and perpendicular to the flow of runoff from disturbed areas, where the tributary area is greater than 5,000 square feet, and where runoff will flow in a sheet flow manner. Perimeter erosion control shall also be provided at the base of soil stockpiles.
11. The stormwater management system shall be protected from erosion and sedimentation downslope from disturbed areas. Inlet protection that reduces sediment loading, while allowing runoff to enter the inlet, shall be required for all storm sewers. Check dams, or an equivalent control measure, shall be required for all channels. Filter fabric inlet protection and straw bale ditch checks are not acceptable control measures.
12. If dewatering services are used, discharges shall be routed through an effective sediment control measure (e.g., sediment trap or an equivalent control measure). The enforcement officer shall be notified prior to the commencement of dewatering activities.
13. All temporary soil erosion and sediment control measures shall be removed within 30 days after final stabilization of the development site is achieved or after the temporary measures are no longer necessary. Trapped sediment shall be removed and disturbed areas shall be permanently stabilized.
14. Stockpiled soil and materials shall be removed from flood hazard areas at the end of each work day. Soil and materials stockpiled in IWSMC or buffer areas shall be placed on timber mats, or an equivalent control measure.
15. Effective control measures shall be utilized to minimize the discharge of pollutants from the development site. At a minimum, control measures shall be implemented in order to:
   a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash water; and
   b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, vehicle fluids, sanitary waste, and other materials present on the development site to precipitation and to stormwater.
16. Adequate receptacles shall be provided for the depositing of all construction material debris generated during the development process. The applicant shall not cause or permit the dumping, depositing, dropping, throwing, discarding or leaving of construction material debris upon or into any development site, channel, or IWSMC. The development site shall be maintained free of construction material debris.
17. The enforcement officer may require additional or alternate soil erosion and sediment control measures, based on development-site-specific considerations and the effectiveness of the installed control measures.

595 Attachment 2:2 — Supp 32, Nov 2020

STORMWATER MANAGEMENT

595 Attachment 3

City of Crystal Lake

Appendix 3
Standard Drain Tile Notes

1. Drain tiles disturbed during regulated development shall be reconnected by those responsible for their disturbance, unless the development plans specify abandonment of the drain tiles.
2. All abandoned drain tiles within disturbed areas shall be removed in their entirety.
3. Drain tiles within the disturbed area of a development site shall be replaced, bypassed around the development site or intercepted and connected to the stormwater management system for the development site. The size of the replaced or bypassed drain tile shall be equivalent to the existing drain tile.

GE-02a

GENERAL SITE WORK:

1. Pre-Construction meeting shall be conducted with City Staff and all Contractors prior to commencing any grading or underground utility construction activities (schedule meeting with the Community Development Department at 815.356.3600).
2. 24-hour Emergency contact numbers shall be provided to City Staff at the Pre-Construction meeting.
3. Working hours shall be limited to the hours of 7:00 a.m. and 7:00 p.m. on weekdays only (except in cases of emergency). Non-emergency work on weekends or holidays is not permitted per City Code except under written permission from the City Engineer. The owner is responsible for the City Inspector cost of overtime inspection beyond the normal eight (8) hour day, including weekends and holidays.
4. Public/private streets shall be kept free of dirt and debris with regular cleaning, sweeping, and scraping conducted by the Contractor. Junk and debris shall not be allowed to accumulate, blow, or scatter onto streets or adjacent properties.
5. J.U.U.L.I.E. shall be contacted for utility locations on-site and in the adjacent rights-of-way.
6. Contractor shall provide and maintain fencing, barricades, traffic control signs, and other safeguarding measures during the course of all work to protect the public from the construction operations.
7. Maintain access to adjacent streets during construction. No closing of streets unless approved is first obtained from the agency with jurisdiction (City of Crystal Lake, McHenry County Department of Transportation, Illinois Department of Transportation, etc).
8. Any damage to public right-of-way, public utilities, streets, curb, etc. shall be repaired/replaced as soon as possible and as directed by the City Engineer.
9. The contractor shall give the City of Crystal Lake, Illinois Department of Transportation, and any other governmental agency having jurisdiction, at least two (2) working days notice excluding Saturday and Sunday prior to the initiation of any phase of construction. Contractor shall investigation width if construction has ceased and renew the two (2) working day notification thereafter.
10. The Contractor shall be responsible for obtaining all required permits for construction prior to commencement along or across existing streets or highways. The Contractor shall make arrangements for the proper bracing, shoring and other protection of all roadways before construction begins.

GRADING:

1. The grading and construction of the site improvements shall not cause ponding of storm sewer water. All areas adjacent to these improvements shall be graded to allow positive drainage.
2. The proposed grading elevations shown on the plans are finished grade. A minimum of six (6) inches of topsoil is to be placed before finished grade elevations are achieved.
3. Embankment material within parkway and open space areas shall be compacted to a minimum of ninety percent (90%) of maximum density in accordance with ASTM Specification D-1557 (modified proctor method), or to such other density as may be determined appropriate by the soils engineer.
4. All subgrade material shall have a minimum CBR (California Bearing Ratio) of 3.0 as determined by the soils engineer, or base replacement and pavement design revisions shall be provided which are adequate to obtain equivalent pavement strength.
5. Proposed pavement areas, building pads, driveways and sidewalks and yard/open space areas shall be excavated or filled to plus or minus 0.1 foot of design subgrade elevations by the Contractor.
6. Any borrow pit locations shall be identified by the Contractor on a copy of the preliminary grading plans and submitted to the City Engineer for approval at least 72 hours prior to excavation. Provide backfill compaction reports from a geotechnical engineer and as-built plans to the Engineering Division for any borrow pit areas.
7. Backfill shall be monitored by a geotechnical engineer on-site with compaction reports forwarded to the Engineering Division for review.
8. Water truck shall be on-site at all times during mass-grading operations and be available as needed, for the purposes of dust control or at the request of City Staff.
9. Use of City fire hydrants is not allowed unless approved (separate from this permit) by the Public Works Department and a hydrant meter and RPZ is obtained from the City of Crystal Lake Water Division (815-356-3614). Only the City of Crystal Lake Water Division may operate valves and hydrants.

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STANDARD NOTES AND SPECIFICATIONS	GE-02a	City of Crystal Lake Illinois
2.		Date: 01/30/15	
3.		Drawn: DD	Checked: AW
4.			

GE-02b

TOPSOIL STOCKPILING:

1. Location of any on-site topsoil stockpile shall be identified on the approved plans with silt fence installed around the perimeter of the stockpile.
2. Topsoil stockpiled for future use shall be watched free from large rocks, sticks, weeds, brush, stones larger than one (1) inch diameter, or other litter and waste products including other extraneous materials so conducive to plant growth.
3. Topsoil shall be stockpiled in sequence to eliminate any re-handling or double movements by the Contractor. Failure to properly sequence re-stockpiling operations shall not constitute a claim for additional compensation. No material shall be stockpiled in front yards, in utility easements, or in the right-of-way nes.
4. If a stockpile is to remain in place for more than (4) calendar days, it is required that the stockpile meet the requirements as outlined in section 595 of the City Code.

UNDERGROUND UTILITY:

1. The Contractor shall coordinate water main, water service, sanitary and storm sewer inspections and testing with the Community Development at least 24 hours in advance.
2. All main line sanitary shall be cleaned and televised (provide DVD to the City's Engineering Division).
3. All manhole or valve covers shall be imprinted "City of Crystal Lake Sanitary", or "City of Crystal Lake Storm", or "City of Crystal lake Water" as directed by the City.
4. Reference the latest edition of the Standard Specifications for Water and Sewer Main Construction in Illinois.
5. Existing manholes to be circular cored and bored.

EROSION CONTROL:

1. All specified erosion control measures shall be installed and maintained per the requirements of the Crystal Lake Stormwater Ordinance in accordance with the active NPDES permit.
2. All slopes 4:1 or steeper shall be sodded or blanketed immediately after mass earthwork
3. All overland flow routes to be stabilized by sod or blanket.
4. Erosion control measures to be inspected and approved by City Engineering Division prior to additional work on site.
5. Continuous monitoring of erosion control measures is required. Maintain records of weekly reports per the City of Crystal Lake Stormwater Ordinance.
6. The Contractor shall implement any additional erosion control measures deemed necessary by the City per the standards of the City Of Crystal Lake Stormwater Ordinance.
7. All storm sewer catch basins, sumps and/or retention basins provided are to be cleaned if the end of construction of the project prior to final acceptance. Cleaning may also be required during the course of the construction if the product is determined that the silt and sandy traps are not properly functioning and their performance is impaired.
8. Rip-rap material RR-2 (6") - RR4 (18") shall be in accordance with Article 281
9. Projects of 1 Acre or greater must obtain an NPDES permit prior to commencement of any construction activity.

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STANDARD NOTES AND SPECIFICATIONS	GE-02b	City of Crystal Lake Illinois
2. 02/25/2020		Date: 01/30/15	
3.		Drawn: DD	Checked: AW
4.			

GE-02c

SANITARY SEWER:

1. Non-ferrous stainless steel couplings shall be used when connecting sewer pipes of dissimilar materials and pipes with no hub joints. When connecting to an existing sanitary sewer by means other than an existing wye or manhole, contractor shall use a Sewer-Tap and hub-wye or hub-tee saddle.
2. Unless an alternate method is approved, water stop gaskets shall be provided at all sanitary sewer manhole connections. Type and manufacturer to be approved by the City.
3. PVC plastic sewer pipe and fittings of sizes 4inch through 15-inch shall conform to the latest revised specification requirements of ASTM D3034 for type PSM polyvinyl chloride (PVC) sewer pipe and fittings of minimum wall thickness SDR 26.
4. Joints shall be either the solvent weld type conforming to the latest revised specification requirements of ASTM D2564 and ASTM D2665, or elastomeric gasket type conforming to the latest revised specification requirements of ASTM D1869 and ASTM D3212.
5. Wooden vertical pipe such as SDR 19 may be specified by the engineer depending on design and/or field conditions.
6. R/C plastic sewer pipe and fittings of sizes 18-inch through 36-inch shall conform to the latest revised specification requirements of ASTM F679 or polyvinyl chloride (PVC) large diameter ribbed gravity sewer pipe and fittings, with integral bell gasketed joints and elastomeric gaskets to form a watertight seal conforming to the latest revised specification requirements of ASTM F477 or ASTM D3212.
7. Pipe and fittings shall be the products of one approved manufacturer only, and there shall not be any mixing of pipe and fittings of different manufacturers between manholes.
8. No handling and installation of pipe, assembly or joints, and manhole connections shall be in accordance with the manufacturer's recommendations.
9. Gasket-type watertight collars consist of a neoprene collar and a stainless steel band or other approved, manhole watertight collar be installed wherever the pipe passes through the manhole walls to provide a watertight joint to prohibit infiltration into the sewer system.
10. R/C pipe shall be installed in accordance with the latest revised specification requirements ASTM C0321 using either compacted class I or class II granular embedment materials for bedding, haunching and initial backfill of 12 inches over the top of pipe to provide the necessary support for the pipe so that the maximum deflection does not exceed five percent of the pipe's original internal diameter.
11. The Contractor shall provide the necessary tools and equipment and perform the work necessary to test the deflection in the initial 1,000 feet of installed sewer and not less than ten percent (10%) of the remainder of the sewer project at random locations selected by the engineers no sooner than 30 days after backfilling has been completed. In the event that deflection exceeds the maximum limit of five percent (5%), the Contractor shall test all other new flexible pipe for deflection. Deflection shall be tested by use of either a mandrel or rigid ball having a diameter equal to ninety-five percent (95%) of the inside diameter of the pipe, and the test shall be performed without using mechanical pulling devices. Wherever the deflection limitation is exceeded, the contractor shall uncover the pipe, carefully replace compacted embedment and backfill as necessary, and retest for deflection.
12. The Contractor shall subject all sanitary sewers including service lines, to an air test. Air testing shall be performed in accordance with the latest Standard Specifications for Water and Sewer.
13. The Contractor shall subject all newly constructed sanitary manholes to the Negative Pressure (Vacuum) Test in accordance with ASTN C 1244.The Contractor shall also televise all public sanitary sewers. Televising or sanitary sewer, cost for televising, and testing shall be the responsibility of the Contractor.
14. Cast Iron Soil Pipe- service weight cast iron soil pipe and fittings conforming C.I.S.P.I. Specification 301-97 with compression type rubber gasket joints conforming to ASTM specification C564, or other suitable materials approved by the City Engineer.

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STANDARD NOTES AND SPECIFICATIONS	GE-02c	City of Crystal Lake Illinois
2. 01/25/2021 KL Vacuum Test Note 13		Date: 01/30/15	
3.		Drawn: DD	Checked: AW
4.			

GE-02d

WATER MAIN:

1. Water main shall be Ductile Iron.
   a) Ductile iron water main shall be Class 52 conforming to ANSI/AWWA C151/A21.51-09,
   b) Ductile iron fittings shall conform to ANSI/AWWC153/A21.53 with mechanical joint gaskets.
2. All bolted connections shall be torqued to the manufacturer's specification. The Contractor shall verify the manufacturer's specification with an approved torque wrench.
3. Thrust blocking or Mega-Lugs with Mega-Band coating or pre-approved equal shall be installed on water mains at all bends, tees, elbows, etc. except serpbed below.
4. Thrust blocks not permitted with 45 degree vertical bends in water main. Those shall be restrained with Mega-Lug or pre-approved equal.
5. Ductile iron pipe shall be encased in polyethylene and shall conform with ANSI/AWWA C105/A21.5 – 10 yr. ASTM A674-5.
6. Minimum cover from finished grade to top of water main shall be six (6) feet. Maximum cover shall be eight (8) feet.
7. Water Main Taps: An Illinois licensed plumber is required for any water main tap.
8. All water mains shall be subjected to a 2 hour pressure and leakage test by the Contractor in accordance with City Detail LW-9A and LW-9B. Water mains will be chlorinated in accordance with City Detail LW-9A.
9. The Underground Contractor shall conduct inadvertate the contract any chlorination and testing of existing water main where connections to and conclusion of such mains is included on the drawing.
10. For repairs to existing PVC watermains, see details LW-12 and W-13

PAVING:

1. All subgrades and bases shall be proof-rolled and approved by the Engineering Division prior to base or binder installation.
2. Subgrade and proposed pavements shall be finished by the Excavation Contractor to within 0.1 feet plus or minus, of plan elevation.
3. The Paving Contractor shall ensure that the subgrade has been properly prepared and that the finished top of subgrade elevation has been graded within the tolerances allowed in these specifications. Unless the Paving Contractor advises the owner and engineer in writing prior to fine grading for base course construction. It is understood that the Contractor has approved and accepts responsibility for the subgrade.
4. For the purpose of providing handicap accessibility and complying with the American Disability Act and City Standards, curbs shall be depressed at locations where public walks or pedestrian paths intersect curb lines at street intersections and other locations as directed.
5. ¾ Inch thick premolded fiber expansion joints with two (2) No. 4 plain round steel dowel bars shall be installed at designated intervals and at all P.C., P.T., curb returns and at the end of each pour. Alternate ends of the dowel bars shall be greased and fitted with metal expansion sides.
6. ¾ Inch thick fiber expansion joints shall be used in every case where the sidewalk abutters with the curb and gutter. Contraction joints shall be sew cut at designated intervals in the curb. The cost of these joints shall be considered as incidental to the cost of the contract.
7. All poured in place concrete curb and gutter shall be corporate two (2) No. 4 reinforcing bars installed wherever the curb and gutter crosses utility service lines, the cost of which shall be considered incidental to the cost of concrete curb and gutter.
8. Sidewalks (where required) shall be of the thickness and dimensions as shown in the construction plans. All sidewalk concrete shall be a minimum of 6.0 bag mix (or IDOT class SI concrete) and shall develop a minimum of 3,500 psi compressive strength at fourteen (14) days. Contraction joints shall be set at five (5) foot centers, and one-half inch (½ inch) premolded fiber expansion joints at fifty (50) foot centers and where the sidewalk meets the curb or another sidewalk, or at the end of each pour. All sidewalks constructed over utility trenches and/or abutting driveway aprons shall be reinforced with three (3) No. 4 reinforcing bars (½ foot minimum weight).

Revised:	Drawing Name	Drawing Number	
1. 09/12/2015	STANDARD NOTES AND SPECIFICATIONS	GE-02d	City of Crystal Lake Illinois
2. KL 01/25/2021 Torque Specification		Date: 01/30/15	
3. 02062023 JRG - Update Water Main Note 8		Drawn: DD	Checked: AW
4. 07142022 JRG - Update Water Main Notes 1, 5, 10			

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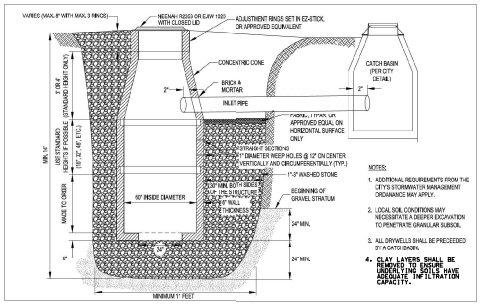
		DESIGNED	MS
		DRAWN	JD
		APPROVED	MTL
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	DATE	09/12/2024
DATE	DESCRIPTION OF REVISION	BY	SCALE N.T.S.

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET
21 OF 23

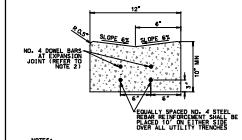
PROJECT NUMBER: 4782
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ILLINOIS FIRM LICENSE 184-000894

Plotted: 9/9/2024 - 8:54:46 AM
By: Jeffrey Glueckert
File: K:\Projects\4782 - Waterside at Three Oaks\Civil\Plan Sheets\4782 - GE-02 Construction Details.dwg



UD-03

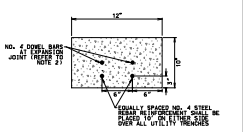
Revised:	Drawing Name	Drawing Number
1. 06/12/2015	DRYWELL	UD-03
2. 09/21/2018		Date: 12/04/2012
3.		Drawn: DD / Checked: AW
4.		City of Crystal Lake Illinois



NOTES:
1. CURB SHALL BE CONSTRUCTED WITH PORTLAND CEMENT IDOT CLASS "SI" CONCRETE.
2. CONTRACTION AND EXPANSION JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS, AS NOTED WITHIN THIS PLAN SET OR AS OTHERWISE SHOWN BY THE ARCHITECT.
3. CONCRETE RIBBON CURB SHALL BE PLACED ON 4" MINIMUM COMPACTED AGGREGATE BASE COURSE. AGGREGATE BASE COURSE SHALL EXTEND A MINIMUM OF 1-FOOT BEYOND CURB.
4. SLOPE SHALL BE A MAXIMUM OF 5.0% ADJACENT TO ADA ACCESSIBLE ROUTES.

FOR URBAN TOWNHOME ALLEYS AT BUILDINGS 1-10 ONLY

CONCRETE RIBBON CURB & GUTTER DETAIL
NOT TO SCALE



NOTES:
1. CURB SHALL BE CONSTRUCTED WITH PORTLAND CEMENT IDOT CLASS "SI" CONCRETE.
2. CONTRACTION AND EXPANSION JOINTS SHALL BE PROVIDED IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS, AS NOTED WITHIN THIS PLAN SET OR AS OTHERWISE SHOWN BY THE ARCHITECT.
3. CONCRETE RIBBON CURB SHALL BE PLACED ON 4" MINIMUM COMPACTED AGGREGATE BASE COURSE. AGGREGATE BASE COURSE SHALL EXTEND A MINIMUM OF 1-FOOT BEYOND CURB.

FOR URBAN TOWNHOME ALLEYS AT BUILDINGS 11-20 ONLY

CONCRETE RIBBON CURB DETAIL
NOT TO SCALE

TR-03

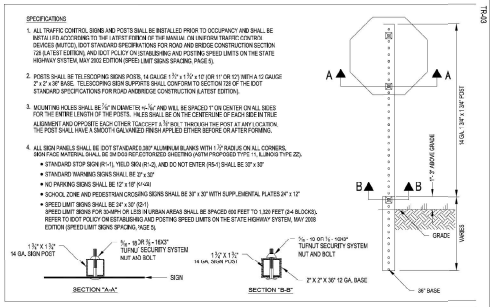
SPECIFICATIONS

1. ALL TRAFFIC CONTROL SIGNS AND POSTS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND SHALL BE INSTALLED ACCORDING TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 729 (LATEST EDITION), AND IDOT POLICY ON ESTABLISHING AND POSTING SPEED LIMITS ON THE STATE HIGHWAY SYSTEM, MAY 2002 EDITION (SPEED LIMIT SIGNS SPACING, PAGE 5).

2. POSTS SHALL BE TELESCOPING SIGNS POSTS, 14 GAUGE 1.75" x 1.75" x 10' (OR 11' OR 12') WITH A 12 GAUGE 2" x 2" x 36" BASE. TELESCOPING SIGN SUPPORTS SHALL CONFORM TO SECTION 729 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).

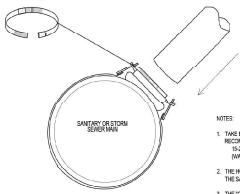
3. MOUNTING HOLES SHALL BE 7/16" IN DIAMETER w- 3/4" AND WILL BE SPACED 1" ON CENTER ON ALL SIDES FOR THE ENTIRE LENGTH OF THE POSTS. HOLES SHALL BE ON THE CENTERLINE OF EACH SIDE IN TRUE ALIGNMENT AND OPPOSITE EACH OTHER TO ACCEPT A 5/16" BOLT THROUGH THE POST AT ANY LOCATION. THE POST SHALL HAVE A SMOOTH GALVANIZED FINISH APPLIED EITHER BEFORE OR AFTER FORMING.

4. ALL SIGN PANELS SHALL BE IDOT STANDARD 0.080" ALUMINUM BLANKS WITH 1 1/2" RADIUS ON ALL CORNERS. SIGN FACE MATERIAL SHALL BE 3M DG3 RET.2 OTCH/VIZED SHEETING (WITH PROPOSED TYPE 11, ILLINOIS TYPE ZZ).
- STANDARD STOP SIGN (R1-1), YIELD SIGN (R1-2), AND DO NOT ENTER (R5-1) SHALL BE 30" x 30"
- STANDARD WARNING SIGNS SHALL BE 30" x 30"
- NO PARKING SIGNS SHALL BE 12" x 18" (R7-1)
- SCHOOL ZONE AND PEDESTRIAN CROSSING SIGNS SHALL BE 30" x 30" WITH SUPPLEMENTAL PLATES 24" x 12"
- SPEED LIMIT SIGNS SHALL BE 24" x 30" (S2-1)
SPEED LIMIT SIGNS FOR 30 MPH OR LESS IN URBAN AREAS SHALL BE SPACED 656 FEET TO 1,320 FEET (2-4 BLOCKS). REFER TO IDOT POLICY ON ESTABLISHING AND POSTING SPEED LIMITS ON THE STATE HIGHWAY SYSTEM, MAY 2008 EDITION (SPEED LIMIT SIGNS SPACING, PAGE 5).



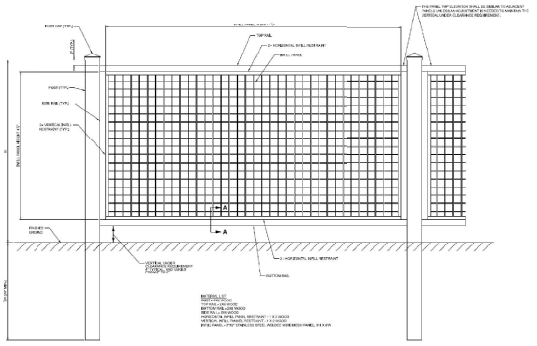
Revised:	Drawing Name	Drawing Number
1. 06/12/2015	TRAFFIC CONTROL SIGN AND POST	TR-03
2.		Date: 04/15/2007
3.		Drawn: EM / Checked: AW
4.		City of Crystal Lake Illinois

US-03

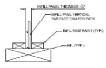


NOTES:
1. TAKE EXTRA CARE TO FOLLOW PROPER TIGHTENING PROCEDURES AND TORQUE RECOMMENDATIONS:
50-80 FT-LB FOR 6" - 12" MAINS AND 20-30 FT-LB FOR 14" -48" MAINS (WAIT 10 MINUTES AND RETORQUE).
2. THE HOLE CUT IN THE MAIN SHOULD BE NO LARGER THAN THE INSIDE DIAMETER OF THE SADDLE GASKET.
3. THE "CB" "UN" SADDLES ARE PROVIDED WITH A BAND CLAMP (HOSE CLAMP) WHICH ALLOWS IT TO HAVE A 'RANGE'. THE BAND CLAMP COMES WITH TWO ADJUSTING SCREWS WHICH PROVIDE MUCH GREATER CLAMPING FORCE THAN BAND CLAMPS WITH ONLY ONE ADJUSTMENT SCREW. THE BAND CLAMP NEEDS TO BE ASSEMBLED AROUND THE OUTLET AND BOTH ADJUSTING SCREWS TIGHTENED EVENLY.
4. ALL METAL HARDWARE MATERIAL SHALL BE STAINLESS STEEL

Revised:	Drawing Name	Drawing Number
1. 06/12/2015	SANITARY OR STORM SEWER SADDLE CONNECTION	US-03
2. 02/04/2021 KL ADDED STORM SEWER CONNECTIONS		Date: 04/15/2007
3.		Drawn: FM / Checked: VR
4.		City of Crystal Lake Illinois

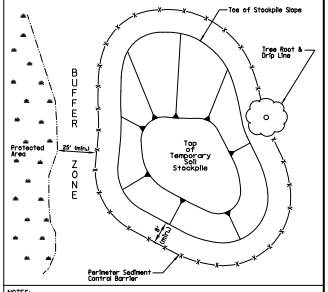


PEDESTRIAN SAFETY RAILING



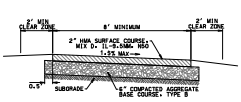
SECTION A-A

TEMPORARY SOIL STOCKPILE DETAIL

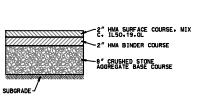


NOTES:
1. Stockpile slopes should be based on angle of repose of the soil material to avoid potential sloughing of the slope.
2. Soil stockpile to be stabilized in accordance with practical standards.
3. Do not locate stockpile within overland drainage flow path, designated floodways, drip line or over the root crown of adjacent trees.
4. Provisions for sediment control practices may be required along haul roads and entrance/exit locations for access to the soil stockpile that can create flow path for stormwater runoff.
5. Installation of benches, terraces, or slope interrupters should be considered.
6. Avoid building soil stockpiles on impervious surfaces.
7. Linear sediment trap surrounding the stockpile base may be used to control sediment.

REFERENCE		STANDARD DWG. NO.
Project		ILM-627
Designed — Date		SHEET 1 OF 1
Checked — Date		DATE JANUARY 2007
Approved — Date		



BIKE PATH DETAIL
NOT TO SCALE



PRIVATE ALLEY PAVEMENT DETAIL
NOT TO SCALE

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DESIGNED	MS
DRAWN	JD
APPROVED	MTL
DATE	09/12/2024
SCALE	N.T.S.

DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

CONSTRUCTION DETAILS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 22 OF 23

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-000894

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GENERAL NOTES

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   - STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION
   - CITY OF CRYSTAL LAKE STANDARD SPECIFICATIONS AND DETAILS. ALL STANDARDS TO BE IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE

   IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE CITY OF CRYSTAL LAKE MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATION OF THE UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
2. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
3. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY THE MUNICIPALITY OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
4. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
5. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY UNPOLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
6. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OR LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY.
7. THE LOCATION OF VARIOUS EXISTING UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
8. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
9. NO FINAL CONNECTION SHALL BE MADE TO THE EXISTING WATER MAIN SYSTEM UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED AND CHLORINATED.
10. ALL NON-PAVING CONCRETE USED ON THE PROJECT SHALL BE IDOT CLASS SI.
11. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY AND OWNER.
12. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
13. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION WHICH DRAIN OFFSITE PROPERTY SHALL BE CONNECTED TO THE STORM SEWER SYSTEM. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION THAT SERVES ON-SITE PROPERTY CAN BE CAPPED AND/OR REMOVED FROM THE SITE.
14. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
15. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.
16. TRAFFIC CONTROL SIGNS SHALL BE INSTALLED DURING CONSTRUCTION IN ACCORDANCE WITH THE IDOT SS AND IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE MAINTAINED AT ALL TIMES.

D. EXCAVATION AND SITE GRADING

1. EXCAVATION AND EMBANKMENT REQUIRED FOR SITE GRADING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORTS PREPARED FOR THIS SITE. COPIES OF THE SOILS REPORTS ARE AVAILABLE FROM THE OWNER.
2. BUILDING PAD, BUILDING FOOTING, AND PAVEMENT SUBGRADES SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, AND COMPACTED TO A MINIMUM BEARING CAPACITY OF 3,000 PSF IN BUILDING PAD AREAS AND 95% MODIFIED PROCTOR DENSITY WITHIN PUBLIC RIGHT-OF-WAYS.
3. COMPACTION TESTING SHALL MEET THE REQUIREMENTS OF THE MUNICIPALITY AND THE OWNER.
4. NO EQUIPMENT, MATERIAL OR WORK IS TO BE PERFORMED OUTSIDE THE LIMITS OF CONSTRUCTION.
5. THE CONTRACTOR IS REQUIRED TO MEET ALL SOIL EROSION CONTROL AND SEDIMENTATION REQUIREMENTS AS SET FORTH IN THE IEPA STANDARDS, MUNICIPAL ORDINANCES, COUNTY ORDINANCES, AND THE ENGINEERING PLANS.
6. ALL PAVEMENT SUBGRADES SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK. ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.
7. ALL UNSUITABLE MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, SHALL BE REMOVED AND (1.) DISC-DRIED AND RECOMPACTED, OR (2.) LIME OR CEMENT DRIED AND RECOMPACTED, OR (C.) REPLACED WITH CRUSHED STONE, IDOT CA-6 GRADATION. ALTERNATIVE OPTIONS MAY INCLUDE, BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION, BY A LICENSED PROFESSIONAL ENGINEER, AND STATE AND LOCAL TIPPING FEES.

E. PAVEMENT CONSTRUCTION

1. HOT-MIX ASPHALT PAVEMENT SHALL HAVE A MINIMUM TOTAL COMPACTED THICKNESS AS SHOWN ON THE DRAWINGS AND SHALL BE COMPACTED TO 93% OF THE MAXIMUM UNIT WEIGHT AS DETERMINED BY ASTM D-2041.
2. THE PAVEMENT SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 301 (SUBGRADE PREPARATION) OF THE IDOT SS. SUBGRADE SHALL BE COMPACTED TO A MINIMUM IBR OF 3.0.
3. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 351 (AGGREGATE BASE COURSE) OF THE IDOT SS.
4. NO AGGREGATE BASE COURSE SHALL BE INSTALLED UNTIL THE SUBGRADE HAS BEEN APPROVED BY THE OWNER.
5. HOT-MIX ASPHALT PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 406 (HOT-MIX ASPHALT BINDER AND SURFACE COURSE).
6. NO HOT-MIX ASPHALT BINDER SHALL BE INSTALLED UNTIL THE AGGREGATE BASE COURSE HAS BEEN APPROVED BY THE OWNER. AGGREGATE BASE COURSE PRIME COAT (HC-150) SHALL BE APPLIED AT A RATE OF 0.20 TO 0.5 GALLONS PER SQUARE YARD, THE EXACT RATE TO BE SPECIFIED BY THE ENGINEER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SIGNS, BARRICADES, FENCES, ETC. TO KEEP THE CONSTRUCTION SITE IN COMPLIANCE WITH STATE AND FEDERAL LAWS. THE MUNICIPALITY MAY REQUIRE ADDITIONAL SIGNAGE OR BARRICADES. THE CONTRACTOR SHALL COMPLY WITH ALL SUCH MUNICIPAL REQUIREMENTS.
8. ALL EXISTING PAVEMENT, SIDEWALK, OR CURB AND GUTTER TO BE REMOVED SHALL BE SAWCUT ALONG THE LIMITS OF THE PROPOSED REMOVAL BEFORE REMOVAL OPERATIONS BEGIN.
9. PRIOR TO PLACEMENT OF BASE COURSE, THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK. ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.
10. CURB AND GUTTER REMOVAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 440 (REMOVAL OF EXISTING PAVEMENT AND APPURTENANCES) OF THE IDOT SS.
11. ALL PAVEMENT MARKINGS WITHIN PUBLIC RIGHT OF WAY SHALL BE THERMOPLASTIC.
12. ADA ACCESSIBLE CURB RAMPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE THE SIDEWALK ADJOINS THE CURB AND GUTTER. ALL ADA RAMPS SHALL PROVIDE DETECTABLE WARNINGS PER THE DETAIL NOTED WITHIN THIS PLAN SET. THE INSTALLATION OF THESE DETECTABLE WARNINGS SHALL CONFORM TO SECTION 424 OF THE IDOT SS AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.
13. ALL CONCRETE FOR SIDEWALK AND CURB AND GUTTER IS TO BE CLASS SI, 6.1 BAG MIX WITH NO FLY ASH.
14. COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 606 (CONCRETE GUTTER, CURB, MEDIAN AND PAVED DITCH) OF THE IDOT SS:
    a. CONTRACTION JOINTS SHALL BE PLACED AT THE END OF RADII AND AT INTERVALS OF NO MORE THAN 40-FEET IN STRAIGHT LINE PORTIONS OF WORK. EXPANSION JOINTS SHALL BE PROVIDED WHERE THE CURB AND GUTTER ABUTS AN EXISTING OR PROPOSED SIDEWALK, BUILDING, PERMANENT STRUCTURE OR EXISTING OR PROPOSED CONCRETE DRIVEWAY. EXPANSION JOINTS ARE REQUIRED 5-FEET ON EACH SIDE OF ANY STORM SEWER STRUCTURE IN THE CURB LINE. EXPANSION JOINTS SHALL CONSIST OF 1-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL.
    b. EXPANSION JOINTS SHALL INCLUDE 12-INCH LONG #4 DOWEL BARS WITH CAP.
    c. CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NO MORE THAN 10-FEET. CONTRACTION JOINTS SHALL BE SAWED TO A DEPTH EQUAL TO 1/3 THE THICKNESS OF THE GUTTER FLAG AND TO A WIDTH OF NOT LESS THAN 1/8 INCH.
    d. A MINIMUM 4-INCH COMPACTED AGGREGATE BASE SHALL BE PROVIDED UNDER THE CURB AND GUTTER AND SHALL EXTEND 1-FOOT BEHIND BACK OF CURB. REFER TO SECTION 606 FOR ADDITIONAL JOINTING REQUIREMENTS.
15. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 424 (PORTLAND CEMENT CONCRETE SIDEWALK) OF THE IDOT SS:
    a. THE SURFACE SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT RIGHT ANGLES TO THE CENTERLINE OF THE SIDEWALK OR AS SHOWN ON THE ENGINEERING PLANS. GROOVES SHALL EXTEND TO 1/4 THE DEPTH OF THE SIDEWALK, SHALL BE NOT LESS THAN 1/8 IN. NOR MORE THAN 1/4 IN. IN WIDTH, AND SHALL BE LONGER THAN 6 FT. AND LESS THAN 4 FT. ON ANY SIDE, UNLESS OTHERWISE DIRECTED.
    b. EXPANSION JOINTS SHALL BE 1/2 IN. THICK AND CONSIST OF PREFORMED JOINT FILLER. THE TOP OF THE JOINT FILLER SHALL BE 1/4 IN. BELOW THE SURFACE OF THE SIDEWALK.
    c. EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIDEWALK AND ALL STRUCTURES SUCH AS LIGHT POLES, TRAFFIC SIGNAL POLES, TRAFFIC POLES AND SIGNAL FOUNDATIONS. WHERE SIDEWALK THROUGH DRIVEWAY, EXPANSION JOINTS SHALL BE PLACED AT MAXIMUM INTERVALS OF 50 FT. IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT TO PAVEMENT OR CURB HAVING EXPANSION JOINTS; THE EXPANSION JOINTS IN THE SIDEWALK SHALL BE PLACED IN LINE WITH THE EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL BE PLACED WHERE THE SIDEWALK ABUTS BUILDINGS, BETWEEN BUILDING PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK ACCESSIBILITY RAMPS AND CURBS WHERE THE RAMP ABUTS A CURB.
16. HOT-MIX ASPHALT SPECIFICATIONS SHALL BE AS FOLLOWS:

ITEM	AIR VOIDS
HMA SURFACE COURSE, MIX "D", IL-9.5MM, N50, 1.5" MIN.	4% AT 50 GYR.
HMA BINDER COURSE, IL-19.0, N50 2.25" MIN	4% AT 50 GYR.
LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1/4" MIN	3.5% AT 50 GYR.
CLASS D PATCHES (HMA BINDER IL-19mm)	4% AT 70 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR ALL NON-POLYMERIZED HMA MIXES THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS. APPLICABLE DISTRICT ONE SPECIAL PROVISIONS MAY INCLUDE, "RECLAIMED ASPHALT PAVEMENT AND SHINGLES", "HMA MIXTURE IL-4.75" AND "HMA SURFACE COURSE, MIXTURE D".

17. ALL CURBS CONSTRUCTED OVER A UTILITY TRENCH SHALL BE REINFORCED WITH TWO EQUALLY SPACED #4 REBARS CENTERED IN THE FLAG FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH. SIDEWALK SHALL BE REINFORCED IN THE SAME MANNER USING THREE EQUALLY SPACED #4 REBARS CENTERED IN THE SIDEWALK FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH.
18. ALL WATER AND SANITARY SERVICE LOCATIONS SHALL BE STAMPED ON THE CURB WITH "W" OR "S" AT THE DEMARKED LOCATIONS WHERE POSSIBLE.

F. SANITARY SEWER

1. ALL SANITARY SEWERS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS OR SANITARY DISTRICT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).
2. SANITARY SEWERS SHALL BE:
    a. POLYVINYL CHLORIDE PIPE (PVC), SDR 26 PER ASTM D-3034 WITH ELASTOMERIC JOINTS IN ACCORDANCE WITH ASTM D-3212 AND F477 or
    B. PRESSURE RATED PIPE (WATER MAIN QUALITY) SHALL BE IN ACCORDANCE WITH ASTM D 2241. PVC PIPE JOINTS SHALL BE SOLVENT CEMENTED JOINTS PER ASTM D 2672 OR FLEXIBLE ELASTOMERIC JOINTS PER ASTM D3139 AND F477.
3. FRACTURED GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-7 OR CA-11 AND SHALL BE INSTALLED PER CITY OF CRYSTAL LAKE DRAWING UG-03. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
4. SELECTED GRANULAR BACKFILL, IDOT CA-6, GRADE 7, 8, OR 9 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN AN EXISTING OR PROPOSED PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS AND SIDEWALKS. REFER TO CRYSTAL LAKE DRAWING UG-03
5. SANITARY SEWER TESTING SHALL INCLUDE EXFILTRATION TEST OR INFILTRATION TESTING IN ACCORDANCE WITH THE SSWS. MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. ALL SANITARY SEWERS CONSTRUCTED OF FLEXIBLE PIPE SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH THE SSWS. MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. DEFLECTION TESTING SHALL NOT OCCUR SOONER THAN THIRTY (30) DAYS AFTER COMPLETION OF THE SEWER INSTALLATION OF THE SECTION BEING TESTED.
6. SANITARY MANHOLES SHALL BE TESTED FOR WATERTIGHTNESS BY EITHER ASTM C969 - STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES OR ASTM C 1244 - STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE PRESSURE (VACUUM) TEST.
7. SANITARY SEWER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO ARCHITECTURAL PLANS MAY EXIST; THEREFORE, CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SERVICE AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS. FIELD LOCATION OF ALL SERVICE STUBS TO BE VISIBLY DEMARKED. SUPPLIED BY CONTRACTOR, AND SHOWN ON RECORD DRAWINGS.

G. WATER MAIN

1. ALL WATER MAINS, SERVICES, AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).
2. WATER MAINS SHALL BE:
    a. DUCTILE IRON PIPE CONFORMING TO ANSI A 21.51 (AWWA C151), CLASS 52 PER ANSI A 21.50 (AWWA C150). SEAL COATED OR CEMENT LINED PER ANSI A21.4 (AWWA C104), WITH RUBBER RING (SLIP SEAL OR PUSH ON) JOINTS OR MECHANICAL FOR RESTRAINED JOINTS. or
    b. ALL WATER SERVICES (2.5" DIA. AND SMALLER) SHALL BE COPPER WATER TUBE TYPE K OR GREATER SOFT TEMPER, FOR UNDERGROUND SERVICE AND CONFORMING TO ASTM B88 AND ASTM B251. THE PIPE SHALL BE MARKED WITH THE MANUFACTURER'S NAME OR TRADEMARK AND A MARK INDICATIVE OF THE TYPE OF PIPE. THE OUTSIDE DIAMETER OF THE PIPE SHALL CONFORM TO ASTM B251 TABLE 2. FITTINGS FOR SERVICE PIPE SHALL BE BRASS AND OF THE COMPRESSION TYPE FOR TYPE K TUBING. ONE PIECE SHALL BE USED FROM THE MAIN TO THE CURB STOP AND ONE PIECE FROM THE CURB STOP TO THE METER SPREAD FOR LENGTHS OF 100 FEET OR LESS.
3. THE COVER OVER THE WATERMAIN AND SERVICES SHALL BE MAINTAINED BETWEEN 6'-0" AND 8'-0" AT ALL TIMES. UNLESS SPECIAL PROVISIONS HAVE BEEN MADE.
4. FRACTURED GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-7 OR CA-11 AND SHALL BE INSTALLED PER CITY OF CRYSTAL LAKE DRAWING UG-03. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
5. SELECTED GRANULAR BACKFILL, IDOT CA-6, GRADE 7, 8, OR 9 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS AND SIDEWALKS. REFER TO CRYSTAL LAKE DRAWING UG-03
6. ALL WATER VAULTS SHALL HAVE THE WORD "WATER" CAST INTO THE LID.
7. VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO THE RESPECTIVE STANDARDS OF THE LATEST AWWA C500, AWWA C509 AND AWWA C515 STANDARDS. ALL MATERIALS USED IN THE MANUFACTURE OF WATERWORKS GATE VALVES SHALL CONFORM TO THE EPA STANDARDS DESIGNED FOR EACH MATERIAL LISTED. ALL VALVES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE SSWS.
8. WATER MAINS SHALL BE PRESSURE TESTED, LEAK TESTED AND CHLORINATED IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.
9. WATER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO THE ARCHITECTURAL PLANS MAY EXIST; THEREFORE, CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF WATER SERVICES AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS. FIELD LOCATION OF ALL SERVICE STUBS TO BE VISIBLY DEMARKED. SUPPLIED BY CONTRACTOR, AND SHOWN ON RECORD DRAWINGS
10. WATER MAINS SHALL BE LOCATED AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER, STORM SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION. WATER MAINS MAY BE LOCATED CLOSER THAN 10-FEET TO A SEWER LINE WHEN:
    a. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10-FEET AND
    b. THE WATER MAIN INVERT IS AT LEAST 18-INCHES ABOVE THE CROWN OF THE SEWER; AND
    c. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER, WHEN IT IS IMPOSSIBLE TO MEET THE CONDITIONS ABOVE, BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WITH SLIP-ON OR MECHANICAL JOINTS. THE SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.
11. WATER MAIN SHALL BE SEPARATED FROM STORM AND SANITARY SEWERS AS FOLLOWS:
    a. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18-INCHES ABOVE THE CROWN OF THE SEWER WHERE WATER MAINS CROSS A STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF WATER MAIN LOCATED WITHIN 10-FEET HORIZONTALLY OF ANY SEWER CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER or
    b. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINTS OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN a) ABOVE OR THE WATER MAIN PASSES UNDER A SEWER or
    c. A VERTICAL SEPARATION OF 18-INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN or
    d. CONSTRUCTION OF WATER MAIN QUALITY PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER IS AT LEAST 10-FEET.
12. FIRE HYDRANTS SHALL CONFORM TO THE AMERICAN WATER WORKS ASSOCIATION STANDARD C-502 AND SHALL BE OF A MAKE THAT HAS BEEN ADOPTED BY THE MUNICIPALITY AS A STANDARD. HYDRANTS SHALL BE DESIGNED FOR A MINIMUM WORKING PRESSURE OF ONE HUNDRED FIFTY (150) PSI AND A TEST PRESSURE OF THREE HUNDRED (300) PSI. HYDRANT BODY CASTING SHALL BE MANUFACTURED OF CAST IRON OR DUCTILE IRON. ALL NOZZLES SHALL BE MANUFACTURED OF AN ACCEPTABLE GRADE OF BRONZE AND ACCURATELY THREADED IN ACCORDANCE WITH "NATIONAL STANDARD HOSE COUPLING THREAD SPECIFICATIONS." THE HYDRANT SHALL OPEN BY TURNING LEFT (COUNTER-CLOCKWISE) AND SHALL BE SO MARKED. HYDRANTS SHALL BE OF THE "BREAK-AWAY" OR "TRAFFIC" BASE DESIGN.
13. SMALL SERVICE LINE APPURTENANCES SHALL BE IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS AND AS FOLLOWS:
    a. CURB STOP: CURB STOPS SHALL BE FABRICATED OF BRASS AND SHALL BE PROVIDED WITH OUTLETS SUITABLE FOR COPPER CONNECTIONS. CURB STOPS SHALL BE OF THE ROUND-WAY TYPE. CURB STOPS SHALL BE EQUIPPED WITH CONDUCTIVE COMPRESSION CONNECTIONS. FLARED OR SWEAT CONNECTIONS ARE NOT ALLOWED.
    b. CORPORATION STOPS: CORPORATION STOPS SHALL BE FABRICATED OF BRASS AND SHALL BE PROVIDED WITH OUTLETS SUITABLE FOR COPPER CONNECTIONS. CURB STOPS SHALL BE EQUIPPED WITH CONDUCTIVE COMPRESSION CONNECTIONS. FLARED OR SWEAT CONNECTIONS ARE NOT ALLOWED.
    c. CURB BOX: CURB BOX SHALL BE SCREW TYPE WITH THE BASE THREADED TO ATTACH TO THE CURB STOP, OR SHALL BE "BUFFALO" OR "ARCH" TYPE AND OF SUCH CONSTRUCTION THAT IT SHALL BE CAPABLE OF EXTENSION TO FINISH GRADE. THE TOP OF THE CURB BOX SHALL BE FURNISHED WITH THE WORD "WATER" ON THE LID.

H. STORM SEWER

1. ALL STORM SEWERS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS, THE IDOT SS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
2. STORM SEWERS SHALL BE:
    a. REINFORCED CONCRETE PIPE, ASTM C-76, MINIMUM CLASS III WITH MASTIC JOINTS OR O-RING JOINTS IN ACCORDANCE TO ASTM C-443.
3. FRACTURED GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-7 OR CA-11 AND SHALL BE INSTALLED PER CITY OF CRYSTAL LAKE DRAWING UG-03. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
4. SELECTED GRANULAR BACKFILL, IDOT CA-6, GRADE 7, 8, OR 9 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS AND SIDEWALKS. REFER TO CRYSTAL LAKE DRAWING UG-03

I. LANDSCAPING

1. ALL DISTURBED AREAS SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDED. SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 250 (SEEDING) OF THE IDOT SS. SEEDING MIXTURE SHALL BE CLASS 1 LAWN MIXTURE, UNLESS OTHERWISE INDICATED.
2. EROSION CONTROL BLANKET SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 251 (MULCH) OF THE IDOT SS. EROSION CONTROL BLANKET SHALL BE EXCELSTOR 2S-150 OR SC-150 DEPENDING ON THE INTENDED USE.

Mackie Consultants, LLC
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(847)696-1400
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CLIENT:
LENNAR
1700 E. GOLF ROAD, SUITE 100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

DATE	DESCRIPTION OF REVISION	BY
12-17-2024	REVISED PER CITY OF CRYSTAL LAKE COMMENTS	MM

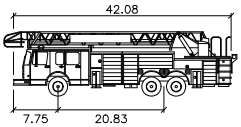
DESIGNED MS
DRAWN JD
APPROVED MTL
DATE 09/12/2024
SCALE N.T.S.

PROJECT SPECIFICATIONS
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 23 OF 23
PROJECT NUMBER: 4782

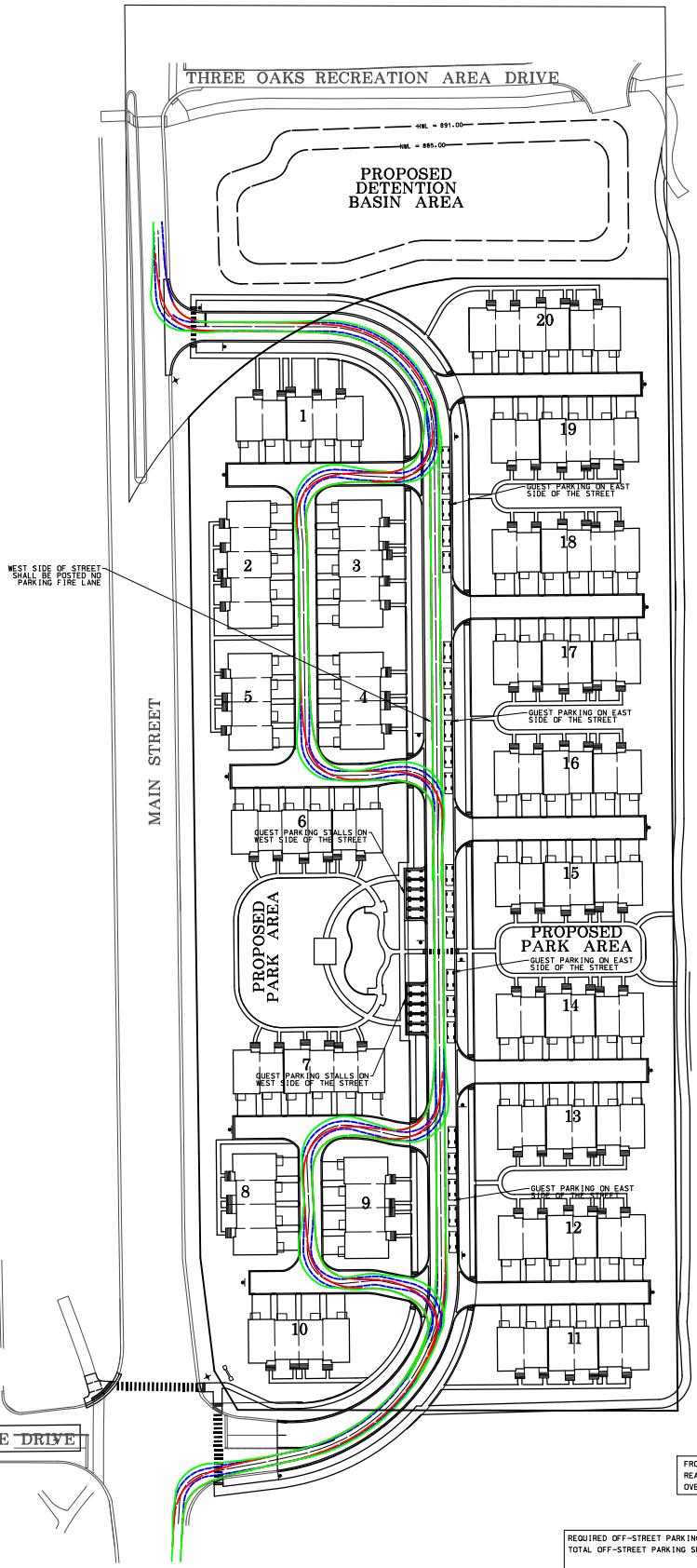
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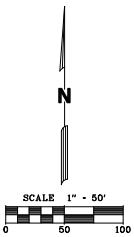
Plotted: 9/9/2024 - 8:50:47 AM
$Project Name$
$Project Number$
$Project Manager$
$Author$



Crystal Lake Firetruck
feet

Width	: 8.00
Track	: 8.08
Lock to Lock Time	: 6.0
Steering Angle	: 37.0





FRONT WHEEL PATH:
REAR WHEEL PATH:
OVERHANG ENVELOPE:

REQUIRED OFF-STREET PARKING (2 PER UNIT) =	214 REQUIRED
TOTAL OFF-STREET PARKING SPACES PROVIDED (2 PER GARAGE) =	214
REQUIRED OFF-STREET GUEST PARKING (0.25 PER UNIT) =	27 REQUIRED
TOTAL GUEST PARKING STALLS PROVIDED =	10
TOTAL GUEST PARKING IN DRIVEWAYS PROVIDED (2 PER UNIT) =	214
TOTAL OFF-STREET GUEST PARKING PROVIDED =	224
TOTAL ON-STREET GUEST PARKING PROVIDED =	23
TOTAL PARKING PROVIDED IN THE COMMUNITY =	461

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
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DATE	DESCRIPTION OF REVISION	BY
12/18/2024	REVISED PER CITY COMMENTS	MS

DESIGNED	MS
DRAWN	MS
APPROVED	MTL
DATE	09/12/2024
SCALE	1"=50'

FIRE TRUCK TURNING AND PARKING EXHIBIT WATERSIDE AT THREE OAKS CRYSTAL LAKE, ILLINOIS

SHEET 1 OF 1

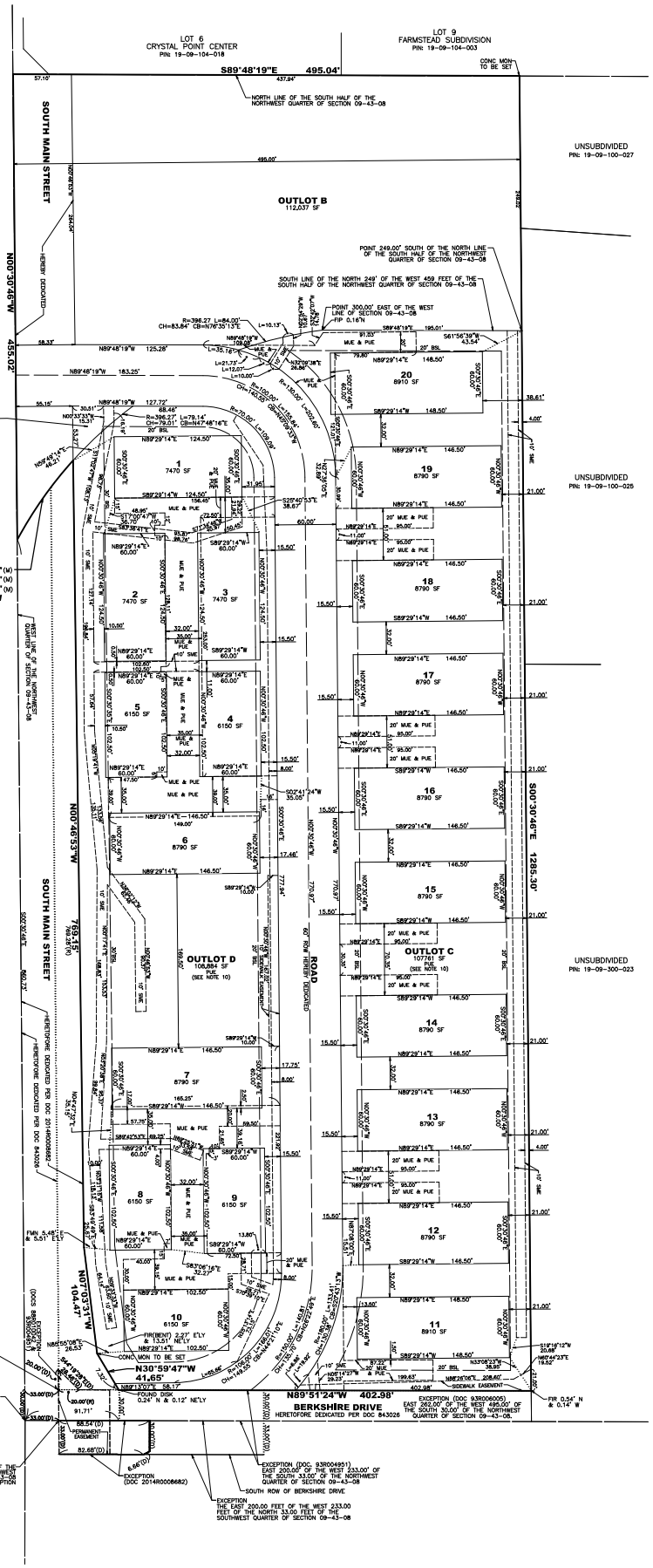
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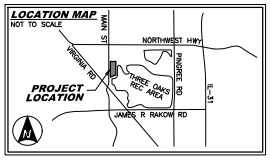
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FINAL PLAT OF
WATERSIDE AT THREE OAKS

BEING A SUBDIVISION OF PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS





AREA:
PROPERTY CONTAINS 584,673 SQUARE FEET OR 13.422 ACRES MORE OR LESS

P.I.N.s:
19-09-100-028
19-09-100-029

LEGEND:

	BOUNDARY LINE
	CENTERLINE
	PROPOSED LOT LINE
	BUILDING SETBACK LINE (BSL)
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	RIGHT-OF-WAY LINE
	EXISTING LOT LINE
	SECTION LINE
	TIE DIMENSION
FIR	FOUND IRON ROD
FIP	FOUND IRON PIPE
PUE	PUBLIC UTILITY EASEMENT
MUE	MUNICIPAL UTILITY EASEMENT
SME	STORMWATER MANAGEMENT EASEMENT
L=	ARC LENGTH
(M)	MEASURED
R=	RADIUS
(R)	RECORD
(D)	DEED

NOTES:

1. THIS PLAT IS BASED IN PART ON INFORMATION CONTAINED IN THE FOLLOWING COMMITMENTS FOR TITLE INSURANCE ISSUED BY CHICAGO TITLE INSURANCE COMPANY:
   1. COMMITMENT NUMBER 23006028WE, REVISION 1, WITH COMMITMENT DATE OF MARCH 8, 2024,
   2. COMMITMENT NUMBER 24002727WE, WITH A COMMITMENT DATE OF APRIL 8, 2024.

   THESE COMMITMENTS HAVE BEEN USED AS A BASIS FOR LEGAL DESCRIPTION.
2. BEARINGS BASED ON NAD83 (2011) ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE.
3. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
4. NO DIMENSIONS SHALL BE DERIVED FROM SCALE MEASUREMENT.
5. UPON COMPLETION OF CONSTRUCTION, 5/8" REBAR SHALL BE PLACED AT ALL CORNERS OF THE EXTERIOR BOUNDARY, LOT CORNERS AND CRITICAL POINTS ALONG THE RIGHTS-OF-WAY, UNLESS NOTED OTHERWISE.
6. ALL EASEMENTS SHOWN HEREON ARE HEREBY GRANTED UNLESS SHOWN OTHERWISE.
7. FOR ADDITIONAL INFORMATION PERTAINING TO DEFINITIONS/USES OF EASEMENTS, SETBACKS AND OTHER MATTERS, SEE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED BY SEPARATE DOCUMENT.
8. ALL AREAS ARE MORE OR LESS.
9. ALL CURVES ARE TANGENT TO ADJOINING COURSES UNLESS DEFINED BY CHORD BEARING.
10. A BLANKET PUBLIC UTILITY EASEMENT (PUE) IS HEREBY GRANTED OVER OUTLOTS, A, C, AND D.
11. A BLANKET PUE IS HEREBY GRANTED OVER LOTS 1-20 (INCLUSIVE) EXCEPTING THAT PART FALLING WITHIN A PROPOSED OR EXISTING FOUNDATION.
12. THERE SHALL BE NO DIRECT VEHICULAR ACCESS TO SOUTH MAIN STREET FROM OUTLOTS A, B, OR D.

BUILDING SEPARATION MINIMUMS

SIDE TO SIDE:	20.0'
FRONT TO SIDE:	55.0'
BACK TO BACK:	60.0'
FRONT TO FRONT:	60.0'

LAND SURVEYOR:
KEITH M. FRANCE PLS#035-004077
MACKIE CONSULTANTS, LLC
9575 WEST HIGGINS ROAD, SUITE 500
ROSEMONT, IL 60018
ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694

ENGINEER:
MADELINE LARMON PE#062-069517
MACKIE CONSULTANTS, LLC
9575 WEST HIGGINS ROAD, SUITE 500
ROSEMONT, IL 60018
ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694

PLAT PREPARED FOR:
CALATLANTIC GROUP, LLC
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, ILLINOIS 60173

OWNER OF RECORD (1):
THE CITY OF CRYSTAL LAKE,
AN ILLINOIS MUNICIPAL CORPORATION
100 WEST WOODSTOCK STREET
CRYSTAL LAKE, IL 60014

MAIL PLAT AND TAX BILL TO:
CALATLANTIC GROUP, LLC
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, ILLINOIS 60173

OWNER OF RECORD (2):

LAND PLANNER:
GARY R. WEBER ASSOCIATES, INC.
402 WEST LIBERTY DRIVE
WHEATON, IL 60187

SUBDIVIDER:
CALATLANTIC GROUP, LLC
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, ILLINOIS 60173

Mackie Consultants, LLC
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Rosemont, IL 60018
(847)696-1400
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DATE	DESCRIPTION OF REVISION	BY
12/18/2024	REVISED PER CLIENT COMMENTS	AJM
11/26/2024	REVISED PER CITY COMMENTS	AJM

DESIGNED	MTL
DRAWN	AJM
APPROVED	KMF
DATE	09/12/2024
SCALE	1" = 50'

FINAL PLAT OF SUBDIVISION
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 1 OF 2

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-002694

8/19/2024 DWG: N:\4782\Survey\Preliminary\Final\4782-FP01.dwg

FINAL PLAT OF
WATERSIDE AT THREE OAKS

BEING A SUBDIVISION OF PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

SIDEWALK EASEMENT PROVISIONS

THE CITY OF CRYSTAL LAKE, ITS SUCCESSORS, LICENSEES AND ASSIGNS, ARE HEREBY GIVEN EASEMENT RIGHTS OVER ALL AREAS ON THE PLAT MARKED "SIDEWALK EASEMENT", TOGETHER WITH THE RIGHT OF ACCESS THERETO, TO CONSTRUCT, INSTALL, RECONSTRUCT, REPAIR, REMOVE, REPLACE, INSPECT AND MAINTAIN A SIDEWALK, PAVED OR UNPAVED, FOR THE USE AND ENJOYMENT OF THE GENERAL PUBLIC. THE ABOVE NAMED ENTITIES ARE HEREBY GRANTED THE RIGHT TO ENTER UPON EASEMENTS HEREIN DESCRIBED FOR THE USES HEREIN SET FORTH AND THE RIGHT TO CUT, TRIM, OR REMOVE ANY TREES, SHRUBS OR OTHER PLANTS WITHIN THE EASEMENT AREAS HEREIN GRANTED WHICH INTERFERE WITH THE CONSTRUCTION, INSTALLATION, RECONSTRUCTION, REPAIR, REMOVAL, REPLACEMENT, INSPECTION, MAINTENANCE AND OPERATION THEREOF. NO TEMPORARY OR PERMANENT BUILDINGS, STRUCTURES OR OBSTRUCTIONS SHALL BE PLACED ON OR OVER SAID EASEMENTS THAT INTERFERE WITH THE RIGHTS HEREIN GRANTED.

PUBLIC UTILITY EASEMENT (PUE) PROVISIONS

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH UTILITY SERVICES IS HEREBY RESERVED FOR AND GRANTED TO: COMMONWEALTH EDISON, COMCAST CABLE, NICOR GAS AND AT&T TELEPHONE, THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, JOINTLY AND SEVERALLY, HEREIN AFTER REFERRED TO AS "UTILITY COMPANIES". UTILITY COMPANIES SHALL HAVE THE RIGHT TO INSTALL, OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES USED IN CONNECTION WITH UTILITY SERVICES, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN AS A PUBLIC UTILITY EASEMENT (PUE) AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT. UTILITY COMPANIES SHALL HAVE THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED IN A PUE WITHOUT THE PRIOR WRITTEN CONSENT OF THE RESPECTIVE UTILITY COMPANY. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

ONLY PERPENDICULAR CROSSINGS OF THE MUNICIPAL UTILITY EASEMENT ARE PERMITTED BY THE UTILITY COMPANIES.

MUNICIPAL UTILITY EASEMENT (MUE) PROVISIONS:

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH DOMESTIC WATER AND STORMWATER DRAINAGE IS HEREBY RESERVED FOR AND GRANTED TO THE CITY OF CRYSTAL LAKE, ILLINOIS, THEIR SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE, MAINTAIN, RELOCATE, RENEW AND REMOVE FACILITIES USED IN CONNECTION WITH SEWER AND WATER MAINS, IN, UNDER, ACROSS, ALONG, AND UPON THE SURFACE OF THE PROPERTY SHOWN ON THE PLAT WITHIN THE AREAS MARKED AS "MUNICIPAL UTILITY EASEMENT" (MUE) AND THOSE PARTS DESIGNATED ON THE PLAT AS DEDICATED FOR PUBLIC STREET, TOGETHER WITH THE RIGHT TO CUT, TRIM, OR REMOVE TREES, BUSHES, AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE PROPERTY FOR ALL SUCH PURPOSES.

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUNICIPAL UTILITY EASEMENT (MUE) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

i. THE SURFACE OF THE MUE MAY BE GRASS, SOD, OR PAVEMENT TO ALLOW FOR DRIVEWAYS OR PARKING. MINOR LANDSCAPING AS SHOWN ON THE APPROVED LANDSCAPE PLAN MAY BE PERMITTED.

ii. CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE MUE WHICH IS LOCATED ON SUCH PARTY'S PROPERTY SO THAT IT IS IN GOOD CONDITION FOR ITS INTENDED PURPOSE AS A MUE WHICH MAINTENANCE MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING AND MOWING OF ALL LAWNS OR PAVEMENT RESTORATION.

NO TITLEHOLDER OF ANY PART OR PORTION OF THE MUE (OR ANY PARTY ACTING ON BEHALF OF THE TITLEHOLDER) SHALL:

iii. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE MUE, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN, OR

iv. ALTER, MODIFY OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE MUE.

THE CITY SHALL MAINTAIN THE WATER MAINS LOCATED WITHIN THE MUE UP TO AND INCLUDING THE SHUT OFF VALVES AND FIRE HYDRANTS, BUT NOT INCLUDING THE SERVICE CONNECTIONS AND LATERALS (REFERRED TO AS THE "SYSTEM"). THE CITY'S DUTIES WILL INCLUDE ALL NECESSARY WORK UP TO AND INCLUDING THE BACKFILL STAGE IN THE EVENT OF REPAIR AND REPLACEMENT WORK ON THE SYSTEM.

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUE WILL BE RESPONSIBLE FOR PROMPT, QUALITY RESTORATION OF ALL SURFACE AND ABOVE-GRADE IMPROVEMENTS MEETING OR EXCEEDING THE ORIGINAL CONSTRUCTION REQUIREMENTS OF ALL AREAS IN THE MUE THAT WERE DAMAGED BY THE CITY IN THE PROCESS OF REPAIRING, REPLACING OR CONSTRUCTING THE SYSTEM. THE CITY AGREES TO EXERCISE REASONABLE CARE IN REPAIRS MADE SO AS NOT TO CAUSE UNNECESSARY DAMAGES.

THE MUE IS EXCLUSIVE OF ANY OTHER BLANKET EASEMENT ON THE PROPERTY.

ONLY PERPENDICULAR CROSSINGS OF THE MUNICIPAL UTILITY EASEMENT ARE PERMITTED BY THE UTILITY COMPANIES.

STORMWATER MANAGEMENT EASEMENT (SME) PROVISIONS

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE STORMWATER MANAGEMENT EASEMENT (SME) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

i. CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE SME WHICH IS LOCATED ON SUCH PARTY'S PROPERTY AS A WELL LANDSCAPED, HIGH-QUALITY PARCEL (WHICH MAINTENANCE SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING, AND MOWING OF ALL LAWNS), AND

ii. KEEP ALL SURFACE OPENINGS OF THE DRAINAGE PIPES UNDERLYING THE SME FREE OF ALL GRASS CLIPPINGS, LEAVES, OR OTHER RELATED OR FOREIGN MATERIALS.

NO INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE SME SHALL:

i. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE SME INCLUDING, BUT NOT LIMITED TO, FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN, OR

ii. ALTER, MODIFY, OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE SME, OR

iii. OBSTRUCT, ALTER, OR MODIFY THE ESTABLISHED DRAINAGE PATTERN FROM OR OVER THE SME.

MAINTENANCE OF THE STORM SEWERS AND STORM STRUCTURES WITHIN THE SME SHALL BE THE SOLE RESPONSIBILITY OF EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PURSUANT TO THE REQUIREMENTS CONTAINED HEREIN.

IF THE CITY DETERMINES THAT THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE IS IN DEFAULT IN SAID MAINTENANCE OBLIGATIONS AND UPON FIVE (5) DAYS NOTICE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE SERVED BY CERTIFIED MAIL, THE CITY AND ITS SUCCESSORS AND ASSIGNS SHALL BE GRANTED AN EASEMENT OVER THE AREA DESCRIBED ON THIS DEED RESTRICTION FOR THE RIGHT, PRIVILEGE AND AUTHORITY, WITHOUT OBLIGATION, TO PERFORM SAID MAINTENANCE AND REPAIRS. THE CITY MAY ENTER UPON THE EASEMENT FOR THE PURPOSE OF EMERGENCY REPAIRS.

THE CHARGE OF THE EMERGENCY REPAIRS AND/OR MAINTENANCE IS THE RESPONSIBILITY OF THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. THE CITY MAY, AT ITS SOLE ELECTION, RECORD NOTICE OF LIEN WITH THE RECORDER OF DEEDS FOR MCHENRY COUNTY AS DESCRIBED ABOVE AGAINST THE SUBJECT REAL PROPERTY. SAID LIEN SHALL INCLUDE THE APPLICABLE EXPENSE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PLUS ATTORNEY'S FEES AND COURT COSTS. UPON PAYMENT OF SAID LIEN, THE CITY SHALL ISSUE THE APPROPRIATE RELEASE OF LIEN TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. IT SHALL NOT BE THE OBLIGATION OF THE CITY TO RECORD THE RELEASE OF THE LIEN BUT SHALL BE THE OBLIGATION OF THE PARTY PROCURING THE RELEASE.

EASEMENT PROVISIONS

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND COMMUNICATION SERVICE IS HEREBY RESERVED FOR AND GRANTED TO

COMMONWEALTH EDISON COMPANY
AND
SBC ILLINOIS A.K.A. ILLINOIS BELL TELEPHONE COMPANY, GRANTEES.

THEIR RESPECTIVE LICENSEES, SUCCESSORS AND ASSIGNS JOINTLY AND SEVERALLY, TO CONSTRUCT, OPERATE, REPAIR, MAINTAIN, MODIFY, RECONSTRUCT, REPLACE, SUPPLEMENT, RELOCATE AND REMOVE, FROM TIME TO TIME, POLES, GUYS, ANCHORS, WIRES, CABLES, CONDUITS, MANHOLES, TRANSFORMERS, PEDESTALS, EQUIPMENT CABINETS OR OTHER FACILITIES USED IN CONNECTION WITH OVERHEAD AND UNDERGROUND TRANSMISSION AND DISTRIBUTION OF ELECTRICITY, COMMUNICATIONS, SOUNDS AND SIGNALS IN, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN WITHIN THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) ON THE PLAT AND MARKED "EASEMENT", "UTILITY EASEMENT", "PUBLIC UTILITY EASEMENT", "PUE" (OR SIMILAR DESIGNATION), THE PROPERTY DESIGNATED IN THE DECLARATION OF CONDOMINIUM AND ON THE PLAT AND MAP AS "COMMON ELEMENTS", AND THE PROPERTY DESIGNATED ON THE PLAT AS "COMMON AREA OR AREAS", AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHTS TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT AND COMMON AREA OR AREAS TO SERVE IMPROVEMENTS THEREON, OR ON ADJACENT LOTS, AND COMMON AREA OR AREAS, THE RIGHT TO KEEP, REMOVE TREES, BUSHES, UNDERBRUSH AND SAPLINGS AND TO CLEAR OBSTRUCTIONS FROM THE SURFACE AND SUBSURFACE AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED OVER GRANTEES' FACILITIES OR IN, UPON OR OVER THE PROPERTY WITHIN THE DASHED OR DOTTED LINES (OR SIMILAR DESIGNATION) MARKED "EASEMENT", "UTILITY EASEMENT", "PUBLIC UTILITY EASEMENT", "PUE" (OR SIMILAR DESIGNATION) WITHOUT THE PRIOR WRITTEN CONSENT OF GRANTEES. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

THE TERM "COMMON ELEMENTS" SHALL HAVE THE MEANING SET FORTH FOR SUCH TERM IN THE "CONDOMINIUM PROPERTY ACT", CHAPTER 765 ILCS 605/2(C), AS AMENDED FROM TIME TO TIME.

THE TERM "COMMON AREA OR AREAS" IS DEFINED AS A LOT, PARCEL OR AREA OF REAL PROPERTY, THE BENEFICIAL USE AND ENJOYMENT OF WHICH IS RESERVED IN WHOLE OR AS AN APPURTENANCE TO THE SEPARATELY OWNED LOTS, PARCELS OR AREAS WITHIN THE PLANNED DEVELOPMENT, EVEN THOUGH SUCH BE OTHERWISE DESIGNATED ON THE PLAT BY TERMS SUCH AS "OUTLOTS", "COMMON ELEMENTS", "OPEN SPACE", "OPEN AREA", "COMMON GROUND", "PARKING", AND "COMMON AREA". THE TERM "COMMON AREA OR AREAS", AND "COMMON ELEMENTS" INCLUDE REAL PROPERTY SURFACED WITH INTERIOR DRIVEWAYS AND WALKWAYS, BUT EXCLUDES REAL PROPERTY PHYSICALLY OCCUPIED BY A BUILDING, SERVICE BUSINESS DISTRICT OR STRUCTURES SUCH AS A POOL, RETENTION POND OR MECHANICAL EQUIPMENT.

RELOCATION OF FACILITIES WILL BE DONE BY GRANTEES AT COST OF THE GRANTOR/LOT OWNER, UPON WRITTEN REQUEST.

UTILITY CERTIFICATES

APPROVED AND ACCEPTED BY:

ELECTRIC AND TELEPHONE
COMPANY: COMMONWEALTH EDISON

NAME:_____ TITLE:_____

DATED THIS_____ DAY OF_____ , 20____

COMPANY: SBC

NAME:_____ TITLE:_____

DATED THIS_____ DAY OF_____20____

CABLE TELEVISION
COMPANY: COMCAST

NAME:_____ TITLE_____

DATED THIS_____ DAY OF_____ 20____

GAS
COMPANY: NICOR

NAME:_____ TITLE:_____

DATED THIS_____ DAY OF_____, 20____

OWNER'S & SCHOOL DISTRICT CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF _____ }

THIS IS TO CERTIFY THAT THE UNDERSIGNED IS AN OWNER OF THE LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE HAS CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS INDICATED HEREON, FOR THE USES AND PURPOSES HEREIN SET FORTH, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON INDICATED.

ALSO, THIS IS TO CERTIFY THAT PROPERTY BEING, SUBDIVIDED AFORESAID, AND TO THE BEST OF THE OWNER'S KNOWLEDGE AND BELIEF, SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF SCHOOL DISTRICTS:

COLLEGE DISTRICT 528 MCC, CRYSTAL LAKE 47, AND CRYSTAL LAKE 155

DATED THIS _____ DAY OF _____, A.D., 20____.

BY: _____

NOTARY CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF _____ }

I, _____, A NOTARY PUBLIC, IN AND FOR SAID COUNTY, IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNER, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE ANNEXED PLAT AS THEIR OWN FREE AND VOLUNTARY ACT AND THE FREE AND VOLUNTARY ACT OF THE CORPORATION FOR THE USES AND PURPOSES HEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, A.D., 20____, AT _____, ILLINOIS.

_____
NOTARY PUBLIC

OWNER'S & SCHOOL DISTRICT CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF _____ }

THIS IS TO CERTIFY THAT THE UNDERSIGNED IS AN OWNER OF THE LAND DESCRIBED IN THE ANNEXED PLAT, AND THAT HE HAS CAUSED THE SAME TO BE SURVEYED AND SUBDIVIDED AS INDICATED HEREON, FOR THE USES AND PURPOSES HEREIN SET FORTH, AND DOES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE HEREON INDICATED.

ALSO, THIS IS TO CERTIFY THAT PROPERTY BEING, SUBDIVIDED AFORESAID, AND TO THE BEST OF THE OWNER'S KNOWLEDGE AND BELIEF, SAID SUBDIVISION LIES ENTIRELY WITHIN THE LIMITS OF SCHOOL DISTRICTS:

COLLEGE DISTRICT 528 MCC, CRYSTAL LAKE 47, AND CRYSTAL LAKE 155

DATED THIS _____ DAY OF _____, A.D., 20____.

BY: _____

NOTARY CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF _____ }

I, _____, A NOTARY PUBLIC, IN AND FOR SAID COUNTY, IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT _____ PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AS SUCH OWNER, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE ANNEXED PLAT AS THEIR OWN FREE AND VOLUNTARY ACT AND THE FREE AND VOLUNTARY ACT OF THE CORPORATION FOR THE USES AND PURPOSES HEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, A.D., 20____, AT _____, ILLINOIS.

_____
NOTARY PUBLIC

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF MCHENRY }

APPROVED BY THE CITY COUNCIL OF CRYSTAL LAKE,

ILLINOIS THIS _____ DAY OF _____, 20_____, A.D.

_____,
MAYOR

_____,
CITY CLERK

PLANNING & ZONING COMMISSION CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF MCHENRY }

I, _____, CHAIRMAN OF THE CRYSTAL LAKE PLANNING AND ZONING COMMISSION, DO HEREBY CERTIFY THAT ON THIS

_____ DAY OF _____,

20_____, THIS PLAT OF SUBDIVISION WAS DULY APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE.

_____
CHAIRMAN

GRADING/DRAINAGE CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF COOK }

TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS OR DRAINS WHICH THE OWNER HAS RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES, SO AS TO REDUCE THE LIKELIHOOD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

DATED THIS _____ DAY OF _____, A.D., 20____.

_____
PROFESSIONAL ENGINEER

_____
OWNER OR ATTORNEY

COUNTY RECORDER CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF MCHENRY }

THIS INSTRUMENT FILED FOR RECORD IN THE RECORDER'S OFFICE OF MCHENRY COUNTY,

ILLINOIS ON THIS _____ DAY OF

_____, A.D., 20_____, AT

_____ O'CLOCK _____M. AND RECORDED AS

DOCUMENT NUMBER

_____.

_____
MCHENRY COUNTY RECORDER OF DEEDS

AUTHORIZATION TO RECORD CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF COOK }

WE, MACKIE CONSULTANTS LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694, HEREBY GRANT PERMISSION TO _____ TO RECORD THIS PLAT OF SUBDIVISION.

DATED THIS _____ DAY OF _____, 20____.

_____
KEITH M. FRANCE
EMAIL: kfrance@mackieconsult.com
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 035-004077
LICENSE EXPIRES: NOVEMBER 30, 2026

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS }
}SS
COUNTY OF COOK }

WE, MACKIE CONSULTANTS, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER 184-002694, DO HEREBY CERTIFY THAT WE HAVE SURVEYED, SUBDIVIDED AND PLATTED FOR THE OWNER THEREOF THE FOLLOWING DESCRIBED PROPERTY AND THAT THE PLAT HEREIN DRAWN IS AN ACCURATE REPRESENTATION OF SAID SURVEY, SUBDIVISION AND PLAT:

THAT PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:

THE WEST 495 FEET OF SAID SOUTH HALF, AS MEASURED PERPENDICULARLY TO THE WEST LINE OF SAID NORTHWEST QUARTER, EXCEPTING THAT PART DEDICATED FOR PUBLIC ROAD BY DOCUMENT 843026, ALSO EXCEPTING THAT PART DESCRIBED IN DEEDS 88R010042, 93R004951, 93R006005 AND 2014R0006682, ALL LOCATED IN THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS.

WE FURTHER CERTIFY THAT ACCORDING TO OUR INTERPRETATION OF THE FLOOD INSURANCE RATE MAPS THAT COVER THE AREA, THE HEREON DESCRIBED PROPERTY FALLS WITHIN ZONE "X" (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE ANNUAL FLOODPLAIN AS IDENTIFIED BY THE FLOOD INSURANCE RATE MAP, MAP NUMBER 17111C0327J, WITH AN EFFECTIVE DATE OF NOVEMBER 16, 2006. SUBJECT TO MAP INTERPRETATION AND SCALING.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF

_____, 20____, IN ROSEMONT, ILLINOIS,

_____
KEITH M. FRANCE
EMAIL: kfrance@mackieconsult.com
ILLINOIS PROFESSIONAL LAND SURVEYOR NUMBER 035-004077
LICENSE EXPIRES: NOVEMBER 30, 2026

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

DATE	DESCRIPTION OF REVISION	BY
12/18/2024	REVISED PER CLIENT COMMENTS	AJM
11/26/2024	REVISED PER CITY COMMENTS	AJM

DESIGNED	MTL
DRAWN	AJM
APPROVED	KMF
DATE	09/12/2024
SCALE	1" = 50'

FINAL PLAT OF SUBDIVISION
WATERSIDE AT THREE OAKS
CRYSTAL LAKE, ILLINOIS

SHEET 2 OF 2

PROJECT NUMBER: 4782

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ILLINOIS FIRM LICENSE 184-002694

12/18/2024 4:45:00 PM
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FINAL
STORMWATER MANAGEMENT
REPORT

FOR

Waterside at Three Oaks
Crystal Lake, McHenry County, Illinois

Prepared By:

MACKIE CONSULTANTS

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com



Dated: September 12, 2024
Revised: November 25, 2024

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NARRATIVE DESCRIPTION OF THE WATERSIDE AT THREE OAKS COMMUNITY

Introduction

The Waterside at Three Oaks Community will consist of approximately 13 acres containing 20 multi-family buildings, with 107 total units. The proposed site also includes 2 roadway connections to Main Street and an onsite infiltration basin. The project site is located east of Main Street, north and west of Vulcan Lake, and south of Three Oaks Recreational Area Drive.

Existing Conditions

The site, located in the Upper Fox River Watershed, was previously mined/excavated (beginning in 1967). The northern half of the site generally drains north with a discharge point at the existing road stub connection to Three Oaks Recreation Area Drive, eventually flowing to the existing detention basin northeast of the project site. The southern half of the site drains south to an existing man-made depression and eventually infiltrates into the sandy soils in this area. Refer to the historical aerial maps provided in Tab 5 indicating the disturbance of the site and the creation of a man-made depression.

An existing TR-20 model and supporting calculations have been provided to determine the critical duration 100-year peak flow for the existing conditions depicted in the provided Existing Conditions Exhibit (See Tab 2).

Base Flood Elevation Determination

Based on site-specific topography and McHenry County 1-foot aerial topography, there are two depressional areas on the project site: one in the north portion and one in the south portion of the site.

North Depressional Area

The northwest depressional area has approximately 4.24 acres tributary in the existing conditions. The onsite topography was used to model ridgelines and create a stage-storage calculation for the existing depressional area, which is deep in relation to the adjacent areas and overtops at an elevation of 893.2 at the existing road stub connection to Three Oaks Recreation Area Drive. A TR-20 model was prepared to determine the existing Base Flood Elevation within this depressional area based on the determined tributary areas, land characteristics, and calculated stage storage. No infiltration was assumed for this depressional area due to the presence of a clay layer identified in the geotechnical report for this area. An existing Base Flood Elevation of 893.21 was determined for this depression, which indicates that the depression fills and overtops in the peak 100YR storm. Since this depression will be filled in the proposed condition, 1.39 ac-ft of compensatory storage will be required to replace the lost storage below the existing overtopping elevation.

South Depressional Area

The south depressional area has approximately 6.32 acres tributary in the existing condition. The onsite topography was used to model ridgelines and create a stage-storage calculation for the existing depressional area, which is deep in relation to the adjacent areas and provides no surficial outlet. A TR-20 model was prepared to determine the existing Base Flood Elevation within this depressional area based on the determined tributary areas, land characteristics, and calculated stage storage and calculated infiltration rate. Infiltration was calculated for this area based on soil permeability obtained from the geotechnical report for the site and due to the underlying soil being composed of sand (absence of a clay layer) for this area. An existing Base Flood Elevation of 885.95 was determined for this depression, which indicates that the depression does not fill to the overtopping elevation in the peak 100YR storm. Since this

depression will be filled in the proposed condition, 1.28 ac-ft of compensatory storage will be required to replace the lost storage below the calculated existing Base Flood Elevation.

Soils Review

A NRCS Soil Survey of the site was used to determine the overall soil group classification. (Please refer to the NRCS Soils Survey Map in Tab 1). Predominately, the soils on the site are loam and gravel and soil Group B; which has been utilized in determining the proposed runoff curve number (CN) based on land use characteristics.

Please refer to Tab 5 for the Soil Exploration Report and Soil Boring by MSET, Inc dated July 23, 2024 for the determined soil permeability/infiltration rate in this area.

Wetland Review

The U.S. Fish and Wildlife Service National Wetland Inventory, provided within Tab 1 of this report, shows that the site does not contain any wetlands.

Floodplain and Flood Prone Area Review

The FEMA Flood Insurance Rate Map, provided within Tab 1 of this report, shows that the property in question contains no mapped floodplain areas. Two depressional areas exist onsite as described in the Base Flood Elevation Determination Section. The project will result in filling these depressional areas (2.67 ac-ft). This fill is provided within the proposed infiltration basin system at a 1:1 ratio per CLSO requirements.

Hydrologic Analysis

Proposed condition hydrology was modeled using TR-20 to determine flow generated by the proposed development on the subject area. The appropriate Huff rainfall distributions were applied to Bulletin 75 rainfall depths based on the model storm duration. A theoretical TR-20 was performed using total disturbed area on site and the 100-YR 24HR storm in order to determine the required detention volume for the site. An actual TR-20 model was also performed based on actual tributary areas, both disturbed and undisturbed, to determine actual release rates and emergency overflow weir sizing. Curve numbers were calculated using TR-55 methodology. Land use characteristics were determined for the tributary area and a composite curve number was determined. Composite curve number calculation sheets for the existing and proposed conditions are included within this report.

Proposed Conditions - *Detention Required for the Proposed Improvements*

The proposed development will include the development of an onsite infiltration basin. The proposed basin includes eight dry wells to allow water to infiltrate the ground. The pond will include naturalized plantings for water quality purposes. The location of the infiltration area in the pond ensures that the proposed infiltration facility is at least 200 feet from water supply wells or on-site waste disposal systems. The emergency overflow weirs have been appropriately sized for the peak 100 YR, critical duration inflow into the basin.

<u>Volume Determination (Proposed Theoretical TR-20)</u>

A proposed theoretical model was run in TR-20 based upon the total disturbed area only with the allowable release rate of 0.04 cfs/acre and 0.15 cfs/acre multiplied by the total acreage disturbed for the 2-year and 100-year 24-hour event (13.20 acres at 0.53 cfs and 1.98 cfs respectively). Based on the theoretical TR-20 results, 5.97 ac-feet of detention is required for the proposed improvements. Total required storage volume in the pond is 8.64 ac-ft, which includes the required detention volume plus 2.67 ac-ft of compensatory storage for filling in the existing depressional areas. 8.74 ac-ft of storage volume is provided in the proposed infiltration basin at a high-water level of 892.0.

Actual Release Rates (Proposed Actual TR-20)

A Proposed Actual model was then run in TR-20 utilizing the actual calculated infiltration rates (based on the MSET Soil Exploration Report and Drywell Calculation) and total tributary area to the infiltration basin which also includes offsite tributary area. The determined peak 100YR, critical duration inflow to the Detention Basin of 69.18 cfs was used to size the emergency overflow weir from the pond to provide at least 1.0' of freeboard from top of water within the weir to top of berm in the emergency overflow scenario. The emergency overflow weir for the pond discharges at an elevation of 892.3 to Three Oaks Recreation Area Drive to the northeast and ultimately to the existing basin northeast of the site.

Per the actual TR-20 model, which models actual infiltration rates, the proposed Infiltration Basin will fill up to an actual HWL of 888.83 in peak 100 YR flow conditions. As a result, the actual overland release rate of the proposed basin is 0.00 cfs in the 100 YR event. The peak infiltration rate at the actual HWL is 2.21 cfs. Detention drawdown calculations have been provided to demonstrate that the proposed infiltration basin will dewater in under 72 hours, assuming a pond full at the required HWL and the actual infiltration rate.

The following table summarizes the results of the proposed Infiltration Basin:

Name	Total Disturbed Area	Total Tributary Area	Peak Inflow (100YR)	Required Detention Volume (incl. comp. storage)	Provided Detention Volume	Allowable Release Rate	Actual Release Rate (Above Ground)	Peak Infiltration Rate
	acre	acre	cfs	ac-ft	ac-ft	cfs	cfs	cfs
Detention Basin (10)	13.20	14.73	69.18	8.64	8.74	2.21	0.00	2.21

Proposed Conditions – *Runoff Volume Reduction and Water Quality*

Various measures have been incorporated into the Three Oaks Community design to meet runoff volume reduction (RVR) hierarchy requirements per CLSO 595-26.F, as follows:

- *CLSO RVR Item 5 - Natural landscaping as an alternative to turf grass:*
  - Approximately 1.2 acres of the site have been proposed with native, naturalized plantings instead of traditional turf grass. These areas have been proposed within the proposed stormwater basin area. These plantings will provide better water quality benefits and permanent erosion control protection than the use of traditional turf grass. Please refer to the Landscape Plan prepared by Gary R. Weber Associates, Inc for the native planting areas.
- *CLSO RVR Item 6 - Structural measures that provide water quality and quantity control:*
  - A proposed infiltration basin is provided on the site that incorporates native plantings at the bottom and on the side slopes of the basin for water quality benefit purposes.
  - Eight dry wells are provided on the site that incorporates pretreatment through the proposed basin.

In addition to RVR requirements, the proposed design also meets the Water Quality Protection requirements as specified in CLSO 595-26.G, as follows:

- Water quality measures provided within the storm sewer system include the addition of snout hoods within catch basins to remove floatable and settleable pollutants from runoff from multifamily buildings areas before discharging to the infiltration basin system.

Storm Sewer Modeling and Overland Flood Route Sizing
All storm sewers and overland flood routes were designed using Bulletin 75 rainfall for northeast Illinois. A composite rational runoff coefficient (C) of 0.71 was used for all tributary areas within the residential portion of the site to be developed. Storm sewers were designed using Manning's equation to determine the flow capacity in the storm network for the 10-YR storm event. A conservative time of concentration of 5 minutes for pavement areas and 5 minutes for lawn areas was used for the storm sewer design. StormCAD was used to ensure that all storm sewers have sufficient capacity and were sized correctly for gravity flow.

Overland flood routes have been designed to provide at least 0.5' of freeboard between adjacent home lowest opening elevations and 100-YR water elevations within the overland channels. A time of concentration of 5 minutes was used for local areas less than 0.5 acres. A conservative time of concentration of 10 minutes was used for all onsite overland paths. Flowmaster was used to calculate water depths in the provided overland flood route cross sections. An emergency 100YR scenario calculation is also provided for the depressed curb downstream of the east emergency overflow weir to ensure that the total 100YR peak inflow to the Basin can be passed safely through this depressed curb. Furthermore, a 100YR critical duration storm event scenario calculation is provided for the curb downstream of the east emergency overflow weir which shows that the total ponding within the street is less than 6", ponding within the driveway is less than 9", and the ponding within pervious areas is less than 1'. Overland flood route and Storm sewer calculations, including the site runoff coefficient have been provided in Tab 4 of this report.

Soil Erosion/Sediment Control Measures
A Stormwater Pollution Prevention Plan (SWPPP) has been created in the Final Engineering Plans in order to protect the existing natural resources located within the general proximity to the project site.

Maintenance & Monitoring Plan
An ongoing stormwater system maintenance plan must be undertaken for the storm water system to operate as designed. Maintenance of the detention basins will be provided by the Homeowners Association. While these systems will be privately maintained, easements will be provided to facilitate maintenance and public access to the system. See Tab 6 for a *Maintenance Plan for New Facilities* for additional considerations and checklists for managing the stormwater systems.

Summary
The proposed stormwater management strategy has been designed to minimize the potential for any adverse stormwater impacts to neighboring and downstream resources and properties, reduce the total peak discharge from the site in the 100-year storm event and meet the criteria of the McHenry County and City of Crystal Lake Stormwater Ordinances.

TAB ONE

Maps and Permits

City of Crystal Lake
STORMWATER MANAGEMENT PERMIT

100 West Woodstock Street
Crystal Lake, IL 60014
(815) 356-3605

For Internal Use Only:
Application No: _____

Property Owner: CalAtlantic Group, LLC
Project Address: Main Street and Berkshire Drive
Owner Address: 1700 East Golf Road, Suite 1100
Schaumburg, IL 60173
Phone: 312-813-0004
Email Address: richard.murphy@lennar.com

Primary Contact: Richard Murphy
Company Name: CalAtlantic Group, LLC
Address: 1700 East Golf Road, Suite 1100
Schaumburg, IL 60173
Phone: 312-813-0004
Email Address: richard.murphy@lennar.com

Project Description: Proposed 20-Building Multi-Family Residential Community

13.20 acre(s) Proposed hydrologically disturbed area

0.38 acre(s) Existing impervious area on development site

6.79 acre(s) Proposed impervious area on development site

Approx 9.7 acre(s) Impervious area on development site before 2005 (Blacktop or gravel per demolition Plat of Survey dated 04/15/2015)

Statement of Authorization (completed by owner only if using a primary contact):

I hereby authorize Richard Murphy (primary contact) to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. This person will act on my behalf as the point of contact for permit correspondence.

Signature: [signature] Date: 12/3/24

Certification (completed by primary contact or by owner if no primary contact):

I declare that this application is true and correct to the best of my knowledge. I realize that the information that I have provided forms the basis for the issuance of the permit and have included all work to be authorized with this permit. I agree to construct said development in compliance with the permitted documents.

Signature: Richard J. Murphy Date: 12/3/24

For internal use only:

Impact to Flood Hazard Area (floodway, floodplain, floodprone area): ☐ Yes ☒ No
Located within the Crystal Lake Watershed: ☐ Yes ☒ No
Will the project impact any wetlands: ☐ Yes ☒ No
Development Classification: ☐ Minor (<20,000 sq ft) ☐ Intermediate (20,000 sq ft to < 1 acre)
☒ Major (> or = to 1 acre) ☐ Mining Development ☐ Public Road Development

A stormwater management permit is hereby issued per the approved plans dated_____

Permit conditions should be referenced per the plan review dated_____

_____ _____
Enforcement Officer Date

If wetlands are impacted, the wetland specialist has reviewed and recommends approval of this stormwater management permit.

_____ _____
Wetland Specialist Date



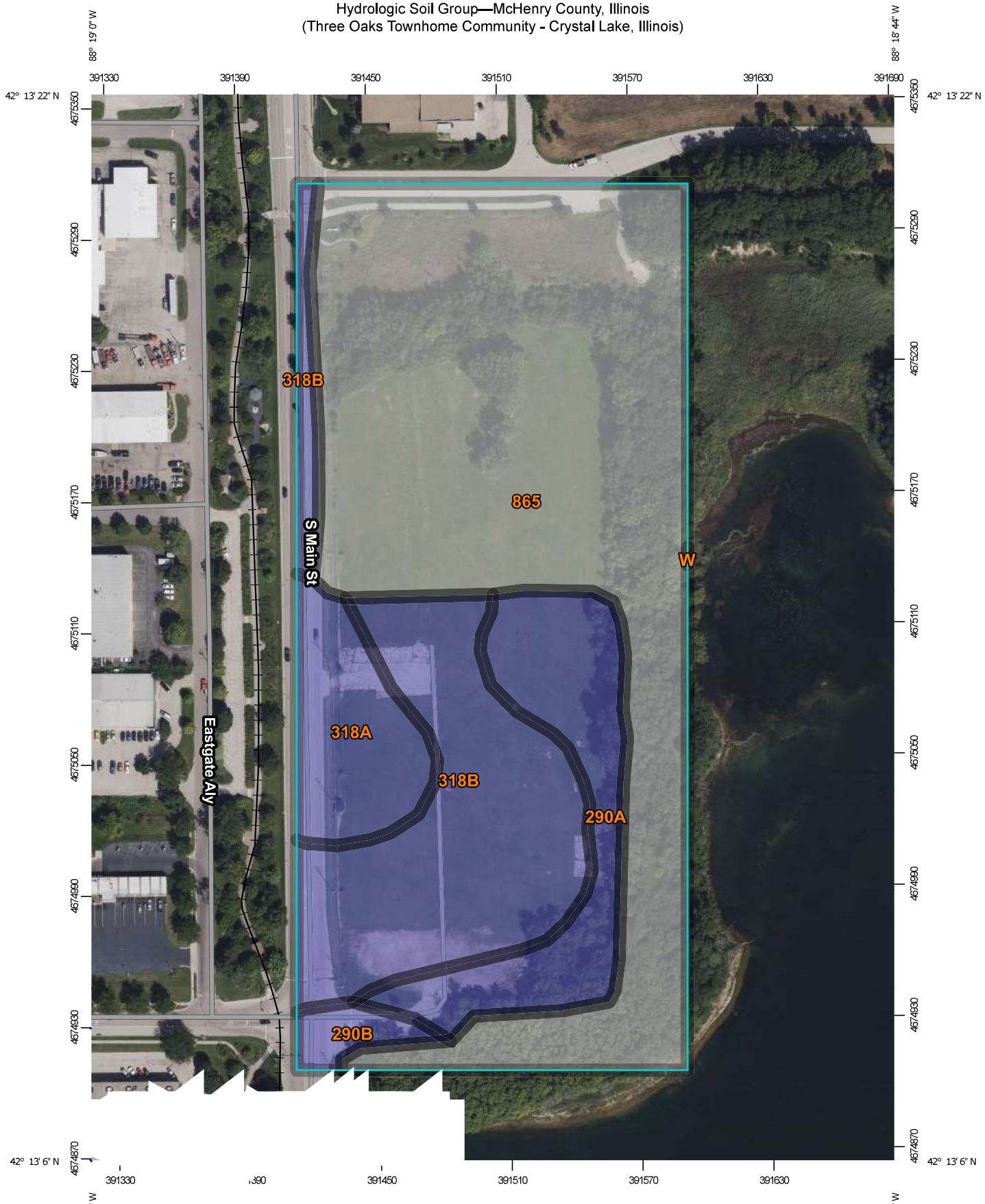
AERIAL LOCATION MAP
NOT TO SCALE

MAIN STREET AND THREE OAKS ROAD
CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

MACKIE CONSULTANTS

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
mackieconsult.com

Hydrologic Soil Group—McHenry County, Illinois
(Three Oaks Townhome Community - Crystal Lake, Illinois)



Map Scale: 1:2,370 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: McHenry County, Illinois
Survey Area Data: Version 19, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2022—Sep 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
290A	Warsaw loam, 0 to 2 percent slopes	B	2.1	11.7%
290B	Warsaw loam, 2 to 4 percent slopes	B	0.3	1.8%
318A	Lorenzo loam, 0 to 2 percent slopes	B	1.3	7.5%
318B	Lorenzo loam, 2 to 4 percent slopes	B	4.0	22.3%
865	Pits, gravel		10.2	56.8%
W	Water		0.0	0.0%
Totals for Area of Interest			**18.0**	**100.0%**

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



December 13, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

FEMA

88°19'15"W 42°13'22"N



88°18'38"W 42°12'55"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/12/2023 at 6:06 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

McHenry County
Crystal Lake
NE Corner Main St. and Three Oaks Road
Section:9-Township:43N-Range:8E
IEPA, MC-4782
New Construction, Three Oaks Townhomes

PLEASE REFER TO: SHPO LOG #016031124

April 4, 2024

Maggie Burke
Mackie Consultants, LLC
9575 W Higgins Road Suite 500
Rosemont, IL 60018

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420, as amended, 17 IAC 4180) to review all state undertakings for their effect on cultural resources. Pursuant to this requirement, we have received information regarding the above referenced project for our comment.

According to the information provided there is no federal involvement in your project. Be aware the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency, then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

Our files do not identify any known historic properties within this proposed project area, nor is it within the high probability area for archaeological resources as defined in the state Act. Accordingly, this project is **EXEMPT** pursuant to Section 6 of the Illinois State Agency Historic Resources Preservation Act. An archaeological survey for your above referenced project is not *required* under Illinois law as there is no public funding and it is not on public land. Please know, however, we are always receptive to reviewing the results of any due diligence survey coverages that may help prevent unanticipated discoveries during construction.

This does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440).

If further assistance is needed please contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: Mackie Consultants, L.L.C.
Contact: Maggie Burke
Address: 9575 W Higgins Road
Suite 500
Rosemont, IL 60018

IDNR Project Number: 2407932
Date: 12/13/2023
Alternate Number: 4782

Project: Three Oaks Townhomes
Address: Main Street and Three Oaks Road, Crystal Lake

Description: The project site is approximately 10.1 acres of raw land to be developed into urban townhomes in Crystal Lake, IL.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Consultation is terminated. This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: McHenry

Township, Range, Section:
43N, 8E, 8
43N, 8E, 9



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Permits Section
Post Office Box 19276
Springfield, Illinois 62794 -9276

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Traffic Impact Study

Proposed Townhouse Development
Waterside at Three Oaks
Crystal Lake, Illinois

December 3rd, 2024

Prepared For:

Prepared by:

David W Westergreen, EIT

Daniel P Brinkman, PE, PTOE

GHA GEWALT HAMILTON ASSOCIATES, INC.

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact Study (TIS) for the proposed townhomes to be constructed at the presently vacant lot northeast of the intersection between Main Street and Berkshire Drive. Per the September 13, 2024, Overall Site Plan prepared by Mackie Consultants, LLC, 107 townhomes are proposed to be constructed on the approximately 13.5-acre subject site located in Crystal Lake, Illinois. Access to the site is proposed via the existing east leg of the signalized Berkshire Drive intersection, utilizing the full-movement access, and a right-in, right-out (RIRO) drive located north of Berkshire Drive along Main Street. Driveways and garages are proposed for each townhome for parking vehicles, and visitor parking is provided.

Several references are made to a previous study conducted by GHA on behalf of the City for the redevelopment of Crystal Court located northeast of the subject site. The latest study for the redevelopment (now called Water's Edge) is dated May 22, 2024.

The following summarizes our findings and provides various recommendations for your consideration. *Appendices* referenced are in the Technical Addendum at the end of this document.

Part II. Background Information

Site Location Map and Roadway Inventory

Exhibit 1 provides a site location map. The existing traffic operations in the site area are illustrated on ***Exhibit 2***. ***Appendix A*** provides a photo inventory of operations along the site frontage. Pertinent comments to the adjacent roadways include:

Main Street

- Main Street is a north-south Minor Arterial under the jurisdiction of the City of Crystal Lake.
- Along the site frontage, Main Street provides two travel lanes in each direction separated by a wide (±18-foot), flush median that also becomes a raised median northwest of the proposed site access.
- Main Street has a posted speed limit of 35 miles per hour (mph) in the vicinity of the site.
- Separate northbound and southbound left turn lanes are provided at the signalized intersection with Berkshire Drive, and a southbound left turn lane is provided at the unsignalized intersection with Three Oaks Recreational Area Drive.
- The Annual Average Daily Traffic (AADT), year 2021, on Main Street was 14,200 vehicles per day.

Berkshire Drive

- Berkshire Drive is an east-west Major Collector under the jurisdiction of the City of Crystal Lake.
- Berkshire Drive provides one travel lane in each direction separated by a ±12-foot flush median.
- Berkshire Drive provides a left turn lane in both directions at the signalized intersection with Main Street. The eastbound left turn lane continues west of the intersection and also serves Eastgate Road.
- Berkshire Drive has a posted speed limit of 30 mph.
- The Annual Average Daily Traffic (AADT), year 2021, on Berkshire Drive was 2,150 vehicles west of Main Street.

Three Oaks Recreation Area Drive

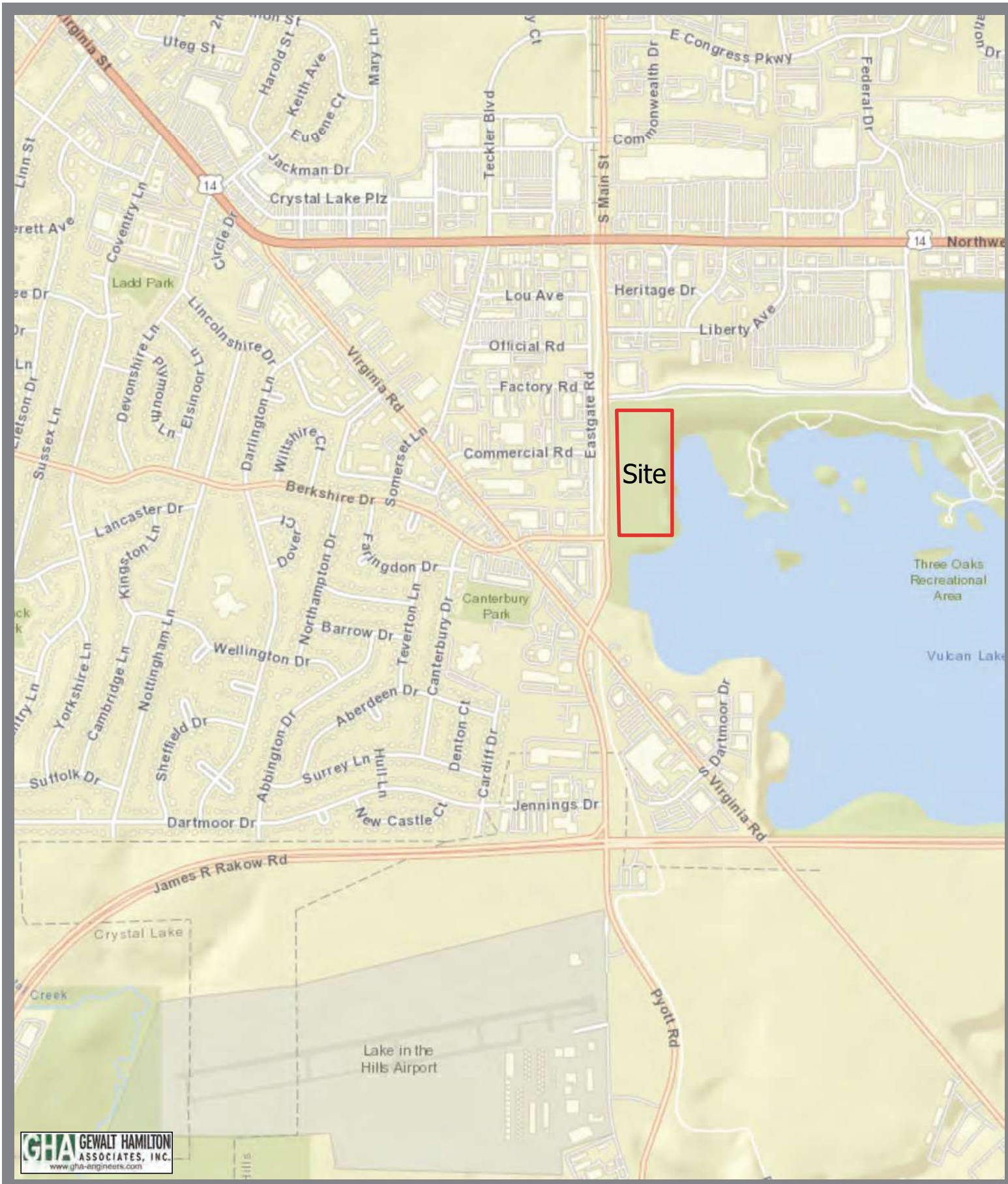
- Three Oaks Recreation Area Drive is an east-west local roadway that intersects Main Street approximately 1,250 feet north of the intersection with Berkshire Drive.
- Three Oaks Recreation Area Drive is limited to right and left turns and provides both right and left turn lanes at its Stop-Controlled intersection with Main Street.
- The posted speed limit along Three Oaks Recreation Area Drive is 20 MPH.
- There is no posted AADT for Three Oaks Recreation Area Drive.

Pedestrian Facilities

- Prairie Trail travels north and southbound within the site vicinity as sidewalk west of Main Street. A crosswalk is provided at the west leg of the intersection of Main Street and Berkshire Drive on the west leg.
- A sidewalk is provided both north and south of Berkshire Drive, but no crosswalk is provided across Main Street at the signalized intersection with Main Street.
- A sidewalk is provided along the south side of Three Oaks Recreation Area Drive and continues east of the site. A crosswalk is provided along the east leg of the Three Oaks Recreation Area Drive intersection with Main Street
- A crosswalk is provided across Main Street at Three Oaks Recreation Area Drive along the south leg, with Rectangular Rapid Flashing Beacons and pushbuttons provided to stop north and southbound traffic.

Transit

- There are no active PACE routes along Main Street.



GHA GEWALT HAMILTON ASSOCIATES, INC.
www.gha-engineers.com

1 inch = 1,500 Feet

Exhibit 1 - Location Map

Proposed Waterside at Three Oaks Townhomes
Main Street at Berkshire Drive
Crystal Lake, IL

Map Center: 88.31888°W 42.21628°N



GEWALT HAMILTON ASSOCIATES, INC.

N

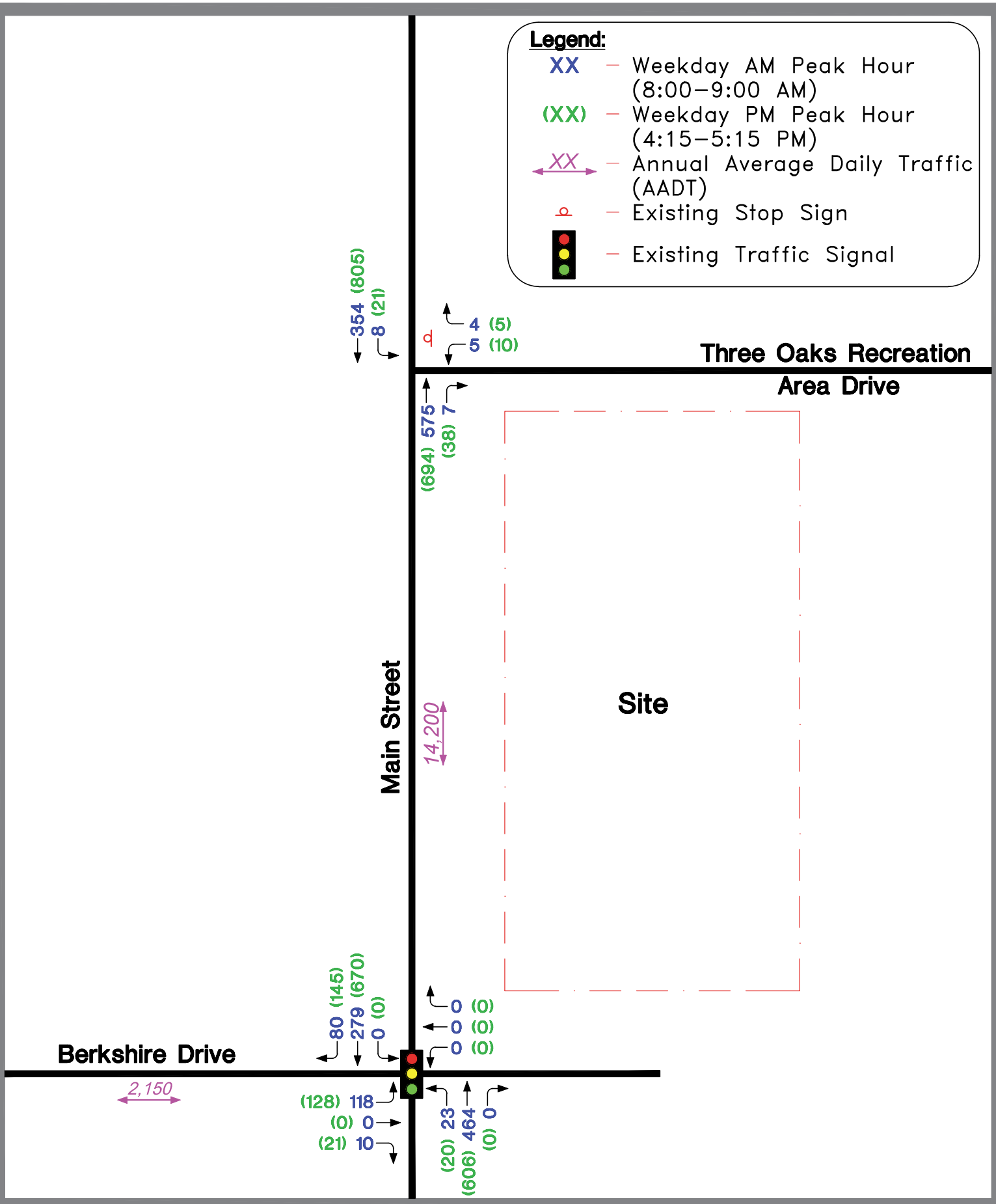
Not to Scale

Exhibit 2
Existing Traffic Operations

Existing Traffic

Exhibit 3 summarizes the existing weekday morning and evening peak hour traffic volumes. Peak period traffic turning movement counts were conducted by GHA on Thursday, November 14, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the Main Street intersection with Berkshire Drive. The observed weekday morning and evening peak hours occurred from 8:00 to 9:00 AM, and from 4:15 to 5:15 PM respectively. Peak Hour counts conducted by GHA for the Traffic Impact Study for the Water's Edge development at the Main Street intersection with Three Oaks Recreation Area Drive were also referenced and combined with the 2024 data. *Exhibit 3* also provides the year 2021 Annual Average Daily Traffic (AADT) volume (24-hour volume) along Main Street and Berkshire Drive as published by IDOT on their website: www.gettingaroundillinois.com.

No unusual activities (e.g., roadway construction, or inclement weather) were observed during our counts that would be expected to impact traffic volumes or travel patterns in the vicinity. Traffic Count Summaries can be found in ***Appendix B***.



GHA GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 3
Existing Traffic

Sources: 1) GHA November, 2024 2) IDOT 2021 AADT

Crash Analysis

Crash data was obtained from the IDOT Division of Transportation and Safety for the last five calendar years, 2019 through 2023. A summary of the crash data is provided in ***Table 1*** with the locations mapped on the exhibit contained in ***Appendix C***.

Table 1: Crash Summary (2019-2023) [A]

Location	No. of Crashes	PD	Severity[A]			F	Crash Type[B]									Percent Wet / Icy
			A	B	C		A	FO	FTF	FTR	SS	T	PED	BIKE	O	
Intersections (Crashes within 250 ft of Intersection)																
Main Street at Three Oaks Rec Area Dr	2	1	0	0	1	0	-	1	-	-	-	1	-	-	-	50%
Main Street at Berkshire Drive	9	8	0	1	0	0	-	1	-	2	3	2	-	1	-	11%
Total =	11	9	0	1	1	0	0	2	0	2	3	3	0	1	0	18%

[A] PD=Property Damage Only, A=Type A (incapacitating injury), B=Type B (non-incapacitating injury), C=Type C (possible injury), F= Fatal Injury

[B] A=Angle, FO=Fixed Object, FTF=Front-to-Front, FTR=Front-to-Rear, SSD=Sideswipe Same Direction, T=Turning, PED=Pedestrian, BIKE=Pedacyclist, O=Other

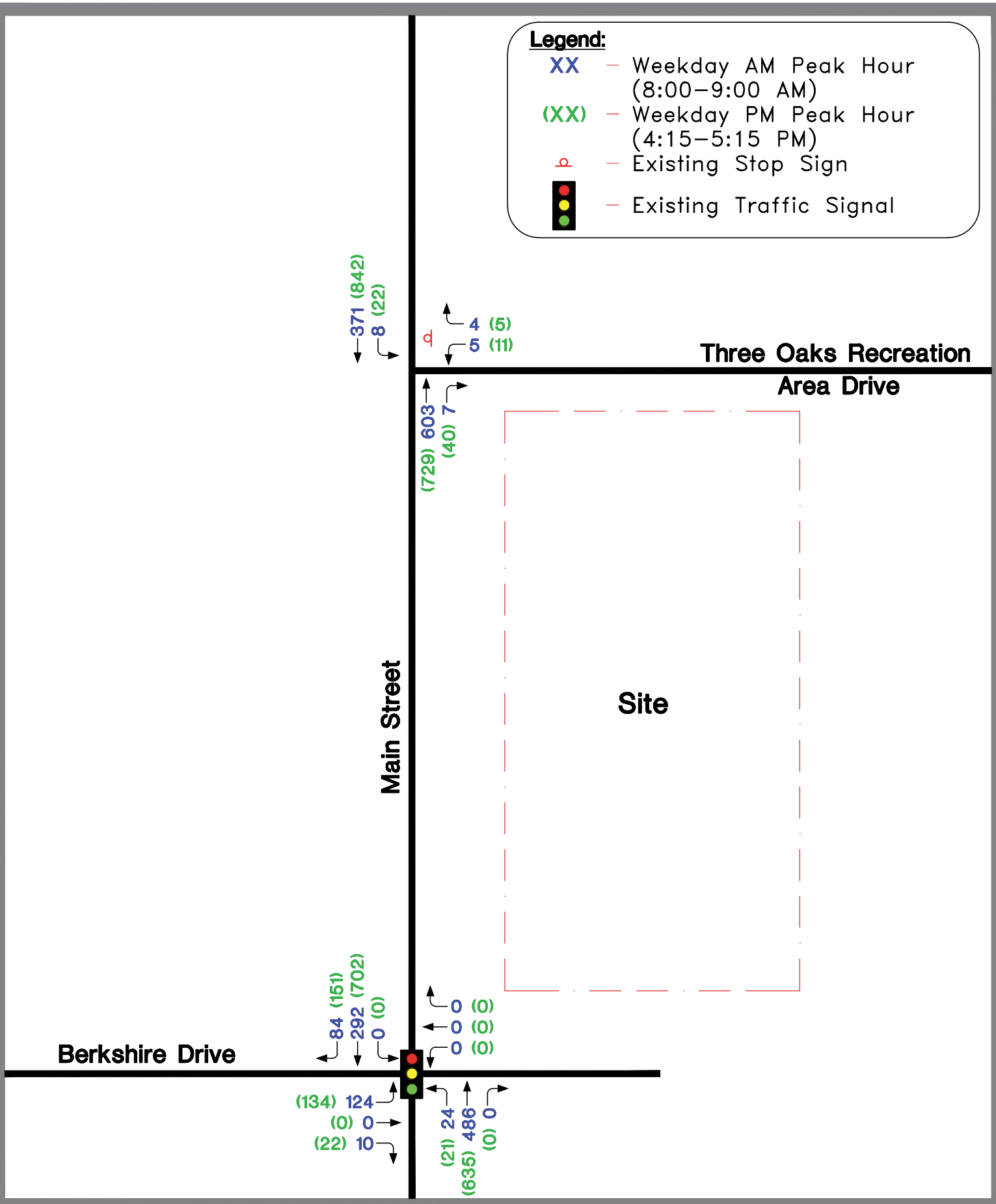
As shown in Table 1, the intersection of Main Street at Berkshire Drive experienced the highest number of crashes within the study area over the five-year analysis period, with an average of approximately 2 crashes per year. Approximately 89 percent (8 of 9) of the crashes involved property damage only and 33 percent (3 of 9) were rear-end collisions. Turning and Front-To-Rear crashes both accounted for 22 percent (2 of 9) crashes at this intersection.

Additionally, the intersection of Main Street and Three Oaks Recreation Area Drive experienced the next highest number of crashes with an average of approximately 1 crash every 2.5 years. The two crash types were a turning movement crash and a fixed object crash, and the fixed object crash was a Type-C Injury crash.

The lone injury crash at the Main Street and Berkshire Drive intersection was a Type-B injury Pedalcyclist crash. No pedestrian crashes at the RRFB crossing of Main Street at Three Oaks Recreation Area Drive were reported in the five-year analysis period.

No-Build Traffic

Traffic growth in the area is a function of expected land development in the region. Future traffic volume conditions were developed for the year 2032, for consistency with previous analyses completed for the Water's Edge development. Based on the historical Chicago Metropolitan Agency for Planning (CMAP) 2050 projections provided to GHA for Water's Edge (see ***Appendix D***), traffic volumes along the roadways surrounding the site are assumed to experience an overall annual compounded growth rate of approximately 0.60% per year. Accordingly, the 2032 No-Build peak hour traffic volumes (see ***Exhibit 4***) were developed by applying the predicted growth to existing traffic.



GEWALT HAMILTON ASSOCIATES, INC.

N

Not to Scale

Exhibit 4
Year 2032 No-Build Traffic

Part III. Traffic Evaluation

Future Site Characteristics

Proposed Development Plan

Lennar Corporation proposes to construct a townhouse development on the approximately 13.5-acre subject site located on the northeast corner of the Main Street and Berkshire Drive intersection in Crystal Lake, Illinois. The project is proposing to construct 20 buildings featuring 107 townhouse units, with garage parking and park areas within the complex. Access to the site is proposed to utilize the existing east leg of the signalized Berkshire Drive intersection with Main Street. Additional access to the site is proposed via a right-in, right-out (RIRO) drive to be located approximately 1,000 feet north of the Main Street and Berkshire Drive intersection, and approximately 250 feet south of the Main Street and Three Oaks Recreation Area Drive intersection. There is no proposed site access onto Three Oaks Recreation Area Drive.

The proposed dimensions are illustrated on ***Exhibit 5.***

The September 13, 2024, Overall Site Plan is provided in ***Appendix E***.

Trip Generation

Table 2 summarizes the traffic generation calculations for the proposed development. Trip generation rates published by the Institute of Transportation Engineers (ITE) in the 11th Edition of the Manual *Trip Generation* were used to determine the anticipated traffic generated by the proposed development of 107 townhomes. As can be seen in ***Table 2*** the proposed townhouse development is expected to generate approximately 60 trips (combined inbound and outbound) during each of the Peak Hours and 762 trips (again inbound and outbound total) in a 24-hour period.

See ***Appendix F*** for excerpts of the ITE manual.

Table 2: Trip Generation Calculations

Land Use	Size	ITE Code	Weekday Peak Hours						Daily		
			Morning 8:00-9:00 AM			Evening 4:15-5:15 PM					
			In	Out	Sum	In	Out	Sum	In	Out	Sum
Townhouse Developoment	107 DU	220	13	43	56	42	21	63	381	381	762
New Trips			**13**	**43**	**56**	**42**	**21**	**63**	**381**	**381**	**762**

Sources:ITE Trip Generation Manual, 11th Edition - See Appendix F

Trip Distribution

Table 3 provides the anticipated distribution of site traffic. This was based on existing site travel patterns, proposed access, and the operational characteristics of the adjacent street system.

Table 3: Trip Distribution

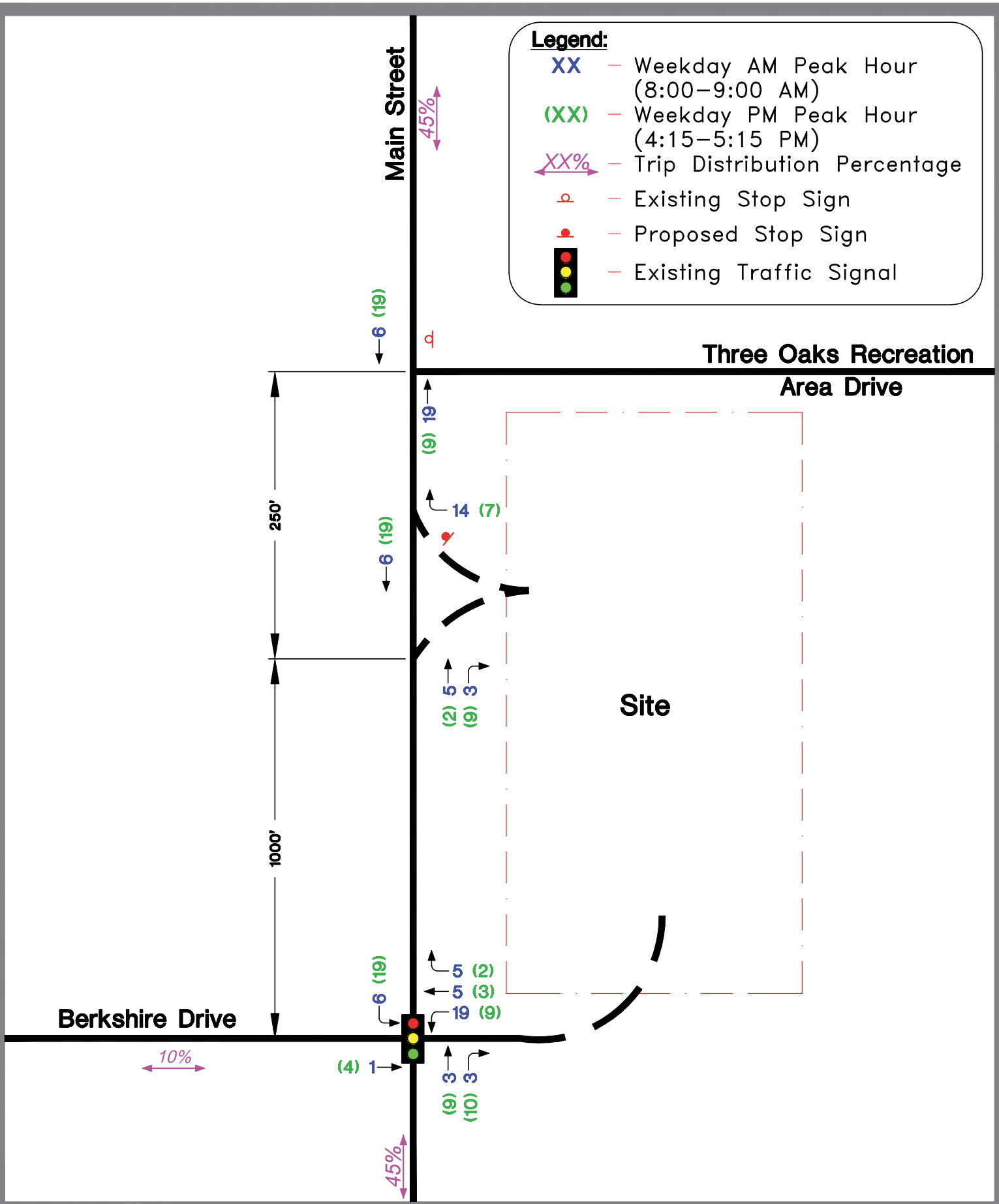
Route & Direction	Percent Route To/From Site
Main Street	
North of Three Oaks Rec Area Dr	45%
South of BerkshireDrive	45%
Berkshire Drive	
West of Main Street	10%
Three Oaks Rec Area Drive	
East of Main Street	0%
Totals =	***100%***

Traffic usage of the area roadway network is also illustrated on ***Exhibit 5.*** As can be seen, the majority of Peak Hour development traffic is expected to be oriented along Main Street with limited use of Berkshire Drive and little to no use of Three Oaks Recreation Area Drive.

Site and Total Traffic Assignments

Exhibit 5A illustrates the site traffic assignments for the development's trips, which is based on the traffic characteristics summarized in *Tables 2 and 3* (traffic generation and trip distribution) and assigned to the area roadways. ***Exhibit 5B*** illustrates site traffic associated with the Water's Edge development to the northeast (See ***Appendix G***) for an excerpt from the previous study. Therefore, we have considered the total impacts of the buildout of both proposed developments for the year 2032.

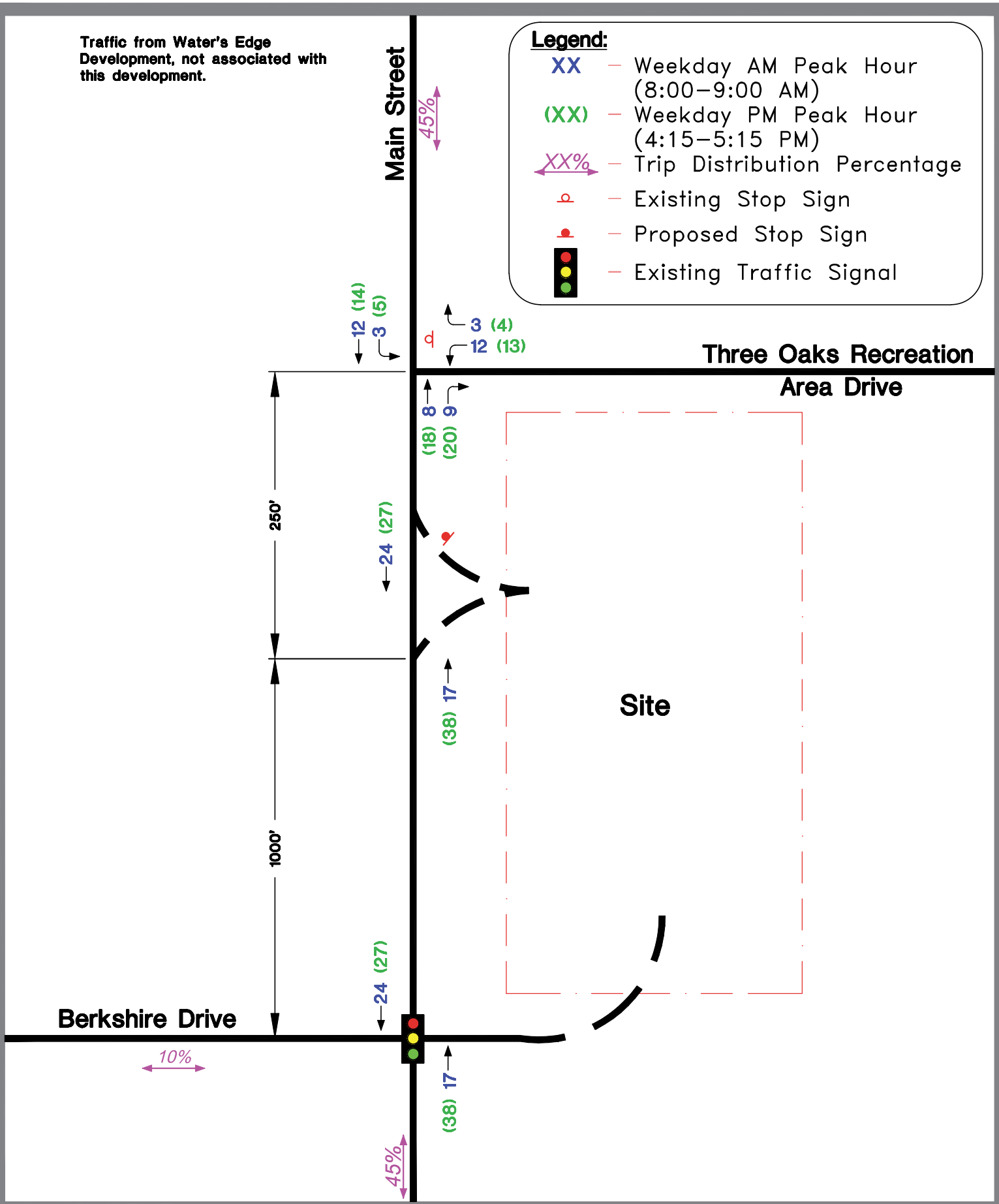
The site traffic (***Exhibits 5A and 5B***) and the 2032 No-Build traffic (***Exhibit 4***) were combined to produce the 2032 Total traffic, which is illustrated on ***Exhibit 6.***



GEWALT HAMILTON ASSOCIATES, INC.

Not to Scale

Exhibit 5A
Site Traffic

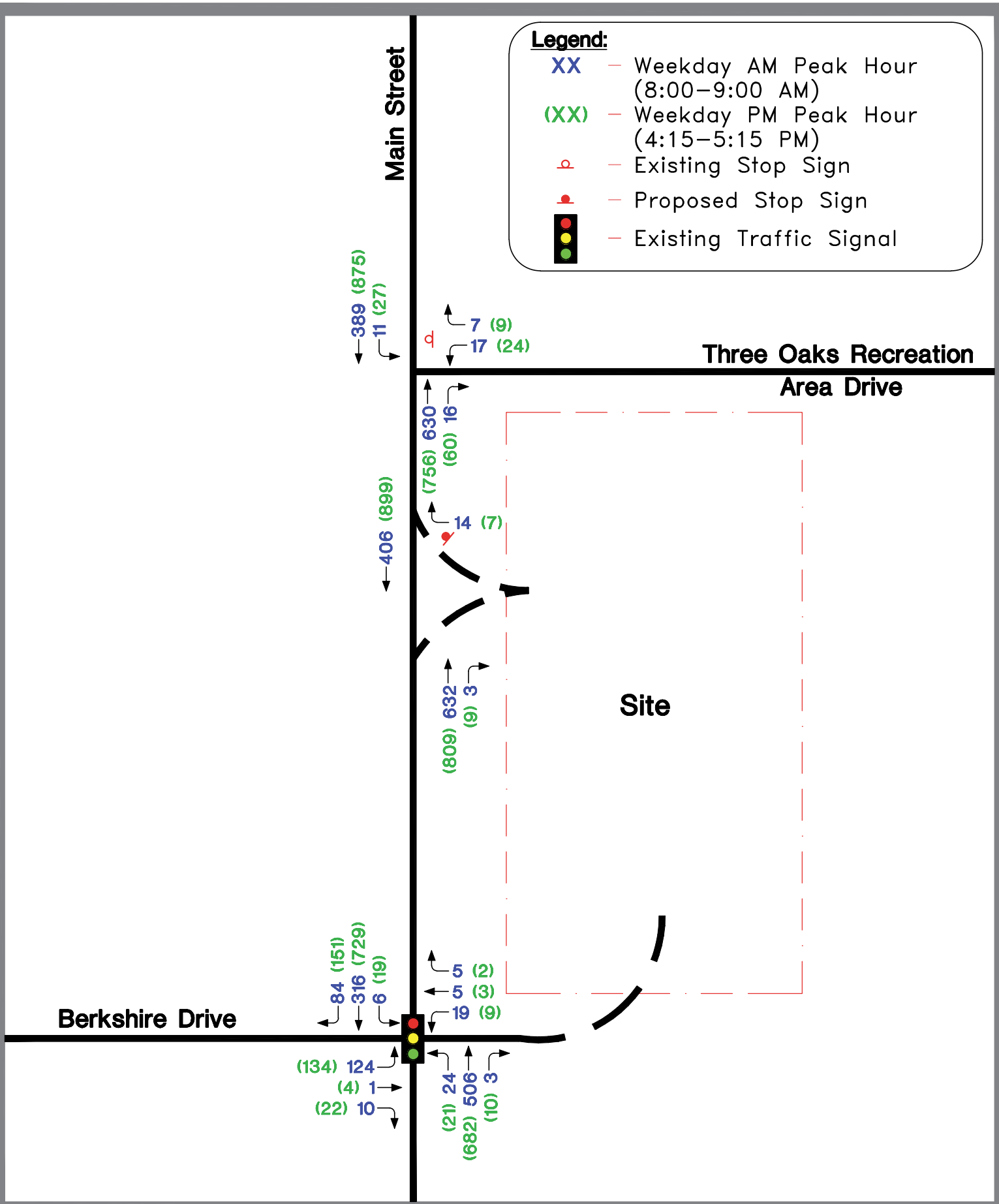


GHA GEWALT HAMILTON ASSOCIATES, INC.

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Not to Scale

Exhibit 5B
Water's Edge Traffic



GEWALT HAMILTON ASSOCIATES, INC.

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Not to Scale

Exhibit 6
Year 2032 Total Traffic

Capacity Analysis

Capacity analyses are a standard measurement that identifies how an intersection operates. They are measured in terms of Level of Service (LOS). The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels of Service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. Since the level of service is a function of the traffic flows placed upon it, the facility may operate at a wide range of levels of service, depending on the time of day, day of week or period of year. A description of the operating condition under each level of service, based on the analysis parameters as published in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM), Seventh Edition, is provided in ***Table 4***.

Table 4: Level of Service (LOS) Summary

LOS	Description	Delay (sec/veh)	
		Traffic Signal	Stop Sign
A	Describes conditions with little to no delay to motorists.	<10	< 10
B	Represents a desirable level with relatively low delay to motorists.	>10 and < 20	>10 and < 15
C	Describes conditions with average delays to motorists.	>20 and < 35	>15 and < 25
D	Describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.	>35 and < 55	>25 and < 35
E	Represents operating conditions with high delay values. This level is often considered within urban settings or for minor streets intersecting major arterial roadways to be the limit of acceptable delay.	>55 and < 80	>35 and < 50
F	Is unacceptable to most drivers with high delay values that often occur, when arrival flow rates exceed the capacity of the intersection.	>80	>50

Capacity analyses were performed using the methodologies outlined in the HCM, for the following scenarios:

- *Existing Traffic* –Existing traffic (year 2024),
- *No-Build Traffic* – Future (non-site, year 2032) traffic with background growth, and
- *Total Traffic* – Future No-Build traffic volumes (year 2032) plus the addition of the site generated traffic, as well as Water's Edge Site generated traffic.

2032 Total traffic conditions assume the following:

- Traffic exiting the RIRO access will be under Stop Sign control.
- Water's Edge development will be completed, and the proposed traffic from that development will be added to Main Street as estimated in the prior Traffic Impact Study conducted by GHA.

Table 5 summarizes the intersection capacity and queue analysis results.

Table 5: Level-of-Service Summary

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement												Overall Intersection
			Eastbound			Westbound			Northbound			Southbound			
1. Main Street at Berkshire Drive		**Traffic Signal**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
AM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**D**	**D**	**<**	**-**	**-**	**-**	**A**	**A**	**-**	**-**	**A**	**A**	**A**
		• Delay	54.4	50.2	-	-	-	-	2.4	2.2	-	-	4.1	4.2	9.7
		• 95th Queue Length (ft)	190	15	-	-	-	-	4	41	-	-	59	56	-
		• Approach LOS (Delay)	**D (54.1)**			**-**			**A (2.2)**			**A (4.2)**			-
	B. 2032 No-Build Traffic (See Exhibit 4)	• LOS	**D**	**D**	**<**	**-**	**-**	**-**	**A**	**A**	**-**	**-**	**A**	**A**	**A**
		• Delay	54.1	49.8	-	-	-	-	2.5	2.3	-	-	4.3	4.4	9.8
		• 95th Queue Length (ft)	197	15	-	-	-	-	4	45	-	-	64	61	-
		• Approach LOS (Delay)	**D (53.8)**			**-**			**A (2.3)**			**A (4.4)**			-
	C. 2032 Total Traffic (See Exhibit 6)	• LOS	**D**	**D**	**<**	**D**	**E**	**<**	**A**	**A**	**A**	**A**	**A**	**A**	**B**
		• Delay	54.7	51.2	-	53.1	56.1	-	5.3	7.1	7.1	6	7.5	7.5	13.4
		• 95th Queue Length (ft)	178	28	-	29	16	-	9	122	121	2	103	97	-
		• Approach LOS (Delay)	**D (54.2)**			**D (54.2)**			**A (7.0)**			**A (7.5)**			-
PM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	**D**	**D**	**<**	**-**	**-**	**-**	**A**	**A**	**-**	**-**	**A**	**A**	**A**
		• Delay	54.1	49.8	-	-	-	-	2.6	2.2	-	-	4.6	4.7	8.3
		• 95th Queue Length (ft)	197	15	-	-	-	-	3	44	-	-	125	118	-
		• Approach LOS (Delay)	**D (53.8)**			**-**			**A (2.2)**			**A (4.7)**			-
	B. 2032 No-Build Traffic (See Exhibit 4)	• LOS	**D**	**D**	**<**	**-**	**-**	**-**	**A**	**A**	**-**	**-**	**A**	**A**	**A**
		• Delay	54.5	50.8	-	-	-	-	2.8	2.3	-	-	4.9	4.2	8.5
		• 95th Queue Length (ft)	187	29	-	-	-	-	3	49	-	-	138	129	-
		• Approach LOS (Delay)	**D (53.9)**			**-**			**A (2.3)**			**A (4.9)**			-
	C. 2032 Total Traffic (See Exhibit 6)	• LOS	**D**	**D**	**<**	**D**	**E**	**<**	**A**	**A**	**A**	**A**	**A**	**A**	**B**
		• Delay	48.4	48.2	-	54.4	55.9	-	5.8	7.7	7.7	5.4	8.4	8.5	12.0
		• 95th Queue Length (ft)	175	33	-	12	7	-	6	153	152	6	210	199	-
		• Approach LOS (Delay)	**D (48.4)**			**D (55.0)**			**A (7.7)**			**A (8.4)**			-

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
2. Main Street at 3 Oaks Rec Area Drive		**TWSC - WB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	-	-	-	C	-	B	-	-	-	A	-	-
		• Delay	-	-	-	18.6	-	10.5	-	-	-	9.0	-	-
		• 95th Queue Length (ft)	-	-	-	3	-	0	-	-	-	0	-	-
		• Approach LOS (Delay)		-			B (15.0)			-			A (9.0)	
	B. 2032 No-Build Traffic (See Exhibit 4)	• LOS	-	-	-	C	-	B	-	-	-	A	-	-
		• Delay	-	-	-	19.5	-	10.7	-	-	-	9.1	-	-
		• 95th Queue Length (ft)	-	-	-	3	-	0	-	-	-	0	-	-
		• Approach LOS (Delay)		-			C (15.6)			-			A (9.1)	
	C. 2032 Total Traffic (See Exhibit 6)	• LOS	-	-	-	C	-	B	-	-	-	A	-	-
		• Delay	-	-	-	21.9	-	10.9	-	-	-	9.3	-	-
		• 95th Queue Length (ft)	-	-	-	8	-	0	-	-	-	0	-	-
		• Approach LOS (Delay)		-			C (18.7)			-			A (9.3)	
PM Peak	**A. Existing Traffic (See Exhibit 3)**	• LOS	-	-	-	D	-	B	-	-	-	A	-	-
		• Delay	-	-	-	26.5	-	10.8	-	-	-	9.3	-	-
		• 95th Queue Length (ft)	-	-	-	5	-	0	-	-	-	3	-	-
		• Approach LOS (Delay)		-			C (21.3)			-			A (9.3)	
	B. 2032 No-Build Traffic (See Exhibit 4)	• LOS	-	-	-	D	-	B	-	-	-	A	-	-
		• Delay	-	-	-	28.8	-	11.0	-	-	-	9.4	-	-
		• 95th Queue Length (ft)	-	-	-	5	-	0	-	-	-	3	-	-
		• Approach LOS (Delay)		-			C (23.2)			-			A (9.4)	
	C. 2032 Total Traffic (See Exhibit 6)	• LOS	-	-	-	D	-	B	-	-	-	A	-	-
		• Delay	-	-	-	34.5	-	11.2	-	-	-	9.6	-	-
		• 95th Queue Length (ft)	-	-	-	15	-	0	-	-	-	3	-	-
		• Approach LOS (Delay)		-			D (28.2)			-			A (9.6)	

Table 5: Level-of-Service Summary (cont.)

Intersection / Timeframe		Roadway Conditions	Movement Group By Approach > = Shared Lane - = Non Critical or Not Allowed Movement											
			Eastbound			Westbound			Northbound			Southbound		
3. Main Street at Site Entrance		**TWSC - WB Stop**	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
AM Peak	**C. 2032 Total Traffic (See Exhibit 6)**	• LOS	**-**	**-**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**-**
		• Delay	-	-	-	-	-	14.1	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	3	-	-	-	-	-	-
		• Approach LOS (Delay)		**-**			**B (14.1)**			**-**			**-**	
PM Peak	**C. 2032 Total Traffic (See Exhibit 6)**	• LOS	**-**	**-**	**-**	**-**	**-**	**B**	**-**	**-**	**-**	**-**	**-**	**-**
		• Delay	-	-	-	-	-	15.0	-	-	-	-	-	-
		• 95th Queue Length (ft)	-	-	-	-	-	3	-	-	-	-	-	-
		• Approach LOS (Delay)		**-**			**B (15.0)**			**-**			**-**	

Capacity analysis summary printouts are provided in ***Appendix H***.

The following summarizes the findings of the Capacity Analyses.

Main Street at Berkshire Drive

Overall, the intersection operates at LOS A during both peak hours under the existing and No Build Conditions but deteriorates to LOS B during the total traffic future condition. The eastbound and westbound movements in the Year 2032 total traffic scenario experience LOS D and LOS E delays, but this is a common occurrence for side roads entering an arterial. The overall delay increase due to the townhome development is negligible. The queues for the eastbound left turn onto Main Street from Berkshire Drive do queue past the adjacent intersection with Eastgate Road in the existing condition, but the eastbound left turn queues are expected to improve upon the construction of the development and the associated traffic signal operation modifications. Those queues are expected to clear after one cycle.

Main Street at Three Oaks Recreation Area Drive

Left Turn movements exiting Three Oaks Recreation Area Drive are anticipated to operate at LOS C during the morning peak hour and LOS D during the evening peak hour under all three conditions. With the proposed traffic from the site and the Water's Edge site development to the northeast, delay and queues increase, but the overall impact on the intersection is minimal.

Main Street at RIRO Site Access Drive

A new limited (RIRO) movement access is proposed at the northwestern end of the site. All movements are expected to operate at or above LOS B.

Part IV. Recommendations and Conclusions

Analyses have been conducted under existing and future conditions to determine the impact from the proposed townhouse development on the study area intersections. The capacity analysis results indicate that the increase in project site-generated traffic has little to no effect upon the Peak Hour operations of the area roadway network with the recommendations contained herein:

- Exiting traffic at the RIRO access will operate under Stop Sign control.
- The proposed crosswalk with pedestrian signal head upgrades on the north leg of the intersection of Main Street and Berkshire Drive should remain as part of the townhouse development.

Part V. Technical Addendum

The following Appendices were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

Appendices

A. Photo Inventory
B. Traffic Count Summaries
C. Crash Summary Map
D. Water's Edge CMAP Traffic Projections
E. September 13, 2024, Site Plan
F. ITE Trip Generation Manual Excerpts
G. May 22, 2024 Water's Edge Site Traffic Excerpt
H. Capacity Analysis Worksheets

6096.905 Waterside at 3 Oaks TIS.docx

Agenda Item No: 11

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: REPORT OF THE PLANNING & ZONING COMMISSION

Request: Final Planned Unit Development Amendment to allow changes to the site plan and exterior facade

Chris Hansen, architect
100 N. Virginia Street

PZC Recommendation: To deny the petitioner's request

City Council Discretion: A) To deny the petitioner's request.
B) To approve the amended request for a Final Planned Unit Development Amendment to allow changes to the site plan and exterior façade at 100 N. Virginia Street subject to the recommended conditions of approval.
C) To refer the amended petition to the Planning and Zoning Commission for reconsideration.

Staff Contact: Kathryn Cowlin, Director of Community Development
Elizabeth Maxwell, City Planner

Background:

- Request: The petitioner is requesting a Final Planned Unit Development Amendment to allow an increase in the hard surface coverage and changes to the site layout and elevations.
- Land Use: The land use map shows the area as Office. This is an appropriate land use designation for the Health Department and Animal Control building.
- Zoning: The site is zoned W, Watershed and subject to a settlement agreement. Watershed allows development through a Planned Unit Development approval.
- Previous Approvals: In 1993, the State Farm building was constructed per the approved plans at the maximum 68,000 square feet of hard-surface coverage. The Settlement Agreement set the minimum coverage of 68,000 square feet and an additional 19,000 square feet for the parcel to the north.

- The petitioners presented a revised site plan and elevations for the additions to the Planning and Zoning Commission. The new exterior material is a fiber cement board. The Commission had concerns over the look as it is not a traditional masonry product.

PZC Highlights:

The following discussion took place during the Planning and Zoning Commission hearing:

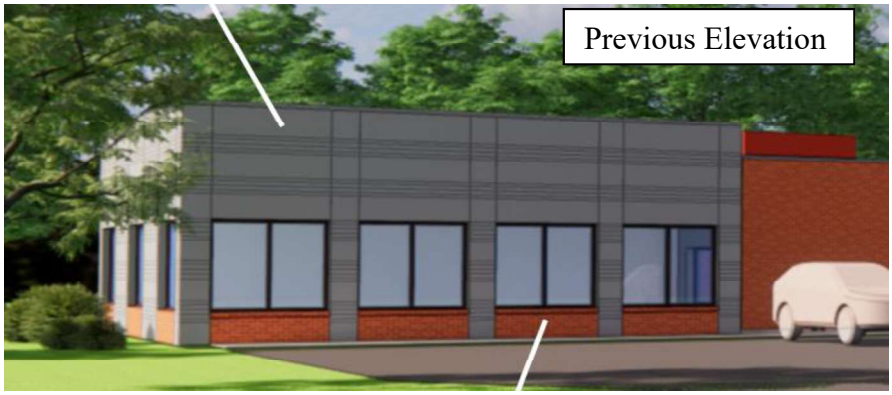
- The PZC was supportive of the revised site layout and the additional parking.
- The commission had concerns with the material on the front facades. They were not supportive of the fiber cement board and felt it looked affordable and warehouse-like. They voted to deny the petition because of the architecture.

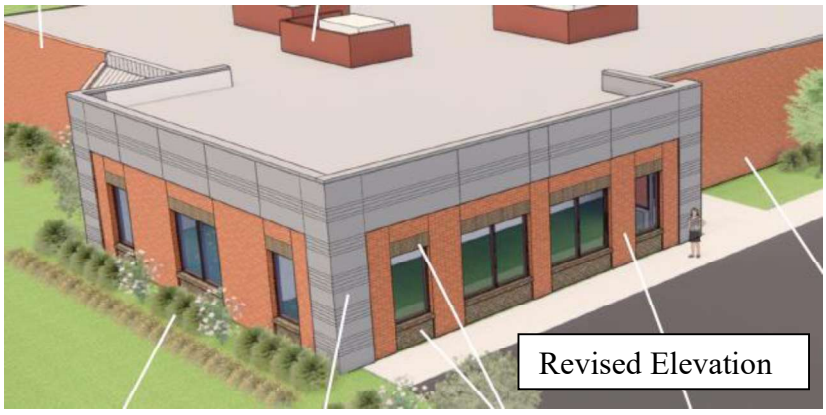
The Planning and Zoning Commission recommended **denial (7-0)** of the petitioner's request.

Architectural Changes since the PZC Hearing:

The petitioner has made changes to the elevations to address the concerns. The north and east elevations now meet the minimum 60% traditional masonry requirement.

- The brick has been extended around the windows on both the north and east elevations.
- The new Animal Control addition, on the north elevation, will be all brick, leaving small EIFS panels as accents above the windows.
- Darker brick accents are added above and below the new windows.
- The east elevation is now at 75% masonry from the 53.8%.
- The north elevation is now at 64.6% masonry from the 48.2%.





Should the City Council chose to approve the petitioner's request the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (McHenry County, received 12/19/24)
   B. Site Plan (Kluber, Inc., dated 09/24/24, received 12/26/24)
   C. Landscape Plan (Kluber, Inc., dated 10/17/24, received 12/26/24)
   D. Elevations (Kluber, Inc., undated, received 01/27/25)
   E. Narrative Letter (Kluber, dated 01/27/25, received 01/27/25)
   F. Engineering Plans (Kluber, Inc., dated 09/24/24, received 12/26/24)
   G. Impervious Exhibit (Kluber, Inc. dated 12/16/24, received 12/23/24)

~~2. Architecture~~
   A. ~~At least 60% of the building shall be traditional masonry like brick or stone. Amend the façade to utilize brick or stone rather than siding~~. **Amended by Staff as the elevations now comply**

3. Landscape
   A. All proposed landscape areas and existing landscape beds adjacent to the building or foundation base landscape, shall contain a mixture of evergreen bushes and flowers. No more than 10% of landscape areas can be non-living material, such as mulch. Work with staff to add additional materials to be sure to comply with landscape requirements.
   B. Landscape areas shall be modified to meet the Watershed Ordinance requirements to install water quality treatment measures including rain gardens and/or bio-swales.

4. Petitioner shall provide documentation that the detention basin is adequate to handle the increased hard-surface, as well as existing hard-surface allowed by the Settlement Agreement.

5. The petitioner must address all of the review comments and requirements of the Fire, Engineering, Public Works, and Community Development Departments.

Votes Required to Pass: A super majority vote (5 votes)

Acknowledgement Form

Regarding the Final Planned Unit Development Amendment for the McHenry County Health Building and Animal Control, please check one of the choices and sign below.

☒ I hereby acknowledge that I have read, understand, and agree to the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable).

☐ I hereby acknowledge that I have read, understand, and agree to most of the staff review comments and recommended conditions contained in the staff report, city staff reviews, and consultant reviews (if applicable) but have concerns with the following items:

_____

_____

Petitioner's Name: _____ Date: 1-27-25
Signature
KLUBER INC. ON BEHALF OF MCHENRY COUNTY.

Recommended Conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (McHenry County, received 12/19/24)
   B. Site Plan (Kluber, Inc., dated 09/24/24, received 12/26/24)
   C. Landscape Plan (Kluber, Inc., dated 10/17/24, received 12/26/24)
   D. Elevations (Kluber, Inc., dated 09/24/24, received 12/26/24)
   E. Perspective Plan (Kluber, Inc., dated 06/26/24, received 12/26/24)
   F. Engineering Plans (Kluber, Inc., dated 09/24/24, received 12/26/24)
   G. Impervious Exhibit (Kluber, Inc. dated 12/16/24, received 12/23/24)

2. Architecture
   A. At least 60% of the building shall be traditional masonry like brick or stone. Amend the façade to utilize brick or stone rather than siding.

3. Landscape
   A. All proposed landscape areas and existing landscape beds adjacent to the building or foundation base landscape, shall contain a mixture of evergreen bushes and flowers. No more than 10% of landscape areas can be non-living material, such as mulch. Work with staff to add additional materials to be sure to comply with landscape requirements.

B. Landscape areas shall be modified to meet the Watershed Ordinance requirements to install water quality treatment measures including rain gardens and/or bio-swales.

4. Petitioner shall provide documentation that the detention basin is adequate to handle the increased hard-surface, as well as existing hard-surface allowed by the Settlement Agreement.

5. The petitioner must address all of the review comments and requirements of the Fire, Engineering, Public Works, and Community Development Departments.

PIQ MAP
100 N. Virginia Street



Ord. No.
File No.

The City of Crystal Lake Illinois

AN ORDINANCE GRANTING A FINAL PLANNED UNIT DEVELOPMENT AMENDMENT TO ALLOW SITE LAYOUT CHANGES, CHANGES TO THE ARCHITECTURE AND INCREASED HARD-SURFACE COVERAGE TO 71,200 SQUARE FEET AT 100 N. VIRGINIA STREET

WHEREAS, pursuant to the terms of a Petition (File #PLN-2024-225) before the Crystal Lake Planning and Zoning Commission, the Petitioner has requested an Amendment to the Final Planned Unit Development to make changes to the approved site plan and elevations increasing the hard surface coverage up to 71,200 square feet for the McHenry County Health Services and Animal Control building at 100 N. Virginia Street; and

WHEREAS, the Planning and Zoning Commission of the City of Crystal Lake, pursuant to notice duly published on December 28, 2024 in the Northwest Herald, held a public hearing at 7:00 p.m., on January 15, 2025 at City Hall at 100 W. Woodstock Street, Crystal Lake, Illinois to consider the proposed Final Planned Unit Development Amendment; and

WHEREAS, on January 15, 2025, the Planning and Zoning Commission, having fully heard and considered the testimony of all those present at the public hearing who wished to testify, made findings of fact as required by law and recommended to the Mayor and City Council of the City of Crystal Lake that the proposed Final Planned Unit Development Amendment be denied, as documented in the minutes, and

WHEREAS, it is in the best interests of the CITY OF CRYSTAL LAKE that the Final Planned Unit Development Amendment be issued as requested in said Petition.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE, McHENRY COUNTY, ILLINOIS, as follows:

Section I: That an amendment to the Final Planned Unit Development to allow changes to the site layout, elevations and hard-surface coverage at 100 N. Virginia Street (14-31-451-039), Crystal Lake, Illinois is hereby approved.

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (McHenry County, received 12/19/24)
   B. Site Plan (Kluber, Inc., dated 09/24/24, received 12/26/24)
   C. Landscape Plan (Kluber, Inc., dated 10/17/24, received 12/26/24)

Draft

D. Elevations (Kluber, Inc., undated, received 1/27/25)
E. Narrative Letter (Kluber, Inc., dated 01/27/25, received 01/27/25)
F. Engineering Plans (Kluber, Inc., dated 09/24/24, received 12/26/24)
G. Impervious Exhibit (Kluber, Inc. dated 12/16/24, received 12/23/24)

2. Landscape
   A. All proposed landscape areas and existing landscape beds adjacent to the building or foundation base landscape, shall contain a mixture of evergreen bushes and flowers. No more than 10% of landscape areas can be non-living material, such as mulch. Work with staff to add additional materials to be sure to comply with landscape requirements.
   B. Landscape areas shall be modified to meet the Watershed Ordinance requirements to install water quality treatment measures including rain gardens and/or bio-swales.

3. Petitioner shall provide documentation that the detention basin is adequate to handle the increased hard-surface, as well as existing hard-surface allowed by the Settlement Agreement.

4. The petitioner must address all of the review comments and requirements of the Fire, Engineering, Public Works, and Community Development Departments.

Draft

Section III: That the City Clerk be and is hereby directed to amend all pertinent records of the City of Crystal Lake to show the issuance of a Planned Unit Development Amendment in accordance with the provisions of this Ordinance, as provided by law.

Section IV: That this Ordinance shall be in full force and effect from and after its passage, approval and publication as provide by law.

DATED at Crystal Lake, Illinois, this 4th day of February, 2025.

City of Crystal Lake, an
Illinois municipal corporation

_____
Haig Haleblian, MAYOR

SEAL

ATTEST:

Ord. No.
File No.

CITY CLERK

Passed: February 4, 2025
Approved: February 4, 2025

Draft

#2024-225
McHenry County Health Building PUD Amendment
Project Review for Planning and Zoning Commission

Meeting Date: January 15, 2025

Request: Final Planned Unit Development Amendment to allow changes to the site and exterior facade

Location: 100 N. Virginia Street

Acreage: Approximately 3 acres

Existing Zoning: W Watershed

Surrounding Properties:
North: W Watershed
South: W Watershed
East: Across Route 14, O Office
West: W Watershed

Staff Contact: Elizabeth Maxwell (815.356.3615)

Background:

- In 1992, Jewel Hahn wanted to develop this parcel and the adjacent properties. During the review, the plans were failed. The petitioner filed a lawsuit. A Settlement Agreement determined that a limited scope of development with maximum hard-surface coverage limits was allowed.
- The State Farm building was constructed shortly thereafter at the maximum 68,000 square feet of hard-surface coverage. The building and site were constructed per the approved plans.
- In 2012 right-of-way taking for Route 14 occurred reducing the size of the parcel, so that now the coverage does exceed that maximum, but not due to expansion of the site or building.
- The proposal is for changes to the architectural materials and site layout, an increase in hard-surface coverage and to allow a building addition.

Development Analysis:

Land Use/Zoning

- The site is zoned W, Watershed and subject to a settlement agreement. Watershed allows development through a Planned Unit Development approval.
- The land use map shows the area as Office. This is an appropriate land use designation for the Health Department and Animal Control building.

- The project was approved as a planned unit development. Changes to the approved site and architecture, as well as variations from the UDO require a PUD amendment.

Site/Landscape Plan:

- New parking will be added in the center green space and the west side parking will be modified to allow for the addition and new drive-in bay.
- The building will include new office space at the front, the eastern side of the building closest to Route 14. A new landscape bed will be installed around this area.
- The parking lot layout is changing and new landscape islands will be added at the ends of the rows and adjacent to the drive lane.
- Currently, the hard surface coverage is 68,592 square feet. The proposed hard-surface coverage would be 71,190 square feet. This is approximately 55% of the site. There is no maximum hard-surface coverage for Watershed zoned properties, they are all site specific.

Architecture/Elevations:

- The current façade is red brick with a silver metal mansard roof over window and doorways.
- Renovations to a building comprising 50% or more of the façade area shall meet the design standards. The front façade needs to meet the design standards.
- The proposed changes include adding a grey fiber cement (fiber cement is made from cellulose like wood pulp and cement) and thin brick veneer for the new additions. This is not considered traditional masonry.
- The west elevation will modify the exiting drive in bays for interior space and have one new bay constructed.
- The eastern elevation will have the new corner addition with the grey fiber cement siding.
- The front or north façade will be broken up between the existing red brick and the new elements with the grey fiber cement siding.

Findings of fact:

FINAL PLANNED UNIT DEVELOPMENT AMENDMENT

The petitioner is requesting approval of a Final Planned Unit Development to allow the changes to the site, landscape, and elevations. Also this increases the hard-surface coverage to 71,190 square feet. The purpose of Planned Unit Developments is to encourage and allow more creative and imaginative design of land developments than is possible under district zoning regulations. Planned Unit Developments are, therefore, intended to allow substantial flexibility in planning and designing a proposal.

This flexibility is often in the form of relief from compliance with conventional zoning ordinance site and design requirements which may otherwise require individual requests and applications for zoning variations.

Ideally, this flexibility results in a development that is better planned, contains more amenities, and is ultimately more desirable than one that would have been produced through compliance with typical zoning ordinance and subdivision controls.

Therefore more lenient site requirements may be granted where the Planned Unit Development contains features not normally required of traditional developments. Although a formal variation request is not required to be made in conjunction with a Planned Unit Development, Staff identifies those aspects of the Planned Unit Development which effectively result in variations from UDO requirements. If the evidence is not found to justify these variations from the UDO that fact shall be reported to the City Council with a recommendation that the variations from the UDO which are proposed as part of the Planned Development be lessened or denied.

The Planned Unit Development proposed by the Petitioner includes the following variation from the UDO:

A) Article 4-900 Design Standards to allow fiber cement board as principal exterior material, reducing traditional masonry elements to less than 60%.

Comprehensive Land Use Plan 2030 Summary Review:

The Comprehensive Plan designates the subject property as Office, which allows for existing and future office and service uses. The following goals are applicable to this request:

Land Use - Commerce

Goal: Maintain and expand the availability of professional and research office in appropriate locations throughout the City to complement commercial and manufacturing uses.

This can be accomplished with the following supporting action:

Supporting Action: Encourage office development along major roadways, near transit stops and bicycle routes, and in proximity to residential uses.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (McHenry County, received 12/19/24)
   B. Site Plan (Kluber, Inc., dated 09/24/24, received 12/26/24)
   C. Landscape Plan (Kluber, Inc., dated 10/17/24, received 12/26/24)
   D. Elevations (Kluber, Inc., dated 09/24/24, received 12/26/24)
   E. Perspective Plan (Kluber, Inc., dated 06/26/24, received 12/26/24)
   F. Engineering Plans (Kluber, Inc., dated 09/24/24, received 12/26/24)
   G. Impervious Exhibit (Kluber, Inc. dated 12/16/24, received 12/23/24)

2. Architecture

A. At least 60% of the building shall be traditional masonry like brick or stone. Amend the façade to utilize brick or stone rather than siding.

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   B. Landscape areas shall be modified to meet the Watershed Ordinance requirements to install water quality treatment measures including rain gardens and/or bio-swales.

4. Petitioner shall provide documentation that the detention basin is adequate to handle the increased hard-surface, as well as existing hard-surface allowed by the Settlement Agreement.

5. The petitioner must address all of the review comments and requirements of the Fire, Engineering, Public Works, and Community Development Departments.

City of Crystal Lake
Development Application
Ownership Sign-off Acknowledgement Form

The following information is related to a development application. As the owner of the property in question, I (we) acknowledge that the information provided in the submittal was reviewed and approved.

Owner Information

Name: Anne Marrin for Mchenry County

Address: 2200 N Seminary Ave.

Woodstock IL. 60098

Phone: 815-334-4574

E-mail: AEMarrin@mchenrycountyil.gov

Project Name & Description: Three additions, renovations,

some rooftop A/C replacement, entire re-roof,

some parking added N. of building, some parking/island re-work, W. of Building.

Project is at an existing McHenry County facility - Health Dept. and Animal Control.

Project Address/Location: 100 N. Virginia St. Crystal Lake, IL60014

Signature

ANNE MARRIN 12-19-24

Owner: Print and Sign name Date

NOTE: If the property is held in a trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

CRYSTAL LAKE PLANNING AND ZONING COMMISSION
WEDNESDAY, JANUARY 15, 2025
HELD AT THE CRYSTAL LAKE CITY COUNCIL CHAMBERS

The meeting was called to order by Mr. Greenman at 7:00 p.m.

CALL TO ORDER

On roll call, members Greenman, Gronow, Mason, Repholz, Skluzacek, Smith, and Teetsov were present.

Kathryn Cowlin, Director of Community Development and Elizabeth Maxwell, City Planner was present from Staff.

Mr. Greenman said this meeting is being recorded for broadcast and future playback on the City's cable channel. He led the group in the Pledge of Allegiance.

2024-225 – MCHENRY COUNTY HEALTH BUILDING AND ANIMAL CONTROL – 100 N. VIRGINIA ROAD – FINAL PLANNED UNIT DEVELOPMENT AMENDMENT

Final Planned Unit Development Amendment to allow changes to the site and exterior facade.

Chris Hansen, Project Manager of Kluber Architects, and Jon Green, Civil Engineer, were present to represent the petition. Mr. Hansen went through the presentation. He showed the existing site conditions and described the minor demolition and the three additions. The additions will enclose a new public lobby area, administrative offices for the animal care staff, and a drive-through for the clinic. The site will feature a new parking area and landscape changes.

During their analysis they found the parking was inconvenient to people entering the clinic. They needed more parking right up front. The site currently exceeds the 68,000 square feet that was set in the Settlement Agreement. They are requesting 71,190 square feet of hard surface coverage.

The building is currently brick with a standing seam metal roof. He described they are introducing new forms to the front of the building. The fiber cement panels will look like metal. He went through the calculations and if they look at the entire building they are meeting the 60% brick requirement.

Mr. Greenman asked about the conditions of approval and if they agree with them. Mr. Hansen replied yes, he believed they are already meeting 2A. He noted the landscape plan will be updated as they are already working with the engineering department on the stormwater and watershed requirements.

Mr. Greenman opened the public hearing. There being no one in the public to speak, he closed the public hearing and turned it over to staff.

Staff summarized the request. There are three different sets of regulations that are dealing with the hard surface coverage. The first is the Settlement Agreement that set hard-surface coverage limits. This would be exceeding the agreement, but not in violation of today's ordinance. The city is being less restrictive than the agreement allows, which is okay. There are also the watershed ordinance requirements that state that 95% of any new impervious needs to be infiltrated. This requires bio-swales and rain gardens. Then there is the stormwater ordinance requirements and the existing detention basin. The petitioners will need to verify it can accommodate the increased coverage. Staff also discussed the desire for the traditional masonry on the front elevations.

Mr. Gronow thanked the petitioners and the County as this building provides good services to the community. He said the two most public facing facades are the ones moving to less brick. Mr. Hansen said the panels will have an inch and a half thick routed revels that will look nice and be low maintenance. They want to improve the character and make it more modern. The project was already publicly bid. The project is under a timeline and they would need to reengineer the site. They could remove some of the panel area, but that would look out of place.

Ms. Mason said she had no additional questions. She asked about the entrance on the side. The architect clarified that the new entrance would be on that side and the new panels would frame around the entrance with brick below. They have also created a higher parapet that breaks up the roof line.

Ms. Teetsov asked if the stormwater detention was for all the lots. She thought the new parking would be better for the patrons. She would prefer more masonry.

Ms. Repholz said she likes the clean lines, but feels the cement board is a mismatch for the mission of the use. She does not like this product and feels it looks very "warehouse". People deserve it to be welcoming and substantial not look "affordable". She asked about the reflectivity of the windows. Mr. Hansen clarified that they will be the same light grey as the existing windows. She suggested maybe a grey brick.

Mr. Smith asked for the presentation slide about the façade material calculations. Mr. Hansen said he believes the façade meets the building as a whole and they meet the 60%. Mr. Smith understood that they are working with staff on the hard surface coverage. He asked staff why they settled on the numbers they did in the settlement agreement. Staff explained that the court set the numbers for the coverage limits and based on the design plans and it was due to the design of the detention area.

Mr. Skluzacek asked if the trash enclosures would stay in the same location.

Mr. Greenman summarized all the comments. He agrees with the Design Standards and says all four elevations do not need to look the same. The rear elevations can be different, the front elevations that are public facing should be the high quality materials. It may be modern, but that is not an improvement. He cannot support the architecture.

Mr. Green said they will do the best management practices (BMPs) in the new landscape areas. The entry way will have a nice landscape feature. They used LiDAR to measure the basin and it will meet the volumetric requirements.

Mr. Gronow made a motion to deny the Final Planned Unit Development Amendment to allow changes to the site and exterior façade of the health building. He noted the front façade should be brick.

Ms. Cowlin noted that there is a condition of approval to meet the masonry requirement of 60% brick or stone as part of the recommendation if the Commission wants to make a motion to approve knowing they would need to meet the requirement.

Mr. Greenman asked the architect if felt he could meet the requirement. Mr. Hansen said there is a deadline for the grant and without further discussion he could not answer yes at this time.

Ms. Teetsov said she wanted it noted that their services at this location are extremely important. Their purview is not cost, but the architectural standards in the UDO.

Ms. Repholz seconded the motion. On roll call vote Members Greenman, Gronow, Mason, Repholz, Skluzacek, Smith, and Teetsov voted aye. Motion passed with the petition denied 7-0.



City Council Meeting | February 04, 2025

McHenry County – Crystal Lake Public Health Facility Renovation

SUBMITTED TO:

CITY OF CRYSTAL LAKE

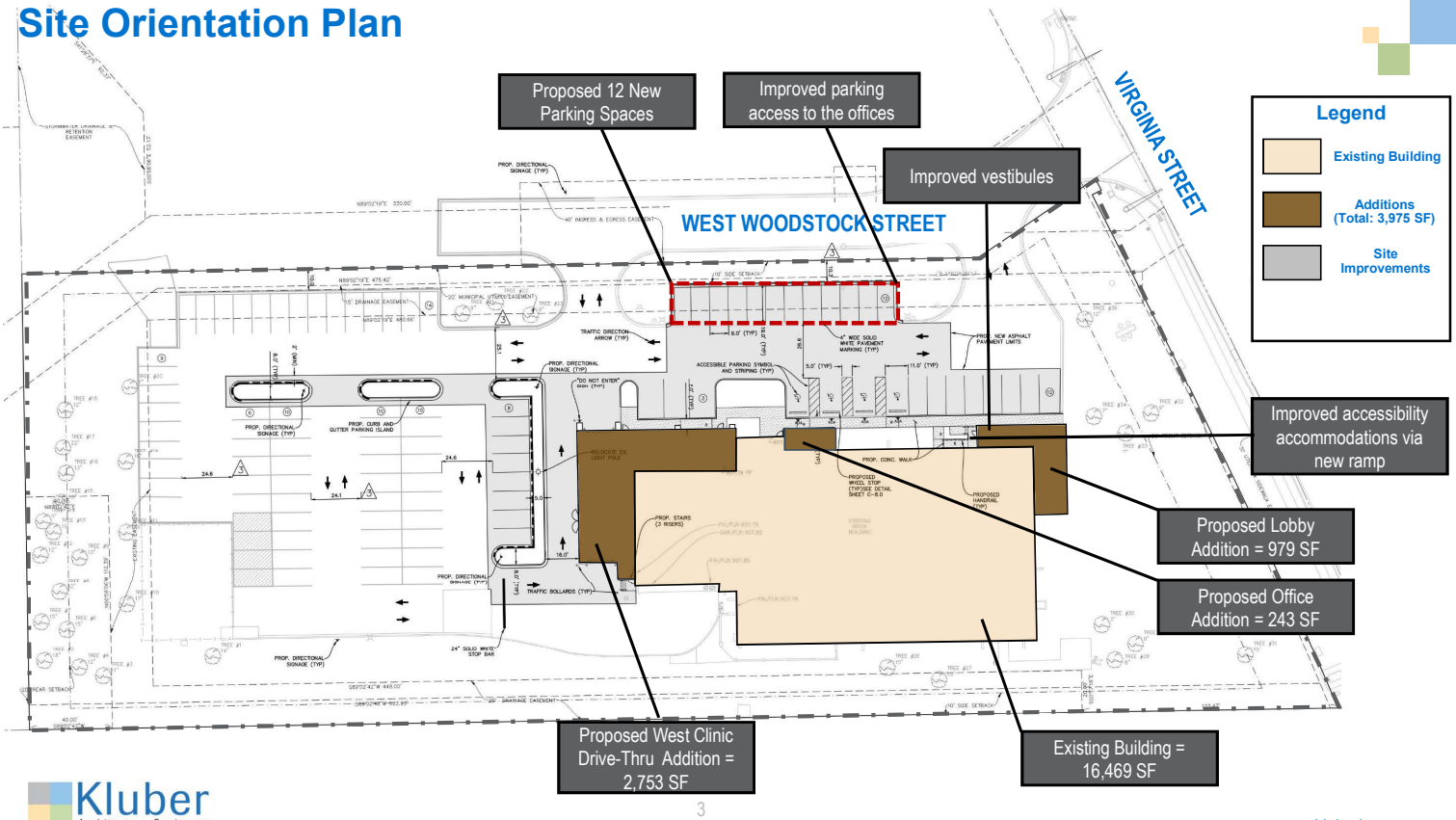
100 W. Woodstock St.

Crystal Lake, IL 60014

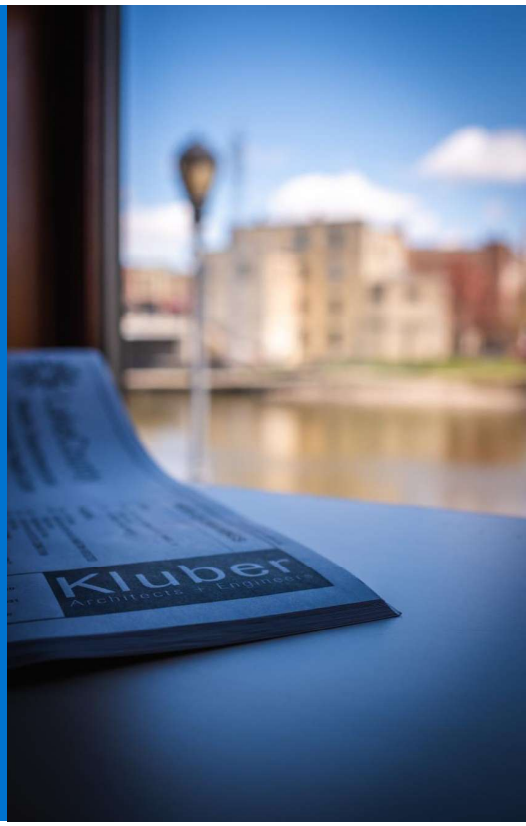
Site Orientation Plan



Site Orientation Plan



Revised Design Images



Aerial Image Looking Southwest



Proposed North Elevation Looking East





Existing North Elevation

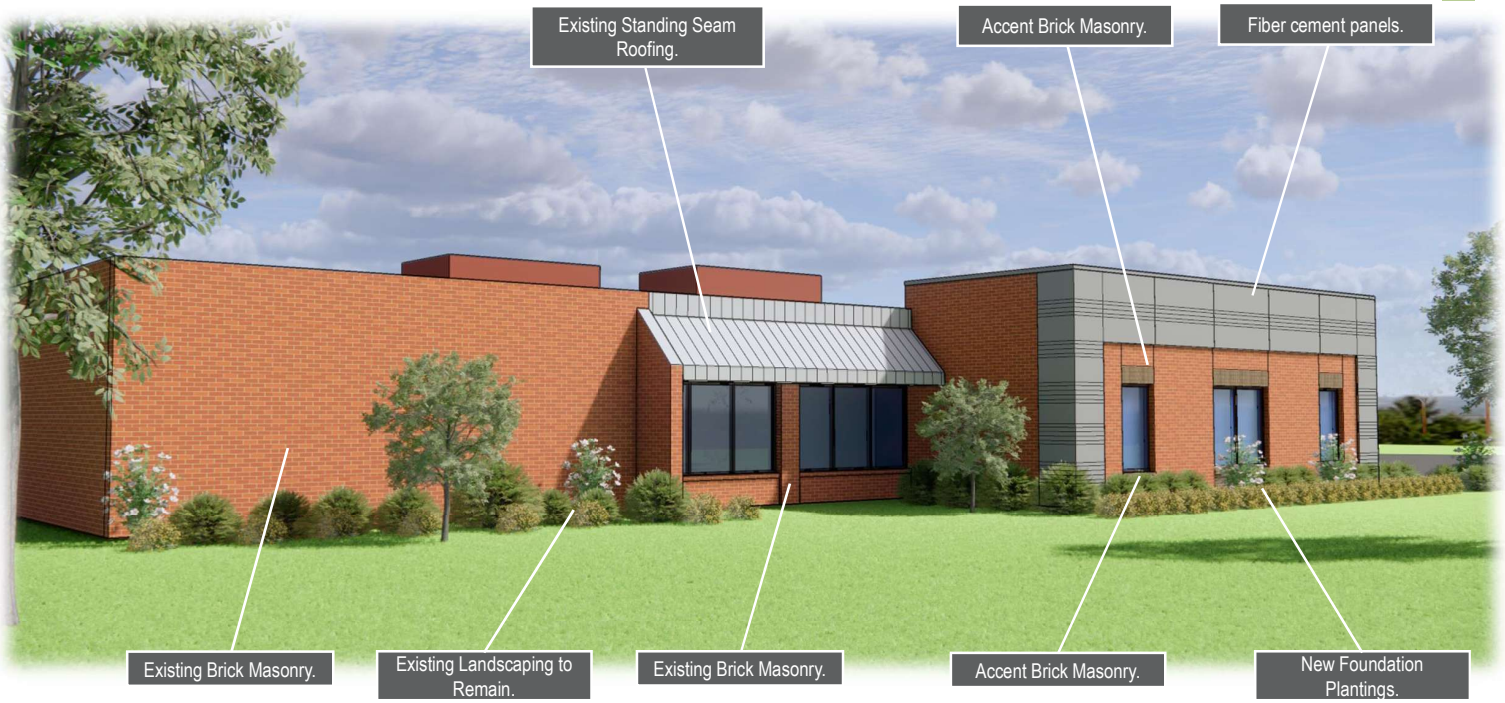
Proposed North Elevation Looking Southwest



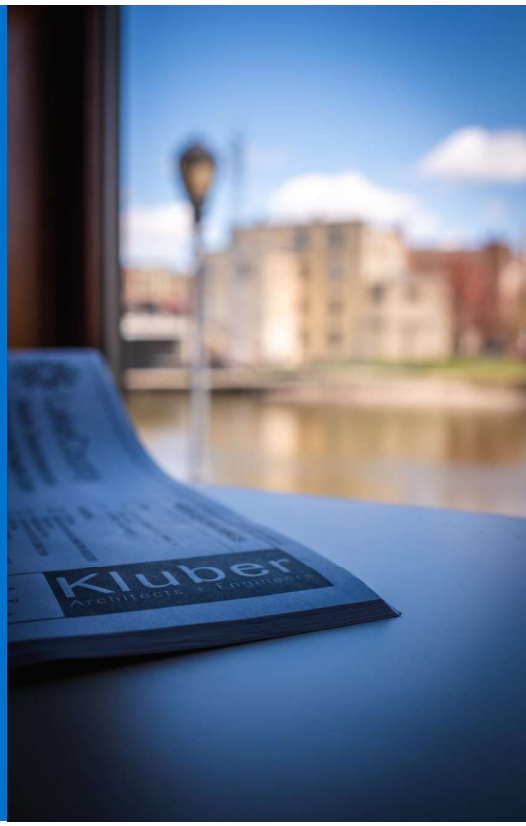
Proposed East Elevation Looking Southwest



Proposed East Elevation Looking Northwest

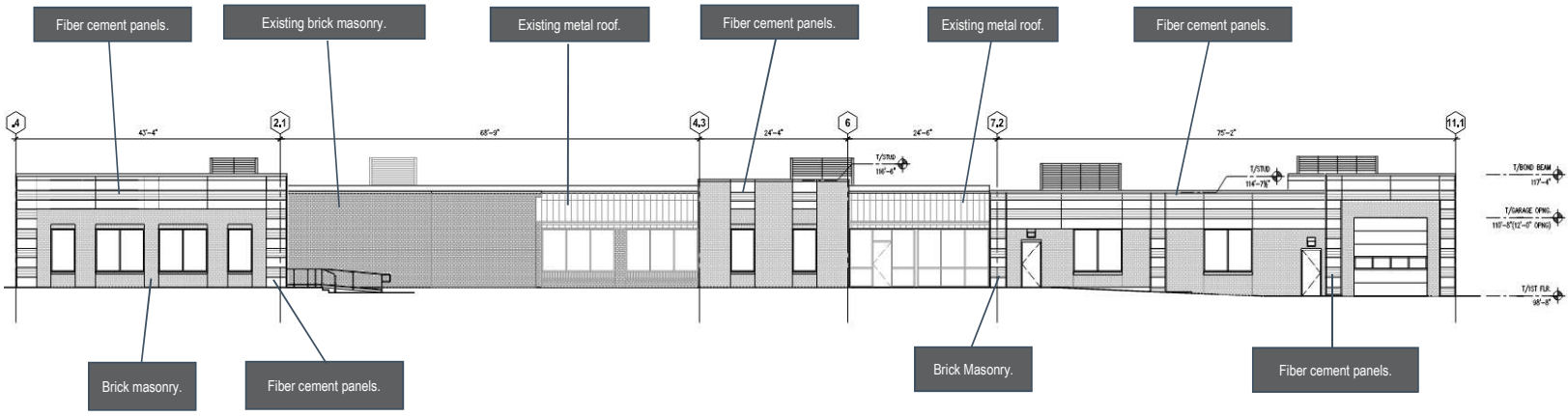


Façade Calculations



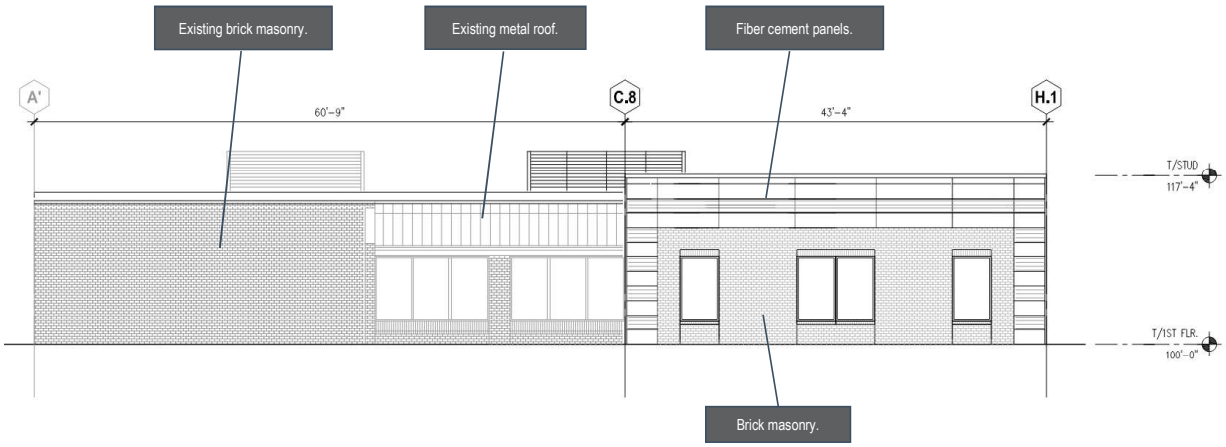
Proposed North Elevation – Facade Calculations

NORTH ELEVATION AREA BRICK	= 1,759 SF – 64.6%
NORTH ELEVATION AREA FIBER CEMENT	= 965 SF – 35.4%
NORTH ELEVATION FAÇADE AREA	= 2,724 SF – 100%



Proposed East Elevation – Facade Calculations

EAST ELEVATION AREA BRICK	= 953 SF – 75.0%
EAST ELEVATION AREA FIBER CEMENT	= 317 SF – 25.0%
EAST ELEVATION FAÇADE AREA	= 1,270 SF – 100%



Questions?



January 27, 2025

Ms. Kathryn Cowlin
Director of Community Development
City of Crstal Lake
100 W. Woodstock
Crystal Lake, IL., 60014

Re: Planned Unit Development (PUD) amendment
Façade Elevation Revisions for Min. 60% Masonry
McHenry County - Crystal Lake Facility Renovation
100 N. Virginia Street, Crystal Lake, IL 60014
BLD-2024-02892
Kluber Project No. 1541

Dear Ms. Cowlin and City Council,

McHenry County, A Body Politic, is seeking approval of the East & North building elevations for the subject property. The revised East & North façades now exceed the 60% minimum masonry materials requirement requested by the City of Crystal Lake & the Planning & Zoning Commission.

The following revisions have been made to each façade to demonstrate compliance:

East Elevation (Fronting Virginia Street) Updated Information:

- PZC original masonry materials quantity = 53.8%.
- Revised masonry materials quantity = 75.0%.
- The Northeast addition fiber cement panels extent between column lines C.8 & H.1 was reduced and brick masonry materials were increased.
- Window sizing and spacing has been revised to accommodate more brick masonry.
- The proposed red brick shall match the existing brick color on the existing building.
- Dark brown brick masonry was added above and below the windows to provide additional masonry accents.
- The masonry header accents will be in a double soldier course configuration.
- The masonry below the window openings will be inset to match the existing construction techniques.

North Elevation (Fronting West Woodstock Street) Updated Information:

- PZC original masonry materials quantity = 48.2%.
- Revised masonry materials quantity = 64.6%.
- The Northeast addition fiber cement panels extent between column lines 0.4 & 2.1 was reduced and brick masonry materials were increased.
- Window sizing and spacing has been revised to accommodate more brick masonry.

- The proposed red brick shall match the existing brick color on the existing building.
- Dark brown brick masonry was added above and below the windows to provide additional masonry accents to match the east elevation.
- The masonry header accents will be in a double soldier course configuration.
- The masonry below the window openings will be inset to match the existing construction techniques.
- The central addition at the Animal Control facility entrance between column line 4.3 and 6 was revised to include full height brick masonry piers to the roof line, brick masonry accent panels and fiber cement accent siding panels over the window openings.
- No other façade revisions were necessary at the proposed northwest addition location to meet the minimum 60% masonry requirement.

If you should have any further questions or require additional information, please feel free to contact our office.

Thank you in advance for your assistance with this matter. Your efforts are greatly appreciated.

Sincerely,

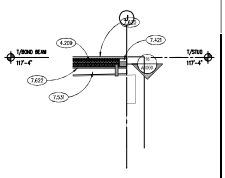


Chris Hansen, AIA, NCARB
Project Manager,
Kluber Architects + Engineers

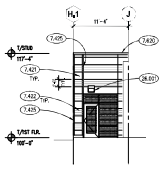
Cc: Anne Marrin & Tom Burroughs, McHenry County.

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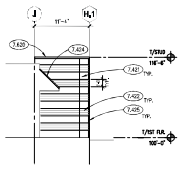
PREVIOUS ELEVATIONS



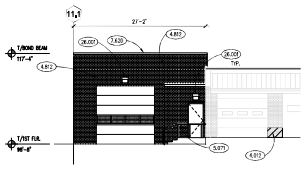
PARTIAL ROOF ELEV. 9
SCALE: 1/8" = 1'-0"



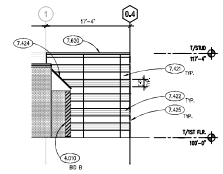
PARTIAL WEST ELEVATION 7
SCALE: 1/8" = 1'-0"



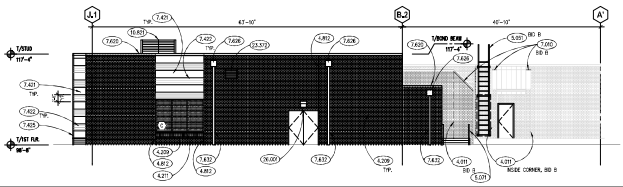
PARTIAL EAST ELEVATION 6
SCALE: 1/8" = 1'-0"



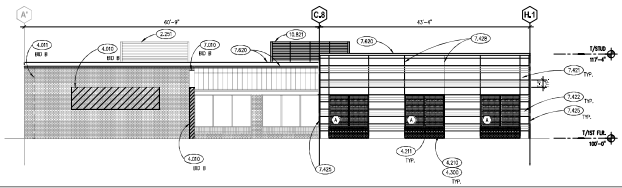
PARTIAL SOUTH ELEVATION 5
SCALE: 1/8" = 1'-0"



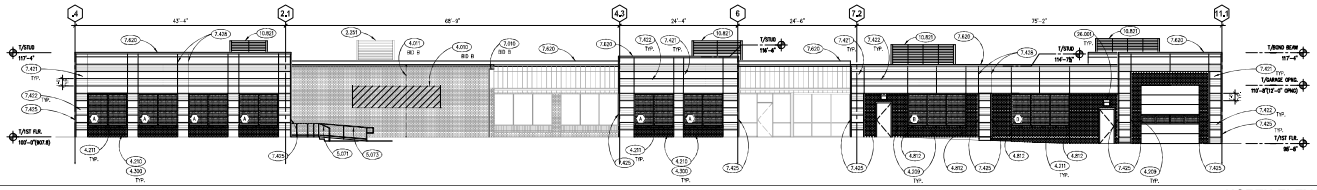
PARTIAL SOUTH ELEVATION 4
SCALE: 1/8" = 1'-0"



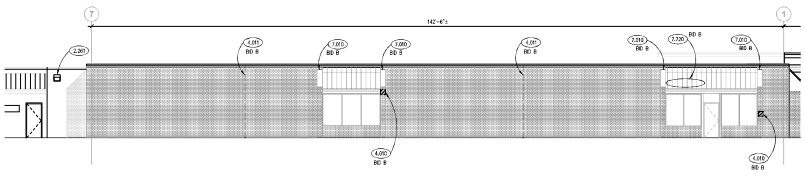
WEST ELEVATION 3
SCALE: 1/8" = 1'-0"



EAST ELEVATION 2
SCALE: 1/8" = 1'-0"



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



PARTIAL SOUTH ELEVATION 8
SCALE: 1/8" = 1'-0"

KEYNOTES

KEYNOTES ARE, TYPICALLY NOT DUPLICATED WITHIN A KNOX DETAIL OR NON-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

2.251 EXISTING MECHANICAL ROOF SCREEN TO REMAIN.
2.261 RELOCATE EXISTING LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS.

4.050 REMOVE AND REPLACE ENTIRE DAMAGED OR DETERIORATED BRICK MASONRY.
4.051 REMOVE AND REPLACE DAMAGED SEALANT AT MASONRY CONTROL JOINT.
4.052 REPOINT EXISTING DETERIORATED MORTAR JOINTS.
4.056 BRICK MASONRY: TYPE B-1; MODULAR TYPE; RUNNING BOND; REFER TO SPECIFICATIONS.
4.250 BRICK MASONRY: TYPE B-2; THIN MODULAR TYPE; RUNNING BOND; REFER TO SPECIFICATIONS.
4.251 BRICK MASONRY: POINTED WITH DRIP EDGE.
4.300 INSULATED CONCRETE BOARD; REFER TO SPECIFICATIONS.
4.852 MASONRY ASSEMBLY: MASONRY CONTROL JOINT.

5.051 METAL FABRICATION: ROOF ACCESS LADDER; LOOKING TYPE; REFER TO SPECIFICATIONS.
5.071 METAL FABRICATION: EXTERIOR STEEL HANDRAIL ASSEMBLY; 1 1/2" NOM. DIA. GALVANIZED STEEL PIPE WITH VERTICAL END POSTS CORE DRILLED AND SET INTO CONCRETE SLAB A MINIMUM OF 12" DEEP; PROVIDE ADA COMPLIANT TOP AND BOTTOM HANDRAIL EXTENSIONS WITH RADIUS BENDS RETURNING TO VERTICAL SUPPORT POSTS TO FORM A U-SHAPED BEND. ALL CONNECTIONS SHALL BE FULLY WELDED. SLOPE HANDRAIL TO MATCH STAIR PROFILE. PROVIDE EXTERIOR GRADE POP-RIVE TO ANCHOR POSTS INSIDE CONCRETE SLAB CORES. TOP POP-RIVE WITH SELF LEVELING SEALANT. SEE G201 FOR INTERMEDIATE BALUSTER/RAIL AND EXTENSION DETAILING. PRIME AND TWO COAT PAINT. COLOR AS SELECTED BY ARCHITECT.
5.073 METAL FABRICATION: INTERIOR STEEL HANDRAIL ASSEMBLY; 1 1/2" NOM. DIA. GALVANIZED STEEL PIPE WITH VERTICAL END POSTS CORE DRILLED AND SET INTO CONCRETE SLAB A MINIMUM OF 12" DEEP; PROVIDE ADA COMPLIANT TOP AND BOTTOM HANDRAIL EXTENSIONS WITH RADIUS BENDS RETURNING TO VERTICAL SUPPORT POSTS TO FORM A U-SHAPED BEND. ALL CONNECTIONS SHALL BE FULLY WELDED. SLOPE HANDRAIL TO MATCH RAMP PROFILE. PROVIDE EXTERIOR GRADE POP-RIVE TO ANCHOR POSTS INSIDE CONCRETE SLAB CORES. TOP POP-RIVE WITH SELF LEVELING SEALANT. SEE G201 FOR EXTENSION DETAILING. PRIME AND TWO COAT ENAMEL PAINT. COLOR AS SELECTED BY ARCHITECT.

7.200 REMOVE AND REPLACE DAMAGED SEALANT AT METAL-TO-BRICK CONDITION.
7.421 COMPOSITE WALL PANEL: SMOOTH STYLE; REFER TO SPECIFICATIONS.
7.422 COMPOSITE WALL PANEL: RIBBED STYLE; REFER TO SPECIFICATIONS.
7.424 COMPOSITE WALL PANEL ACCESSORY: J-TRIM.
7.425 COMPOSITE WALL PANEL ACCESSORY: OUTSIDE CORNER TRIM.
7.428 COMPOSITE WALL PANEL ACCESSORY: H-MOLD.
7.531 ELASTOMERIC MEMBRANE ROOFING MATERIAL; EPDM MEMBRANE.
7.620 METAL COPING FLASHING: THICKNESS AND FINISH AS SPECIFIED.
7.622 METAL COUNTERFLASHING: MATERIAL, THICKNESS AND FINISH AS SPECIFIED.
7.638 SCUPPER THROUGH WALL: 10"W x 15"H; CONSTRUCT IN ACCORDANCE WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL FIGURE 1-27A.
7.652 METAL DOWNSPOUT: MATERIAL, THICKNESS AND FINISH AS SPECIFIED.
7.720 SNOW GUARD: REPLACE DAMAGED OR MISSING IN LOCATION INDICATED; REFER TO SPECIFICATIONS.

10.821 LOUVERED EQUIPMENT SCREEN AND SUPPORT FRAMING; ATTACHES TO ROOFTOP UNIT; REFER TO SPECIFICATIONS.

23.372 MECHANICAL LOUVER: REFER TO MECHANICAL DRAWINGS.

26.001 LIGHT FIXTURE: REFER TO ELECTRICAL DRAWINGS.

GENERAL NOTES

1. REFER TO DRAWING G100 FOR PROJECT MATERIAL MATRIX.
2. REFER TO ROOF PLAN DRAWINGS FOR ELEVATIONS OF OVERFLOW SCUPPERS.
3. APPLY SPECIFIED MASONRY SEALER TO BRICK MASONRY AND CONCRETE UNIT MASONRY EXPOSED TO WEATHER.
4. COORDINATE LOCATIONS OF WALL-MOUNTED MECHANICAL, PLUMBING AND ELECTRICAL ITEMS TO ENSURE NO OVERLAP.

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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ISSUED	RE-DOCUMENTS
JOB NO.	24-248-4541
DRAWN	PJT
CHECKED	CJH
APPROVED	CJH

SHEET TITLE
EXTERIOR BUILDING ELEVATIONS

SHEET NUMBER
A700

P:\24-Projects\McHenry County - Crystal Lake Health Renovations\06_Design\Drawings\CAD\A700_Previous Elevations.dwg, 10/7/2024 8:53:47 PM, AKOS

PREVIOUS ELEVATIONS





Existing color and material pallet



PREVIOUS ELEVATIONS



PREVIOUS ELEVATIONS

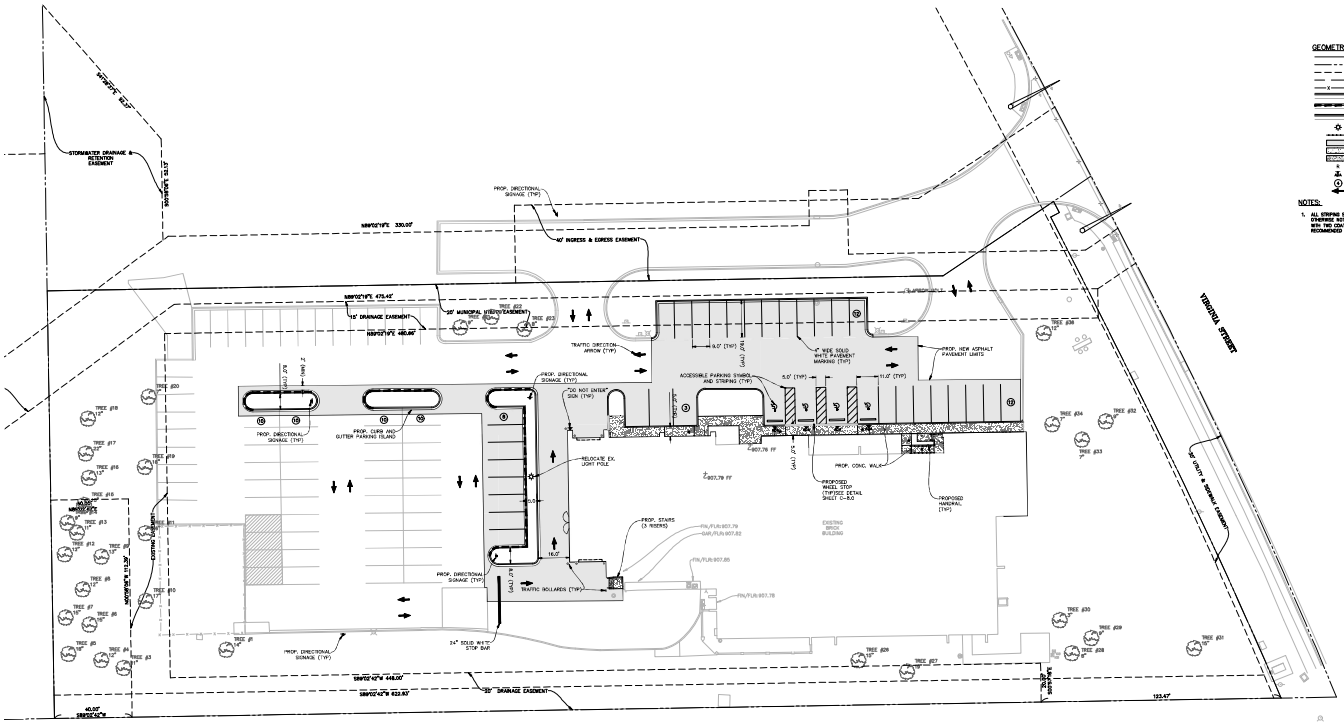




Existing contextual elements.



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GEOMETRY PLAN LEGEND

- PROPERTY LINE
- LOT LINE ADJACENT / R.O.W.
- EASEMENT LINE
- BUILDING SETBACK LINE
- PROP. FENCE
- PROP. CURB & GUTTER
- PROP. CURB & GUTTER (PITCH OUT)
- PROP. CURB (DEPRESSED)
- PROP. LIGHT POLE (RELOCATED)
- PROP. HANDRAIL
- PROP. ASPHALT PAVEMENT
- PROP. CONCRETE PAVEMENT
- PROP. CONCRETE WALK
- PROP. RAMP
- PROP. ADA SIGN
- PROP. PARKING COUNT
- TRAFFIC DIRECTION ARROW

NOTES:

1. ALL STRIPING SHALL BE 4" YELLOW PAINT UNLESS OTHERWISE NOTED. ALL STRIPING SHALL BE APPLIED WITH TWO COATS OF PAINT AT MANUFACTURER'S RECOMMENDED RATE.

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PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

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ISSUED
FOR PLAN COMMISSION 6/10/2024

JOB NO.	W24001.00
DRAWN	MDD
CHECKED	BAS
APPROVED	JPG

SHEET TITLE

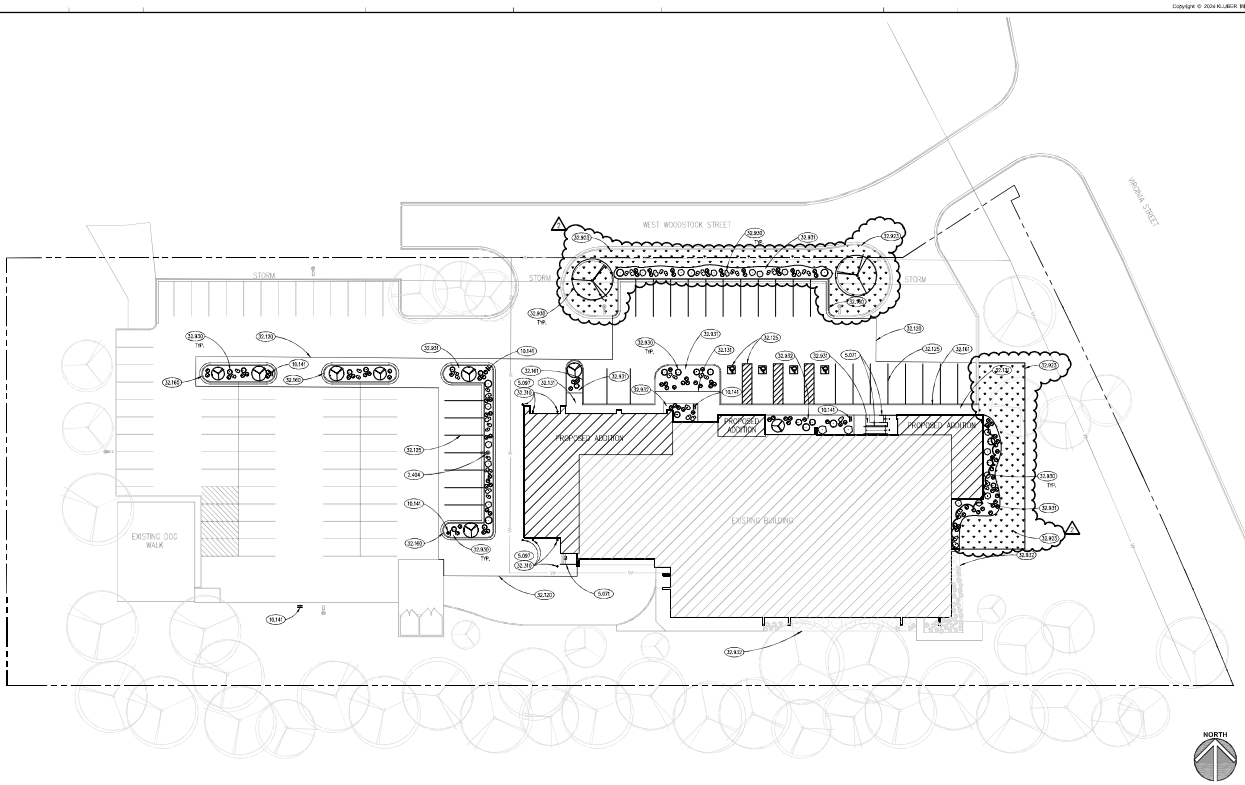
GEOMETRIC PLAN

SHEET NUMBER

C-4.0

G:\PROJECTS\Active\Kluber\Engineering\W24001.00 Crystal Lake Public Facility Renovation\CAD\CONSTR DEVELOPMENT\W24001.00 Crystal Lake Public Facility Renovation Civil Site Plan.dwg Updated by: mdevay 6/10/2024

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SITE PLAN (1)
SCALE: 1" = 20'-0"

KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

2.404 SALVAGE AND RELOCATE EXISTING LIGHT POST; REMOVE EXISTING CONCRETE BASE IN ITS ENTIRETY, REFER TO CIVIL DRAWINGS.

5.071 METAL FABRICATION: EXTERIOR STEEL HANDRAIL ASSEMBLY; 1 1/2" NOM. DIA. GALVANIZED STEEL PIPE WITH VERTICAL END POSTS CORE DRILLED AND SET INTO CONCRETE SLAB A MINIMUM OF 12" DEEP, PROVIDE ADA COMPLIANT TOP AND BOTTOM HANDRAIL EXTENSIONS WITH RADIUS BENDS RETURNING TO VERTICAL SUPPORT POSTS TO FORM A U-SHAPED BEND. ALL CONNECTIONS SHALL BE FULLY WELDED. SLOPE HANDRAIL TO MATCH STAIR PROFILE. PROVIDE EXTERIOR GRADE POP-RIVA TO ANCHOR POSTS INSIDE CONCRETE SLAB CORES. TOP POP-RIVA WITH SELF LEVELING SEALANT. SEE SIZE FOR INTERMEDIATE BALUSTER RAIL AND EXTENSION DETAILING. PRIME AND TWO COAT ENAMEL PAINT. COLOR AS SELECTED BY ARCHITECT.

5.087 METAL FABRICATION: STEEL BOLLARD 6" O.D.; CONCRETE FILLED.

10.141 GROUND MOUNTED DIRECTIONAL SIGNAGE; PANEL 30" WIDE X 20" TALL ON 42" HIGH SUPPORT POST; VERBIAGE AND GRAPHICS TO BE DETERMINED, REFER TO ALLOWANCES AND SPECIFICATIONS.

32.020 ASPHALT PAVING: REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
32.025 ASPHALT PAVING MARKING: REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
32.131 CONCRETE PAVING: PEDESTRIAN WALK; REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
32.160 CONCRETE CURB AND GUTTER: REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
32.161 CONCRETE BARRIER CURB: REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
32.260 PLASTIC CONE® MANUFACTURED BY POST GUARD; 7" DOME TOP BOLLARD COVER – SLIP ON TYPE; REFER TO SPECIFICATIONS.
32.803 LAWN/GRASSED AREA: SODDED.
32.807 PLANTED GROUNDCOVER AREA: REFER TO ALLOWANCES.
32.821 HARDWOOD MULCH: 4" DEEP – TYPICAL.
32.822 HARDWOOD MULCH: 2" DEEP OVER EXISTING MULCH.

GENERAL NOTES

1. REFER TO DRAWING D100 FOR PROJECT GENERAL NOTES.
2. COORDINATE INFORMATION ON THIS DRAWING WITH INFORMATION CONTAINED ON CIVIL DRAWINGS.

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ISSUED
PLANNING SUBMITTAL 10.04.24
PLANNING RESUBMITTAL 11.15.24
PLANNING RESUBMITTAL 12.06.24

JOB NO.	24-248-1541
DRAWN	NCG
CHECKED	CJH
APPROVED	CJH

SHEET TITLE
SITE PLAN

SHEET NUMBER
A010

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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McHENRY COUNTY - CRYSTAL LAKE HEALTH RENOVATION

100 N VIRGINIA STREET
CRYSTAL LAKE, IL 60014
JOB NO. W24081.00
SEPTEMBER 24, 2024
TYPE OF SUBMITTAL: CONSTRUCTION DRAWINGS

INDEX TO DRAWINGS	
Sheet Number	Sheet Title
C-1.0	COVER SHEET
C-2.0	CONSTRUCTION NOTES
C-3.0	EXISTING CONDITIONS & DEMOLITION
C-4.0	GEOMETRIC PLAN
C-5.0	UTILITY PLAN
C-6.0	GRADING PLAN
C-6.1	GRADING PLAN-DETAIL
C-7.0	SOIL EROSION & SEDIMENT CONTROL PLAN
C-7.1	SOIL EROSION & SEDIMENT CONTROL PLAN-DETAIL
C-7.2	SOIL EROSION & SEDIMENT CONTROL PLAN-SPECS
C-8.0	CONSTRUCTION DETAILS
C-8.1	CONSTRUCTION DETAILS



LOCATION MAP

COUNTY: McHENRY
TOWNSHIP: 44N
RANGE: 8E
SECTION: 31

ZONING - VILLAGE OF CRYSTAL LAKE
W - WATERSHED

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41 W BENTON ST
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FIRE HYDRANT #1:
SERVICE VALVE ON THE HYDRANT ALONG THE NORTH SIDE OF PROJECT SITE.
ELEVATION: 888.48 (NAVD 88)

FIRE HYDRANT #2:
SERVICE VALVE ON THE HYDRANT ALONG THE EAST SIDE OF PROJECT SITE.
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EXPIRES NOVEMBER 30, 2025

PROFESSIONAL DESIGN FIRM NUMBER: 184.001196

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ISSUED
Issued for review 4/24/2024

JOB NO. W24081.00
DRAWN MDD
CHECKED BAS
APPROVED JPG

SHEET TITLE
COVER SHEET

SHEET NUMBER
C-1.0

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GENERAL NOTES:

1. AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF ALL PHASES OF WORK, THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE.

2. UTILITY INFORMATION IS BASED UPON FIELD MEASUREMENTS AND BEST AVAILABLE RECORDS. FIELD DATA IS LIMITED TO THAT WHICH IS VISIBLE AND CAN BE MEASURED. THIS DOES NOT PRECLUDE THE EXISTENCE OF OTHER UNDERGROUND UTILITIES.

3. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (800) 892-0123, 48 HOURS PRIOR TO ANY EXCAVATION WORK TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES.

4. EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING DOCUMENTS:
   a. IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN THE STATE OF ILLINOIS", LATEST EDITION.
   b. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS"
   c. THE MCHENRY COUNTY STORMWATER MANAGEMENT ORDINANCE"
   d. ILLINOIS URBAN MANUAL, LATEST EDITION

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC. "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", AS ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION, SHALL BE CONSULTED. APPROPRIATE CONTROL METHODS SHOULD BE APPLIED TO THE SPECIFIC SITUATIONS AND TYPES OF CONSTRUCTION OPERATIONS BEING PERFORMED.

6. THE CONTRACTOR SHALL ESTABLISH THE NECESSARY PERFORMANCE BONDS REQUIRED. PERMITS SHALL BE OBTAINED FROM ALL OUTSIDE GOVERNMENTAL AGENCIES HAVING JURISDICTION PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES.

7. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THE MOST RECENT SET OF "APPROVED" FINAL ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION.

8. THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION AND WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE SAME.

9. CONTRACTOR SHALL RESTORE OFF-SITE SURFACES TO ORIGINAL CONDITION IF DAMAGED BY CONSTRUCTION.

10. THE CONTRACTOR IS TO PROVIDE THE CITY ENGINEER WITH RECORD DRAWINGS OF ALL UTILITIES SHOWING LOCATIONS OF ALL SEWER PIPE, MAINS, SERVICE STUBS, & STRUCTURES.

11. THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO PERFORM OR FURNISH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

12. THE ENGINEER WARRANTS THE DESIGN, RECOMMENDATIONS, AND SPECIFICATIONS TO HAVE BEEN PREPARED BASED ON CONDITIONS GENERALLY ENCOUNTERED WITHIN THE INDUSTRY. THE ENGINEER ASSUMES NO RESPONSIBILITY WHATSOEVER, WITH RESPECT TO THE DESIGN RECOMMENDATIONS AND SPECIFICATIONS, FOR COMPLEX OR UNUSUAL SOIL CONDITIONS ENCOUNTERED ON THE PROJECT. IT SHALL BE THE OWNER'S/BIDDER'S RESPONSIBILITY TO ASCERTAIN THE EXACT NATURE OF SUBSURFACE CONDITIONS PRIOR TO THE CONSTRUCTION OF THE IMPROVEMENT.

13. ALL TRENCHES CAUSED BY THE CONSTRUCTION OF SEWERS, WATERMAINS, WATER SERVICE PIPES AND IN EXCAVATIONS AROUND CATCH BASINS, MANHOLES, INLETS AND OTHER APPURTENCES WHICH OCCUR WITHIN TWO FEET OF THE LIMITS OF EXISTING AND PROPOSED PAVEMENT IMPROVEMENTS, SIDEWALKS, AND CURB AND GUTTERS SHALL BE BACKFILLED WITH TRENCH BACKFILL (AS DEFINED IN SECTION 208 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND SPECIAL PROVISIONS).

14. AT LEAST 2 WORKING DAYS BEFORE COMMENCEMENT OF ANY WORK ACTIVITIES, THE CONTRACTOR WILL BE REQUIRED TO ATTEND AN ON-SITE PRECONSTRUCTION CONFERENCE. AT THIS CONFERENCE, THE CONTRACTOR WILL BE REQUIRED TO FURNISH AND DISCUSS (INCLUDING BUT NOT LIMITED TO THE FOLLOWING): 1.) WRITTEN PROGRESS SCHEDULE AND BEGINNING OF WORK 2.) NAMES OF PROJECT MANAGER, FIELD SUPERINTENDENT AND THE NAME AND PHONE NUMBER OF A RESPONSIBLE INDIVIDUAL WHO CAN BE REACHED 24 HOURS A DAY.

15. THE CONTRACTOR SHALL NOT BE PERMITTED TO OPERATE EXISTING WATER VALVES OR HYDRANTS WITHOUT PERMISSION FROM THE WATER DEPARTMENT. THE CONTRACTOR SHALL CALL THE WATER DEPARTMENT 24 HOURS PRIOR TO THE NEED TO OPERATE THE VALVES OR HYDRANTS.

16. THE OWNER SHALL PROVIDE A FULL AND COMPLETE CIVIL ENGINEERING RECORD DRAWING AS-SET IN HARD COPY AND AUTOCAD AT THE COMPLETION OF THE PROJECT. THE RECORD DRAWINGS SHALL INCLUDE ANY CHANGES FROM THE ORIGINAL CIVIL ENGINEERING PLANS. CURRENT ELEVATIONS SHALL BE SHOWN FOR THE FOLLOWING, AT A MINIMUM: 1) ALL RIM AND INVERTS 2) GRADE INFLECTION POINTS WITH PERIODIC GRADES SHOTS IN LEVEL AREAS 3) DETENTION POND GRADES WITH VOLUME CALCULATION. ADD NOTE COMPARING ACTUAL TO REQUIRED POND VOLUME.

17. DUST CONTROL WILL BE IN ACCORDANCE WITH IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN THE STATE OF ILLINOIS", LATEST EDITION, SECTION 107.35.

18. ANY DEWATERING NECESSARY FOR THE INSTALLATION OF THE IMPROVEMENTS AS SHOWN ON THE PLANS SHALL BE THE CONTRACTORS RESPONSIBILITY. THE COST FOR DEWATERING SHALL BE INCLUDED IN THE INSTALLATION OF THE IMPROVEMENTS.

19. ANY POOR SOILS ENCOUNTERED UNDER AREAS TO BE PAVED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

20. THE CONTRACTOR SHALL TAKE CARE TO PROTECT ADJACENT LAND TO THE PROJECT BY NOT DISTURBING THE SOIL BY DUMPING VEHICLES ON IT.

21. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR DAMAGE TO PLANT MATERIAL OR SOILS OUTSIDE THE CONSTRUCTION LIMITS.

22. ANY REMOVAL ITEMS SHALL BE PROPERLY DISPOSED OF IN ACCORDANCE WITH THE SPECIFICATIONS

23. ALL TREES ARE DESIGNATED TO BE SAVED SHALL BE PROTECTED IN ACCORDANCE WITH THE PROVISIONS OF ARTICLE 201.3 OF THE STANDARD SPECIFICATION AND SPECIAL PROVISIONS.

STORM SEWER:

1. STORM SEWER PIPE MATERIAL SHALL CONFORM TO CLASS B MATERIALS FROM SECTION 550 OF THE IDOT STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

2. SEWER PIPE JOINTS SHALL BE SEALED WITH "O-RING" GASKETS. WATERMAIN QUALITY PIPE JOINTS SHALL BE "O-RING" TYPE, ASTM C-443

3. VERTICAL SEPARATION:

3.1. A WATERMAIN SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM SEWERS. SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN

3.2. BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE. PRE-STRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN:

3.2.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED ABOVE, OR:

3.2.2. THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.

3.3. A VERTICAL SEPARATION OF 18" BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER, SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATERMAIN, AS SHOWN ON THE PLANS OR APPROVED BY THE ENGINEER.

3.4. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST 10 FEET.

4. MANHOLES AND CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE - ASTM C-478 AND ASTM C-443 CONFORMING TO THE FOLLOWING MINIMUM SIZE CRITERIA UNLESS SPECIFIED OTHERWISE: A.) FOR SEWER EIGHTEEN (18) INCH DIAMETER OR LESS, MANHOLE SHALL HAVE A FORTY-EIGHT (48) INCH INSIDE DIAMETER. B.) FOR SEWER TWENTY-ONE (21) INCH TO THIRTY-SIX (36) INCH DIAMETER, MANHOLE SHALL HAVE A SIXTY (60) INCH INSIDE DIAMETER. C.) FOR SEWERS LARGER THAN THIRTY-SIX (36) INCH DIAMETER, MANHOLE SHALL HAVE AN OFFSET RISER PIPE OF FORTY-EIGHT (48) INCH INSIDE DIAMETER.

5. NO MORE THAN TWO PRECAST ADJUSTING RINGS WITH A MAXIMUM HEIGHT ADJUSTMENT OF 8 INCHES SHALL BE ALLOWED.

6. INLETS SHALL BE TWENTY-FOUR (24) INCH DIAMETER PRECAST REINFORCED CONCRETE CONFORMING TO ASTM C-478.

7. FOUR INCHES OF CA-7 CRUSHED GRAVEL OR CRUSHED STONE AGGREGATE SHALL BE USED AS BEDDING UNDER THE PIPE. THE BEDDING STONE SHALL BE GRADED ALONG THE ENTIRE LENGTH OF PIPE TO PROVIDE FULL BEARING. THE BEDDING STONE SHALL EXTEND TO THE SPRINGLINE OF THE PIPE.

8. ANY PIPES OR MANHOLES CONTAINING SEDIMENT SHALL BE CLEANED OUT PRIOR TO FINAL ACCEPTANCE.

9. STORM SEWER MANHOLE JOINTS SHALL BE SEALED WITH "O-RING" GASKETS OR MASTIC MATERIAL.

SANITARY SEWER:

1. ALL GRAVITY SANITARY SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321-89. ALL FLEXIBLE GRAVITY SANITARY SEWER PIPE SHALL BE PVC SDR 26 PIPE MEETING THE REQUIREMENTS OF ASTM D-3034 WITH JOINTS TO BE ELASTOMERIC GASKETS COMPLYING WITH ASTM F-477 AND PRESSURE RATED IN ACCORDANCE WITH ASTM D-3212. WATERMAIN QUALITY PVC SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2241 AND ELASTOMERIC GASKETS TO COMPLY WITH F477 AND PRESSURE RATED IN ACCORDANCE WITH ASTM D1784.

2. EMBEDMENT MATERIALS FOR BEDDING, HAUNCHING AND INITIAL BACKFILL TO AT LEAST TWELVE INCHES OVER THE TOP OF THE PIPE WITH CA-7, PROCESSED MATERIAL PRODUCED FROM HIGH-WAY CONSTRUCTION AS IN THE PROJECT CLASSIFIED ACCORDING TO PARTICLE SIZE, SHAPE AND GRADATION IN ACCORDANCE WITH ASTM D-2321-89, SECTION 5, TABLE 1.

3. ALL RIGID GRAVITY SEWER PIPE TO BE INSTALLED IN ACCORDANCE WITH ASTM C-12 AND BEDDING MATERIAL CA-7.

4. MANHOLES IN ALL MANHOLES LIKELY TO BE FLOODED SHALL NOT BE LARGER THE ONE INCH IN DIAMETER AND SHALL BE OF THE CONCEALED TYPE.

5. THE MINIMUM BUILDING SANITARY SEWER SERVICE SIZE SHALL BE SIX (6) INCHES IN DIAMETER, THE SERVICE LATERAL SHALL SLOPE TOWARD THE MAIN AT THE MINIMUM RATE OF ONE (1) PERCENT.

6. MANHOLES SHALL BE PRECAST REINFORCED CONCRETE- ASTM C-478 WITH TONGUE AND GROOVE JOINTS SEALED WITH GASKETS CONFORMING TO ASTM C-443 OR BITUMINOUS JOINTING MATERIAL.

7. NO MORE THAN TWO PRECAST ADJUSTING RINGS WITH A MAXIMUM HEIGHT ADJUSTMENT OF SIX INCHES SHALL BE ALLOWED.

8. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER-TIGHT PIPE TO MANHOLE SLEEVES OR SEALS, PER ASTM C-923.

9. MANHOLES SHALL INCLUDE EXTERNAL CHIMNEY SEALS.

10. ALL SANITARY SEWER CONSTRUCTION REQUIRES SIX (6) INCHES OF CA-7 CRUSHED GRAVEL OR CRUSHED STONE BEDDING UNDER THE PIPE, BEDDING STONE SHALL EXTEND TO A POINT TWELVE INCHES ABOVE THE TOP OF PIPE.

11. THE INSTALLATION OF SANITARY SEWER AND APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-2321 FOR PVC PIPE AND FITTINGS.

12. BACKFILLING OF THE TRENCH SHALL BE ACCOMPLISHED BY CAREFUL REPLACEMENT OF THE EXCAVATED MATERIAL AFTER THE PIPE, BEDDING, AND THE COVER MATERIAL HAVE BEEN INSTALLED. ANY PIPE INSTALLED UNDER OR WITHIN TWO (2) FEET OF A PAVEMENT EDGE, SIDEWALK, OR CURB AND GUTTER SHALL BE BACKFILLED TO THE TOP OF THE TRENCH WITH CA-7 MATERIAL.

13. "RAMNECK" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE CROSSING AS MATERIALS, ALL CHANGES OF MATERIAL SHALL OCCUR INSIDE A MANHOLE.

14. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHOULD BE USED: A.) CIRCULAR SAWCUT OF SEWER MAIN BY PROPER TOOLS ("SEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF INSERT-A-WYE SADDLE OR HUB-TEE SADDLE. B.) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE (RUNNER SECTION). C.) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "RAMNECK" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

15. MANHOLE FRAMES SHALL BE INSTARRING NO. 8-4-710 / WATERTIGHT LID OR EAST JORDAN IRON WORKS 1030AZG. ALL CLOSED LIDS SHALL HAVE A CONCEALED PICK HOLE. WATER AND SANITARY LIDS SHALL BE WATER TIGHT AND SELF-SEALING. LIDS SHALL BE EMBOSSED WITH "SANITARY SEWER" AND "CITY OF CRYSTAL LAKE" UNLESS OTHERWISE NOTED.

16. SANITARY MAINS AND WATER MAIN VAULTS SHALL BE EAST JORDAN IRON WORKS NO. 1020 AND EMBOSSED WITH "CITY OF BROADWOOD" AND "SANITARY" OR "WATER", RESPECTIVELY.

17. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.

18. ALL SANITARY SEWER PIPES SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, AS A MINIMUM, AND WITH CITY SANITARY CODE REQUIREMENTS. INCLUDING VISUAL, TELEVISED, INFILTRATION, EXFILTRATION, AIR TESTS, LEAKAGE TESTS AND DEFLECTION TESTS.

19. THE SEWER SHALL MEET THE REQUIREMENTS OF EXFILTRATION OR AIR UNDER PRESSURE AND TELEVISION INSPECTION. ALL TEST MUST BE CONDUCTED IN THE PRESENCE OF AN EMPLOYEE OF THE CITY AND THE ENGINEER'S REPRESENTATIVES.

20. MANHOLES SHALL BE TESTED PER ASTM C969 OR C1244.

PAVEMENT / SIDEWALK:

1. PAVEMENT THICKNESS SHALL COMPLY WITH CITY REQUIREMENTS.

2. HANDICAPPED RAMPS AND DEPRESSED CURBS SHALL BE PROVIDED AT LOCATIONS SHOWN ON PLANS.

3. EXPANSION JOINTS SHALL BE PLACED, AS A MINIMUM AT ALL CONSTRUCTION JOINTS IN THE CURB, TWO PCC REINFORCING BARS SHALL BE PLACED CONTINUOUSLY BETWEEN EXPANSION JOINTS. EXPANSION JOINTS SHALL BE DOWELED AND SPACED NO MORE THAN SIXTY (60) FEET ON CENTERS.

4. PRIOR TO PLACING ANY PAVEMENT MATERIAL, THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY PREPARING AND COMPACTING THE SUBGRADE. THE PAVEMENT BASE COURSE SHALL BE PROOF-ROLLED WITH A FULLY LOADED DUMP TRUCK. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE PROOF-ROLLING. ADDITIONAL PROOF-ROLLS MAY BE NECESSARY TO VERIFY THAT ANY UNSTABLE AREAS HAVE BE REPAIRED. NO PAVEMENT MATERIAL IS TO BE PLACED ON A WET OR SOFT SUBGRADE.

5. ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT TO A NEAT EDGE ALONG LIMITS OF PROPOSED REMOVAL BEFORE REMOVAL OPERATIONS BEGIN.

SOIL EROSION CONTROL PLAN:

1. THE PROJECT AREA SHALL BE GRADED SO A MINIMAL AMOUNT OF STORMWATER RUNOFF AND LIKEWISE SOIL SEDIMENT WILL DISCHARGE UNRESTRICTED FROM THE SITE.

2. IN ACCORDANCE WITH THE NPDES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL PROTECTION DURING CONSTRUCTION AS WELL AS PROVIDING PROTECTION TO ADJOINING STREETS FROM MUD AND POLLUTED RUNOFF AS WELL AS KEEPING EXISTING PAVEMENT CLEAN OF MUD AND DEBRIS. PAVEMENT CLEANING SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER OR REPRESENTATIVE OF THE CITY AND THE COUNTY ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND CLEANED OR OTHERWISE MAINTAINED ON A WEEKLY BASIS, AND WITHIN 24 HOURS AFTER ANY SIGNIFICANT RAINFALL (0.5 INCHES OR GREATER) TO ENSURE THAT ANY DAMAGE THAT MAY HAVE OCCURRED IS REPAIRED. ALL EROSION CONTROL INSTALLATION SHALL BE APPROVED BY THE CITY ENGINEERING DIVISION PERSONNEL BEFORE CONSTRUCTION IS ALLOWED TO BEGIN.

3. INLET PROTECTORS SHALL BE USED IN ALL STORM GRATES DURING CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL THE RESTORATION IS SUFFICIENTLY ESTABLISHED. THE INLET PROTECTORS SHALL BE MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL KEEP A MAINTENANCE LOG, THE CITY ENGINEER CAN DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL.

4. SILT FENCING SHALL REMAIN IN PLACE THROUGH THE CONSTRUCTION OF HOUSE/BUILDINGS TO SERVE AS EROSION CONTROL FOR THAT CONSTRUCTION.

5. TO PREVENT SOIL FROM LEAVING THE SITE ON CONSTRUCTION VEHICLE WHEELS, WORK ENTRANCES SHALL BE CONSTRUCTED OF GRAVEL AND SHALL EXTEND AT LEAST 50 FEET INTO THE JOB SITE. THE EXISTING PAVEMENT SURFACES SHALL BE INSPECTED DAILY FOR SOIL DEBRIS AND SHALL BE CLEANED WHEN NECESSARY.

6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROPERLY DISPOSE OF ANY EXCESS EXCAVATED MATERIAL.

7. DISPOSAL OF DEBRIS EXCAVATION AND PAVEMENT REMOVAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND CONSIDERED AS AN INCIDENTAL EXPENSE.

8. ANY TOPSOIL THAT WILL BE STOCKPILED ON SITE SHALL BE MANAGED IN ACCORDANCE WITH THE CURRENT IMPDES REGULATIONS. IF THE STOCKPILE WILL REMAIN ON SITE FOR AN EXTENDED PERIOD, IT SHALL BE STABILIZED WITH GRASS AND/OR OTHER VEGETATION AND DOUBLE ROW OF SILT FENCING SHALL BE PLACED AROUND THE STOCKPILE.

9. ALL ACCESS TO AND FROM THE CONSTRUCTION SITE IS TO BE RESTRICTED TO THE CONSTRUCTION ENTRANCE.

10. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE EFFECTIVE PERFORMANCE OF THEIR INTENDED FUNCTION.

11. THE ENGINEER SHALL BE NOTIFIED OF MAJOR AMENDMENTS OF THE SITE DEVELOPMENT PLAN AND IMPLEMENTATION CONTROLS PLANS, WHICH WILL BE APPROVED IN THE SAME MANNER AS THE ORIGINAL PLANS.

12. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY SWEEPING OR STREET CLEANING (NOT FLUSHING) BEFORE THE END OF EACH WORKDAY AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL.

13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF WITHIN 30 DAYS AFTER THE FINAL SITE STABILIZATION IS ACHIEVED WITH PERMANENT SOIL STABILIZATION MEASURES

14. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 7 CALENDAR DAYS FOLLOWING THE END OF ACTIVE DISTURBANCE OR REDISTURBANCE.

15. IF DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. ALL PUMPED DISCHARGES SHALL BE ROUTED THROUGH APPROPRIATELY DESIGNED SEDIMENT TRAPS OR BASINS.

SITE GRADING:

1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS MAY REQUIRE EACH EXCAVATION AND COMPACTED EARTH FILL MATERIAL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS.

2. PLACEMENT OF THE EXCAVATED MATERIAL SHALL BE IN AREAS DESIGNATED BY THE OWNER FOR FUTURE USE, WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL.

3. COMPACTION OF THE EXCAVATED MATERIAL PLACED IN AREAS NOT REQUIRING STRUCTURAL FILL SHALL BE MODERATE.

4. EXCESS MATERIALS, IF NOT UTILIZED AS FILL OR STOCKPILED FOR FUTURE LANDSCAPING, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF BY THE CONTRACTOR.

5. EXCAVATION OF EARTH AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.2' +- OF THE PLAN SUBGRADE ELEVATIONS. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIAL SHALL BALANCE AS PART OF THE FINE GRADING OPERATION.

6. PLACEMENT AND COMPACTION OF MATERIALS SHALL CONFORM TO 12.0.7 SPECIFICATIONS.

7. THE CONTRACTOR SHALL MAINTAIN PROPER SITE DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.

8. PAYMENT FOR THE REMOVAL OF UNSUITABLE MATERIAL (EXCLUDING TOPSOIL EXCAVATION) SHALL BE BASED ON THE QUANTITIES AS FIELD MEASURED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE AS PART OF HIS BID A UNIT PRICE PER CUBIC YARD FOR THE REMOVAL OF UNSUITABLE MATERIALS. SAID UNIT PRICE SHALL INCLUDE THE COMPLETE REMOVAL OF THE MATERIAL, REPLACEMENT WITH SUITABLE MATERIAL OBTAINED BY THE CONTRACTOR FROM A BORROW SOURCE, AND COMPACTION TO THE REQUIRED SPECIFICATIONS OF THE ENGINEER.

9. ALL DISTURBED AREAS SHALL BE RESTORED W/6" TOPSOIL AND SEED AND BLANKET UNLESS OTHERWISE INDICATED.

10. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO MAINTAIN ALL THE SEDIMENTATION CONTROL MEASURES. INSPECTIONS SHALL BE CONDUCTED AFTER A RAIN EVENT, AND IF MAINTENANCE OF THE STRUCTURES IS NECESSARY, INCLUDING REPAIR OF DAMAGE AND REMOVAL OF DEPOSITS OR SEDIMENT FROM VEGETATIVE FILTERS, IT SHALL BE DONE BY THE DEVELOPERS.

PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

NOTE: SCALES DEPICTED ON THIS DRAWING ARE NOT CORRECT UNLESS PLOTTED SHEET SIZE IS 30 X 42 INCHES.

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CRYSTAL LAKE FACILITY RENOVATION

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1	CITY COMMENTS 08/30/2024

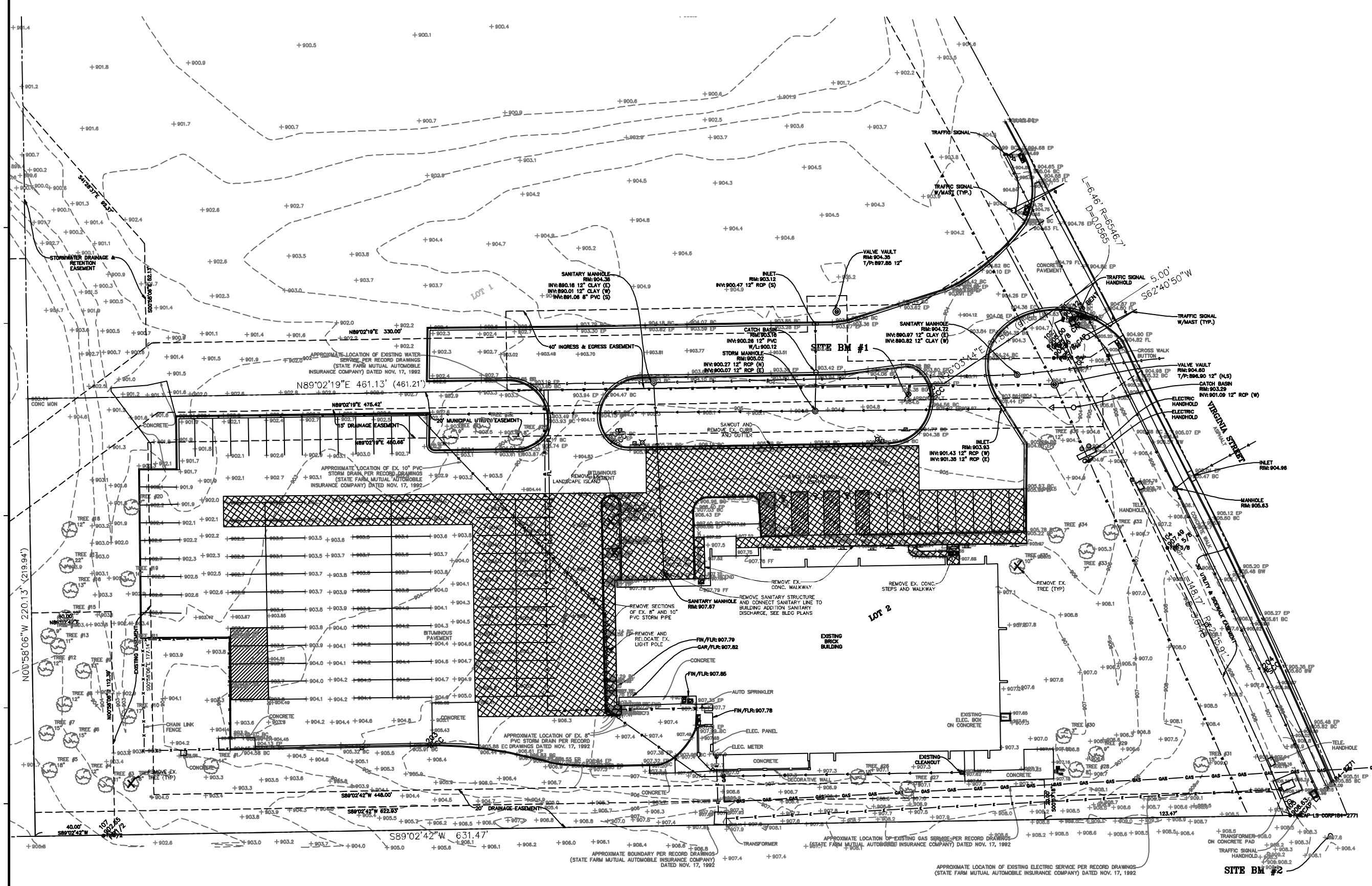
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SHEET TITLE
CONSTRUCTION NOTES

SHEET NUMBER
C-2.0

G:\PROJECTS\Active Architecture\Engineers\2024\W24001.00 Wolfenbuttle Crystal Lake Facility Renovation\CAD\CONSTRUCTION DOCUMENTS\W24001 - C2.0.dwg Wednesday, September 04, 2024 - 10:49:00 AM by mdavis

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SCALE: 1"=20'

EX. CONDITIONS LEGEND

- PROPERTY LINE
- LOT LINE ADJACENT / R.O.W
- EASEMENT LINE
- BUILDING SETBACK LINE
- EX. SANITARY LINE
- EX. STORM LINE
- EX. WATER LINE
- EX. UNDERGROUND CABLE
- EX. UNDERGROUND ELECTRIC
- EX. UNDERGROUND GAS
- EX. UNDERGROUND TELEPHONE
- EX. FENCE
- EX. OVERHEAD WIRE
- EX. CONCRETE CURB & GUTTER
- EX. DEPRESSED CURB
- EX. CONTOURS
- EX. SANITARY MANHOLE
- EX. STORM CATCH BASIN
- EX. STORM FLARED END SECTION
- EX. STORM INLET
- EX. STORM MANHOLE
- EX. VALVE VAULT
- EX. FIRE HYDRANT
- + XXX.X EX. SPOT ELEVATION
- EX. TREE / VEGETATION LINE
- EX. CONIFEROUS TREE W/TRUNK SIZE IN INCHES
- EX. DECIDUOUS TREE W/TRUNK SIZE IN INCHES
- EX. BUSH

DEMO LEGEND

- DEMO EX. UTILITY/FENCE
- SAWCUT EX. CURB
- REMOVE EX. TREE/SHRUB
- DEMO EX. BUILDING
- DEMO EX. ASPHALT/CONCRETE

ABBREVIATIONS

A	ARC LENGTH
ACU	AIR CONDITIONER UNIT
BC	BACK OF CURB
BM	BENCHMARK
B/	BOTTOM OF
CH	CHORD
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
DS	DOWNSPOUT
E	EAST
ELEC	ELECTRIC
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FF	FINISHED FLOOR
GF	GARAGE FLOOR
GM	GAS METER
IBT	ILLINOIS BELL TELE. EASEMENT
INV	INVERT
MB	MAILBOX
N	NORTH
PEDC	CABLE PEDESTAL
PEDE	ELECTRIC PEDESTAL
PEDT	TELEPHONE PEDESTAL
PP	POWER POLE
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
S	SOUTH
TF	TOP OF FOUNDATION
TRANS	TRANSFORMER
T/	TOP OF
TW	TOP OF WALL
VCP	VITRIFIED CLAY PIPE
W	WEST
WW	WINDOW WELL
XXX.XX'	MEASURED DIMENSION
(XXX.XX')	RECORD DIMENSION

SITE BENCHMARK #1:
ARROW BOLT ON FIRE HYDRANT ALONG THE NORTH SIDE OF PROJECT SITE.

ELEV: 906.48 (NAVD 88)

SITE BENCHMARK #2:
ARROW BOLT ON FIRE HYDRANT ALONG THE EAST SIDE OF PROJECT SITE.

ELEV: 906.61 (NAVD 88)

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CRYSTAL LAKE, IL 60014

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1	09/24/24 BID DOCUMENTS

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SHEET TITLE
EXISTING CONDITIONS & DEMOLITION

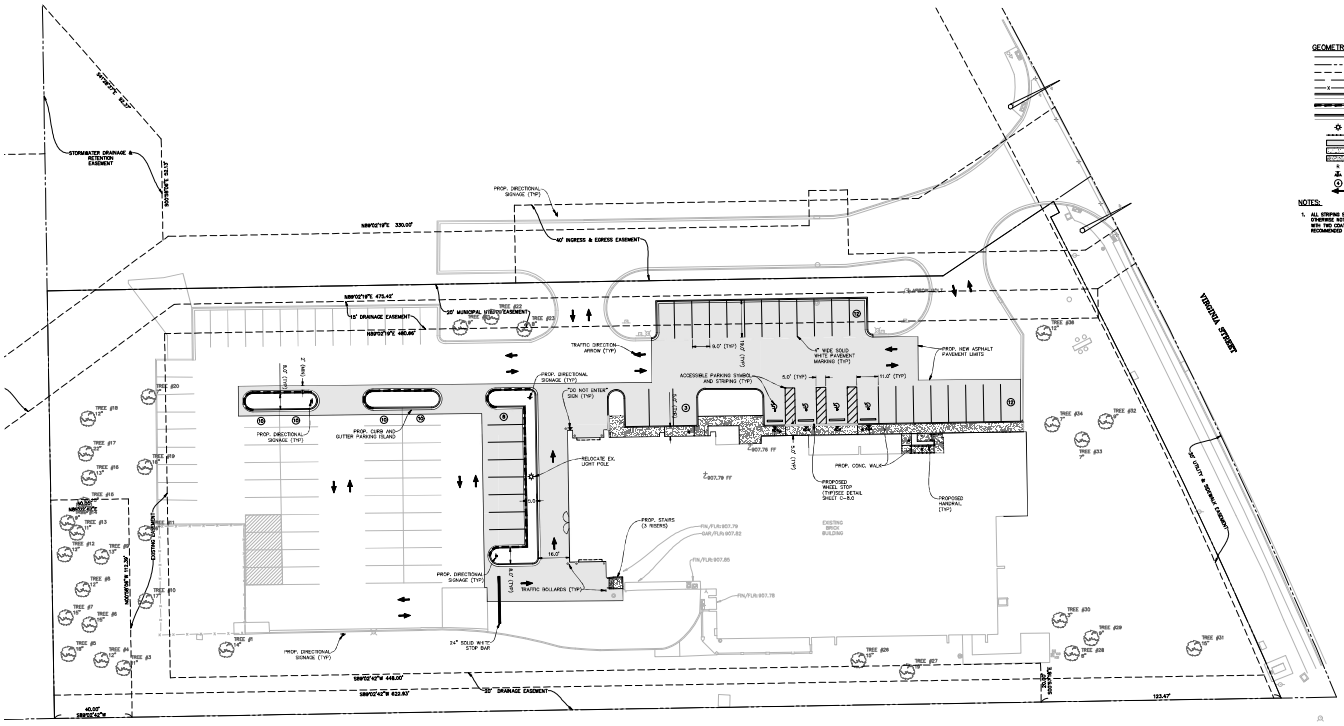
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PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

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GEOMETRY PLAN LEGEND

- PROPERTY LINE
- LOT LINE ADJACENT / R.O.W.
- EASEMENT LINE
- BUILDING SETBACK LINE
- PROP. FENCE
- PROP. CURB & GUTTER
- PROP. CURB & GUTTER (PITCH OUT)
- PROP. CURB (DEPRESSED)
- PROP. LIGHT POLE (RELOCATED)
- PROP. HANDRAIL
- PROP. ASPHALT PAVEMENT
- PROP. CONCRETE PAVEMENT
- PROP. CONCRETE WALK
- PROP. RAMP
- PROP. ADA SIGN
- PROP. PARKING COUNT
- TRAFFIC DIRECTION ARROW

NOTES:

1. ALL STRIPING SHALL BE 4" YELLOW PAINT UNLESS OTHERWISE NOTED. ALL STRIPING SHALL BE APPLIED WITH TWO COATS OF PAINT AT MANUFACTURER'S RECOMMENDED RATE.

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APPROVED	JPG

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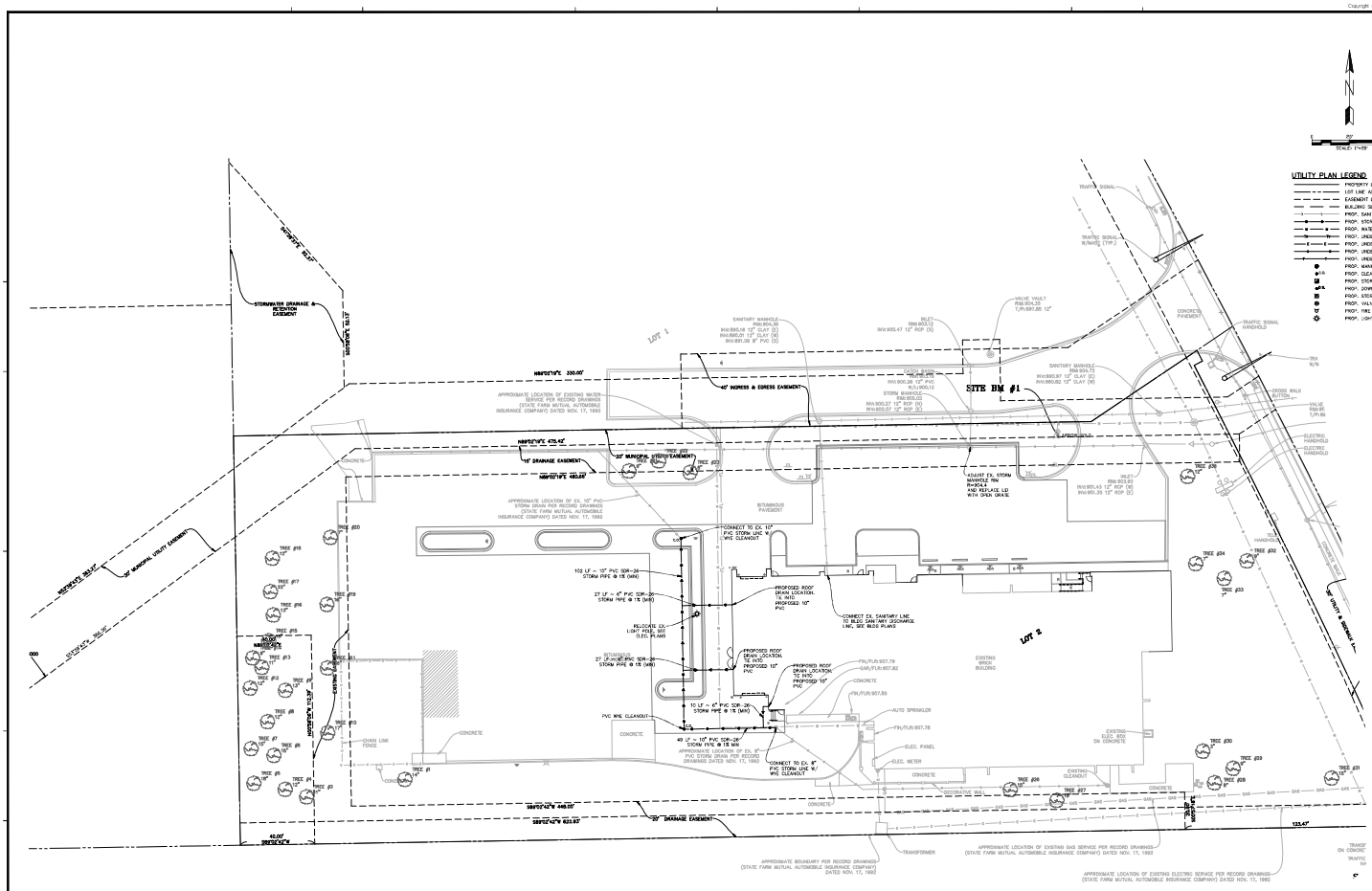
GEOMETRIC PLAN

SHEET NUMBER

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TIE BENCHMARK #1:
SURVEY NAIL SET ON FIRE HYDRANT ALONG THE NORTH SIDE OF PROJECT SITE.
ELEV=806.48 (NAVD 88)

TIE BENCHMARK #2:
SURVEY NAIL SET ON FIRE HYDRANT ALONG THE EAST SIDE OF PROJECT SITE.
ELEV=808.81 (NAVD 88)

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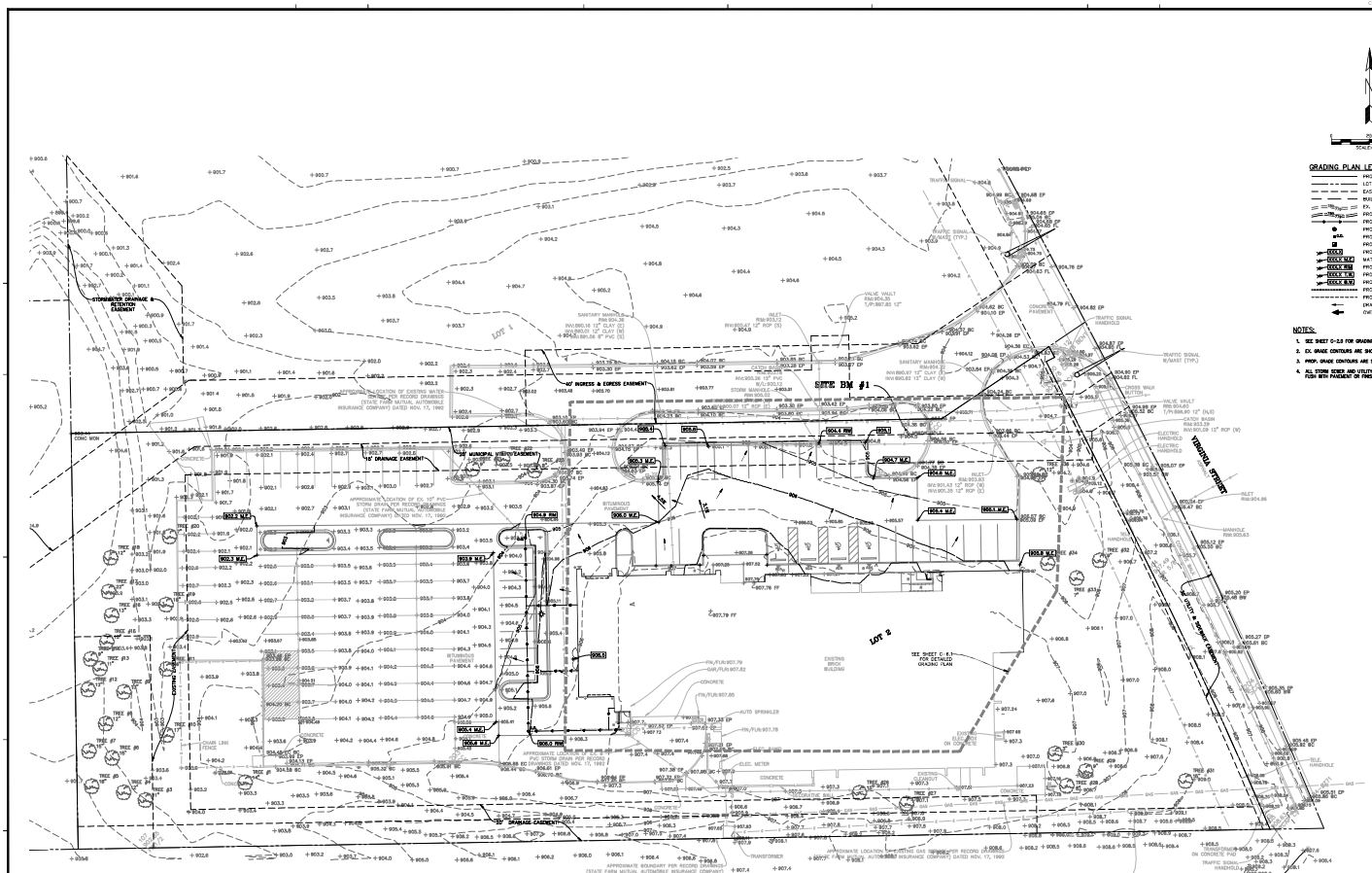
UTILITY PLAN

SHEET NUMBER

C-5.0

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GRADING PLAN LEGEND

- PROPERTY LINE
- LOT LINE ADJACENT / R.O.W.
- EASEMENT LINE
- BUILDING SETBACK LINE
- EX. CONTOURS
- PROP. CONTOURS
- PROP. STORM LINE
- PROP. MANHOLE
- PROP. CLEANOUT
- PROP. STORM CATCH BASIN
- PROP. SPOT ELEV.
- MATCH EX. ELEV.
- PROP. RIM ELEV.
- PROP. TOP OF WALL ELEV.
- PROP. BOTTOM OF WALL ELEV.
- PROP. DRAINAGE SWALE
- PROP. RIDGE LINE / HIGH POINT
- DRAINAGE FLOW
- OVERFLOW ROUTE

NOTES:

1. SEE SHEET C-2.0 FOR GRADING NOTES
2. EX. GRADE CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
3. PROP. GRADE CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
4. ALL STORM SEWER AND UTILITY STRUCTURE RIMS SHALL BE FLUSH WITH PAVEMENT OR FINISH GRADE.

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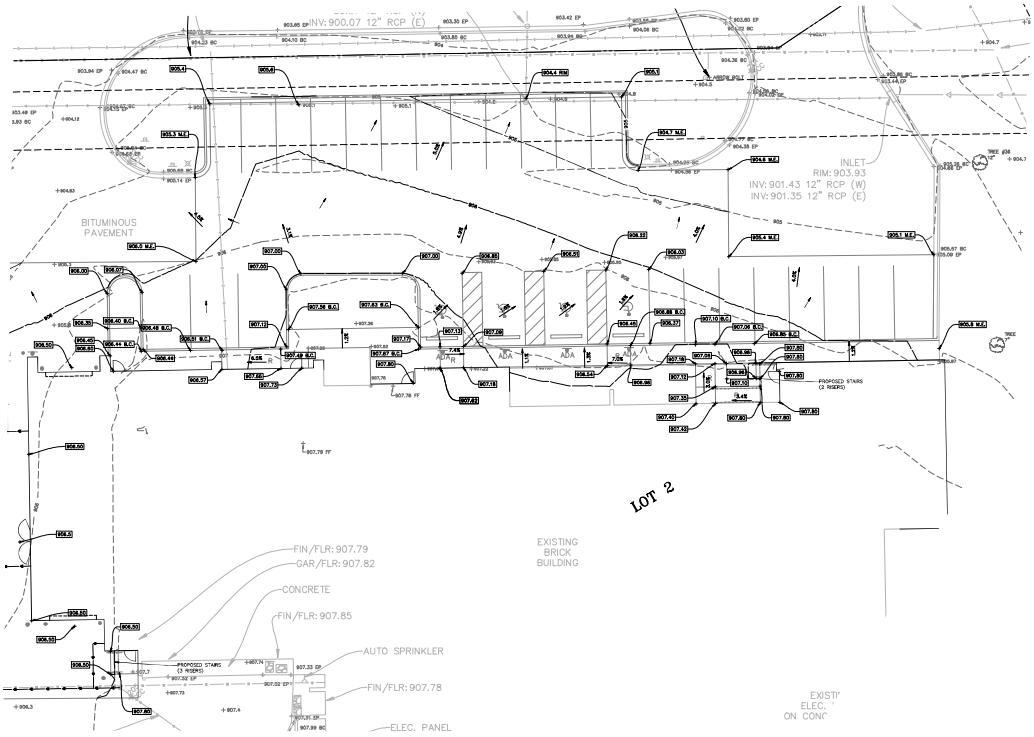
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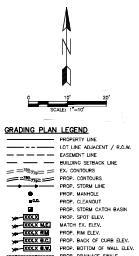
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SHEET NUMBER
C-6.0

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NOTES:

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3. PROP. GRADE CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
4. ALL STORM SEWER AND UTILITY STRUCTURE RIMS SHALL BE FLUSH WITH PAVEMENT OR FINISH GRADE.

TIE BENCHMARK #1:
SURVEY NAIL ON THE HYDRANT ALONG THE NORTH SIDE OF PROJECT SITE.
ELEV=906.48 (NAVD 88)

TIE BENCHMARK #2:
SURVEY NAIL ON THE HYDRANT ALONG THE EAST SIDE OF PROJECT SITE.
ELEV=909.81 (NAVD 88)

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GRADING PLAN-DETAIL

SHEET NUMBER
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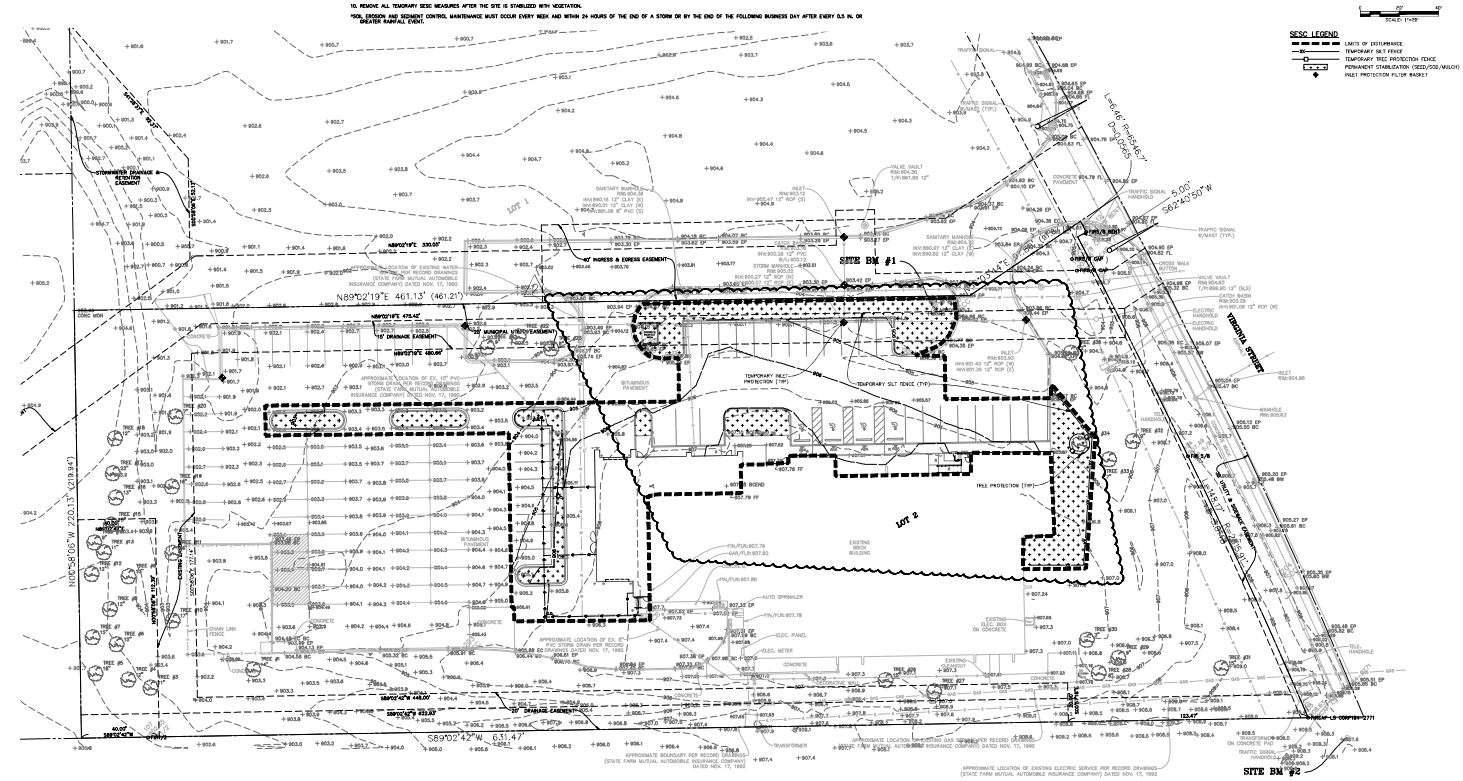
NOTES:

1. SEE SHEET C-7.1 FOR EROSION CONTROL DETAILS.
2. THE LOCATIONS OF CONSTRUCTION STAGING AREA AND TOPSOIL STOCKPILE AREA ARE SUBJECT TO CHANGE PER CONTRACTOR. STAGING AREA SHALL BE ENCLOSED WITH TEMPORARY FENCE. CONSTRUCTION TRAILERS, TEMPORARY PARKING, AND ITEMS SUCH AS SOLID WASTE RECEPTACLES, SANITARY FACILITIES, CONCRETE WASTE, FUEL TANKS, CONSTRUCTION MATERIALS, SUPPLIES, AND STOCKPILES SHALL BE PLACED IN THIS AREA IF NEEDED. TOPSOIL STOCKPILE AREA SHALL BE ENCLOSED WITH SILT FENCE.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN VEHICLES PRIOR TO THEIR EXITING THE SITE. ALL VEHICLES SHALL EXIT THE SITE ONLY AT THE CONSTRUCTION EXIT. ANY MUD OR DEBRIS TRACKED ONTO EXISTING STABILIZED SURFACE WITHIN THE LIMITS OF DISTURBANCE, SHALL BE CLEANED IMMEDIATELY. CONSIDERATION SHALL BE GIVEN TO A WHEEL WASH SYSTEM WHERE APPROPRIATE. ANY WATER USED FOR CLEANING VEHICLES SHALL BE COLLECTED PRIOR TO LEAVING THE LIMITS OF DISTURBANCE OR BEFORE ENTERING AN EXISTING STORM DRAINAGE SYSTEM. SEE SHEET C-7.1 FOR CONSTRUCTION EXIT DETAIL.
4. ALL SOIL DISTURBANCE SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE.

CONSTRUCTION SEQUENCE SCHEDULE:

1. INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL (SESC) MEASURES
   1.1. INSTALL STABILIZED CONSTRUCTION ENTRANCE
   1.2. INSTALL SILT FENCE
   1.3. INSTALL INLET FILTER PROTECTION AT EXISTING STORM STRUCTURES
2. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB)
3. REMOVE EXISTING BUILDING AND STRUCTURES.
4. CONTAIN STOCKPILE LOCATIONS WITHIN THE SITE AND INSTALL EROSION CONTROL MEASURES AS NECESSARY.
5. START CONSTRUCTION OF BUILDING PAD AND UTILITIES.
6. INSTALL INLET PROTECTION AS EACH STORM STRUCTURE IS INSTALLED.
7. INITIATE TEMPORARY SEEDING WITHIN ONE BUSINESS DAY OF INACTIVITY, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE.
8. INSTALL PAVEMENT.
9. PERMANENTLY STABILIZE ALL AREAS.
10. REMOVE ALL TEMORARY SESC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION.

*SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR EVERY WEEK AND WITHIN 24 HOURS OF THE END OF A STORM OR BY THE END OF THE FOLLOWING BUSINESS DAY AFTER EVERY 0.5 IN. OR GREATER RAINFALL EVENT.



TOP BENCHMARK #1:
SURVEY NAIL ON FIRE HYDRANT ALONG THE NORTH SIDE OF PROJECT SITE.
ELEV=906.48 (NAVD 88)

TOP BENCHMARK #2:
SURVEY NAIL ON FIRE HYDRANT ALONG THE EAST SIDE OF PROJECT SITE.
ELEV=908.81 (NAVD 88)

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PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

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CRYSTAL LAKE FACILITY RENOVATION
MCHENRY COUNTY
1550 N MINGHA STREET
CRYSTAL LAKE, IL 60014

ISSUED	
1	CITY COMMENTS 12/20/24

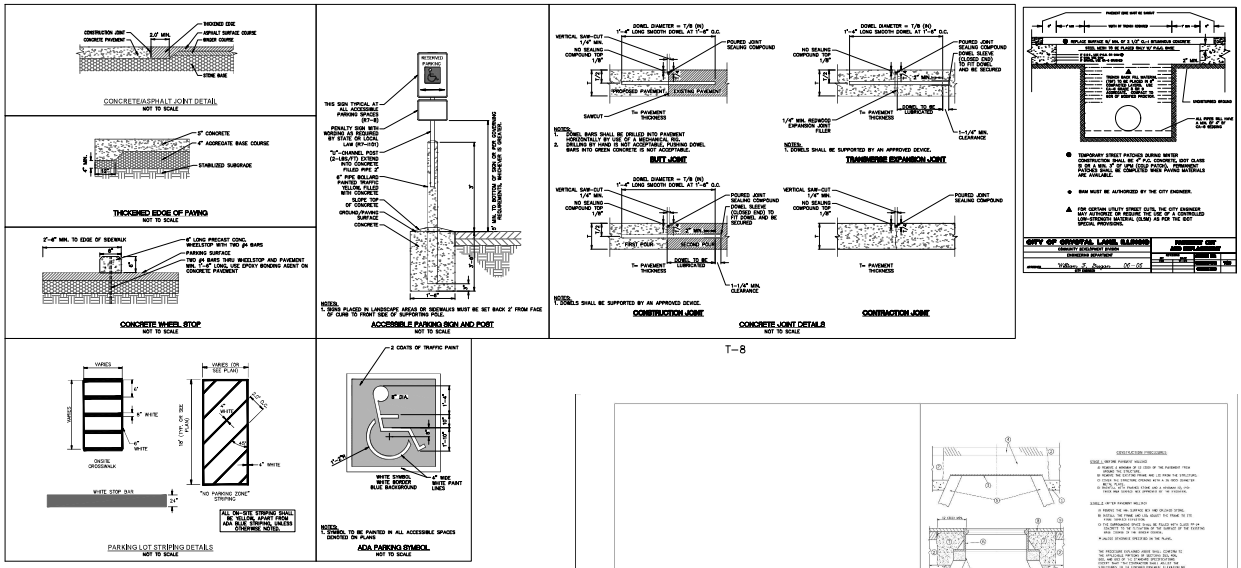
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SHEET TITLE
SOIL EROSION & SEDIMENT CONTROL PLAN

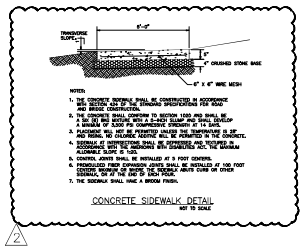
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C-7.0

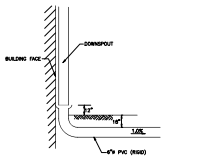
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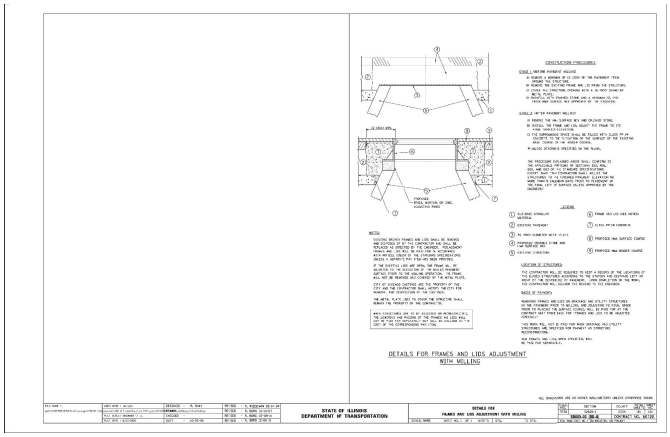
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T-8







PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

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MCHENRY COUNTY
100 N VIRGINIA STREET
CRYSTAL LAKE, IL 60014

ISSUED
1 PERMIT SUBMITTAL 4/26/2024
2 PERMIT RESUBMITTAL
3 PERMIT RESUBMITTAL

JOB NO. W24001.00
DRAWN MDD
CHECKED BAS
APPROVED JPG

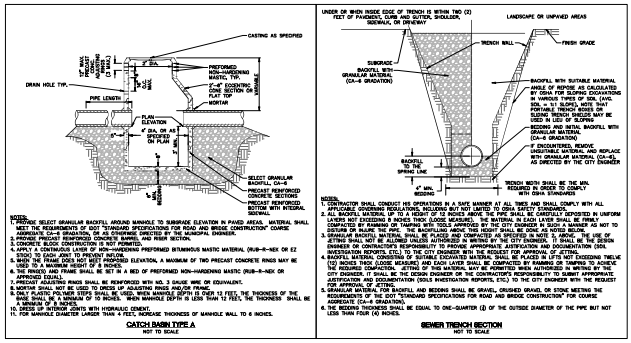
SHEET TITLE
CONSTRUCTION DETAILS

SHEET NUMBER
C-8.0

Updated by Aubrey 4/26/2024

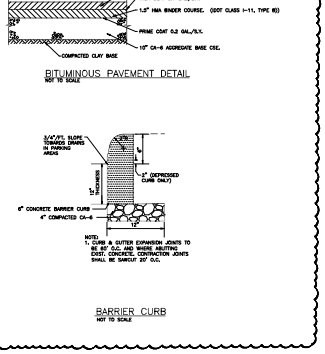
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CATCH BASIN TYPE A
NOT TO SCALE

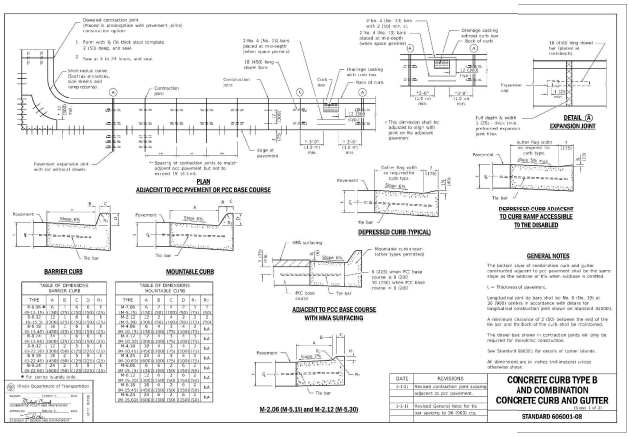
SEWER TRENCH SECTION
NOT TO SCALE



BITUMINOUS PAVEMENT DETAIL
NOT TO SCALE

BARRIER CURB
NOT TO SCALE

2



GENERAL NOTES

The backset slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the adjacent or 6% when subbase is omitted.

t = Thickness of pavement.

Longitudinal joint dry bars shall be No. 6 (No. 20) or 30 (M20) centers in accordance with details for longitudinal construction joints shown on standard subbase.

A minimum clearance of 2 (50) between the end of the bar and the face of the curb shall be maintained.

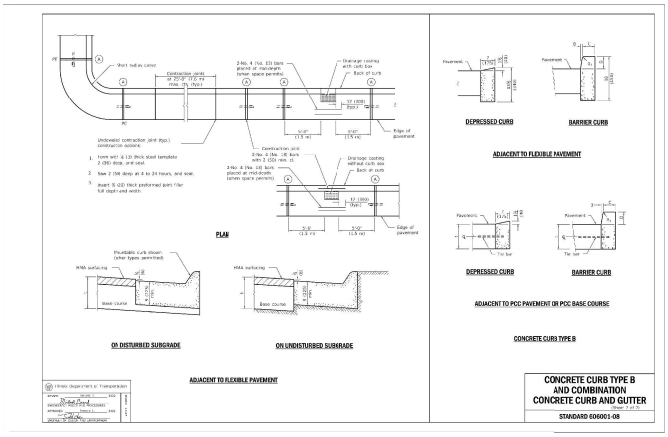
The dowel bars shown in contraction joints will only be required for monolithic construction.

See Standard 606001, for details of corner islands.

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-2-21	Revised contraction joint spacing adjacent to pcc pavement.
1-2-21	Provided General Note for tie bar spacing to be (450) c/c.

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
Sheet 1 of 2
STANDARD 606001-08



CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
Sheet 2 of 2
STANDARD 606001-08

PROFESSIONAL DESIGN FIRM NUMBER: 184.001186

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CRYSTAL LAKE FACILITY RENOVATION

MCHENRY COUNTY
100 N VIRGINIA STREET
CRYSTAL LAKE, IL 60014

Updated by Johnny 4/30/2024

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FOR PERMIT
FOR BIDDING
FOR CONSTRUCTION

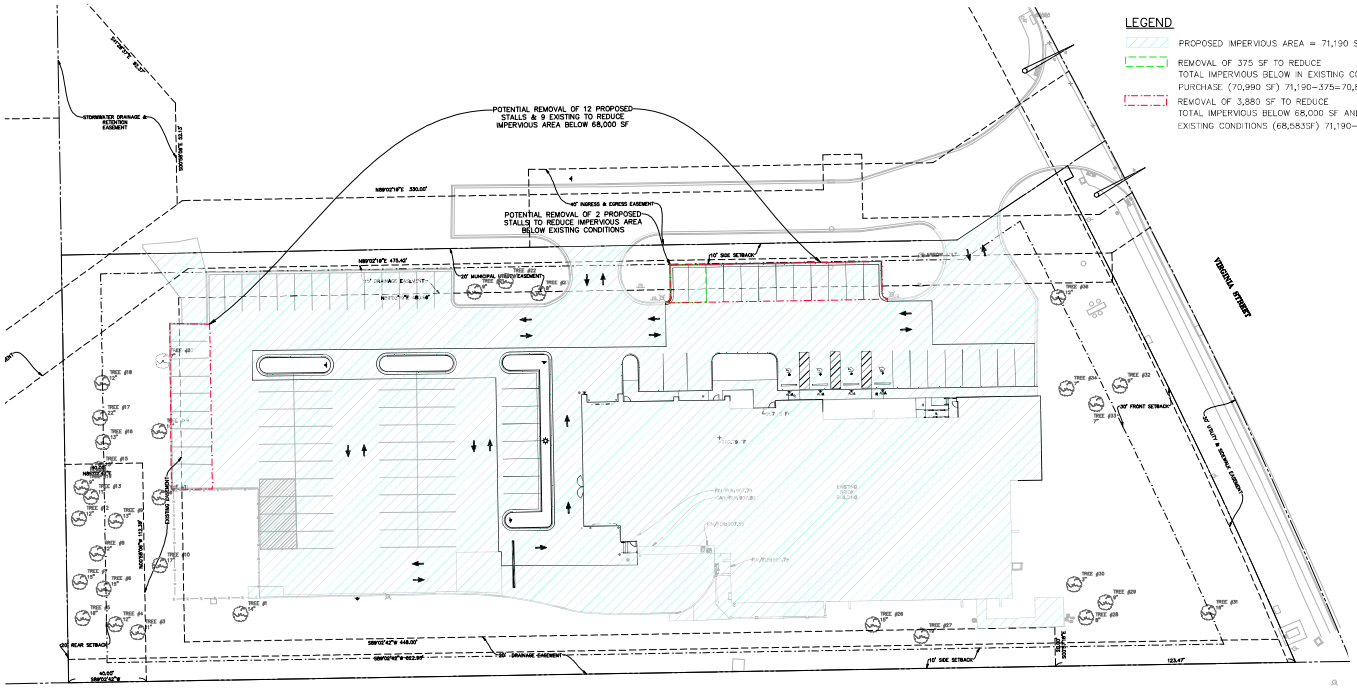
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APPROVED	JPG

SHEET TITLE
CONSTRUCTION DETAILS

SHEET NUMBER
C-8.1

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1	8/26/2024

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APPROVED	JPG

SHEET TITLE

PROPOSED IMPERVIOUS AREA EXHIBIT

SHEET NUMBER

EXH-2.0

S:\PROJECTS\Active\Kluber Engineering\W24001.00 Waterman Dr, Crystal Lake Public Facility Renovation\CAD\EXHIBITS\EXH-2.0 - Impervious Area Exhibit\W24001.00 - Impervious Area Presentation.dwg Updated by mBerry 8/26/2024

JUDGE REINHARD

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
WESTERN DIVISION

RECEIVED

DEC 31 1998 — 7 years

MICHAEL W. DOBBINS
CLERK, U.S. DISTRICT COURT

AMCORE TRUST COMPANY, as Trustee under Trust Agreement No. 3343, dated June 3, 1991, and sole beneficiary thereof,

Plaintiff,

vs.

CITY OF CRYSTAL LAKE, a municipal corporation,

Defendant.

No. 98 C 50431

JURY DEMAND

COMPLAINT AT LAW

NOW COMES THE Plaintiff, AMCORE TRUST COMPANY, as Trustee under Trust Agreement No. 3343, dated June 3, 1991, and sole beneficiary thereof (hereinafter "Plaintiff"), by and through its attorneys, GANN & PARKER, P.C., and complaining of the Defendant, CITY OF CRYSTAL LAKE (hereinafter "the City"), states as follows:

BACKGROUND FACTS

1. Plaintiff seeks in this action damages against the City for its violations under color of law of the civil rights of Plaintiff's beneficiary, a property owner.

2. Plaintiff's beneficiary, The Hahn Family Limited Partnership, is the successor in beneficial interest of the subject property, the legal description of which is described in Exhibit "A" attached hereto.

3. Plaintiff holds title to the property described in Exhibit "A" of this Complaint pursuant to the terms of a certain land trust agreement dated June 3, 1991.

4. The City is a municipal corporation organized under the statutes of the State of Illinois and located in McHenry County, Illinois.

5. The subject property is located on the west side of U. S. Route 14 at the intersection of Woodstock Street, Crystal Lake, Nunda Township, Illinois. Said property contains approximately 11.45 acres, of which 3.16 acres were sold to State Farm Insurance Company in 1993.

6. Pre-1977, the zoning for subject property was R-1 (Single Family Residence). Post-1977 annexation, the zoning was changed to W-2 F (Watershed District 2 Farming) by unilateral action of the City. A true and correct copy of said post-1977 zoning map is attached hereto as Exhibit "B".

7. As a result of Plaintiff's efforts to obtain Plan Commission, Zoning Board of Appeal and City Counsel zoning approval regarding the subject parcel, certain disputes arose between the Plaintiff and the City regarding portions of the City's Watershed Zoning Ordinance and its application to Plaintiff's property.

8. As a direct result of the City's application of the Watershed Ordinance to Plaintiff's property, on June 21, 1991, Plaintiff commenced suit in this District against the City in the action entitled, "Amcore Trust Company as Trustee under Trust Agreement No. 3343, dated June 3, 1991, and sole beneficiary thereof, Plaintiff, vs. City of Crystal Lake, a municipal corporation, Defendant", and known as Case Number 91 C 20182. A true and correct copy of said Complaint is attached hereto as Exhibit "C".

9. Said complaint contained eight counts and sought this Court's declaration and construction of the following: (Count I) that the City's Zoning Ordinance is unconstitutional, in derivation of Plaintiff's 14th Amendment rights; (Count II) that the Watershed Study and Zoning Ordinance as applied to the subject property is arbitrary, capricious and unreasonable, in derivation of the 5th and 14th Amendments; (Counts III and VIII) that the application of the Zoning Ordinance and Watershed Study to Plaintiff's property constitutes a deprivation of Plaintiff's private property rights without compensation under both federal and Illinois law; (Count IV) that the City's denial of rezoning was arbitrary and capricious pursuant to state law; (Counts V and VI) that the City's denial of the original and final modified site plans was unreasonable, arbitrary and capricious under state law; and (Count VII) that the conditions imposed upon the development proposals were unreasonable and in violation of its discretion granted under Illinois law.

10. On or about July 30, 1991, the City filed a Motion to Dismiss, pursuant to Federal Rule of Civil Procedure 12(b)(6). On Order of the Honorable Stanley J. Roszkowski of October 15, 1991, the City's Motion to Dismiss Plaintiff's Complaint was denied, with the parties being directed to immediately proceed with discovery.

11. Subsequently, the parties entered into settlement discussions culminating into a written Settlement Agreement, filed with this Court on July 7, 1992, and made a part of the court record. A true and correct copy of said Settlement Agreement is attached hereto as Exhibit "D".

12. On August 7, 1992, this Court entered an Order of Dismissal, dismissing said lawsuit pursuant to the terms of the Settlement Agreement. A true and correct copy of said Order is attached hereto as Exhibit "E".

13. Paragraph 14 of said Settlement Agreement states as follows:

> Amcore and the City agree that Amcore shall have the right, at its sole discretion, to set aside this Settlement Agreement and reinstate its lawsuit should the City and Amcore fail to reach agreement concerning the final designs and specifications of the site plans to be attached as Exhibits "A", "B" and "C" as referenced in this Agreement.

14. The parties agreed that Exhibit "A" referenced Preliminary Planned Unit Development for Lot 2; Exhibit "B" referenced the Preliminary Planned Unit Development (final site engineering) for Lots 1 and 3; and Exhibit "C" referenced Final Planned Unit Development for Lot 2.

15. Specifically Exhibit "B" memorialized the following: (a) the final site engineering plans for Lot 1 which anticipated the future construction of a one story office building, with building and parking footprint as depicted on SPACECO Plan Set, Sheet 3, dated 10/22/92; and (b) the final site engineering plans for Lot 3 regarding the construction of a storm water retention basin, also depicted on SPACECO Plan Set, Sheet 3, dated 10/22/92. A true and correct copy of said Plan Sheet is attached hereto as Exhibit "F".

16. Following the dismissal of said lawsuit, Plaintiff complied with each and every requirement of the Settlement Agreement, including submitting preliminary PUD (inclusive of final site engineering) for the entire site to the Plan Commission, submitting final PUD for development of Lot 2, and submitting a final plat of subdivision.

17. Final site engineering plans were thoroughly reviewed and approved by the City engineering staff, following consultation and direction by the City's watershed consultant, Fred Roland, with particular regard to the storm water retention basin of Lot 3.

18. Additionally, Plaintiff submitted to the Corporate Authorities, pursuant to paragraph 3 of said Settlement Agreement, the following plans: preliminary PUD for Lots 1 and 2, the final PUD and the final plat of subdivision.

19. Pursuant to paragraph 4 of said Settlement Agreement, the City gave final subdivision approval to the entire site. Final plat of subdivision was executed by the City, and recorded with the McHenry County Recorder of Deeds on March 5, 1993 as Document No. 93R 012622 and is attached hereto as Exhibit "G".

20. The recorded plat delineates the lots in the subdivision, the municipal utility easement and storm water drainage and retention area(s).

21. Pursuant to the terms of the Settlement Agreement, Plaintiff was granted seven years to pursue development of the subject property in accordance with the preliminary plans marked Exhibits "A" and "B" and final plan marked Exhibit "C".

22. Pursuant to the express terms of Paragraph 10 of said Settlement Agreement, the City agreed that Plaintiff may develop the subject property according to the preliminary plans, Exhibits "A" and "B", and final plans, Exhibit "C", with an impervious coverage of Lot 2: 68,000 square feet; Lot 1: 19,000 square feet.

23. During the years 1993, 1994 and 1995, the final site engineering plans were implemented for Lots 1, 2, and 3. Attached hereto as Exhibit "H" is a true and correct copy of the current Topographic Survey for Lots 1 and 3, dated November 7, 1998, showing topography and utility easements fully complying with the final site engineering requirements imposed by the City prior to its final approval of the Final Plat of Subdivision. The Topographic Survey reveals modifications made by the City in 1997, whereupon the City re-graded the swale on the west side of Lot 3. This re-grading of the swale was done in conjunction with the construction of a ditch on City owned property, which has no outlet other than Plaintiff's storm water retention basin.

24. Final site engineering plans for Lot 3 specified the construction of a storm water retention area for the benefit of Lot 1 and Lot 2, said storm water retention area having been built according to the initial plans approved by the City and made a part of the Settlement Agreement.

25. The design for the storm water retention basin was based solely upon criteria established by the City, through its agent, Fred Roland, based upon Mr. Roland's expertise in watershed issues.

26. The storm water retention basis area of Lot 3 was constructed in accordance with the final site plans approved by the City and at substantial cost to Plaintiff.

27. The design of the storm water retention basin on Lot 3 anticipated the storm water flow from Lot 1 with an impervious coverage of greater than 19,000 square feet and the storm water flow from the 68,000 square feet of impervious coverage on Lot 2.

28. On or about August, 1998, Plaintiff entered into a real estate sales contract with buyer, Advantage Group, Inc. (hereinafter "Advantage"), with regard to the sale of Lot 1. A true and correct copy of said Contract is attached hereto as Exhibit "I".

29. Pursuant to the terms of the Settlement Agreement, Advantage presented plans to the City, said plans being in compliance with the requirements imposed by the Settlement Agreement and in conformance with the final site engineering plans approved by the City in 1992. Specifically, Advantage proposed the construction of a one-story office, inclusive of parking area, with an impervious coverage of 18,800 square feet. A true and correct copy of Advantage site plan is attached as Exhibit "J".

30. On or about September 15 1998, in a pre-application meeting with the City, and in compliance with the City's Development Review Procedure, Advantage was informed by the City engineering staff that approval of the site plans and building plans would not occur unless the storm water retention basin area of Lot 3 was expanded.

31. During discussions with the City, Advantage was also informed that it was required to pay $75,000.00 to $100,000.00 to hook up to the installed sewer in the municipal utility easement traversing Lot 2 and Lot 3.

32. On or about September 28, 1998, Advantage requested the termination of the Sales Agreement due to its understanding that the City would not approve site plans and building plans unless the storm water retention basin was enlarged.

33. During the implementation of the final site engineering plans, the City requested Plaintiff to modify final site engineering plans to accommodate enlargement and extension of the sewer line in

the municipal utility easement. Plaintiff acquiesced to the City's request to facilitate the City's desired location of the municipal utility easement. The modification of the engineering plans for the sewer enlargement and purchase of easement rights from Plaintiff was for the "Oak Street trunk sewer line". In exchange for modification of the engineering plans and grant of municipal utility easement, the City agreed that Plaintiff was not liable for any costs associated with the construction of the Oak Street sewer.

34. In confirmation of Plaintiff's understanding that Lots 1, 2 and 3 were not encumbered with any assessment or recapture fee with regard to present or future sewer services, title commitment for said property bears evidence that Lots 1, 2 and 3 are not encumbered by extra capital costs associated with construction of new or future sewer lines.

35. On or about October 25, 1998, S.G.I. Builders expressed interest in purchasing Lot 1 and had discussions with the City's building inspector who again informed S.G.I. that site plans and buildings plans would not be approved for Lot 1 unless the storm water retention basis area of Lot 3 was expanded.

36. Accordingly, S.G.I. Builders did not pursue entering into contract negotiations with Plaintiff.

37. On or about October 21, 1998, City's counsel, John L. Cowlin, indicated that the City believes present groundwater levels suggest that the Lot 3 storm water retention basin area capacity would not adequately support development on Lot 1, without causing potential flooding hazards. A true and correct copy of said correspondence is attached hereto as Exhibit "K".

38. Certain Covenants and Conditions were recorded with the McHenry County Recorder of Deeds in conjunction with the filing and recording of the Final Plat of Subdivision, dated March 5, 1993, specifying that any maintenance issues regarding the storm water retention basin area on Lot 3 were to have been directly addressed by the City with Plaintiff and State Farm Insurance Company, the owner of Lot 2, responsibility of said detention area being vested in Plaintiff and State Farm Insurance Company.

39. Notwithstanding the terms of the Covenants and Conditions, at no time was the Plaintiff apprised of the City's concerns regarding the storm water retention area until Advantage terminated its Sales Contract.

40. SPACECO Engineer, Keith Berg, the engineer having performed the site engineering work on said project discussed the City's concerns with City Engineer, Clyde Wakefield, on or about November 20, 1998.

41. City Engineer Clyde Wakefield indicated to Keith Berg that the storm water retention basin area of Lot 3 needed to be enlarged.

42. The initially completed site engineering of Lots 1 and 3 fully comply with the final designs and specifications of said lots, as determined, approved and agreed to by the City.

43. Plaintiff has wholly complied with each and every term of the Settlement Agreement.

44. Plaintiff has been damaged as a direct result of its inability to procure buyers for Lot 1 due to the City's requirements that final plans for Lot 1 will not be approved absent enlargement of the storm water retention basin area on Lot 3.

45. Although the City agreed with the final designs and specifications of the site plans pertaining to Lots 1 and 3, the City fails and refuses to abide by the terms of the previously approved final site engineering designs and specifications.

46. Pursuant to paragraph 14 of the Settlement Agreement, the parties are unable to reach agreement concerning the final designs and specifications of Lot 1 and Lot 3.

47. The City has willfully breached the terms of the Settlement Agreement in its requirements that the storm water retention basin area of Lot 3 must be expanded in order for Plaintiff to sell and/or develop Lot 1.

48. The City has willfully breached the terms of the Settlement Agreement in its requirement that the owner of Lot 1 pay "recapture" fees associated with the Oak Street sewer.

49. Pursuant to paragraph 14 of the Settlement Agreement, Plaintiff is entitled to set aside the Settlement Agreement and reinstate said lawsuit.

Agenda Item No: 12

City Council
Agenda Supplement

Meeting Date:	February 4, 2025
Item:	Vehicle Purchase – Use of Sourcewell Contract #091521-NAF, for the pricing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines, at a total cost of $178,225.65
Staff Recommendation:	Motion to adopt a Resolution ratifying the purchase order between the City and National Auto Fleet Group for purchasing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines in the total amount of $178,225.65 using Sourcewell Purchasing Cooperative contract #091521-NAF, and authorizing the City Manager to execute such other documents as may be necessary to secure the purchase, execute change orders for up to 10% of the contract amount, and approve warranted completion date change orders relating to the contract
Staff Contact:	Michael Magnuson, Director of Public Works & Engineering

---

Background:

The 2025 fiscal year Public Works budget includes funds for the replacement of vehicles including three (3) pickup trucks used by the Engineering Division, one (1) service van used by the Wastewater Division, and one (1) Ford Escape used by the Fleet Division.

The Public Works and Engineering Department strives to make value driven decisions on vehicle replacements and always looks to reduce costs without sacrificing function. Upon review of the needs of the divisions and the intended functions of the vehicles to be replaced, the Public Works & Engineering Department has determined that it is in the best interest of the City to replace these five (5) large, full size vehicles with five (5) new hybrid 2025 Ford Mavericks (XLT, AWD, SuperCrew, 121.1" WB, 4.5' Box). Replacing the five vehicles currently in service with these smaller hybrid trucks reduces the initial vehicle purchase cost compared to replacing them with larger non-hybrid trucks with comparable specifications, as illustrated in the table below, and will also reduce fuel consumption compared to the larger non-hybrid vehicles. Public Works is staying up to date on electric vehicle (EV) capabilities and capital costs for charging equipment. Based on other municipalities experience, the relatively large capital cost to install chargers for multiple

vehicles, and uncertainty on rebates in the current environment, staff does not feel it is prudent to pursue EV's at this time.

Vehicle	MSRP	Sourcewell Cooperative % Discount	Adjusted Cooperative Pricing	Total for Five Vehicles
*2025 Ford Maverick	$36,400.00	2.074%	$35,645.13	$178,225.65
2025 Ford F-150	$59,600.00	4.892%	$56,684.34	$283,421.70
		Savings =	**$21,039.21**	**$105,196.05**

*Recommended vehicle and cooperative pricing

Staff researched alternative vehicles and vehicle market pricing and is recommending the contract pricing provided by the National Auto Fleet Group, through the Sourcewell contract #091521-NAF, as the most advantageous to the City. This contract will provide the City with an overall discount of $3,774.35 (2.074%) on the MSRP of the vehicles. The pricing provided through this Sourcewell contract was negotiated as part of an RFP that was advertised and reviewed by Sourcewell.

As members of Sourcewell, the City can take advantage of the contracts leveraged by the cooperative members' combined purchasing power, which reduces costs. Participation in this cooperative was authorized by Resolution 17R-98.

Late in the afternoon on January 30, staff was informed that Ford was closing the order bank for production of hybrid Ford Mavericks on January 31st. Given the difficulty in securing new vehicles and the critical importance of having efficiently operating public works vehicles to serve the health and safety of the residents of the City, a purchase order was executed on January 31st in order to secure the vehicles. City Staff is asking that the City council approve the attached resolution ratifying the execution of the purchase order and approving the purchase.

Recommendation:

The Public Works Department recommends entering into an agreement with National Auto Fleet Group, using Sourcewell contract #091521-NAF, for the pricing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines for a total of $178,225.65. The replaced vehicles will be auctioned in accordance with the City's surplus equipment policy.

Votes Required to Pass:

Simple Majority

RESOLUTION

WHEREAS the City has budgeted for the replacement vehicles during the 2025 fiscal year including vehicles within the Public Works and Engineering Department; and

WHEREAS City staff has determined that of the vehicles identified for replacement, five (5) of these vehicles should be replaced with five (5) new hybrid 2025 Ford Mavericks; and

WHEREAS the City utilizes purchasing cooperatives and joint bids to combine purchasing power with other government agencies to leverage purchasing power and reduce costs; and

WHEREAS the City Council has authorized participation in the Sourcewell cooperative; and

WHEREAS contract #091521-NAF, provided through Sourcewell, offers pricing for the purchase and delivery of new 2025 Ford Mavericks with hybrid engines as specified by the Public Works and Engineering Division; and

WHEREAS, on January 30, City Staff was informed that Ford was closing the order bank for these vehicles on January 31st; and

WHEREAS, given the difficulty in securing new vehicles and the critical importance of having efficiently operating public works vehicles to serve the health and safety of the residents of the City, a purchase order was executed on January 31st in order to secure the vehicles; and

WHEREAS, the Mayor and City Council have found and determined that it is in the best interests of the City and its residents to ratify the purchase order and approve the purchase from National Auto Fleet Group for the pricing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines in the total amount of $178,225.65.

Draft

NOW THEREFORE BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the foregoing recitals are repeated and incorporated as though fully set forth herein; and

BE IT FURTHER RESOLVED that the City Manager is authorized to execute an agreement between the CITY OF CRYSTAL LAKE and National Auto Fleet Group for the pricing and delivery of five (5) new 2025 Ford Mavericks with hybrid engines in the total amount of $178,225.65; and

BE IT FURTHER RESOLVED that the City Manager is authorized to execute change orders for up to 10% of the contract amount and to approve warranted completion date change orders relating to the contract.

DATED this 4th day of February, 2025.

CITY OF CRYSTAL LAKE, an
Illinois Municipal Corporation,

By: _____
Haig Haleblian, MAYOR

Draft

SEAL

ATTEST

_____
CITY CLERK

PASSED: February 4, 2025
APPROVED: February 4, 2025

National Auto Fleet Group

A Division of Chevrolet of Watsonville
490 Auto Center Drive, Watsonville, CA 95076
(855) 289-6572 • (831) 480-8497 Fax
Fleet@NationalAutoFleetGroup.com

1/17/2025
1/24/2025 Re-Configured

Quote ID: **38573 R1**

Order Cut Off Date: **TBA**

Tim Spencer
City of Crystal Lake
Fleet

100 West Woodstock St

Crystal Lake, Illinois, 60014

Dear Tim Spencer,

National Auto Fleet Group is pleased to quote the following vehicle(s) for your consideration.
Five (5) New/Unused (2025 Ford Maverick (W8J) XLT AWD SuperCrew 121.1" WB 4.5' Box,) and delivered to your specified location, each for

	One Unit (MSRP)	One Unit	Total % Savings	Extended Unit's (5)	Total Savings
Contract Price	$36,400.00	$35,645.13	2.074 %	$178,225.65	$3,774.35
Tax (0.0000 %)		$0.00		$0.00	
Tire fee		$0.00		$0.00	
Total		$35,645.13		$178,225.65	

- per the attached specifications.

This vehicle(s) is available under the **Sourcewell Contract 091521-NAF** . Please reference this Contract number on all purchase orders to National Auto Fleet Group. Payment terms are Net 20 days after receipt of vehicle.

Thank you in advance for your consideration. Should you have any questions, please do not hesitate to call.

Sincerely,

Jesse Cooper
Account Manager
Email: Fleet@NationalAutoFleetGroup.com
Office: (855) 289-6572
Fax: (831) 480-8497

CHEVROLET FORD NISSAN TOYOTA BUICK CADILLAC GMC

Purchase Order Instructions & Resources

In order to finalize your purchase please submit this purchase packet to your governing body for a purchase order approval and submit your purchase order in the following way:

Email: Fleet@NationalAutoFleetGroup.com

Fax: (831) 480-8497

Mail: National Auto Fleet Group

490 Auto Center Drive

Watsonville, CA 95076

We will send a courtesy confirmation for your order and a W-9 if needed.

Additional Resources

Learn how to track your vehicle:	www.NAFGETA.com
Use the upfitter of your choice:	www.NAFGpartner.com
Vehicle Status:	ETA@NationalAutoFleetGroup.com
General Inquiries:	Fleet@NationalAutoFleetGroup.com

For general questions or assistance please contact our main office at:

1-855-289-6572

Vehicle Configuration Options

ENGINE	
Code	**Description**
993	Engine: 2.5L Hybrid, (STD)
TRANSMISSION	
Code	**Description**
44E	Transmission: Automatic Continuous Variable (CVT), (STD)
WHEELS	
Code	**Description**
64Z	Wheels: 17" Steel w/Sparkle Silver Ptd Cover (Flt)
PRIMARY PAINT	
Code	**Description**
M7	Carbonized Gray Metallic
SEAT TYPE	
Code	**Description**
7B	Navy Pier/Aspen Gray, Unique Cloth Front Bucket Seats, -inc: 6-way manual adjustable driver and 4-way manual adjustable passenger, front floor console w/eShifter, armrest and storage bin
AXLE RATIO	
Code	**Description**
___	2.91 Axle Ratio, (STD)
ADDITIONAL EQUIPMENT	
Code	**Description**
54L	XLT Luxury Package, -inc: Remote Start System, Soft Vinyl Wrapped Heated Steering Wheel, 400W Inverter w/USB Console Rear, Cab and bed includes cubby cover, Heated Mirror w/Painted Black Skull Caps, Heated Seats, 8-way power driver and 6-way manual passenger seats, LED Box Lighting
66C	Ford Co-Pilot360, -inc: Evasive Steering Assist, Intersection Assist, AEB oncoming, Cross Traffic Brake Assist, BLIS w/Cross-Traffic Alert, Rear Parking Sensors, Power Glass Manual-Folding Mirrors, blind spot information system, Lane-Keeping System, Lane-Keeping Alert, lane-keeping aid and Driver Alert
53Q	4K Tow Package, -inc: Trailer Hitch (Class III) 2" Receiver, 4-pin and 7-pin connector, Conventional 17" Spare Tire (215/70R17), Transmission Oil Cooler, Upgraded Cooling Fan, Trailer Brake Controller
96J	Modular Hard Drop-In Bedliner, -inc: 4 cargo tie downs
16C	Front & Rear Floor Liners w/o Carpet Mats, -inc: Deletes standard carpeted front floor mats
OPTION PACKAGE	
Code	**Description**
301A	Equipment Group 301A

2025 Fleet/Non-Retail Ford Maverick XLT AWD SuperCrew 121.1" WB 4.5' Box

WINDOW STICKER

2025 Ford Maverick XLT AWD SuperCrew 121.1" WB 4.5' Box

CODE	MODEL	MSRP
W8J	2025 Ford Maverick XLT AWD SuperCrew 121.1" WB 4.5' Box	$28,895.00
	OPTIONS	
993	Engine: 2.5L Hybrid, (STD)	$0.00
44E	Transmission: Automatic Continuous Variable (CVT), (STD)	$0.00
64Z	Wheels: 17" Steel w/Sparkle Silver Ptd Cover (Flt)	($250.00)
M7	Carbonized Gray Metallic	$0.00
7B	Navy Pier/Aspen Gray, Unique Cloth Front Bucket Seats, -inc: 6-way manual adjustable driver and 4-way manual adjustable passenger, front floor console w/eShifter, armrest and storage bin	$0.00
___	2.91 Axle Ratio, (STD)	$0.00
54L	XLT Luxury Package, -inc: Remote Start System, Soft Vinyl Wrapped Heated Steering Wheel, 400W Inverter w/USB Console Rear, Cab and bed includes cubby cover, Heated Mirror w/Painted Black Skull Caps, Heated Seats, 8-way power driver and 6-way manual passenger seats, LED Box Lighting	$1,890.00
66C	Ford Co-Pilot360, -inc: Evasive Steering Assist, Intersection Assist, AEB oncoming, Cross Traffic Brake Assist, BLIS w/Cross-Traffic Alert, Rear Parking Sensors, Power Glass Manual-Folding Mirrors, blind spot information system, Lane-Keeping System, Lane-Keeping Alert, lane-keeping aid and Driver Alert	$795.00
53Q	4K Tow Package, -inc: Trailer Hitch (Class III) 2" Receiver, 4-pin and 7-pin connector, Conventional 17" Spare Tire (215/70R17), Transmission Oil Cooler, Upgraded Cooling Fan, Trailer Brake Controller	$745.00
96J	Modular Hard Drop-In Bedliner, -inc: 4 cargo tie downs	$375.00
16C	Front & Rear Floor Liners w/o Carpet Mats, -inc: Deletes standard carpeted front floor mats	$135.00
301A	Equipment Group 301A	$2,220.00

Please note selected options override standard equipment

	SUBTOTAL	**$34,805.00**
	Advert/ Adjustments	$0.00
	Manufacturer Destination Charge	$1,595.00
	TOTAL PRICE	**$36,400.00**

Est City: N/A MPG
Est Highway: N/A MPG
Est Highway Cruising Range: N/A mi

Any performance-related calculations are offered solely as guidelines. Actual unit performance will depend on your operating conditions.

Notes

Standard Equipment

MECHANICAL

Engine: 2.5L Hybrid (STD)
Transmission: Automatic Continuous Variable (CVT) (STD)
2.91 Axle Ratio (STD)

EXTERIOR

Wheels: 17" Carbonized Gray Painted Aluminum (STD)

ADDITIONAL EQUIPMENT

50-State Emissions System
Engine Auto Stop-Start Feature
Transmission w/Driver Selectable Mode
Automatic Full-Time All-Wheel
45-Amp/Hr 390CCA Maintenance-Free Battery w/Run Down Protection
Regenerative 150 Amp Alternator
Class I Towing Equipment -inc: Hitch and Trailer Sway Control
Trailer Wiring Harness
GVWR: 5,320 lbs
Gas-Pressurized Shock Absorbers
Front And Rear Anti-Roll Bars
Electric Power-Assist Speed-Sensing Steering
13.8 Gal. Fuel Tank
Single Stainless Steel Exhaust
Permanent Locking Hubs
Strut Front Suspension w/Coil Springs
Short And Long Arm Rear Suspension w/Coil Springs
Regenerative 4-Wheel Disc Brakes w/4-Wheel ABS, Front And Rear Vented Discs, Brake Assist, Hill Hold Control and Electric Parking Brake
Lithium Ion (li-Ion) Traction Battery 1.1 kWh Capacity
Regular Box Style
Tires: P225/65R17 A/S BSW
Steel Spare Wheel
Compact Spare Tire Stored Underbody w/Crankdown
Clearcoat Paint
Body-Colored Front Bumper w/Black Rub Strip/Fascia Accent
Black Rear Step Bumper
Black Side Windows Trim and Black Rear Window Trim
Black Door Handles
Black Power Side Mirrors w/Manual Folding
Fixed Rear Window
Deep Tinted Glass
Fixed Interval Wipers
Galvanized Steel/Aluminum Panels
Black Grille
Tailgate Rear Cargo Access
Tailgate/Rear Door Lock Included w/Power Door Locks
Integrated Storage
Autolamp Auto On/Off Reflector Led Low/High Beam Daytime Running Lights Preference Setting Headlamps w/Delay-Off

Cargo Lamp w/High Mount Stop Light
Auto High Beams
Radio w/Seek-Scan, Clock, Speed Compensated Volume Control, Steering Wheel Controls, Radio Data System and External Memory Control
Radio: AM/FM Stereo w/6 Speakers -inc: 2 front USB ports and 1 rear USB port
Streaming Audio
Integrated Roof Antenna
SiriusXM w/360L
SYNC 4 w/Enhanced Voice Recognition -inc: 13.2" LCD touch screen w/swipe capability, wireless phone connection, cloud connected, AppLink w/App catalog, 911 Assist, Apple CarPlay and Android Auto compatibility, digital owner's manual and conversational voice command recognition
2 LCD Monitors In The Front
Driver Seat
Passenger Seat
Full Folding Bench Front Facing Fold Forward Seatback Premium Cloth Rear Seat
Manual Tilt/Telescoping Steering Column
Gauges -inc: Speedometer, Odometer, Engine Coolant Temp, Power/Regen, Trip Odometer and Trip Computer
Power Rear Windows
FordPass Connect 5G Mobile Hotspot Internet Access
Front Cupholder
Rear Cupholder
Compass
Remote Releases -Inc: Power Fuel
Proximity Key For Doors And Push Button Start
Remote Keyless Entry w/Integrated Key Transmitter, Illuminated Entry, Illuminated Ignition Switch and Panic Button
Cruise Control w/Steering Wheel Controls
Voice Activated Automatic Air Conditioning
HVAC -inc: Underseat Ducts
Glove Box
Driver Foot Rest
Interior Trim -inc: Colored Instrument Panel Insert, Colored Door Panel Insert and Other Interior Accents
Full Cloth Headliner
Urethane Gear Shifter Material
Unique Cloth Front Bucket Seats -inc: 6-way manual adjustable driver and 4-way manual adjustable passenger, front floor console w/eShifter, armrest and storage bin
Day-Night Rearview Mirror
Driver And Passenger Visor Vanity Mirrors w/Driver And Passenger Auxiliary Mirror
Full Floor Console w/Covered Storage, Mini Overhead Console w/Storage and 1 12V DC Power Outlet
Front Map Lights
Fade-To-Off Interior Lighting
Full Carpet Floor Covering -inc: Carpet Front Floor Mats
Pickup Cargo Box Lights
FOB Controls -inc: Cargo Access
Rear View Camera
Pre-Collision Assist w/Automatic Emergency Braking -inc: pedestrian detection, forward collision warning and dynamic brake support
Instrument Panel Bin, Dashboard Storage, Driver / Passenger And Rear Door Bins and 2nd Row Underseat Storage
Power 1st Row Windows w/Driver 1-Touch Down
Delayed Accessory Power
Power Door Locks w/Autolock Feature
Driver Information Center
Redundant Digital Speedometer
Trip Computer

Outside Temp Gauge
Digital/Analog Appearance
Seats w/Cloth Back Material
Manual Adjustable Front Head Restraints and Fixed Rear Head Restraints
1 Seatback Storage Pocket
Rear Center Armrest
Securilock Anti-Theft Ignition (pats) Immobilizer
Perimeter Alarm
1 12V DC Power Outlet
Air Filtration
AdvanceTrac w/Roll Stability Control Electronic Stability Control (ESC) And Roll Stability Control (RSC)
ABS And Driveline Traction Control
Side Impact Beams
Dual Stage Driver And Passenger Seat-Mounted Side Airbags
Lane-Keeping Aid Lane Keeping Assist
Lane-Keeping Aid Lane Departure Warning
Tire Specific Low Tire Pressure Warning
Dual Stage Driver And Passenger Front Airbags
Safety Canopy System Curtain 1st And 2nd Row Airbags
Airbag Occupancy Sensor
Driver Knee Airbag
Mykey System -inc: Top Speed Limiter, Audio Volume Limiter, Early Low Fuel Warning, Programmable Sound Chimes and Beltminder w/Audio Mute
Rear Child Safety Locks
Outboard Front Lap And Shoulder Safety Belts -inc: Rear Center 3 Point, Height Adjusters and Pretensioners

Agenda Item No: 13

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: Vehicle Purchase – Use of Suburban Purchasing Cooperative Contract #206, for the pricing and delivery of three (3) new 2025 Ford Escapes, at a total cost of $102,594.00

Staff Recommendation: Motion to adopt a Resolution authorizing the City Manager to execute an agreement with Currie Motors Frankfort, Inc., located in Frankfort, IL, for pricing and delivery of three (3) new 2025 Ford Escapes in the total amount of $102,594.00 using Suburban Purchasing Cooperative Contract #206, execute change orders for up to 10% of the contract amount, and approve warranted completion date change orders relating to the contract

Staff Contact: Michael Magnuson, Director of Public Works & Engineering

Background:

The 2025 fiscal year Community Development Department budget includes funds for the replacement of three (3) 2014 Ford Escapes. These vehicles are critical pieces of equipment for the Community Development Department and are utilized year-round by the Department to conduct inspections and other City business.

Upon review of the needs of the division and the intended functions of the vehicles to be replaced, the Community Development Department, working with the Public Works & Engineering Department, has determined that it is in the best interest of the City to replace these three (3) 2014 Ford Escapes with three (3) new 2025 Ford Escapes (4 door, All Wheel Drive). The discounted pricing available through the cooperative contract is illustrated in the table below.

Vehicle	MSRP	Cooperative % Discount	Adjusted Cooperative Pricing	Total for Five Vehicles
2025 Ford Escape	$36,978.00	7.517%	$34,198.00	$102,594.00

Staff researched alternative vehicles and vehicle market pricing and is recommending the contract pricing provided by Currie Motors Frankfort, Inc. through the Suburban Purchasing

Cooperative Contract #206 as the most advantageous to the City. This contract will provide the City with an overall discount of $8,340.00 (7.517%) on the MSRP of the vehicles. The pricing provided through this Suburban Purchasing Cooperative contract was negotiated as part of an RFP that was advertised and reviewed by the Suburban Purchasing Cooperative. The only standard model Ford Escape available as a hybrid, is a more costly high-end "plug in" style hybrid that would require additional infrastructure to be installed.

As members of the Suburban Purchasing Cooperative, the City can take advantage of the contracts leveraged by the cooperative members' combined purchasing power, which reduces costs. Participation in this cooperative was authorized by Resolution 17R-98.

Recommendation:

The Public Works Department recommends entering into an agreement with Currie Motors Frankfort, Inc., using Suburban Purchasing Cooperative Contract #206, for the pricing and delivery of three (3) new 2025 Ford Escapes for a total of $102,594.00.

Votes Required to Pass:

Simple Majority

RESOLUTION

WHEREAS the City has budgeted for the replacement of vehicles during the 2025 fiscal year including vehicles within the Community Development Department; and

WHEREAS City staff have determined that the identified vehicles should be replaced with three (3) new 2025 Ford Escapes; and

WHEREAS the City utilizes purchasing cooperatives and joint bids to combine purchasing power with other government agencies to reduce costs; and

WHEREAS the City Council has authorized participation in the Suburban Purchasing Cooperative; and

WHEREAS contract #206, provided through the Suburban Purchasing Cooperative, offers pricing for the purchase and delivery of new 2025 Ford Escapes as specified by the Community Development Department.

Draft

NOW THEREFORE BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE that the foregoing recitals are repeated and incorporated as though fully set forth herein; and

BE IT FURTHER RESOLVED that the City Manager is authorized to execute an agreement between the CITY OF CRYSTAL LAKE and Currie Motors Frankfort, Inc. for the pricing and delivery of three (3) new 2025 Ford Escapes in the total amount of $102,594.00; and

BE IT FURTHER RESOLVED that the City Manager is authorized to execute change orders for up to 10% of the contract amount and to approve warranted completion date change orders relating to the contract.

DATED this 4th day of February, 2025.

CITY OF CRYSTAL LAKE, an
Illinois Municipal Corporation,

By:_____
Haig Haleblian, MAYOR

SEAL

ATTEST

_____
CITY CLERK

PASSED: February 4, 2025
APPROVED: February 4, 2025

Draft

Prepared for: , City of Crystal Lake

2025 Escape 4dr AWD Active (U9G)

Price Level: 525



Client Proposal

Prepared by:
THOMAS SULLIVAN
Office: 815-464-9200
Quote ID: crystal
Date: 01/20/2025

Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Major Equipment

(Based on selected options, shown at right)

8-speed automatic

Exterior: Carbonized Gray Metallic

Interior: Space Gray w/Unique Cloth Front Bucket Seats

* 17 x 7-inch front and rear silver aluminum wheels
* P225/65RH17 AS BSW front and rear tires
* Overdrive transmission
* Lock-up transmission
* Transmission electronic control
* Stainless steel quasi-dual exhaust with chrome tailpipe finisher
* All-speed ABS and driveline traction control
* Lead acid battery
* Battery run down protection
* Fuel tank capacity: 15.69 gal.
* Auto stop-start engine
* Driver selectable drivetrain mode
* Connected Navigation integrated navigation system with voice activation
* Steering wheel mounted audio controls
* Wireless audio streaming
* 13.2 inch primary display
* SiriusXM AM/FM/Satellite radio
* AM/FM/satellite
* Seek scan
* Radio data system (RDS)
* SYNC 4 external memory control
* Internet radio capability
* 3 month satellite trial subscription
* Vehicle body length: 181.2"
* Wheelbase: 106.7"
* Interior cargo length: 68.5 "
* Standard ride suspension
* Trip computer
* Rear window defroster
* Power door mirrors
* Heated driver and passenger side door mirrors
* Manual folding door mirrors
* DRL preference setting
* LED daytime running lights
* LED brake lights
* Deep tinted windows

As Configured Vehicle

	MSRP
STANDARD VEHICLE PRICE	$29,550.00
Equipment Group 200A	N/C
Engine: 1.5L EcoBoost	Included
Transmission: 8-Speed Automatic	Included
3.81 Axle Ratio	Included
GVWR: TBD	Included
Tires: 225/65R17 AS BSW	Included
Wheels: 17" Shadow Silver-Painted Aluminum	Included
Unique Cloth Front Bucket Seats	Included
Monotone Paint Application	STD
106" Wheelbase	STD
Radio: AM/FM Stereo	Included
50-State Emissions System	STD
FordPass Connect	Included
Carbonized Gray Metallic	N/C
Space Gray w/Unique Cloth Front Bucket Seats	N/C
Tech Pack #1	$995.00
Ford Co-Pilot360 Assist+	Included
Adaptive Cruise Control w/Stop-and-Go	Included

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Major Equipment

* Variable intermittent front windshield wipers
* Automatic climate control
* Rear under seat climate control ducts
* Seat mounted side impact driver airbag
* Seat mounted side impact front passenger airbag
* 7 airbags
* Manual rear child safety door locks
* Fixed rear seats
* Manual reclining rear seats
* Fold forward rear seatback
* Height adjustable rear seat head restraints
* 3 rear seat head restraints
* Rear seat center armrest
* Driver seat with 6-way directional controls
* Height adjustable front seat head restraints
* Front seat center armrest
* Manual height adjustable driver seat
* Manual reclining passenger seat
* Cloth front seat upholstery
* Heated driver and front passenger seats
* 4-wheel antilock (ABS) brakes
* Speed sensitive wipers
* Dual-zone front climate control
* Driver front impact airbag
* Passenger front impact airbag
* Personal Safety System airbag occupancy sensor
* AdvanceTrac w/Roll Stability Control electronic stability control system with anti-rollover
* SecuriLock immobilizer
* 60-40 folding rear seats
* Front facing rear seat
* Rear seats with manual fore and aft
* Manual rear seat head restraint control
* Split-bench rear seat
* Bucket front seats
* Front passenger seat with 4-way directional controls
* Manual front seat head restraint control
* Manual reclining driver seat
* Manual driver seat fore/aft control
* Manual passenger seat fore/aft control
* Cloth front seatback upholstery
* 4-wheel disc brakes
* Electronic parking brake

As Configured Vehicle

	MSRP
Connected Navigation	Included
Evasive Steering Assist	Included
Intersection Assist	Included
Rear Parking Sensor	Included
Predictive Speed Assist	Included
Rear View Camera	Included
SYNC 4 w/Enhanced Voice Recognition	Included
Cold Weather Package	$995.00
Heated Front Row Seats	Included
Heated Sideview Mirrors	Included
Remote Starter System	Included
Heated Steering Wheel	Included
Front & Rear Floor Liners w/o Carpet Mats	$160.00
Cargo Mat	$100.00
SUBTOTAL	$31,800.00
Destination Charge	$1,495.00
TOTAL	**$33,295.00**

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Major Equipment

* Brake assist system
* Hill start assist

Fuel Economy

City
26 mpg

Hwy
32 mpg

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

As Configured Vehicle

Code	Description	MSRP
Base Vehicle		
U9G	Base Vehicle Price (U9G)	$29,550.00
Packages		
200A	Equipment Group 200A *Includes:* *- Engine: 1.5L EcoBoost* *Includes auto start-stop technology.* *- Transmission: 8-Speed Automatic* *- 3.81 Axle Ratio* *- GVWR: TBD* *- Tires: 225/65R17 AS BSW* *- Wheels: 17" Shadow Silver-Painted Aluminum* *- Unique Cloth Front Bucket Seats* *Includes 6-way manual driver (fore/aft, up/down, recline) and 4-way manual front passenger (fore/aft with manual recline).* *- Radio: AM/FM Stereo* *Includes 6 speakers, speed compensated volume, steering wheel mounted controls and SiriusXM with 360L with a 3 month prepaid subscription. Note: SiriusXM audio and data services each require a subscription sold separately, or as a package, by Sirius XM Inc. Your SiriusXM service will automatically stop at the end of your trial unless you decide to subscribe. If you decide to continue service after your trial, the subscription plan you choose will automatically renew thereafter and you will be charged according to your chosen payment method at then- current rates. Fees and taxes apply. To cancel you must call SiriusXM at 1-866-635-2349. See SiriusXM Customer Agreement for complete terms at www.siriusxm.com. All fees and programming subject to change. Not all vehicles or devices are capable of receiving all services offered by SiriusXM. Current information and features may not be available in all locations, or on all receivers. Satellite and streaming lineups vary slightly. 2020 Sirius XM Inc. Sirius, XM, SiriusXM and all related marks and logos are trademarks of Sirius XM Inc.* *- FordPass Connect* *Includes 4G LTE Wi-Fi hotspot that connects up to 10 devices (includes a wireless data trial that begins upon AT&T activation and expires at the end of 3 months or when 3GB of data is used, whichever comes first, but cannot extend beyond the trial subscription period for remote features. To activate, go to www.att.com/ford). Remote start with specific time scheduling, lock and unlock, locate parked vehicle and check vehicle status (the FordPass App and complimentary connected services are required for remote features (see FordPass terms for details). Connected services and features depend on compatible AT&T network availability. Evolving technology/cellular networks/vehicle capability may limit functionality and prevent operation of connected features. Connected services exclude Wi-Fi hotspot).*	N/C
Powertrain		
99N	Engine: 1.5L EcoBoost *Includes auto start-stop technology.*	Included
448	Transmission: 8-Speed Automatic	Included
STDAX	3.81 Axle Ratio	Included
STDGV	GVWR: TBD	Included
Wheels & Tires		
STDTR	Tires: 225/65R17 AS BSW	Included

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

As Configured Vehicle (cont'd)

Code	Description	MSRP
STDWL	Wheels: 17" Shadow Silver-Painted Aluminum	Included

Seats & Seat Trim

C	Unique Cloth Front Bucket Seats *Includes 6-way manual driver (fore/aft, up/down, recline) and 4-way manual front passenger (fore/aft with manual recline).*	Included

Other Options

PAINT	Monotone Paint Application	STD
106WB	106" Wheelbase	STD
STDRD	Radio: AM/FM Stereo	Included
	SiriusXM service is not available in Alaska and Hawaii.	
	Includes 6 speakers, speed compensated volume, steering wheel mounted controls and SiriusXM with 360L with a 3 month prepaid subscription. Note: SiriusXM audio and data services each require a subscription sold separately, or as a package, by Sirius XM Inc. Your SiriusXM service will automatically stop at the end of your trial unless you decide to subscribe. If you decide to continue service after your trial, the subscription plan you choose will automatically renew thereafter and you will be charged according to your chosen payment method at then- current rates. Fees and taxes apply. To cancel you must call SiriusXM at 1-866-635-2349. See SiriusXM Customer Agreement for complete terms at www.siriusxm.com. All fees and programming subject to change. Not all vehicles or devices are capable of receiving all services offered by SiriusXM. Current information and features may not be available in all locations, or on all receivers. Satellite and streaming lineups vary slightly. 2020 Sirius XM Inc. Sirius, XM, SiriusXM and all related marks and logos are trademarks of Sirius XM Inc.	
	Includes: *- FordPass Connect* *Includes 4G LTE Wi-Fi hotspot that connects up to 10 devices (includes a wireless data trial that begins upon AT&T activation and expires at the end of 3 months or when 3GB of data is used, whichever comes first, but cannot extend beyond the trial subscription period for remote features. To activate, go to www.att.com/ford). Remote start with specific time scheduling, lock and unlock, locate parked vehicle and check vehicle status (the FordPass App and complimentary connected services are required for remote features (see FordPass terms for details). Connected services and features depend on compatible AT&T network availability. Evolving technology/cellular networks/vehicle capability may limit functionality and prevent operation of connected features. Connected services exclude Wi-Fi hotspot).*	
68B	Tech Pack #1	$995.00
	Predictive speed assist is not available to military personnel sales (WAFAC).	
	Includes: *- Ford Co-Pilot360 Assist+* *- Adaptive Cruise Control w/Stop-and-Go* *Includes lane centering assist.* *- Connected Navigation* *Includes 1 year of connectivity, pinch-to-zoom capability, live traffic, predictive destinations and route guidance.* *- Evasive Steering Assist* *- Intersection Assist* *- Rear Parking Sensor* *- Predictive Speed Assist*	

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2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

As Configured Vehicle (cont'd)

Code	Description	MSRP
	- Rear View Camera *- SYNC 4 w/Enhanced Voice Recognition* *Includes 13.2" LCD capacitive touch-screen with swipe capability, wireless phone connection, cloud connected, AppLink with app catalog, 911 Assist, wireless Apple CarPlay and Android Auto, digital owners manual.*	
19H	Cold Weather Package *Includes:* *- Heated Front Row Seats* *- Heated Sideview Mirrors* *- Remote Starter System* *- Heated Steering Wheel*	$995.00
50C	Front & Rear Floor Liners w/o Carpet Mats Ford Accessory. *Deletes standard front and rear carpeted floor mats.*	$160.00
50Q	Cargo Mat Ford Accessory.	$100.00
Emissions		
425	50-State Emissions System	STD
Exterior Color		
M7_07	Carbonized Gray Metallic	N/C
Interior Color		
CW_04	Space Gray w/Unique Cloth Front Bucket Seats	N/C
Upfit Options		
2023-008	License and Title Fees *Doc Fee* *Title Fee* *License Plates*	$203.00
2023-002	4-Corner LED Strobes *4- Corner Amber LED Lights*	$1,495.00
D-001	Delivery	$185.00
ES-0111111124C	Extended Warranty *Powertrain Care* *72 Months* *125,000 Miles*	$1,800.00

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2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

As Configured Vehicle (cont'd)

Code	Description	MSRP
SUBTOTAL		$35,483.00
Destination Charge		$1,495.00
TOTAL		$36,978.00

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2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Warranty

Standard Warranty

Basic Warranty

Basic warranty	36 months/36,000 miles

Powertrain Warranty

Powertrain warranty	60 months/60,000 miles

Corrosion Perforation

Corrosion perforation warranty	60 months/unlimited

Roadside Assistance Warranty

Roadside warranty	60 months/60,000 miles

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Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Pricing Summary - Single Vehicle

	MSRP
Vehicle Pricing	
Base Vehicle Price	$29,550.00
Options	$2,250.00
Colors	$0.00
Upfitting	$3,683.00
Fleet Discount	$0.00
Fuel Charge	$0.00
Destination Charge	$1,495.00
Subtotal	$36,978.00
Discount Adjustments	
Discount Adjustments	-$2,780.00
Total	$34,198.00

Customer Signature

Acceptance Date

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

Prepared for:
City of Crystal Lake
Prepared by: THOMAS SULLIVAN
01/20/2025

Currie Commercial Center | 10125 W. Laraway Frankfort Illinois | 60423

2025 Escape 4dr AWD Active (U9G)

Price Level: 525 | Quote ID: crystal

Pricing Summary - Multiple Vehicles

Vehicle Quantity: 3

	MSRP
Vehicle Pricing	
Base Vehicle Price	$88,650.00
Options	$6,750.00
Colors	$0.00
Upfitting	$11,049.00
Fleet Discount	$0.00
Fuel Charge	$0.00
Destination Charge	$4,485.00
Subtotal	$110,934.00
Discount Adjustments	
Discount Adjustments	-$8,340.00
Total	$102,594.00

Customer Signature

Acceptance Date

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

Agenda Item No: 14

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: Amendments to Sections 329-3(A) of the City Code relating to certification of applications for liquor licenses and Section 329-2 relating to the requirement that liquor licensees also maintain a current liquor license issued by the Illinois Liquor Control Commission

Staff Recommendation: Motion to adopt an Ordinance amending Sections 329-3(A) and 329-2 of the City Code

Staff Contact: Nicholas Hammonds, Deputy City Manager
Melanie Nebel, Executive Assistant

Background:
For the City Council's information, the City uses the Accela program to process several types of online Community Development permits. Staff is working to migrate licenses, such as liquor and tobacco, to the Accela program as well. In order to aid in the transition to a new online portal, and help ensure that applicants are also receiving liquor licenses from the State of Illinois as required, it has been determined that the following amendments to the City Code are needed. Changes would streamline applications for both pouring and packaged liquor licenses and temporary liquor licenses.

1) **Change to Section 329-A of the City Code to allow certification of liquor license applications to be submitted without the need for notarization.**

Section 329 of the City Code governs liquor licenses issued by the City Liquor Control Commissioner, including the process for applying for and renewing licenses. Section 329-3(A) of the code addresses the requirements for applications for liquor licenses and provides that each application shall be "verified by oath or affidavit." Section 7-1 the Illinois Liquor Control act similarly requires that an application for a state liquor license be made under oath. A statement given under oath would typically be made either before someone who is qualified to administer an oath, such as a judge or a court reporter, or before a notary public.

City staff has experienced delays in the submittal of original applications for liquor licenses or renewals applications that have been caused, in part, by the need to obtain notarization of the application documents. Illinois law was modified a number of years ago to adopt Section 1-109 of the Code of Civil Procedure in order to allow certification of an affidavit or other documents as a substitute for notarization in court proceedings. This change effectively streamlined the filing

process for many legal documents. Staff and special legal counsel believe that a similar certification process can be used for liquor license applications. The attached proposed Ordinance would allow applications to be certified by using a form which is similar to the form utilized in court proceedings. This certification would be appended to the application form and would eliminate the need for notarization.

2) Change to Section 329-2 of the Liquor Code to provide that all liquor licensees must have a current liquor license from the Illinois Liquor Control Commission.

In addition to obtaining a local liquor license from the City, a business that intends to sell liquor must also obtain a liquor license from the Illinois Liquor Control Commission (ILCC). The ILCC will not issue its license until it has been provided with a copy of the liquor license issued by the local municipality. Prior to commencing sale of liquor, a business must have both the City issued license and the license issue by the ILCC.

Although this requirement currently exists in the law, it is not specified in the City's current Liquor Code. The attached proposed Ordinance modifies Section 329-2 of the City Code to clarify that obtaining a liquor license from the ILCC is a mandatory condition of maintaining a liquor license issued by the City. The proposed amendment also provides that if a Crystal Lake liquor license holder's license issued by the ILCC expires or is suspended or revoked, the license holder's City liquor license will be suspended and further requires that the license holder notify the City of any suspension or revocation of its ILCC liquor license.

Votes Required to Pass:
Simple majority

Ord. No.
File No.

The City of Crystal Lake

AN ORDINANCE AMENDING SECTION 329-3(A) AND 329-2 OF THE CODE OF ORDINANCES OF THE CITY OF CRYSTAL LAKE

Draft

WHEREAS, Section 329-3 of the Code of Ordinances of the City of Crystal Lake (the "City Code") sets forth the requirements for applications for liquor licenses; and

WHEREAS, the first paragraph of subsection A of Section 329-3 of the City Code mandates that all applications for liquor licenses must be verified by oath or affidavit; and

WHEREAS, statements under oath or by affidavit typically necessitate the seal of a notary public; and

WHEREAS, alternatives to notarization of statements made under oath exist in Illinois, including documents utilized in connection with court proceedings; and

WHEREAS, Section 1-109 of the Illinois Code of Civil Procedure (735 ILCS 5/1-109) provides such a mechanism; and

WHEREAS, In addition to the liquor license issued by the Liquor Commissioner, the State of Illinois Liquor Control Commission also must issue a liquor license as a condition to the sale of alcoholic liquor within Illinois; and

WHEREAS, the Illinois Liquor Control Commission will not issue a liquor license prior to the issuance of a liquor license by the local Liquor Commissioner; and

WHEREAS, the Mayor and City Council have found and determined that it would be in the best interests of the City and its residents to adopt an amendment to Section 329-3(A) of the City Code to allow certification of an application under oath without the necessity of obtaining the seal of a notary and to also amend Chapter 329-2 of the City Code to expressly provide that the holder of a City of Crystal Lake liquor license must also hold a current and valid liquor license issued by the Illinois Liquor Control Commission as a condition of selling liquor within the City.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CRYSTAL LAKE, McHENRY COUNTY, ILLINOIS, as follows:

SECTION ONE. Recitals. The foregoing recitals and repeated and incorporated as though fully set forth herein.

SECTION TWO. Amendment to Section 329-3(A) The first paragraph of Section 329-3(A) of the City Code is hereby amended and shall hereinafter provide as follows:

[Deletions are shown as strikethroughs, additions are underlined and in bold font]

> Applications for such licenses shall be made to the Local Liquor Commissioner in writing, signed by the applicant, or corporation, verified by oath or affidavit**. The verification under oath or affidavit may be satisfied by certification in substantial conformity with the form of certification set forth in Section 1-109 of the Illinois Code of Civil Procedure as approved by the Liquor Commissioner. The application** ~~and~~ shall contain the following information and statements:

SECTION THREE. Amendment to Section 329-2. Section 329-2 is hereby amended and shall hereinafter provide as follows:

[Deletions are shown as strikethroughs, additions are underlined and in bold font]

> §329-2 **License required.**
>
> **A.** It shall be unlawful to sell or offer for sale at retail in the City of Crystal Lake any alcoholic liquor unless the person selling or offering for sale has a valid current liquor license in accordance with the provisions of this chapter, or in the event the person has a valid current license in effect **and is** in violation of the terms of such license.

Draft

B. Notwithstanding any other provisions of this chapter, after issuance of a liquor license pursuant to this chapter, the continued possession of a valid liquor license issued by the Illinois Liquor Control Commission shall be an ongoing condition precedent to maintaining a City liquor license. The licensee must, at all times, keep on file with the Liquor Commissioner a copy of the then current liquor license issued by the Illinois Liquor Control Commission. Should, at any time, a liquor license issued by the Illinois Liquor Control Commission expire or be suspended, revoked or terminated in any manner whatsoever, the licensee's City liquor license should also be immediately suspended. It shall be a violation of this chapter for any liquor license holder to fail to inform the City Liquor Commissioner of any suspension, revocation, termination or other adverse action taken with respect to the license issued by the Illinois Liquor Control Commission.

SECTION FOUR: Effective Date.

This Ordinance shall be in full force and effect from and after is passage, approval and publication in pamphlet form in the manner provided by law.

DATED at Crystal Lake, Illinois, this 4th day of February, 2025.

Draft

City of Crystal Lake, an
Illinois municipal corporation

_____
Haig Haleblian, MAYOR

SEAL

ATTEST

_____
CITY CLERK

PASSED: February 4, 2025
APPROVED: February 4, 2025

Agenda Item No: 15

City Council
Agenda Supplement

Meeting Date: February 4, 2025

Item: Board and Commission Appointment – Sustainability Committee

Council Discretion: Motion to approve the appointment of Dean Farr to fill a vacancy on the Sustainability Committee for a term expiring September 2028.

Staff Contact: Haig Haleblian, Mayor

Background:

On November 17, 2015, the City Council formed the Sustainability Committee ("Committee"), replacing the Ad Hoc Clean Air Counts Advisory Committee established in 2007. The purpose of the Committee is to assist the City in promoting environmental sustainability within the City. As part of the Committee Charter, the City Council approved a total of nine (9) members to fulfill the Committee for three (3) year terms. There is currently one (1) vacancy on the Committee.

Per the Committee Charter, to be a member on the Committee one must live in Crystal Lake, own a business in Crystal Lake, or attend a school in Crystal Lake. Dean Farr meets the requirements of the Charter. The Sustainability Committee has recommended Mr. Farr's appointment.

Dean Farr is passionate about the environment and is involved with sustainable practices. Dean is currently on the Board of Directors for the McHenry-Lake County Soil & Water Conservation District and has worked in other governmental sustainability roles. He has been a regular attendee of the Sustainability Committee prior to his interest of joining the Committee.

Appointments to the Sustainability Committee are nominated and confirmed by the Mayor and City Council.

Votes Required to Pass:

Simple majority.

City of Crystal Lake

Sustainability Committee Application

Applicant Information

Name DEAN FARR

Address: 327 Main Lane (Street) Crystal Lake (City) 60014 (Zip)

Telephone (Home): [redacted] Telephone (Work):

e-mail: [redacted]

Please describe your *training* and *education* that would make you an asset to this Committee.

MPA land use planning

Please describe your *experience* that would make you an asset to this Committee.

Director McHenry/Lake Soil and Water Conservation

Exec Director, Indiana Association Soil and Ours District

Please describe why you are interested in serving on this Committee.

continue my public service

make OL a better place

I certify that all the information submitted by me on this application is true and complete and I understand that if any false information, omissions or misrepresentations are discovered, my application may be rejected and, if I am selected on this Committee, my Committee membership may be terminated.

Signed: Dean Farr Date: 17 Dec 25

Please submit your completed application via email to Ryan Oates, Assistant to the City Manager, at roates@crystallake.org.