PROPERTY ADDRESS:
1936 LUCENT LANE,
NAPERVILLE, IL 60563
[FORMERLY PART OF PROPERTIES
ADDRESSED AS 1940 LUCENT LANE,
1960 LUCENT LANE,
AND 1980 LUCENT LANE,
NAPERVILLE, IL 60563]

P.I.N.
08-05-207-037 (part of)

RETURN TO/PREPARED BY:
CITY OF NAPERVILLE
CITY CLERK'S OFFICE/
COMMUNITY SERVICES DEPT.
400 SOUTH EAGLE STREET
NAPERVILLE, IL 60540

OWNER'S ACKNOWLEDGEMENT AND ACCEPTANCE AGREEMENT FOR THE KARIS CRITICAL DATA CENTER

This Owner's Acknowledgement and Acceptance Agreement for Karis Critical Data Center ("**Agreement**") is entered into by and between the City of Naperville, a home rule unit of local government under the Constitution and laws of the State of Illinois ("**City**" or "**City of Naperville**"), with an address of 400 South Eagle Street, Naperville, Illinois 60540, and Karis Critical Member, LLC, a Delaware limited liability company ("**OWNER**"), with offices at 2150 Goodlette-Frank Road N., Suite 501, Naples, FL 34102. The City and the OWNER are together hereinafter referred to as the "**Parties**" and sometimes individually as "**Party**".

RECITALS

A. This Agreement pertains to approximately twenty (20) acres of real property located within the corporate limits of the City of Naperville with a common address of 1936 Lucent Lane, Naperville, IL 60563 (Formerly part of properties addressed as 1940 Lucent Lane, 1960 Lucent Lane, and 1980 Lucent Lane, Naperville, IL 60563, being part of parcel identification number of 08-05-207-037, and legally described on **Exhibit A** and depicted on **Exhibit B** (hereinafter referred as the "**Subject Property**"), being the western portion of a larger 41 acre parcel owned by OWNER.

B. OWNER has acquired the Subject Property for the purpose of redeveloping the Subject Property as specifically outlined in this Agreement. OWNER intends to partner with an experienced third-party operator who will be responsible for the day-to-day operations of the Data Center and shall contractually require said third party operator ("**Operator**") to comply with the provisions set forth and referenced in this Agreement.

C. The Subject Property is subject to the terms and conditions set forth in the following ordinances ("**Nokia Ordinances**"), approved for the Subject Property by the Naperville City Council on April 7, 2020:

Ordinance 20-035	An ordinance approving of the preliminary/final plat of subdivision of the Nokia Campus for the subject property located on part of 1935 Lucent Lane and 1960-2000 Lucent Lane and approving the Nokia Owner's Acknowledgement and Acceptance Agreement; and
Ordinance 20-038	An ordinance approving variances associated with the Nokia Campus for the subject property located on part of 1935 Lucent Lane and 1960-2000 Lucent Lane .

D. OWNER has petitioned the City for approval of the following requests (collectively known as the "**Karis Critical Entitlement Requests**") in order to construct a single 2-story, 211,160 square foot Data Center, which may be constructed in phases (with Phase 1A consisting of construction of approximately 145,000 square feet, and with Phase 1B constituting an additional 66,160 square feet to full buildout occurring in the future), ("**Data Center**") on the Subject Property:

- A conditional use to permit a data center in the ORI (Office, Research, and Light Industry) District;
- A variance to Section 6-9-3 (Off-Street Parking) of the Naperville Municipal Code to permit a reduction in the required parking for a data center from 211 spaces to 60 spaces; and
- A variance to Section 6-2-12:3 (Fences: Industrial Districts) of the Naperville Municipal Code to permit an increase in the height of the proposed equipment yard screen wall associated with each data center building from 15' to 22'.

E. By entering into this Agreement, the City is acting pursuant to its home rule authority under the Constitution and laws of the State of Illinois.

NOW THEREFORE, in consideration of the mutual promises and agreements set forth herein, the Parties agree as follows:

1. **RECITALS INCORPORATED.**

1.1 The foregoing Recitals are incorporated herein as though fully set forth in this Section 1.1

2. **DEFINITIONS.** (All references to Section numbers and Recitals used in this Section 2 reference Section numbers and Recitals set forth in this Agreement).

2.1 Air Permit: has the meaning set forth in Section 11.2.2.

2.2 Annual Report: has the meaning set forth in Section 21.2.

2.3 Annual True-Up Data Center Report: has the meaning set forth in Section 6.4.

2.4 Approved Plans: has the meaning set forth in Section 5.1.

2.5 City: The City of Naperville, IL

2.6 City Contacts: has the definition set forth in Section 22.2.

2.7 City Code: means the Naperville Municipal Code, as amended from time to time.

2.8 City Consultant: has the definition set forth in Section 5.2.6.

2.9 City Zoning Administrator: has the meaning set forth in Section 6-3-1 of the Naperville Municipal Code.

2.10 Cooling System: has the meaning set forth in Section 7.1.

2.11 Data Center: has the meaning set forth in Recital D.

2.12 Data Center Contacts: has the meaning set forth in Section 22.1.

2.13 Director of DPU-E: the Director of the City of Naperville Department of Public Utilities-Electric.

2.14 Director of DPU-W/WW: the Director of the City of Naperville Department of Public Utilities-Water/Wastewater.

2.15 Electric Load: means all electricity used by or in support of any aspect of the Data Center, measured on an hourly basis, including but not limited to: (i) the IT load; (ii) cooling load; (iii) support load; and (iv) and all other electric uses or demands. This will be computed on an hourly basis by summation of all electric meters servicing the Subject Property.

2.15.1 Peak Electric Load: means the highest one hour of Electric Load for the Subject Property across all hours of all days during a calendar year.

2.16 Electric Utility: has the meaning set forth for the definition of Department of Public Utilities – Electric (DPU-E or UTILITY) in the City Code.

2.17 Emergency Response and Safety Plan: has the meaning set forth in Section 20.2.

2.18 E-Waste Management Plan: has the meaning set forth in Section 18.1.

2.19 Final Engineering Plans: has the meaning set forth in Section 5.1.

2.20 Land Banked Parking: has the meaning set forth in Section 19.1.

2.21 Laws: has the meaning set forth in Section 10.1.

2.22 Noise Impact Assessment: means the Noise Impact Assessment of the Proposed Data Center at 1960 Lucent Lane, Naperville, IL prepared by Jacob & Heffner Associates dated December 2, 2025 and is attached to this Agreement as **Exhibit L**.

2.23 Noise Impact Assessment Assumptions: means the assumptions and modeled inputs set forth in Section 3.4 of the Noise Impact Assessment, including but not limited to Situation 1 and Situation 2, of the Noise Impact Assessment.

2.24 Noise Standards: has the meaning set forth in Section 11.1.

2.25 Nokia Declaration: has the meaning set forth in Section 3.1.

2.26 Nokia OAA: has the meaning set forth in Section 4.1.

2.27 Nokia Ordinances: has the meaning set forth in Recital "C".

2.28 Operator: has the meaning set forth in Recital B.

2.29 OWNER: means Karis Critical Member, LLC, a Delaware limited liability company which is the owner of the Subject Property, and OWNER'S successors, assigns, heirs, and transferees and each successive OWNER'S successors,

2.30 Projected Equipment and Facilities: has the meaning set forth in Section 5.2.1.

2.31 RECs: means Renewable Energy Certificates.

2.32 Selected Equipment and Facilities: has the meaning set forth in Section 5.2.2.

2.33 Stewardship Pledge: has the meaning set forth in Section 25.1 and is attached to this Agreement as **Exhibit K**.

2.34 Subject Property: has the meaning set forth in Recital A.

2.35 Updated Noise Study: has the meaning set forth in Section 11.3.

2.36 U.S. Air Quality Index (AQI): means the U.S. EPA's index for reporting air quality which is also used by the IEPA.

2.37 Verification Period: has the meaning set forth in Section 5.2.3.

2.38 Verification Documentation: has the meaning set forth in Section 5.2.4.

3. **ONGOING COMPLIANCE.**

3.1 OWNER shall be subject to and shall fulfill all conditions set forth or referenced herein associated with the SUBJECT PROPERTY, including but not limited to: (i) the terms of this Agreement; (ii) the provisions of the Naperville Municipal Code, as amended from time to time; (iii) all ordinances and resolutions passed or adopted by the Naperville City Council related to the Subject Property, including but not limited to the Ordinance Approving a Conditional Use for the Karis Data Center, the Nokia Ordinances and the Nokia OAA; (iv) the Declaration of Covenants, Conditions, and Restrictions dated April 11, 2023 and recorded with the DuPage County Recorder on April 13, 2023 as Document No. R2023-022235 (the "**Nokia Declaration**"); and (v) all applicable Laws and regulations.

As noted in Recital D hereof, it is anticipated that the Data Center will be constructed in two phases: Phase 1A and Phase 1 B. Upon issuance of a building permit for vertical construction for a Phase of the Data Center, the Data Center may proceed toward completion of construction pursuant to said building permit irrespective of any ordinance or resolution subsequently passed or adopted by the Naperville City Council. Any subsequent building permit, whether for a completed phase or a new phase, shall be subject to all applicable Laws and code provisions then in effect.

4. **NOKIA OWNER'S ACKNOWLEDGEMENT AND ACCEPTANCE AGREEMENT.**

4.1 The Nokia Owner's Acknowledgement and Acceptance Agreement for the SUBJECT PROPERTY was approved by the Naperville City Council on April 7, 2020 by Ordinance No. 20-035 and recorded with the DuPage County Recorder on August 6, 2020 (DuPage County Recording No. R2020-085329) (the "**Nokia OAA**"). The terms, conditions, and provisions of the Nokia OAA and the Nokia Ordinances, including all exhibits thereto, are binding against the Subject Property. The City shall not object to an amendment to the Nokia Declaration that the City determines: i) is consistent with the completion of obligations under the Nokia OAA; and ii) consistent with the intended development of the Subject Property as set forth or referenced in this Agreement.

5. **DEVELOPMENT OF THE SUBJECT PROPERTY.**

5.1 Construction of all on-site and off-site improvements related to the development of the Subject Property shall be at OWNER's sole cost and shall be in compliance with the plans listed in 5.1.1 – 5.1.6 below (the "**Approved Plans**") and the terms and provisions set forth and referenced herein. OWNER will also be responsible for off-site electrical improvements not depicted on the Approved Plans.

Changes to the Approved Plans shall be processed in accordance with the provisions of Section 6-3-8 of the City Code. Construction of said improvements shall be at OWNER's sole cost.

5.1.1 Site Plan Exhibit, prepared by Jacob & Hefner Associates, last revised on September 26, 2025 ("**Site Plan**") and attached hereto as **Exhibit C**

5.1.2 Site Improvement Plans, prepared by Jacob & Hefner Associates, dated April 7, 2025, last revised October 31, 2025 ("**Final Engineering Plans**") and attached hereto as **Exhibit D**.;

5.1.3 Architectural Elevations & Roof Plan, prepared by Carlson Design Group, last revised on September 26, 2025 (the "**Building Elevations**") and attached hereto as **Exhibit E**;

5.1.4 Final Landscape Plan, prepared by Gary R. Weber Associates, Inc., last revised on September 26, 2025 (the "**Final Landscape Plan**") and attached hereto as **Exhibit F**;

5.1.5 Photometric Site Plan, prepared by Kornacki & Associates, Inc., last revised on September 22, 2025 (the "**Photometric Plan**") and attached hereto as **Exhibit G**;

5.1.6 Stormwater Management Report, prepared by Jacob & Hefner Associates, Inc., last revised on September 26, 2025, and incorporated herein by reference.

5.2 Projected vs. Selected Equipment and Facilities.

5.2.1 Projected Equipment and Facilities. In presenting the Petition for the Data Center, and the impact the Data Center will have on the City in general and properties in the vicinity of the Data Center specifically, Petitioner relied upon assumptions related to the facilities and specific equipment to be used in the operation of the Data Center (the **"Projected Equipment and Facilities**"). The Projected Equipment and Facilities may or may not reflect the final equipment and facilities selected for the Data Center. Petitioner explained that the Projected Equipment and Facilities were selected based on input from design engineers, but that the final selection of facilities and equipment is subject to market availability, introduction of new models, and the final preparation of building permit plans. Thus, Petitioner's Jacob & Hefner Associates Noise Impact Assessment and Petitioner's water and electrical usage projections were based upon assumptions associated with the Projected Equipment and Facilities.

5.2.2 Selected Equipment and Facilities. With submittal for a building permit for Phase 1A of the Data Center, OWNER shall finalize the selection of equipment and facilities to be utilized in construction and operation of Phase 1A of the Data Center (the "**Selected Equipment and Facilities**"). Along with the building permit application, Owner shall submit to the City Zoning Administrator an updated Noise Impact Assessment utilizing the Selected Equipment and Facilities. OWNER shall demonstrate to the City's satisfaction that the Selected Equipment and Facilities will function at least as well, if not better, than the Projected Equipment and Facilities in terms of compliance with: (i) the Noise Standards and the Noise Impact Assessment Assumptions; (ii) the City Code then in effect; (iii) use of electricity as set forth in Section 6 hereof; and (iv) use of water as set forth in Section 7 hereof.

The City shall review the Selected Equipment and Facilities along with associated information provided by the OWNER during the building permit review process. The City may hire a City Consultant as set forth in Section 5.2.6 hereof to review and evaluate the documentation and information described above. If the City determines that the Selected Equipment and Facilities appear to meet the requirements and Noise Impact Assessment Assumptions set forth and referenced herein, the City shall issue the building permit. If the City determines that the Selected Equipment and Facilities do not appear to meet the requirements and Noise Impact Assessment Assumptions set forth and referenced herein, the City may deny issuance of the building permit with specific written explanation of basis for said denial.

5.2.3 Verification Period. Prior to issuance of a final occupancy permit for Phase 1A of the Data Center, a temporary occupancy permit shall be issued to allow OWNER to operate Phase 1A of the Data Center for a period of sixty (60) days (the "**Verification Period**"). During the Verification Period, the OWNER shall test the Data Center's usage of electricity and water and the noise and vibrations generated by the Data Center, including but not limited to testing each of the backup generators in the manner such generators will be tested going forward. Such testing shall reflect operation of the Data Center equipment and facilities consistent with the Noise Impact Assessment Assumptions in in effort to produce an accurate reflection of operational issues affecting noise, water, and vibrations from the Data Center. Noting, however, that less electricity will be used during the Verification Period than when the Data Center is fully occupied.

5.2.4 Verification Documentation. Within thirty (30) days of conclusion of the Verification Period, Owner shall submit a report documenting usage of water and electricity at the Data Center during the Verification Period along with measurements of sound and vibration from the Data Center during the Verification Period ("**Verification Documentation**"). If the City determines that the Verification Documentation shows that any aspect of the operation of the Data Center is not compliant with the provisions set forth or referenced herein regarding water usage, electricity usage, noise, and vibrations, or that the Verification Documentation is insufficient for specified reasons, the temporary occupancy permit may be revoked until such time as OWNER has corrected such deficiencies. Alternatively, the City may extend the temporary occupancy permit past the Verification Period in writing for a stated period of time to allow the OWNER to take necessary steps to correct deficiencies noted in the Verification Documentation. Further, as noted in Section 11.3, the City Zoning Administrator may direct future noise studies if needed and annual documentation of compliance is required in Section 21.2.

5.2.5 Modification of Selected Equipment and Facilities. Notwithstanding the foregoing, if the OWNER seeks modifications of Selected Equipment and Facilities which OWNER can demonstrate to the City's satisfaction will reduce (or at a minimum, not increase) noise or vibration levels emanating from the Data Center, or improve efficiencies related to the use of electricity or water by the Data Center, the City may approve those modifications. Modifications may be approved by the City Manager subject to notification thereof to the City Council which may direct the City Manager to bring such modifications to a meeting of the City Council for consideration. As part of this process, the City may, in its sole discretion, request a City Consultant to evaluate the proposed modifications and their impact on the operations of the Data Center with all costs for such assessment to be reimbursed to the City by the OWNER within thirty (30) days of receipt of an invoice therefor.

5.2.6 City Consultant. As part of the Verification Documentation, and as otherwise specified in this Agreement, the City, in its sole discretion, may obtain an independent consultant ("**City Consultant**") to review and approve, disapprove, or approve with conditions the Verification Documentation. The cost of such review shall be reimbursed to the City by the OWNER within thirty (30) days of receipt of an invoice therefor.

5.2.7 Phase 1B.

The same requirements set forth in Sections 5.2.2 through 5.2.6 hereof, as to Phase 1B of the Data Center instead of Phase 1A, shall also be a condition precedent to the City's issuance of a final certificate of occupancy for Phase 1B of the Data Center. Said Verification Period and

Verification Documentation shall be based upon data generated by virtue of the operation of Phase 1A and Phase 1B of the Data Center as they operate together.

5.2.8 Issuance of Final Certificate of Occupancy.

No final certificate of occupancy shall be issued for Phase 1A or Phase 1B of the Data Center until City approval of the Verification Documentation for the applicable Phase and until the City Consultant's costs have been paid in full by the OWNER.

6. **CITY ELECTRICITY.**

6.1 Access to Electrical Capacity. The OWNER is required to purchase 100% of the Data Center's electricity from the City of Naperville. As of December 17, 2025: (i) the City has confirmed with ComEd that there is sufficient electrical capacity available to the City of Naperville to power the Data Center up to a maximum amount of 36 MW of Peak Electric Load; and (ii) subject to Data Center funded system improvements, the City has the ability to power the Data Center up to a maximum amount of 36 MW of Peak Electric Load. However, the City will not reserve capacity for the Data Center until a site permit has been obtained from the City to construct the Data Center. Further, the availability of electrical capacity to the City of Naperville to serve the Data Center is subject to the availability of electricity to the City from ComEd. Electrical capacity for the Data Center was approved by ComEd in the amount of 36 MW of Peak Electric Load in an email dated September 12, 2025 and reiterated in a letter dated December 17, 2025. Further, the availability of electrical capacity to the City of Naperville to serve the Data Center is subject to the availability of electricity to the City from ComEd. Electrical capacity for the Data Center was approved by ComEd in the amount of 36 MW of Peak Electric Load in an email dated September 12, 2025 and reiterated in a letter dated December 17, 2025.

6.1.1 Notwithstanding the forgoing, the Parties acknowledge and agree that it is possible that the City could be informed at any time by ComEd that ComEd no longer has the electrical capacity to provide the City with sufficient electricity to serve the Data Center or that the cost to provide that capacity will be higher than anticipated. If that occurs the OWNER may have the following options: (i) to fund additional ComEd system improvements as identified by ComEd; (ii) to accept the delay imposed by the need to have system improvements required by ComEd completed in which case the delay shall not serve as the basis for revocation of the Conditional Use permit for the Data Center; and/or (iii) determine not to proceed or continue with the Data Center project. If delay or cancellation or

other impact to the Data Center project occurs as a result of the foregoing, the City shall bear no liability or responsibility therefor.

6.2 Electricity Cap. At no time shall the Data Center have a Peak Electric Load, as defined herein, in excess of 36MW.

6.3 Infrastructure and Improvements. OWNER will prepay 100% of the costs of all improvements to the City's electrical infrastructure and equipment needed to reliably serve the Data Center, including but not limited to those the expenses for improvements the City deems necessary to the Indian Hill Substation and for the extension of electrical feeds from the Indian Hill Substation to the Data Center.

6.4 Cost of Electricity, Energy, and Ancillary Services.

To ensure that there is no subsidy of the Data Center by the City or by other customers of the City's Electric Utility, the OWNER will be responsible to pay the City for any additional costs of electricity attributable to the procurement of: (i) additional capacity over what is necessary, at any time, to serve all of its customers other than the Data Center; (ii) energy over what is necessary, at any time, to serve all of its customers other than the Data Center; (iii) ancillary services over what is necessary, at any time, to serve all of its customers other than the Data Center; (iv) for any additional costs associated with the Data Center not meeting its load forecast projections as agreed upon with the Electric Utility; and (v) for any cost adders implemented at the sole direction of the City to procure zero carbon or "clean" energy for the Data Center.

Notwithstanding the foregoing, the intent of the Parties is also that the Data Center will not subsidize the City or other customers of the City's Electric Utility.

To determine the above (i) – (iv), the City shall request and receive a report from its rate study consultant to verify those costs for the previous calendar year (the "**Annual True-Up Data Center Report**"). OWNER shall reimburse the City for the cost of said Report.

6.4.1 Charges for any additional costs as demonstrated by the Annual True-Up Data Center Report, and for the City's rate study consultant charge to create said Report, shall be paid within sixty (60) days from receipt by the OWNER of the Annual True-Up Data Center Report. Notwithstanding the foregoing, if OWNER disputes the premises or conclusions of the Annual True-Up Data Center Report, within thirty (30) days of receipt thereof, the OWNER may file a complaint with the City's PUAB (Public Utility Advisory Board). If the complaint is not resolved to

OWNER's satisfaction, the OWNER may submit an appeal of the PUAB's findings and/or recommendations to the City Council.

6.4.2 Ancillary services include: (i) ancillary services defined by PJM, including but not limited to the costs of transmission and reactive power; and (ii) reasonable costs of resources based on actual or anticipated use or operation of the Data Center, as determined by the City in its reasonable sole discretion, necessary to support the delivery of power to the Data Center, including but not limited to: (a) staff time for services requested for the Data Center or expended at a time or in a manner requested by the Data Center; (b) procurement of additional equipment to be solely utilized by the Data Center; and (c) other services, including but not limited to consultants, directly related to the Data Center.

6.4.3 The OWNER acknowledges and agrees that a new or different electric rate classification may be implemented at any time by the City or its power provider that encompasses large demand users, including but not limited to the Data Center.

6.5 Enrollment in Green Energy Certificate Program (Renewable Energy Certificates or "**RECs**"). The OWNER will enroll in the City's Green Energy Certificate Program to purchase renewable energy certificates (RECs) throughout the duration of the Data Center's operations sufficient to certify that 100% of the Data Center's Peak Electric Load is matched to renewable energy generation placed on the grid. The RECs shall be purchased through the City of Naperville and the City shall retire the RECs.

6.5.1 Initially, the 10-year commitment will be to buy RECs from wind and solar projects constructed in Illinois or the broader M-RETS region within the last three-year period.

6.5.2 After the initial 10-year commitment described in Section 6.5.1 above, future commitments for OWNER'S procurements of RECs shall occur as agreed to by the OWNER and the Director of DPU-E. If agreement cannot be reached, a final determination shall be made by the Naperville City Council.

6.5.3 For each year of operation of the Data Center, the OWNER will be responsible to purchase RECs of the Electric Load for the prior year, provided that to meet carbon-free standards for the Data Center, the City shall take into account the City's existing carbon-free electric initiatives.

7. COOLING SYSTEM.

7.1 The Data Center shall utilize an air-cooled closed-loop cooling system which will include a maximum total of twenty-four (24) HVAC units which will be placed on the Data Center roof which HVAC units may run for twenty-four (24) hours through the day and night at 60% capacity for the day and 50% capacity at night (the "**Cooling System**").

After the initial fill of the closed-loop system and aside from periodic maintenance activities, the Cooling System is designed to consume zero water on a daily basis. The Cooling System was selected and designed to specifically address concerns with inefficient use of water for cooling operations.

7.2 The Cooling System shall be continuously operated, repaired, and maintained in good operating condition by the OWNER.

7.3 After not less than forty-five (45) days written notice to the City Zoning Administrator and to the Director of the City of Naperville Department of Public Utilities-Water, the OWNER may replace all or some components of the Cooling System with an alternative Cooling System so long as the OWNER proves and the City agrees that the replacement Cooling System: (i) will not violate Noise Standards as defined in Section 11.1 hereof or the assumptions set forth in the Noise Impact Assessment; (ii) will not increase the Data Center's use of water in more than a nominal manner; and (iii) is compliant with all applicable City Codes and all applicable Laws. If these conditions cannot be met, OWNER may seek a minor change to the conditional use granted for the Data Center in accord with the Naperville Municipal Code then in effect.

7.4 Any revision to the Cooling System shall be subject to approval by the City as set forth in Section 5.2.5 hereof.

8. **RESERVED.**

9. **ROOFTOP SCREENING.**

9.1 All rooftop mechanical units and other rooftop mechanical equipment on the Data Center, including but not limited to HVAC units, shall comply with the requirements of Section 5-10-3:12 of the Naperville Municipal Code. Notwithstanding any approved elevations for the Data Center, the height and sufficiency of the rooftop screening must be confirmed by the Zoning Administrator prior to issuance of the building permit for the Data Center. Notwithstanding the foregoing, the OWNER may seek modifications to the rooftop screening in order to improve sound attenuation. Such modifications, if pursued, shall be subject to the provisions of Section 5.2.5 hereof.

10. **COMPLIANCE WITH LAWS**.

10.1 The OWNER will construct, install, and operate all aspects of the Data Center in compliance with applicable state and federal permits; the Naperville Municipal Code as amended from time to time, and all City of Naperville Ordinances, including but not limited to the City of Naperville Ordinance Approving a Conditional Use for the Karis Critical Data Center; state laws and regulations, including but not limited to Illinois Pollution Control Board rules and regulations and Illinois Administrative Code provisions; and all federal laws and regulations (cumulatively referenced herein as "**Laws**").

11. **NOISE.** OWNER shall actively and on a continuing basis take reasonable measures to attenuate noise generated by the Data Center, including but not limited to the design, layout, and selection of equipment and facilities to be used at the Data Center.

11.1 Noise Standards. The OWNER AND DEVELOPER will operate the Data Center in compliance with all Laws related in any way to noise, noise emission standards, and noise pollution, including but not limited to Illinois Pollution Control Board rules and regulations and Illinois Administrative Code provisions related to noise as well as the City of Naperville noise performance standards (together referenced herein as the "**Noise Standards**"). Infrastructure for the Data Center shall be designed, programmed, constructed, and operated within the parameters of said Noise Standards and consistent with the Noise Impact Assessment Assumptions.

11.2 Generators. The Data Center will be constructed and operate with not more than twenty-four (24) backup generators which shall, at the outset, be diesel generators. The generators will be located within the equipment yard north of the Data Center and as depicted on **Exhibit H** attached hereto. The generator yard will be enclosed by a twenty-two foot (22') visual screen wall. With regard to the use of said backup generators the Parties agree as follows:

11.2.1 The generators used at the Data Center shall meet U.S. EPA Tier 4 emission standards and shall not exceed 3MW. The generators will be tested on a regular basis to ensure that they maintain Tier 4 compliance. The generators shall be part of a containerized system that will ensure sound attenuation and integral fuel containment. The generators will be surrounded with an enclosure capable of providing a sound pressure reading of 77 decibels at 30 feet (total sound energy Lw estimated at 104.2 dBA emanating from enclosure walls).

11.2.2 Generators shall not be used in excess of the maximum periods allowed by the Federally Enforceable State Operating Permit for the Data Center (the "**Air Permit**")

11.2.3 To the extent that generators are operated using diesel fuel, diesel fuel shall be stored in "belly tanks" designed as part of the containerized generator system. The belly tanks shall have double-walled construction, spill containment systems, and leak detection technology, and diesel storage will comply with all applicable OSHA and National Fire Protection Association (NFPA) standards, including but not limited to NFPA 75, and all other Laws.

11.2.4 Any revision to the number or type of generators used at the Data Center, or the MW they operate at, shall be subject to approval by the City as set forth in Section 5.2.5 hereof.

11.2.5 Non-Emergency Operation of Generators.

11.2.5.1 Testing of Generators. OWNER shall establish a testing schedule to maintain the generators, which may include monthly, quarterly, and/or annual testing. During testing operations, not more than two (2) generators shall be tested concurrently and testing shall occur only on weekdays between the hours of 9 a.m. and 5 p.m. and shall not occur at all on federal holidays. Generator testing shall not exceed ten hours per year. The generator testing schedule, based on manufacturer recommended testing specifications, shall be provided to the City in advance of the Verification Period referenced in Section 5.2.3 above. Any change in the time period of testing of each generator shall be subject to the provisions of Section 5.2.5.

11.2.5.2 Operation of Generators During Abnormal Conditions. The Data Center may operate backup power systems to the extent required for: i) Electric Utility directed/coordinated maintenance that will or is reasonably expected to interrupt Electric Utility power to the Data Center; ii) critical infrastructure maintenance by the OWNER, to be coordinated with the Electric Utility, which requires isolation from Electric Utility power; iii) life safety system testing as required by Laws; and iv) prevention of equipment damage from unstable Electric Utility conditions. In any instance where the Data Center ceases to use electricity provided by the Electric Utility, the OWNER shall immediately notify the Electric Utility's control room and Director of DPU-E (or their

designee). In all cases once the abnormal conditions described above have ceased to exist, a transfer back to Electric Utility power shall occur without unreasonable delay in coordination with the Electric Utility's control room.

11.2.5.3 Operation of the generators under Subsections 11.2.5.1 and 11.2.5.2 above shall not be conducted when the Air Quality Index for Naperville is classified as higher than "Green/Good/0-50".

11.2.6 Emergency Use of Generators. Emergency use of the generators shall be limited to unforeseen interruptions of power supply affecting the Data Center and situations where continued use of utility electricity will endanger the lives of Data Center personnel or the public. The Data Center will rely on twenty-four (24) diesel backup generators to provide emergency power in the event of an electrical outage. The generators will not be utilized for peak shaving or for any other purpose. Following a power interruption and subsequent transfer to emergency generator power, the Data Center shall transfer back to utility power as soon as possible, in coordination with the City electric utility's control room and in consideration of manufacturer operating recommendations communicated to the City's control room.

11.2.6.1 An emergency shall not include situations where backup power is used solely for economic purposes such as demand response programs or utility rate arbitrage.

11.2.7 Notice to the Public. If the OWNER or Operator determines that it is or may be necessary to use backup generators for any of the reasons described in this Section 11 for a period of time in excess of four (4) hours, the OWNER or Operator will communicate with the City and with neighboring property owners as provided in Sections 22.3 and 22.4 hereof.

11.3 Noise Testing After Issuance of a Certificate of Occupancy. The City Zoning Administrator may direct the OWNER to perform additional noise studies if, after issuance of a final Certificate of Occupancy for Phase 1A or Phase 1B of the Data Center, he or she believes that the operation of the Data Center may be causing an exceedance of any applicable Noise Standards (an "**Updated Noise Study**"). The results of the Updated Noise Study shall be provided to the City who may seek review of the test results and test parameters by the City Consultant. At the request of OWNER, the City shall make the City Consultant available for

consultation regarding the parameters to be used in preparing and evaluating the Updated Noise Study.

If the Updated Noise Study reveals that sound levels from the Data Center exceed any applicable Noise Standards, the OWNER shall promptly take all steps necessary to cure such exceedances by means of additional sound barriers, buffers, operational changes, and/or other measures, which steps shall not take more than sixty (60) days to install or implement unless a different timeframe is agreed to in writing by the City Zoning Administrator.

After installation of the additional noise mitigation measures or operational changes discussed above, OWNER shall conduct a follow-up noise study which shall be subject to the review and approval by the City Consultant. The OWNER shall reimburse the City for the City Consultant's review of the follow-up noise study (or studies, as applicable) within thirty (30) days of receipt of an invoice therefor. If the follow-up noise stud(ies) continue to reflect any exceedance of the Noise Standards, the steps described above shall be repeated. If sound emanating from the Data Center fails to be brought within the Noise Standards, the City may take such enforcement action as it deems appropriate under the circumstances.

12. **RESERVED.**

13. **VIBRATIONS.**

13.1 Any vibrations generated by the Data Center must comply with the requirements of Section 6-14-4:4 (Performance Standards: Vibration) of the Naperville Municipal Code, as amended from time to time.

14. **LOADING DOCKS**.

14.1 Any proposed loading docks on the Subject Property other than those depicted on the final approved engineering plans attached as **Exhibit D** shall be subject to review and approval by the City in accordance with Section 6-3-8:5 (Changes to Approved Conditional Uses) of the Naperville Municipal Code, as amended from time to time.

15. **REVIEW AND APPROVAL OF CHANGES TO SITE PLAN, LANDSCAPING PLAN, AND ELEVATIONS**.

15.1 Any future modifications proposed to the site, landscaping, or elevations approved for the Subject Property shall be subject to review and approval in accordance with Section 6-3-8:5 (Changes to Approved Conditional Uses) of the Naperville Municipal Code as amended from time to time.

16. **LIGHTING AND DARK SKY COMPLIANCE**.

16.1 The Photometric Plan for the Subject Property attached hereto as **Exhibit G** complies with Section 6-14-4:3 of the Naperville Municipal Code.

16.2 Further, as specified in **Exhibit I**, though not required by the Naperville Municipal Code, the photometric plan reflects compliance with Dark Sky lighting strategies and principles endorsed by the International Dark Sky Places program. The lighting shall be operated and maintained consistent with the Photometric Plan.

17. **NO COAL TAR PRODUCTS**.

17.1 At no time shall asphalt sealants containing coal tar, or any other building product that contain coal tar, be used on the Subject Property.

18. **E-WASTE.**

18.1 Prior to issuance of an occupancy permit for the Data Center, the OWNER shall prepare an e-waste management plan for operation of the Data Center (the "**E-Waste Management Plan**") and shall provide a copy of said Plan to the City Zoning Administrator. Said E-Waste Management Plan shall be adhered to, maintained and updated as necessary to ensure proper disposal, collection, transportation, and recycling, of e-waste to ensure public health and environmental protection on an ongoing basis. The E-Waste Management Plan and documentation demonstrating compliance with said Plan shall be available to the City within fourteen (14) calendar days of a request therefor.

19. **PARKING**.

19.1 A parking variance was granted to reduce the required parking for the Data Center from 211 spaces to 60 spaces as depicted on **Exhibit J**; however, a land banked parking ("**Land Banked Parking**") area consisting of 114 parking stalls, as depicted on **Exhibit J**, has been reserved and shall be constructed by the OWNER in the event that additional parking is required based on actual use and operation of the property. If operation of the Data Center requires more than the sixty (60) spaces constructed with the initial development of the Data Center, the Zoning Administrator may require the OWNER to construct all or some portion of the Land Banked Parking (as set forth below) up to a maximum of one hundred and seventy-four (174) spaces.

19.1.1 If the City Zoning Administrator, at his or her reasonable discretion, determines that the construction of all or a portion of the land banked parking spaces is appropriate, OWNER shall obtain all necessary approvals and permits and shall complete construction of said land banked parking improvements

within one hundred and eighty (180) days of written notice by the City that such construction is required unless a different timeframe is agreed upon in writing by the City Zoning Administrator.

19.1.2 The Land Banked Parking shall be constructed in compliance with the Naperville Municipal Code then in effect, including but not limited to all zoning, engineering, and building requirements and regulations.

19.1.3 Until converted to a parking facility, the Land Banked Parking area shall be landscaped and maintained with turf grass. No permanent buildings, structures, or other uses are permitted within the Land Banked area.

20. **SAFETY MEASURES**.

20.1 Battery Backup. The Data Center will rely on containerized battery systems to provide bridging power between the time of a power outage and back-up generators coming on-line. The OWNER will coordinate with the City of Naperville Fire Department regarding the proposed battery storage system and will meet the standards of the 2024 International Fire Code for all battery storage systems.

20.2 Emergency Response and Safety Plan. Not less than thirty (30) days prior to issuance of a temporary occupancy permit for Phase 1A or Phase 1B, OWNER shall provide the City an emergency response and safety plan for the operation of that Phase of the Data Center (the "**Emergency Response and Safety Plan**"). At the City's request, OWNER shall meet with the Fire Department and the Police Department regarding the City's delivery of emergency response services to the Data Center and the Emergency Response and Safety Plan shall be updated as necessary and appropriate.

21. REPORTING REQUIREMENTS.

21.1 Initial Documentation. The OWNER shall provide the City Zoning Administrator with: (i) copies of all application documentation submitted to obtain a Federally Enforceable State Operating Permit for the Data Center (referenced herein as the Air Permit); and (ii) a copy of the Air Permit issued for the Data Center.

21.2 Annual Reports. Annually for each of the first five (5) years that the Data Center is in operation, the OWNER shall submit an annual report ("Annual Report"). The Annual Report shall be based on calendar year operations and shall filed by May 1 of the year following the year of reporting (2027 Annual Report filed by May 1, 2028). The Annual Report shall detail key operations of the Data Center for the, including but not limited to: (i) monthly electric usage; (ii) monthly water usage; (iii) statistics use of backup generators, including the dates and times of usage, and Air Quality Index at the time of said usage; (iv) statistics detailing dates and times of operation of emergency generator when electricity was unavailable, including but not

limited to how many backup generators were used and what the Air Quality Index was at the time the generators were used; (v) a property tax and fiscal impact summary; (vi) a summary of any requests for emergency or Fire Department services at the Data Center detailing the dates, times, and nature of such requests: vii) any complaints or findings of violations that occurred during the calendar year, as well as the mitigation steps taken by the campus in response to these incidents (viii) copies of any noise studies conducted of the Data Center either as required herein; (ix) violations of any kind that were alleged to have occurred (including but not limited to violations of Noise Standards and IEPA permit requirements), whether it was determined that violations did occur, and what steps were taken in what timeframe to address those violations; (x) documentation of any modification(s) made to the Federally Enforceable State Operating Permit for the Data Center; (xi) a copy of any reports, documentation, or statistics provided to the State of Illinois, including but not limited to annual emission reports; (xii) a statement affirming that the Data Center was not used for cryptocurrency or bitcoin mining operations; and (xiii) documentation demonstrating compliance with the E-Waste Management Plan.

21.2.1 After the first five (5) Annual Reports have been submitted, Annual Reports will only be required as requested in writing by the City.

21.3 Other Reports. The City may reasonably request a report from the OWNER regarding matters specifically regulated under this Agreement. The OWNER shall respond to such requests within forty-five (45) days of receipt of the request unless a different timeframe is agreed to by the City and unless the City reasonably identifies the concern as a critical and time-sensitive concern that requires immediate attention, in which case the report shall be submitted to the City within a timeframe reasonably specified by the City and as appropriate for the circumstances.

22. **CONTACTS AND COMMUNICATIONS**.

22.1 Prior to issuance of an occupancy permit for the Data Center, the OWNER shall provide the City Zoning Administrator with a primary and secondary point of contact (the "**Data Center Contacts**") including but not limited to their names, titles, telephone numbers, and email addresses. The Data Center Contacts shall be responsible for 24/7 communications with the City of Naperville.

22.2 After receipt of the Data Center Contacts, the City shall provide OWNER with a list of contacts for the City Manager, the City Attorney, the City Zoning Administrator, the Fire Department, the Police Department, the Director of DPU-E, and the Director of DPU-W/WW (the "**City Contacts**").

22.3 OWNER shall create and maintain a website that provides a point of contact for the public to submit questions and requests for information relative to the

Data Center. Further, the OWNER will use the website to notify the public of situations where the backup generators will be used for a period of time in excess of four (4) hours.

22.4 The OWNER shall create a community contact email (e.g., kariscommunity@kariscritical.com) for neighbors and the public to report concerns related to operations.

23. **CRYPTOCURRENCY AND BITCOIN MINING**.

23.1 The Data Center shall not house nor be used for any purpose related to cryptocurrency or bitcoin mining operations.

24. **CESSATION OF USE**.

24.1 If the Data Center ceases to operate as a data center for a period of two (2) years or more, the OWNER AND DEVELOPER shall submit to the City a plan and schedule for decommissioning the generators and removing hazardous materials identified as a concern by the Naperville Fire Department.

25. **COMMUNITY STEWARDSHIP PLEDGE**.

25.1 Attached as **Exhibit K** is the "Karis Critical Data Center Community Stewardship Pledge" (the "**Stewardship Pledge**"). The provisions contained therein, to the extent not specifically included within the body of this Agreement, are incorporated in their entirety and made part of the requirements of this Agreement. The Parties agree that the "commitments" and other provisions set forth in the Stewardship Agreement are contractually binding agreements and are obligations of the OWNER AND DEVELOPER and enforceable by the City. To the extent that the terms of this Agreement conflict with or are inconsistent with the provisions of the Stewardship Pledge, the provisions in this Agreement shall control.

26. **ENFORCEMENT**.

26.1 The City shall have the right to enforce compliance with the terms and conditions set forth and referenced in this Agreement and the conditional use zoning ordinance authorizing this Agreement as provided herein and as authorized by the Illinois Municipal Code, by the Naperville Municipal Code, as amended from time to time, and pursuant to its powers as a home rule municipality under the Constitution and laws of the State of Illinois, including but not limited to denial or suspension of permits, suspension or revocation of zoning entitlements, and ordinance violations. The Parties agree that the City may lien the Subject Property for any unpaid monies due to the City for reimbursement of consultant fees and for any unpaid fines, fees, or costs imposed related to ordinance violations or other legal action taken by the City to enforce the requirements of this Agreement and the City's conditional use zoning ordinance authorizing this Agreement**.**

26.2 If the Data Center causes a significant negative impact that was not anticipated or adequately covered based upon the Noise Impact Assessment, or any update thereof, or any other aspect of operation of the Data Center, the City Zoning Administrator, City Engineer, and OWNER shall meet, within seven (7) days of a request to do so by the City Zoning Administrator, to discuss the causes of said impact and reasonable steps the OWNER may take to alleviate them.

27. **BINDING EFFECT**.

27.1 This Agreement shall constitute a covenant running with the land and shall be binding upon the City and the OWNER and their respective successors, assigns, heirs, and transferees.

28. **GENERAL CONDITIONS.**

28.1 **Severability**. It is mutually understood and agreed that all agreements and covenants herein are severable and that in the event any of them shall be held to be invalid by any court of competent jurisdiction, this Agreement shall be interpreted as if such invalid agreement or covenant were not contained herein.

28.2 **Amendment**. The agreements, covenants, terms and conditions herein contained may be modified only through the written mutual consent of the Parties hereto.

28.3 **Assignment**. The obligations set forth in this Agreement may not be assigned by OWNER without the written consent of the City which shall not be unreasonably withheld. Further, this Agreement may not be assigned, at any time, to an entity that is not the sole OWNER of the Property.

28.4 **Choice of Law and Venue.** This Agreement shall in all respects be subject to and construed in accordance with and governed by the laws of the State of Illinois, irrespective of its choice of law rules. Venue for any action arising out of the terms or conditions of this Agreement shall be proper only in the Circuit Court for the Eighteenth Judicial Circuit, DuPage County, Illinois.

28.5 **Ambiguity**. If any term of this Agreement is ambiguous, it shall not be construed for or against any Party on the basis that the Party did or did not write it.

28.6 **Recordation**. This Agreement will be recorded by the City with the office of the DuPage County Recorder.

28.7 **Term.** This Agreement shall be effective in perpetuity subject only to termination by mutual agreement of the Parties and for the maximum period of time permitted by any applicable rule against perpetuities.

28.8 **Automatic Expiration.** If the Data Center is not constructed within five (5) years of the Effective Date of this Agreement, this Agreement shall automatically lapse and become null and void without further action by either Party.

28.9 **Authority to Execute/OWNER.** The undersigned warrants he is the owner of the Subject Property and has the full power and authority to sign this Agreement as OWNER and voluntarily agrees to the provisions set forth herein.

28.10 **Authority to Execute/City.** The undersigned City Manager warrants that he has been directed to, and has the authority to, execute this Agreement. The undersigned City Clerk warrants that she has been directed to, and has the authority to, attest the signature of the City Manager on this Agreement.

28.11 **Exhibits.** All exhibits attached hereto or referenced herein, and all exhibits attached or referenced in the Agreement, are incorporated herein by reference and made part hereof.

28.12 **Notices**. Where notices are required to be given as provided herein, the City shall give notice to the Data Center Contacts, and if it deems appropriate, to the OWNER and OWNER shall give notice to the City Contacts.

28.13 **Effective Date.** The effective date of this Agreement ("**Effective Date**") shall be the date upon which it is fully executed by the Parties hereto.

/SIGNATURES ON FOLLOWING PAGES/

OWNER – KARIS CRITICAL MEMBER, LLC

By: _____
Jake Finley

Its: Manager

The foregoing instrument was acknowledged before me by _____, Manager of Karis Critical Member, LLC this _____ day of _____ 2026.

_____
Notary Public

_____
Print Name

-Seal-

EXHIBIT F

CITY OF NAPERVILLE

By: _____
Douglas A. Krieger
City Manager

ATTEST:

By: _____
Dawn C. Portner
City Clerk

Date: _____

EXHIBIT LIST

EXHIBIT A – LEGAL DESCRIPTION

EXHIBIT B – SUBJECT PROPERTY DEPICTION

EXHIBIT C – SITE PLAN

EXHIBIT D – FINAL ENGINEERING PLANS

EXHIBIT E – BUILDING ELEVATIONS

EXHIBIT F – FINAL LANDSCAPE PLAN

EXHIBIT G – PHOTOMETRIC PLAN

EXHIBIT H – GENERATOR DEPICTION

EXHIBIT I – DARK SKY COMPLIANCE LETTER

EXHIBIT J – PARKING EXHIBIT

EXHIBIT K – STEWARDSHIP PLEDGE

EXHIBIT L – NOISE IMPACT ASSESSMENT

EXHIBIT A
LEGAL DESCRIPTION

LEGAL DESCRIPTION FOR CONDITIONAL USE APPROVAL:

THAT PART OF LOT 2 IN THE PRELIMINARY / FINAL PLAT OF SUBDIVISION OF NOKIA CAMPUS SUBDIVISION NAPERVILLE, ILLINOIS, BEING A SUBDIVISION IN PART OF THE NORTH HALF OF SECTION 5, TOWNSHIP 38 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN AND THE SOUTH HALF OF SECTION 32, TOWNSHIP 39 NORTH, RANGE 10, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 6, 2020 AS DOCUMENT NO. R2020-85330, CERTIFICATE OF CORRECTION RECORDED JANUARY 28, 2022 AS DOCUMENT NO. R2022-10489, IN DUPAGE COUNTY, ILLINOIS, EXCEPTING ANY PART DEDICATED IN THE PLAT OF DEDICATION RECORDED JULY 30, 2021 AS DOCUMENT NO. R2021-115129, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID LOT 2; THENCE THE FOLLOWING SIX COURSES ALONG THE NORTHERLY LINES OF SAID LOT 2; 1) NORTH 81 DEGREES 10 MINUTES 15 SECONDS EAST, A DISTANCE OF 376.85 FEET TO A POINT ON A NON-TANGENT CURVE; 2) THENCE NORTHERLY 193.03 FEET ALONG AN ARC, CONCAVE WESTERLY, HAVING A RADIUS OF 290.00 FEET, A CHORD BEARING OF NORTH 00 DEGREES 50 MINUTES 08 SECONDS EAST, A CHORD DISTANCE OF 189.48 FEET TO A POINT OF NON-TANGENCY; 3) THENCE NORTH 61 DEGREES 40 MINUTES 32 SECONDS EAST, A DISTANCE OF 166.09 FEET; 4) THENCE SOUTH 27 DEGREES 20 MINUTES 27 SECONDS EAST, A DISTANCE OF 326.06 FEET; 5) THENCE SOUTH 87 DEGREES 46 MINUTES 18 SECONDS EAST, A DISTANCE OF 140.57 FEET; 6) THENCE NORTH 62 DEGREES 36 MINUTES 37 SECONDS EAST, A DISTANCE OF 309.32 FEET; THENCE SOUTH 27 DEGREES 43 MINUTES 34 SECONDS EAST, A DISTANCE OF 436.30 FEET; THENCE SOUTH 65 DEGREES 51 MINUTES 17 SECONDS EAST, A DISTANCE OF 79.36 FEET; THENCE SOUTH 27 DEGREES 43 MINUTES 34 SECONDS EAST, A DISTANCE OF 129.44 FEET; THENCE SOUTH 62 DEGREES 16 MINUTES 26 SECONDS WEST, A DISTANCE OF 113.60 FEET; THENCE SOUTH 27 DEGREES 43 MINUTES 34 SECONDS EAST, A DISTANCE OF 440.27 FEET TO THE SOUTHEAST CORNER OF SAID LOT 2; THENCE THE FOLLOWING FOUR COURSES ALONG THE SOUTHERLY LINE OF SAID LOT 2; 1) NORTH 88 DEGREES 43 MINUTES 53 SECONDS WEST, A DISTANCE OF 470.48 FEET TO A POINT OF CURVATURE; 2) THENCE WESTERLY 300.68 FEET ALONG AN ARC, CONCAVE SOUTHERLY, HAVING A RADIUS OF 17,268.80 FEET; A CHORD BEARING OF NORTH 89 DEGREES 17 MINUTES 05 SECONDS WEST AND A CHORD DISTANCE OF 300.68 FEET TO A POINT OF NON-TANGENCY; 3) THENCE NORTH 00 DEGREES 14 MINUTES 27 SECONDS EAST, A DISTANCE OF 9.95 FEET TO A POINT ON A NON-TANGENT CURVE; 4) THENCE WESTERLY 456.48 FEET ALONG AN ARC, HAVING A RADIUS OF 17,278.80 FEET; CONCAVE SOUTHERLY, HAVING A CHORD BEARING OF SOUTH 89 DEGREES 29 MINUTES 03 SECONDS WEST, A CHORD DISANCE OF 456.47 FEET TO A POINT OF NON-TANGENCY; THENCE THE FOLLOWING FIVE COURSES ALONG THE WESTERLY LINE OF SAID LOT 2; 1) NORTH 31 DEGREES 54 MINUTES 36 SECONDS WEST, A DISTANCE OF 64.52 FEET; 2) THENCE NORTH 27 DEGREES 34 MINUTES 56 SECONDS EAST, A DISTANCE OF 197.71 FEET; 3) THENCE NORTH 56 DEGREES 32 MINUTES 29 SECONDS WEST, A DISTANCE OF 107.28 FEET; 4) THENCE SOUTH 88 DEGREES 21 MINUTES 28 SECONDS WEST, A DISTANCE OF 189.22 FEET; 5) THENCE NORTH 08

DEGREES 49 MINUTES 51 SECONDS WEST, A DISTANCE OF 504.74 FEET TO THE POINT OF BEGINNING, IN DUPAGE COUNTY, ILLINOIS, CONTAINING 1,056,849 SQUARE FEET OR 24.262 ACRES.

EXHIBIT B
SUBJECT PROPERTY DEPICTION

CONDITIONAL USE EXHIBIT

1960 WEST LUCENT LANE

KARIS CRITICAL

NAPERVILLE, ILLINOIS

No.	Description	Date
1	ORIGINAL EXHIBIT DATE	12/08/25
2	REVISED	01/09/26

JACOB & HEFNER ASSOCIATES

1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515

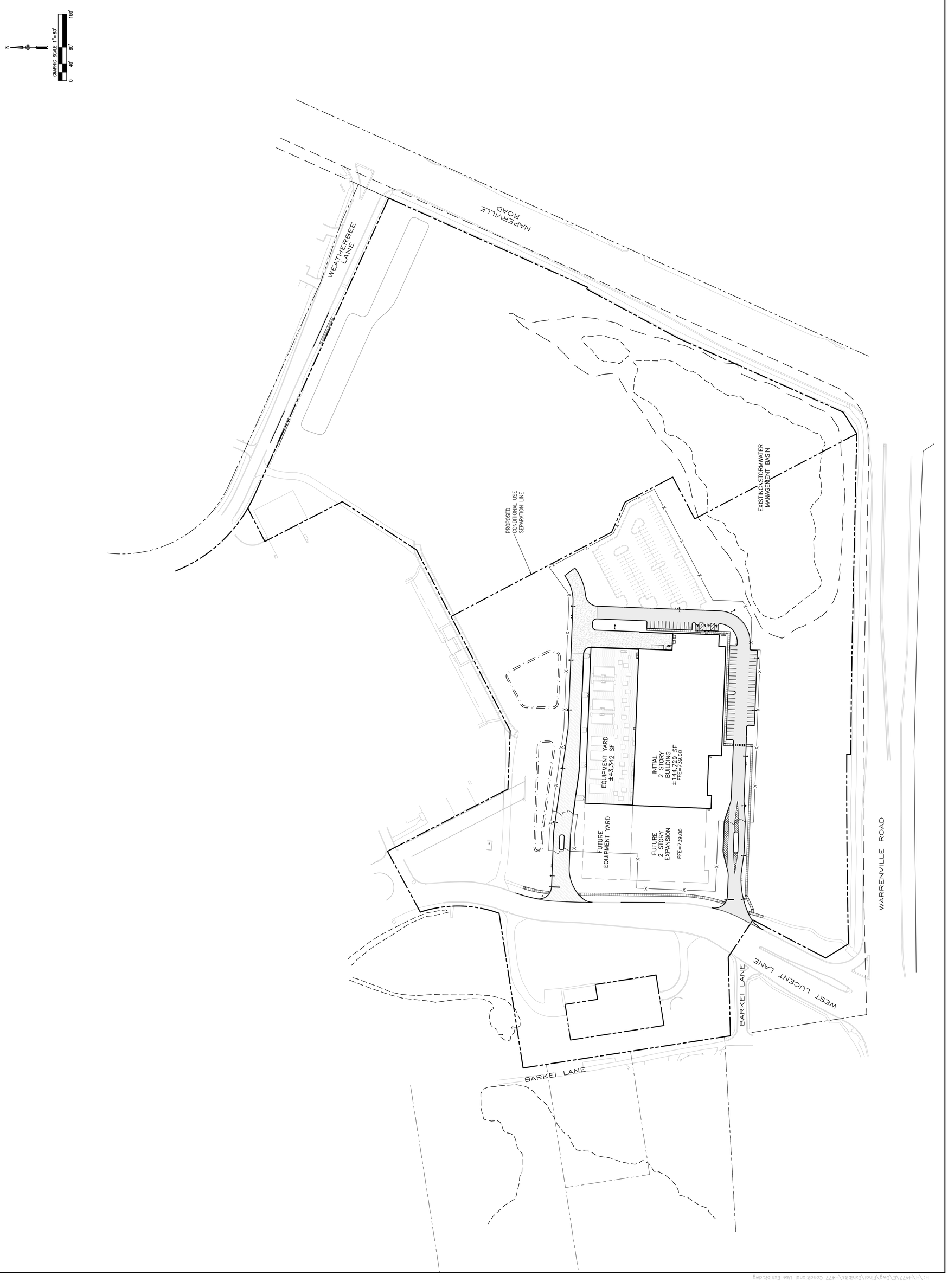
PHONE: (630) 652-4600, FAX: (630) 652-4601

www.jacobandhefner.com

1" = 80'

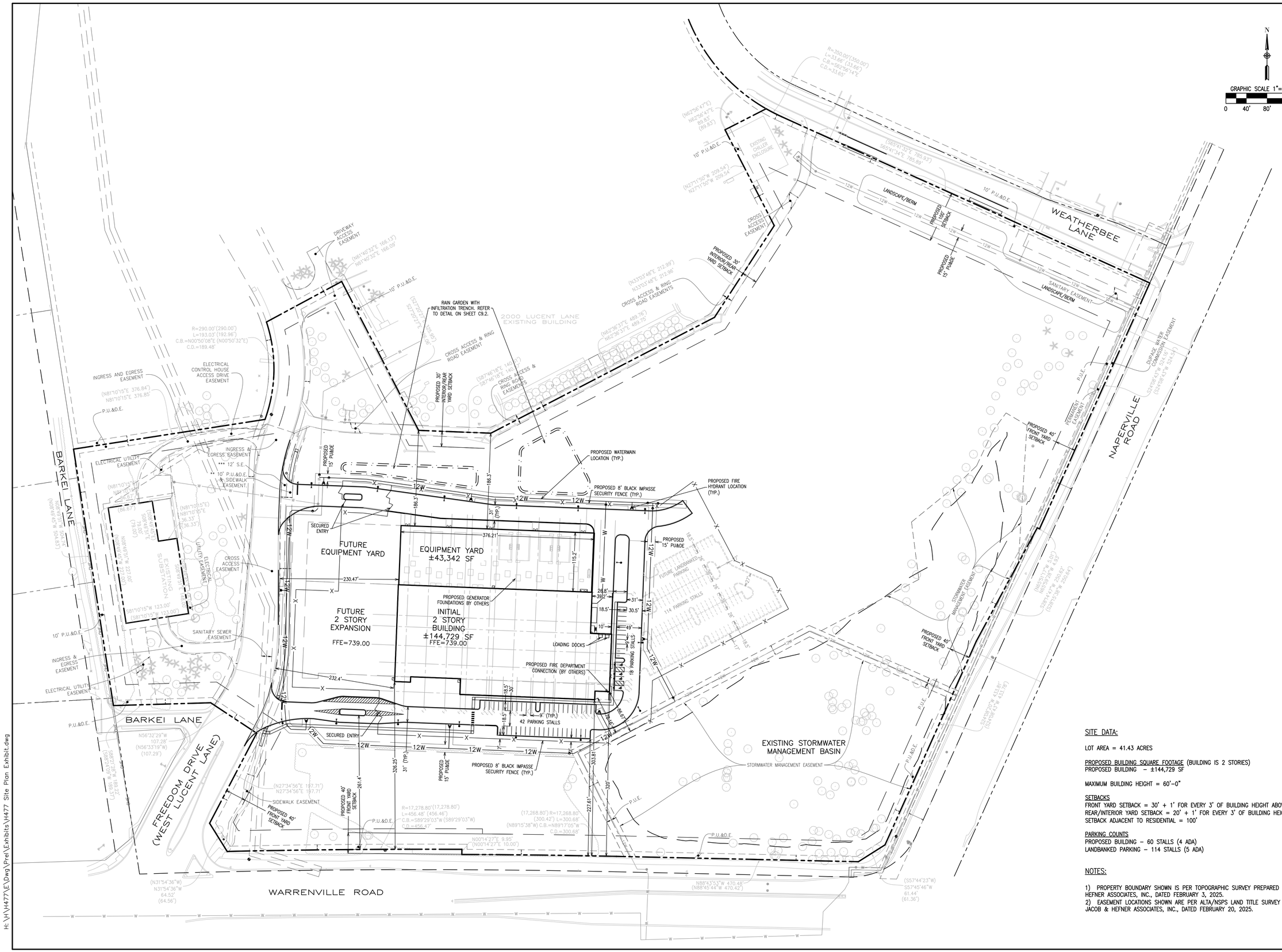
H477a

EXHIBIT A



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EXHIBIT C
SITE PLAN



No.	Description	Date
5	REVISED PER CITY COMMENTS	09/26/25
4	REVISED PER CITY	7/31/25
3	REVISED	7/24/25
2	REVISED PER CITY	6/12/25
1	ORIGINAL EXHIBIT DATE	4/11/25

SITE PLAN EXHIBIT

1960 W LUCENT LANE
NAPERVILLE, ILLINOIS

KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

SITE DATA:

LOT AREA = 41.43 ACRES

PROPOSED BUILDING SQUARE FOOTAGE (BUILDING IS 2 STORIES)
PROPOSED BUILDING – ±144,729 SF

MAXIMUM BUILDING HEIGHT = 60'–0"

SETBACKS
FRONT YARD SETBACK = 30' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 40'
REAR/INTERIOR YARD SETBACK = 20' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 30'
SETBACK ADJACENT TO RESIDENTIAL = 100'

PARKING COUNTS
PROPOSED BUILDING – 60 STALLS (4 ADA)
LANDBANKED PARKING – 114 STALLS (5 ADA)

NOTES:

1) PROPERTY BOUNDARY SHOWN IS PER TOPOGRAPHIC SURVEY PREPARED BY JACOB & HEFNER ASSOCIATES, INC., DATED FEBRUARY 3, 2025.
2) EASEMENT LOCATIONS SHOWN ARE PER ALTA/NSPS LAND TITLE SURVEY PREPARED BY JACOB & HEFNER ASSOCIATES, INC., DATED FEBRUARY 20, 2025.

1" = 80'

H477

EXHIBIT

H:\H477\E\Dwg\Prel\Exhibits\H477 Site Plan Exhibit.dwg

EXHIBIT D
FINAL ENGINEERING PLANS

SITE IMPROVEMENT PLANS

FOR

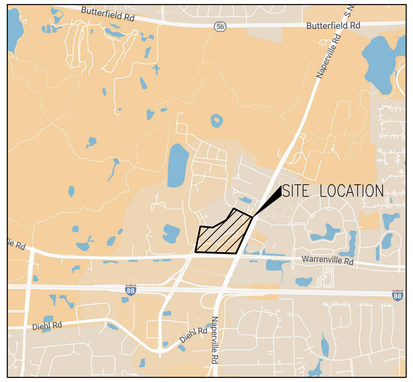
1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

H477a
1960 WEST LUCENT LANE
10/31/25
5

KARIS



LOCATION MAP
NOT TO SCALE

DRAWING INDEX

SHEET	TITLE
C1.0	COVER
C2.0	GENERAL NOTES & TYPICAL SECTIONS
C2.1	CITY OF NAPERVILLE SPECIFICATIONS
C3.0 – C3.4	EXISTING CONDITIONS & DEMOLITION PLAN
C4.0 – C4.4	DIMENSIONAL CONTROL & PAVING PLAN
C5.0–5.4	GRADING PLAN
C5.5	DETAILED GRADING PLAN
C6.0 – C6.4	UTILITY PLAN
C6.5 – C6.6	SANITARY PLAN & PROFILE
C7.0 – C7.4	EROSION CONTROL PLAN
C8.0 – C8.1	STORMWATER POLLUTION PREVENTION PLAN & DETAILS
C9.0 – C9.2	DETAILS

ABBREVIATION LEGEND

ADA	AMERICANS WITH DISABILITIES ACT
B/	BOTTOM OF
BC	BACK OF CURB ELEVATION
C–C	CENTER TO CENTER SPACING
C&G	CURB AND GUTTER
CB	CATCH BASIN
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DWS	DETECTABLE WARNING STRIP
EP	EDGE OF PAVEMENT ELEVATION
EX	EXISTING
FH	FIRE HYDRANT
FR	FUTURE
GR	GRADE RING ELEVATION
HC	HANDICAPPED
HWL	POND HIGH WATER LEVEL
I	UTILITY INVERT ELEVATION
MH	MANHOLE
NWL	POND NORMAL WATER LEVEL
PC	PRESSURE CONNECTION
PCC	PORTLAND CEMENT CONCRETE
PR	PROPOSED
PVC	POLYVINYL CHLORIDE PIPE
R	UTILITY STRUCTURE RIM ELEVATION
R&R	REMOVE AND REPLACE
RCP	REINFORCED CONCRETE PIPE
STM	STORM SEWER
T/	TOP OF
TC	TOP OF CURB ELEVATION
TDC	TOP OF DEPRESSED CURB ELEVATION
TF	TOP OF FOUNDATION ELEVATION
TW	TOP OF RETAINING WALL ELEVATION
VCP	VITRIFIED CLAY PIPE
VIF	VERIFY IN FIELD
Vv	VALVE VAULT
W/	WITH
WM or WTR	WATER MAIN

LEGEND

PROPOSED	DESCRIPTION	EXISTING
C	STORM SEWER	C
8W	WATER MAIN WITH SIZE	8W
	SANITARY SEWER	
	RIGHT-OF-WAY/PROPERTY LINE	
842	CONTOUR	701
805.25	SPOT GRADE	701.30
	SANITARY MANHOLE	
	STORM MANHOLE	
	STORM INLET	
	STORM CATCH BASIN	
	FIRE HYDRANT	
	PRESSURE CONNECTION	
	GATE VALVE W/VAULT	
	LIGHT POLE	
	STREET LIGHT W/MAST	
	UTILITY POLE	
XX	SILT FENCE	
	OVERFLOW DIRECTION	
	SURFACE/DITCH FLOW DIRECTION	
	ROAD SIGN	
	CURB & GUTTER	
	DEPRESSED CURB FOR RAMP/DRIVEWAY	
TF	TOP OF FOUNDATION	
GF	GARAGE FLOOR, AT REAR OF GARAGE	
TD	TOP OF CURB, DEPRESSED	
TW	TOP OF RETAINING WALL	
R=	RIM FOR STRUCTURES	
HWL/NWL	HIGH/NORMAL WATER LEVEL	
T	TRANSFORMER	
X	FENCE LINE	X
	GUARD RAIL	
	FORCE MAIN	
T	UNDERGROUND TELEPHONE	T
E	UNDERGROUND ELECTRIC	E
OHE	OVERHEAD ELECTRIC	OHE
G	UNDERGROUND GAS LINE	G

BENCHMARK & LOCATIONS:

REFERENCE BENHMARK(S):
CITY OF NAPERVIKLLE SURVEY MONUMENT STATION NO. 703

BERNSTEN 3D TOP SECURITY MONUMENT. CONSISTING OF A 9/16" DIAM. STAINLESS STEEL DATUM POINT ON THREADED 9/16" X 4' LONG ROD TOTALING (8') IN LENGTH WITH GREASED TOP SECURITY SLEEVE ENCLOSED IN SAND AND 6" PVC PIPE WITH BMAC 6 ALUMINUM ACCESS COVER.

ELEVATION = 780.31 (NAVD 1988)

SITE BENCHMARK(S):
SITE BENCHMARK 1 (SBM 1) (JHA CP 2) – CROSS NOTCH CUT IN TOP OF CURB

SBM 1 IS A CROSS NOTCH CUT IN THE TOP OF CONC. CURB ON THE W. SIDE OF W. LUCENT LN./FREEDOM DR. +–610' N. OF BARKEI LN. NEAR THE NW COR. OF OUR SITE (W. SIDE OF STREET). "X" IS OPP. THE NW'LY MOST ENTRANCE NEAR THE NW. COR. OF OUR SITE @ 1960 NAPERVILLE WHEATON RD. "X" IS +–0.20'E. OF THE W. BACK OF CURB OF W. LUCENT LN. (NEAR NW. COR. OF SITE)

ELEVATION = 739.86

SITE BENCHMARK 2 (SBM 2) (JHA CP 3) – MAG NAIL SET IN ASPH.

SITE BENCHMARK 2 IS A MAG NAIL SET IN THE ASPH. PATH RUNNING E–W IN THE N'LY. R.O.W. OF WEATHERBEE LN.(AKA LUCENT LN.) NEAR THE NW. COR. OF THE INTERSECTION OF WEATHERBEE LN. & NAPERVILLE RD. NAIL IS +–210' NW. OF THE CENTERLINE OF NAPERVILLE RD. NAIL IS +–7.30' NW. OF THE W. SIDE OF THE DRIVEWAY ENT. 2104–2114 WEATHERBEE LN. (MULTI FAMILY UNITS). NAIL IS +–0.50' NE. OF THE S'LY. EDGE OF PAVE OF THE ASPH. PATH. (NEAR NE. COR. OF SITE)

ELEVATION = 738.01

SITE BENCHMARK 3 (SBM 3) (JHA CP 4) – MAG NAIL SET IN ASPH.

SITE BENCHMARK 3 IS A MAG NAIL SET IN THE ASPH. PATH RUNNING N–S IN THE W'LY. R.O.W. OF NAPERVILLE RD. NEAR THE NW. COR. OF THE INTERSECTION OF NAPERVILLE RD. & WARRENVILLE RD. NAIL IS +–150' NE. OF THE CENTERLINE OF WARRENVILLE RD. NAIL IS +–26' NE. OF A TRAFFIC SIGNAL POST ON A PIECE OF CONC. WALK CONNECTING THE ASPH PATH TO THE CROSSWALK AT THE BACK OF CURB AND NAIL IS +–0.40' W. OF THE E'LY. EDGE OF PAVEMENT OF THE ASPH. PATH. (NEAR THE SE. COR. OF SITE)

ELEVATION = 736.11

SITE BENCHMARK 4 (SBM 4) (JHA CP 1) – MAG NAIL SET IN ASPH.

SBM 4 IS A MAG NAIL SET IN THE ASPH. PATH RUNNING E–W ALONG THE N. R.O.W. OF WARRENVILLE RD. NEAR THE SW. COR. OF OUR SITE, ALSO BEING NEAR THE NE. COR. OF THE INTERSECTION OF WARRENVILLE RD. & LUCENT LN./FREEDOM DR. NAIL IS +–57' E. OF THE POINT WHERE THE W. END OF THE ASPH. PATH CONNECTS TO THE CONC. WALK AT THAT INTERSECTION. NAIL IS +–41' NE. OF A STORM MANHOLE IN THE RIGHT TURN LANE TO TURN FROM WARRENVILLE RD. ON TO LUCENT LN./FREEDOM DR. (NEAR SW. COR. OF SITE)

ELEVATION = 755.74

WARNING

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5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	06/12/25
1	ORIGINAL PLAN DATE	04/07/25

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FOR REVIEW PURPOSES ONLY

GENERAL NOTES

1. ALL PAVING AND RELATED CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, ALL AMENDMENTS THERETO AND IN ACCORDANCE WITH THE LATEST EDITION OF THE SUBDIVISION REGULATIONS OF THE MUNICIPALITY. IN CASE OF CONFLICT, THE MORE STRINGENT CODE SHALL TAKE PRECEDENCE.

2. ALL STORM SEWER, SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION AND IN ACCORDANCE WITH THE CURRENT SUBDIVISION REGULATIONS OF THE MUNICIPALITY UNLESS OTHERWISE NOTED ON THE PLANS.

3. STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THIS CONTRACT.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE MUNICIPALITY FOR UTILITY LOCATIONS.

5. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION." PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE COMMENCING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

6. NOTIFICATION OF COMMENCING CONSTRUCTION

   A. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND THE AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES, EITHER MUNICIPALITY'S OR THE OWNER'S, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.

   B. FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME, WHICH RESULTS IN TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING, WILL CAUSE THE CONTRACTOR TO SUSPEND OPERATION (PERTAINING TO TESTING) UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. THE COST OF SUSPENSION OF WORK TO BE BORNE BY THE CONTRACTOR.

7. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES, FOR ALL TYPES OF TRAFFIC. AT NO TIME SHALL ACCESS BE DENIED TO PROPERTIES SURROUNDING THE SITE.

8. ALL PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS OTHERWISE SPECIFIED.

9. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET AT THE CONTRACTOR'S COST.

10. ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWER STRUCTURES ARE TO BE ADJUSTED TO MEET FINAL FINISHED GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER CONTRACTOR AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. FINAL GRADES ARE TO BE DETERMINED BY THE MUNICIPALITY AT THE TIME OF FINAL INSPECTION AND MAY VARY FROM PLAN GRADE.

11. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND NOT NOTED FOR DISPOSAL, SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT HIS OWN EXPENSE, TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

12. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.

13. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM OR SHALL BE RESTORED TO PROPER OPERATING CONDITION. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED BY OWNER AND MUNICIPALITY.

14. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE DURING THAT PERIOD.

15. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE. FINAL PAYMENT WILL BE MADE AFTER ALL THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED BY THE OWNER AND MUNICIPALITY.

16. UPON AWARDING OF THE CONTRACT AND WHEN REQUIRED BY THE MUNICIPALITY, THE CONTRACTOR SHALL FURNISH A LABOR, MATERIAL AND PERFORMANCE BOND WITH INSURANCE, IN THE AMOUNT REQUIRED BY THE MUNICIPALITY, GUARANTEEING COMPLETION OF THE WORK. THE UNDERWRITER SHALL BE ACCEPTABLE TO THE MUNICIPALITY.

17. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO KNOWN AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, JACOB AND HEFNER ASSOCIATES, INC. IS RESPONSIBLE TO RESOLVE THE CONFLICT. JACOB AND HEFNER ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE COST OF CONSTRUCTION.

18. THE OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS.

19. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK.

20. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE IN ACCORDANCE WITH OSHA REGULATIONS.

21. AT NO ADDITIONAL EXPENSE TO THE OWNER, THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, STAKES OR LATH SET BY SURVEYORS FOR CONSTRUCTION AND OTHER MISCELLANEOUS ITEMS NOT PRESENT PRIOR TO PROJECT COMMENCEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

22. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC AND PEDESTRIANS WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS," LATEST EDITION AND IN CONFORMANCE WITH REGULATIONS OF THE MUNICIPALITY OR D.O.T.

23. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER COURSE OR SURFACE COURSE AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET.

24. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION.

25. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

26. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF ARTICLE 201.05 OF THE STANDARD SPECIFICATIONS.

27. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION.

28. ALL LIMBS, BRANCHES AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE.

29. ALL CUTS OVER ONE INCH IN DIAMETER SHALL BE MADE FLUSH WITH THE NEXT LARGE BRANCH. WOUNDS OVER ONE INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

30. ANY DEWATERING OF SEWER AND WATER TRENCHES, AS WELL AS TEMPORARY SHEETING OR BRACING THAT MAY BE REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL NOT BE CONSIDERED EXTRA WORK. IN THE EVENT THAT SOFT MATERIALS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED DURING SEWER AND WATER MAIN CONSTRUCTION, THE CONTRACTOR SHALL (UPON APPROVAL OF THE OWNER AND/OR ENGINEER) OVER-EXCAVATE TO A DEPTH OF AT LEAST ONE FOOT BELOW THE BOTTOM OF THE PIPE. THE TRENCH SHALL BE BACKFILLED WITH COMPACTED CRUSHED STONE, PROPERLY FORMED TO FIT THE BOTTOM OF THE PIPE.

31. THE CONTRACTOR SHALL RECORD VIDEO OF THE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.

32. AGGREGATE TRENCH BACKFILL WILL BE REQUIRED TO FULL DEPTH ABOVE ALL UNDERGROUND UTILITIES WITHIN TWO FEET OF PROPOSED OR EXISTING PAVEMENT, UTILITIES, BUILDINGS AND SIDEWALKS. AGGREGATE TRENCH BACKFILL SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT IDOT STANDARD SPECIFICATIONS. TRENCH BACKFILL AND BEDDING MATERIAL SHALL CONSIST OF CRUSHED GRAVEL CONFORMING TO IDOT GRADATIONS CA-6 OR CA-7. AGGREGATE TRENCH BACKFILL SHALL BE PLACED IN CONTROLLED LIFTS (12 INCH LOOSE MEASURE TYPICAL FOR GRANULAR MATERIAL) WITH EACH LIFT VIBRATORY COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY BASED ON A MODIFIED PROCTOR TEST (ASTM D 1557), OR IN THE CASE OF OPEN GRADED STONE, TO A FIRM, DENSE STATE AS OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF THE NEXT LIFT. LIFT THICKNESS ADJUSTMENTS CAN ONLY BE DETERMINED/APPROVED BY THE GEOTECHNICAL ENGINEER (OR HIS REPRESENTATIVE) BASED ON THE SIZE/TYPE OF COMPACTING EQUIPMENT USED.

33. WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE.

34. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHEREVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO STORM SEWERS. DAMAGE TO THE ROAD SUBGRADE OR LOT AREAS DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING OR LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. FLUSHING OR USING THE HYDRANT TO MAKE ALL NECESSARY REPAIRS WILL BE AT HIS EXPENSE. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION WATER AT HIS EXPENSE.

35. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT LOCATIONS SHOWN ON THE PLANS OR AS SELECTED IN THE FIELD BY THE ENGINEER. INLET PROTECTION (INLET BASKETS) SHALL BE INSTALLED IN EACH STRUCTURE AS SOON AS THE STRUCTURE INSTALLATION IS COMPLETE. THE PURPOSE OF THE EROSION CONTROL WILL BE TO MINIMIZE THE AMOUNT OF SILTATION, WHICH NORMALLY ENTERS THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.

36. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ILLINOIS URBAN MANUAL AND SHALL BE MAINTAINED BY THE CONTRACTOR. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS BEEN DEVELOPED.

37. UPON PROJECT COMPLETION, THE CONTRACTOR SHALL PROVIDE FINAL RECORD DRAWINGS TO THE OWNER AND ENGINEER FOR REVIEW PRIOR TO ANY REQUEST FOR FINAL INSPECTION. AT A MINIMUM, THE RECORD DRAWINGS SHALL INDICATE THE FINAL LOCATION AND LAYOUT OF ALL SITE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, VERIFICATION OF ALL BUILDING PAD AND FINISHED FLOOR ELEVATIONS, UTILITY RIM AND INVERT ELEVATIONS, KEY PAVEMENT SPOT GRADE ELEVATIONS, LOCATIONS OF ALL WATER SERVICE B-BOXES, SANITARY SEWER SERVICES, AND STORM SEWER SERVICES AND SHALL INCORPORATE ALL FIELD DESIGN CHANGES INCLUDING THOSE APPROVED BY THE OWNER, ENGINEER AND/OR PROJECT GOVERNING AUTHORITY. THE RECORD DRAWINGS SHALL ALSO INCORPORATE FIELD DESIGN CHANGES THAT WERE NOT APPROVED BY OWNER, ENGINEER AND/OR PROJECT GOVERNING AUTHORITY. RECORD DRAWINGS SHALL BE PREPARED BY OR UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL LAND SURVEYOR.

EARTHWORK

1. **TOPSOIL EXCAVATION**

   A. TOPSOIL, ORGANIC MATERIAL, OR ANY OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM AREAS REQUIRING STRUCTURAL FILL.

   B. PLACEMENT OF EXCAVATED MATERIAL SHALL BE DESIGNATED BY THE OWNER FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED OR AS FILL IN THE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL.

   C. EXCESS MATERIALS NOT UTILIZED AS FILL OR NOT STOCKPILED FOR FUTURE LANDSCAPING, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.

2. **EARTH EXCAVATION**

   A. EXCAVATION OF EARTH AND OTHER MATERIALS, WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL SHALL BE WITHIN A TOLERANCE OF 0.05 FEET FOR PADS AND PAVEMENT, AT +0.1 FEET +/- OF THE PLAN SUBGRADE ELEVATIONS. THE +/- TOLERANCE WITHIN PAVEMENT AREAS UTILIZING EARTH MATERIALS SHALL "BALANCE" AS PART OF THE FINE GRADING OPERATION.

   B. PLACEMENT OF EARTH AND OTHER SUITABLE MATERIALS SHALL BE PLACED WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS WITHIN A TOLERANCE OF 0.1 FEET +/-. THE FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS, NOT EXCEED EIGHT INCHES IN THICKNESS. THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE THE REQUIRED COMPACTION. EARTH MATERIAL MAY BE PLACED WITHIN THOSE AREAS OF THE SITE NOT REQUIRING STRUCTURAL FILL WITHIN THE PLAN SUBGRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, THE EARTH MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS. THE STRUCTURAL SUBGRADE AREA SHALL EXTEND TO THE ZONE OF INFLUENCE IN ALL FILL AREAS.

   C. COMPACTION OF THE EARTH AND OTHER SUITABLE MATERIALS SHALL BE TO A MINIMUM OF 95% OF THE MODIFIED PROCTOR DRY DENSITY. THIS INCLUDES AREAS WITHIN PROPOSED PAVEMENT AND BUILDING PAD LOCATIONS, SIDEWALKS, ETC. IN NON-STRUCTURAL FILL AREAS, 90% TO 95% OF THE MODIFIED PROCTOR DRY DENSITY IS REQUIRED.

3. **UNSUITABLE MATERIAL**

   A. UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION. IF IT IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION, IT SHALL BE REMOVED AND REPLACED WITH SELECT GRANULAR MATERIAL APPROVED BY THE SOILS ENGINEER. THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

4. **THE GRADING CONTRACTORS RESPONSIBILITIES**

   A. MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.

   B. SPREAD AND COMPACT UNIFORMLY ALL EXCESS TRENCH SPOIL, AS SPECIFIED, AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

   C. SCARIFY AND COMPACT THE UPPER 12 INCHES OF THE SUITABLE SUBGRADE MATERIAL, AS SPECIFIED, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

   D. PROVIDE ADDITIONAL WATER TO DRY MATERIAL TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

   E. BACKFILL THE CURB AND GUTTER AFTER CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.

   F. ACCOUNTABLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES" AS DESCRIBED ON THE PLANS. ALL CONTRACTORS SHALL COMPLY WITH THE SWPPP AND NPDES REQUIREMENTS.

   G. PERFORM LIME STABILIZATION OF THE SUBGRADE MATERIAL IF REQUIRED BY THE SOILS ENGINEER.

5. **TESTING AND FINAL ACCEPTANCE**

   A. THE CONTRACTOR SHALL PROVIDE, AS A MINIMUM, A TANDEM AXLE TRUCK LOADED TO 14 TONS FOR PROOF ROLLING THE PAVEMENT SUBGRADE. PROOF ROLLING SHALL BE PERFORMED PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND BASE MATERIAL. THIS SHALL BE WITNESSED AND APPROVED BY THE MUNICIPAL ENGINEER AND OWNER.

   B. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING, SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL APPROVED BY THE SOILS CONSULTANT. PROOF ROLLING SHALL BE PERFORMED UNTIL THE SUBGRADE IS APPROVED BY THE MUNICIPAL ENGINEER, OWNER AND SOILS ENGINEER.

   C. THE WORK AREAS SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.

STORM SEWER

1. ALL STORM SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, IN ADDITION TO THE SUBDIVISION CONTROL ORDINANCE OF THE MUNICIPALITY.

2. UNLESS OTHERWISE NOTED ON THE PLANS, ALL STORM SEWERS SHALL BE REINFORCED CONCRETE CULVERT PIPE (RCP), ASTM C 76, WITH "O" RING RUBBER GASKET JOINTS CONFORMING TO ASTM C-443. ALL UNDERDRAINS SHALL BE ADS N-12.

3. ALL DOWNSPOUT AND FOOTING DRAINS SHALL BE DISCHARGED TO THE STORM SEWER SYSTEM OR ONTO THE GROUND.

4. MANHOLE, CATCH BASIN AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE FOUR FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. MANHOLE JOINTS SHALL BE "O" RING GASKET JOINTS. A MAXIMUM OF SIX INCHES OF ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. THE ADJUSTING RINGS SHALL BE SET WITHIN A FULL MORTAR BED.

5. ALL STORM SEWERS SHALL BE INSTALLED ON TYPE "A" BEDDING, 1/4 TO 3/4 INCH IN SIZE, WITH A MINIMUM THICKNESS EQUAL TO 1/4 OF THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR INCHES. USING BLOCKS OF ANY KIND FOR GRADE IS NOT PERMITTED. THE GRANULAR MATERIAL FOR BEDDING AND TRENCH BACKFILL MATERIAL SHALL CONFORM TO IDOT GRADATION CA-6. THE GRANULAR MATERIAL FOR BEDDING AND INITIAL BACKFILL OF FLEXIBLE PIPE SHALL BE NON-ANGULAR GRAVEL MATERIAL CONFORMING TO ASTM D-2321, CLASS I. THE COST OF BEDDING MATERIAL SHALL BE MERGED WITH THE UNIT PRICE BID FOR THE SEWER. THE BEDDING MATERIALS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR DENSITY.

6. THE FRAME AND GRATE OR CLOSED LID TYPE SHALL BE AS SPECIFIED ON THE UTILITY PLAN. THE MANHOLE LIDS SHALL BE A MACHINE SURFACED, NON-ROCKING DESIGN. ALL CASTINGS SHALL BE EMBOSSED WITH A FISH IMAGE AND "DUMP NO WASTE-DRAINS TO WATERWAYS" MESSAGE. THE CLOSED LIDS SHALL HAVE THE WORD "STORM" AND THE MUNICIPALITY NAME EMBOSSED ON THE LID. THE JOINT BETWEEN THE CONCRETE SECTION AND FRAME SHALL BE SEALED WITH A MASTIC COMPOUND.

7. ALL STORM SEWERS SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.

8. AFTER THE STORM SEWER STRUCTURE HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT LOCATIONS SHOWN ON THE PLANS OR AS SELECTED IN THE FIELD BY THE ENGINEER. THE PURPOSE OF THE EROSION CONTROL WILL BE TO MINIMIZE THE AMOUNT OF SILTATION NORMALLY ENTERING THE STORM SEWER SYSTEM FROM ADJECENT AND/OR UPSTREAM DRAINAGE AREAS.

SANITARY SEWER

1. UNLESS NOTED OTHERWISE, ALL SANITARY SEWER SHALL BE RING-TITE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE. ALL PIPE SHALL CONFORM TO ASTM D-3034 WITH ELASTOMERIC RUBBER RING GASKET JOINTS CONFORMING TO ASTM D3212. THE STANDARD DIMENSION RATIO (SDR) FOR SANITARY PIPE SHALL BE 26. WHERE SPECIFIED, PVC SDR 21 SANITARY SEWER SHALL BE RING-TITE PVC (POLYVINYL CHLORIDE) PLASTIC PIPE, CONFORMING TO ASTM D-2241 WITH ELASTOMERIC RUBBER RING GASKET JOINTS CONFORMING TO ASTM D3139. THE PVC DR18 SANITARY SEWER SHALL CONFORM TO AWWA C900/C905, WITH RUBBER GASKET JOINTS CONFORMING TO AWWA C900/C905.

2. CONNECTING SEWER PIPE OF DISSIMILAR MATERIAL IS NOT PERMITTED.

3. ALL FLOOR DRAINS SHALL CONNECT TO THE SANITARY SEWER. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE COMPLETED UNTIL AUTHORIZED BY THE MUNICIPALITY.

4. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CRUSHED GRAVEL, CONFORMING TO ASTM D-2321, CL I.

5. COST FOR PIPE BEDDING SHALL BE MERGED WITH THE UNIT PRICE BID FOR THE SEWER.

6. PIPE BEDDING SHALL CONSIST OF A MINIMUM OF FOUR INCHES OF COMPACTED CRUSHED GRAVEL OR STONE FOR ALL SANITARY SEWERS. SANITARY SEWER PIPE SHALL HAVE TAMPED CRUSHED GRAVEL OR STONE COVER ABOVE THE TOP OF PIPE, TO A MINIMUM OF 12 INCHES. THE BEDDING AND TRENCH BACKFILL MATERIAL SHALL CONFORM TO IDOT GRADITION CA-6 AND INSTALLED PER ASTM D-2321 CLASS I.

7. WATER MAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH IEPA REQUIREMENTS AS SPECIFIED IN THE "WATER MAIN" SECTION.

8. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE.

9. THE TESTING OF THE PIPE STRAIGHTNESS AND FIELD TESTING, SHALL BE IN ACCORDANCE WITH THE DEVELOPMENT CODE OF THE MUNICIPALITY.

10. SANITARY SEWER MANHOLES SHALL BE FOUR FOOT INNER DIAMETER MINIMUM, PRECAST REINFORCE CONCRETE RINGS OR MONOLITHIC CONCRETE, CONFORMING TO ASTM C 478. THE STRUCTURE SHALL HAVE AN ECCENTRIC CONE INSTALLED, LINING UP WITH THE MANHOLE STEPS. ALL MANHOLE STEPS SHALL BE NEENAH R-1981-I AT 16 INCHES ON-CENTER.

11. ALL SANITARY SEWER MANHOLE LIDS SHALL BE NEENAH R-1713-B OR APPROVED EQUAL. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF SEALING WITH "O" RING GASKET. THE LIDS SHALL HAVE THE WORD "SANITARY" AND THE MUNICIPALITY NAME EMBOSSED ON THE LID.

12. ALL MANHOLE JOINTS SHALL BE SEALED WITH "O" RING JOINTS. NO MORE THAN EIGHT INCHES OF PRECAST CONCRETE ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. ALL MANHOLES SHALL HAVE MISSION COUPLING TYPE FITTINGS FOR PIPE CONNECTIONS.

13. DROP MANHOLE ASSEMBLIES SHALL BE PROVIDED AT THE JUNCTION OF SANITARY SEWERS WHERE THE DIFFERENCE IN INVERT GRADES EXCEEDS TWO FEET OR AT LOCATIONS SHOWN ON THE PLANS. THE ENTIRE DROP ASSEMBLY SHALL BE CAST IN CONCRETE MONOLITHICALLY WITH THE MANHOLE BARREL.

14. INSPECTION OF MANHOLES:

    ALL MANHOLES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS. ALL VISIBLE LEAKAGE SHALL BE ELIMINATED BEFORE FINAL INSPECTION AND ACCEPTANCE.

15. TESTING FOR ACCEPTANCE OF SANITARY SEWERS AND MANHOLES, INCLUDING SERVICE LINES, SHALL INCLUDE LOW PRESSURE AIR TEST AND DEFLECTION TEST PER STANDARD SPECIFICATIONS AND SUBDIVISION REGULATIONS OF THE MUNICIPALITY. THE TESTS SHALL BE APPROVED BY THE MUNICIPALITY BEFORE ACCEPTANCE. ALL SANITARY MANHOLES SHALL BE VACUUM TESTED FOR LEAKAGE IN ACCORDANCE WITH MUNICIPAL STANDARDS AND ASTM C 1244-02.

16. TELEVISION TESTING OF ALL SANITARY SEWERS SHALL BE TELEVISED. A COPY OF THE RECORDING AND A WRITTEN REPORT SHALL BE SUBMITTED TO THE MUNICIPALITY FOR APPROVAL. THE REPORT SHALL INCLUDE STUB LOCATIONS, A DESCRIPTION OF ALL DEFECTS, WATER LEVEL, LEAKS AND IDENTIFICATION OF LENGTH FROM THE MANHOLE NUMBER SPECIFIED ON THE APPROVED PLANS. ALL COSTS SHALL BE INCIDENTAL TO THE WORK. TESTING SHALL BE PERFORMED AND APPROVED BY THE MUNICIPALITY BEFORE FINAL ACCEPTANCE. THE LOCATION OF TELEVISION INSPECTION SHALL BE DESIGNATED BY THE MU

CITY OF NAPERVILLE GEOMETRIC & PAVING NOTES

1. THE DEVELOPER AND CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO ADEQUATELY PROTECT THE PAVEMENT AND PROPERTY, CURB AND GUTTER AND OTHER RIGHT-OF-WAY IMPROVEMENTS, WHETHER NEWLY CONSTRUCTED OR EXISTING, FROM ANY AND ALL DAMAGE. SUFFICIENT MEANS SHALL BE EMPLOYED BY THE CONTRACTOR TO PROTECT AGAINST SUCH DAMAGE TO THE SATISFACTION OF THE CITY ENGINEER.
2. ANY NEW OR EXISTING IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED IN A MANNER THAT IS SATISFACTORY TO THE CITY ENGINEER.
3. THE CONTRACTOR AND/OR DEVELOPER SHALL SECURE ALL NECESSARY RIGHTS AND PERMISSIONS TO PERFORM ANY WORK ON PRIVATE PROPERTY NOT WITHIN THE OWNERSHIP RIGHTS OF THE DEVELOPER. THE DEVELOPER SHALL BEAR THE SOLE RESPONSIBILITY FOR DAMAGES THAT MAY OCCUR AS A RESULT OF WORK PERFORMED UNDER CONTRACTS THEY INITIATE.
4. THE CONTRACTOR/DEVELOPER WILL BE RESPONSIBLE FOR BRINGING PAVEMENTS (STREET, CURB AND GUTTER, SIDEWALK, DRIVEWAY) ON THE PROPERTY UP TO CITY STANDARDS INCLUDING ANY REPAIRS TO SUBSTANDARD PAVEMENTS THAT EXISTED PRIOR TO OR OCCURRED DURING CONSTRUCTION.
5. WHEREVER NEW WORK WILL MEET EXISTING CONDITIONS OTHER THAN LAWN AREAS, REGARDLESS OF WHETHER THE NEW OR EXISTING WORK IS ASPHALT OR CONCRETE, THE EXISTING ADJACENT SIDEWALK, DRIVEWAYS, PAVEMENT OR CURB SHALL BE NEATLY SAW CUT. THE SAW CUT SHALL BE IN A NEAT STRAIGHT LINE SUFFICIENTLY DEEP SO THAT IT RENDERS A SMOOTH VERTICAL FACE TO MATCH TO. IF THE CONTRACTOR IS NOT CAREFUL OR DOES NOT SAW DEEP ENOUGH AND THE CUT LINE BREAKS OUT OR CHIPS TO AN IMPERFECT EDGE, THEN THE EXISTING SIDE MUST BE RE-CUT SQUARE AND DONE OVER UNTIL IT IS CORRECT.

CITY OF NAPERVILLE TRAFFIC CONTROL & PROTECTION NOTES

1. ALL DEVELOPERS AND CONTRACTORS SHALL PROVIDE SUITABLE TRAFFIC CONTROL FOR THEIR CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. TRAFFIC CONTROL MUST BE PROVIDED FOR ANY ACTIVITY THAT IMPACTS TRAFFIC FLOW. THIS INCLUDES, BUT IS NOT LIMITED TO, ROAD CLOSURES REQUIRING DETOURS, DAILY LANE CLOSURES, LONG TERM LANE CLOSURES, NARROW LANES, AND CONSTRUCTION VEHICLES ENTERING AND EXITING THE PUBLIC ROADWAY. ALL TRAFFIC CONTROL SET-UPS MAY BE INSPECTED BY THE CITY OF NAPERVILLE TO ENSURE THAT THEY ARE PROVIDING POSITIVE GUIDANCE TO MOTORISTS AND ARE NOT IN THEMSELVES PRESENTING A HAZARDOUS SITUATION. A REPRESENTATIVE OF THE DEVELOPER OR CONTRACTOR MUST PROVIDE PHONE NUMBERS AT WHICH THEY CAN BE REACHED 24 HOURS A DAY AND ON WEEKENDS SO THAT THEY CAN MAINTAIN TRAFFIC CONTROL DEVICES.
2. PEDESTRIANS MUST BE PROVIDED WITH A SAFE ALTERNATE ROUTE IF PEDESTRIAN FACILITIES ARE TO BE CLOSED AS A RESULT OF CONSTRUCTION ACTIVITIES. GUIDANCE MUST BE PROVIDED TO PEDESTRIANS SO THAT THEY MAY AVOID THE WORK ZONE. SAID PEDESTRIAN DETOUR PLAN (WITH SIGNAGE) IS TO BE REVIEWED AND ACCEPTED BY THE CITY IN WRITING, PRIOR TO THE COMMENCEMENT OF THE WORK.
3. THE CONTRACTOR SHALL EMPLOY THE APPROPRIATE METHODS OF TRAFFIC CONTROL IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SUCH THAT THE SAFETY OF VEHICLES, AND PEDESTRIANS IS PRESERVED AT ALL TIMES. THE ERECTION AND MAINTENANCE OF THE TRAFFIC CONTROL DEVICES SHALL BE TO THE SATISFACTION OF THE AGENCY OF JURISDICTION AND THE CITY ENGINEER.
4. ANY TEMPORARY OPEN HOLES SHOULD BE BARRICADED AND PROTECTED IN ACCORDANCE WITH APPLICABLE STANDARDS.
5. LANE CLOSURES ON ARTERIAL ROADWAYS WITHIN THE CITY OF NAPERVILLE ARE NOT PERMITTED BETWEEN THE HOURS OF 6 AM – 9 AM AND 3 PM – 7 PM MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. LANE CLOSURES ON ARTERIAL STREETS ARE PERMITTED BETWEEN 7 AM AND 7 PM ON WEEKENDS, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. ARTERIAL ROADWAYS ARE DEFINED AS BOTH MAJOR AND MINOR ARTERIAL ROADWAYS AS DESIGNATED ON THE CITY'S MASTER THOROUGHFARE PLAN, LATEST EDITION.
6. ANY WORK THAT IMPACTS A TRAFFIC LANE ON AN ARTERIAL ROADWAY REQUIRES AN ARROWBOARD AS PART OF THE TRAFFIC CONTROL.
7. AT THE END OF EACH DAY OF WORK, THE ROADWAY MUST BE COMPLETELY REOPENED TO TRAFFIC. ANY OPEN HOLES MUST BE PLATED OR COLD PATCHED; THE CITY WILL NOT ALLOW THE HOLES TO BE FILLED WITH GRAVEL.

CITY OF NAPERVILLE EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE AT ALL TIMES DURING THE COURSE OF CONSTRUCTION AND PREVENT STORM WATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS.
2. DURING EXTENDED DRY PERIODS, THE CONSTRUCTION AREA(S) MAY NEED TO BE WATERED DOWN TO PREVENT THE BLOWING OF SOIL FROM THE SITE.
3. DURING CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE UTILIZED TO MINIMIZE THE TRACKING OF DIRT ONTO THE PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP PUBLIC STREET PAVEMENT CLEAN OF DIRT AND DEBRIS. ANY DIRT THAT IS TRACKED ONTO THE PUBLIC STREETS SHALL BE REMOVED THE SAME DAY. IF THE AMOUNT TRACKED ON THE PUBLIC STREET IS EXCESSIVE, CLEANING MAY BE REQUIRED MORE FREQUENTLY.
4. ALL EROSION CONTROL MEASURES SHALL BE PROPERLY INSTALLED, AS PERMITTED, PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. ALL EROSION CONTROL SHALL BE MAINTAINED UNTIL TURF IS ESTABLISHED.
5. ACCEPTABLE PERIMETER EROSION CONTROL INCLUDES SILT FENCE, SILT WORM AND ANY OTHER APPLICATION APPROVED BY THE CITY ENGINEER.
6. ALL OPEN GRATE STRUCTURES SHALL HAVE EROSION CONTROL PROTECTION IN ACCORDANCE WITH THE APPROVED EROSION CONTROL PLANS. INLET BASKETS ARE THE PREFERRED METHOD; STRAW BALES SHALL NOT BE USED.
7. STOCKPILES NOT BEING DISTURBED FOR MORE THAN 14 DAYS SHALL BE SEEDED.
8. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY, AFTER ANY 0.5 INCH RAINFALL, OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN THEIR FUNCTION.
9. IT IS THE RESPONSIBILITY OF THE OWNER OR HIS DESIGNEE TO INSPECT ALL TEMPORARY EROSION CONTROL MEASURES PER THE REQUIREMENTS OF THE NPDES PERMIT AND CORRECT ANY DEFICIENCIES AS NEEDED.

CITY OF NAPERVILLE STORM SEWER NOTES

1. NO CONNECTION TO AN EXISTING PUBLIC STORM SEWER MAY BE MADE WITHOUT PERMISSION OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL REPAIR ANY EXISTING FIELD DRAINAGE TILE DAMAGED DURING CONSTRUCTION AND PROPERLY REROUTE AND/OR CONNECT SAID TILE TO THE NEAREST STORM SEWER OUTLET. ALL LOCATIONS OF ENCOUNTERED FIELD DRAINAGE TILE SHALL BE PROPERLY INDICATED ON THE CONTRACTOR'S RECORD DRAWINGS.
3. THE FOLLOWING MATERIALS ARE PERMITTED FOR STORM SEWER AND PIPE CULVERTS. WHERE A PARTICULAR MATERIAL IS SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS, NO OTHER KIND OF MATERIAL WILL BE PERMITTED:
   - 3.a. REINFORCED CONCRETE PIPE (RCP) – REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM DESIGNATION C 76, CLASSES I, II, III, IV OR V. BITUMINOUS JOINTS SHALL CONFORM TO ASTM DESIGNATIONS C 14 OR C 76 AS MAY BE APPLICABLE. BITUMINOUS MATERIAL SHALL CONSIST OF A HOMOGENEOUS BLEND OF BITUMEN, INERT FILLER, AND SUITABLE SOLVENT APPROVED BY THE CITY ENGINEER. RUBBER GASKET JOINTS SHALL CONFORM TO ASTM C 433. REINFORCED CONCRETE PIPE SHALL ALSO BE PERMITTED AS ROUND, ELLIPTICAL, OR BOX SHAPED OR AS REINFORCED CONCRETE ARCH CULVERT.
4. BEDDING, OTHER THAN CONCRETE EMBEDMENT, SHALL CONSIST OF GRAVEL, CRUSHED GRAVEL, OR CRUSHED STONE 1/4 INCH TO 1 INCH IN SIZE. AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-7 OR CA-11 OF THE STANDARD SPECIFICATIONS.
5. BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF IDOT STANDARD SPECIFICATIONS. THE GRADATION SHALL CONFORM TO GRADATION CA-6 OF THE STANDARD SPECIFICATIONS. BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
6. JOINTS CONNECTING DISSIMILAR PIPE MATERIALS SHALL BE MADE WITH SEWER CLAMP NON-SHEAR TYPE COUPLINGS; CASCADE CSS, ROMAC LSS, FERNCO, INC. SHEAR RING, OR APPROVED EQUAL. WHEN AVAILABLE, A STANDARD JOINT WITH A TRANSITION GASKET MAY BE USED. THE NAME OF THE MANUFACTURER, CLASS, AND DATE OF ISSUE SHALL BE CLEARLY IDENTIFIED ON ALL SECTIONS OF PIPE. THE CONTRACTOR SHALL ALSO SUBMIT BILLS OF LADING, OR OTHER QUALITY ASSURANCE DOCUMENTATION WHEN REQUESTED BY THE CITY ENGINEER. ALL NUTS AND BOLTS FOR COUPLINGS SHALL BE STAINLESS STEEL.
7. MANHOLES FOR STORM SEWERS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST EDITION) AND SHALL CONFORM TO THE CITY OF NAPERVILLE STANDARD DETAIL. ALL MANHOLES SHALL BE WATER-TIGHT. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY ENGINEER.
8. MANHOLES SHALL BE FURNISHED WITH A SELF-SEALING FRAME AND SOLID COVER (EAST JORDAN IRON WORKS 1022 WITH TYPE A SOLID COVER, OR APPROVED EQUAL) WITH THE WORD "STORM" IMPRINTED ON THE COVER IN RAISED LETTERS. ALL FRAMES AND LIDS SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT. BOTH THE MANHOLE FRAME AND COVER SHALL HAVE MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. INVERTED MANHOLE FRAMES ARE NOT ALLOWED. PICK HOLES SHALL NOT CREATE OPENINGS IN THE MANHOLE COVER.
9. MANHOLE STEPS ON MAXIMUM 16 INCH CENTER SHALL BE FURNISHED WITH EACH MANHOLE, SECURELY ANCHORED IN PLACE, TRUE TO VERTICAL ALIGNMENT, IN ACCORDANCE WITH THE NAPERVILLE STANDARD DETAILS. STEPS SHALL BE COPOLYMER POLYPROPYLENE REINFORCED WITH 1/2 INCH A615/A615M-05A (OR LATEST EDITION) GRADE 60 STEEL REINFORCEMENT, MEETING OR EXCEEDING ASTM C 478-05 (OR LATEST EDITION) AND OSHA STANDARDS.
10. CATCH BASINS AND INLETS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 24 INCHES AND SHALL BE CONSTRUCTED OF PRECAST CONCRETE UNITS IN ACCORDANCE WITH ASTM C478-05 (OR LATEST EDITION) AND SHALL CONFORM TO THE CITY OF NAPERVILLE STANDARD DETAIL. ALL CATCH BASINS AND INLETS SHALL BE WATER-TIGHT AT ALL POINTS BELOW GRADE. ALL VISIBLE LEAKS SHALL BE SEALED IN A MANNER ACCEPTABLE TO THE CITY ENGINEER. CATCH BASINS AND INLETS SHALL BE FURNISHED WITH A FRAME AND GRATE BASED UPON THE LOCATION OF THE INSTALLATION AS LISTED BELOW. ALL FRAMES AND GRATES SHALL MEET OR EXCEED AASHTO H-20 LOADING SPECIFICATIONS. FRAMES SHALL BE SHOP PAINTED WITH ASPHALTIC BASE PAINT.
    - 10.a. PAVEMENT: EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
    - 10.b. BARRIER CURB AND GUTTER: EAST JORDAN IRON WORKS 7220 FRAME WITH TYPE M1 GRATE AND T1 CURB BOX, OR APPROVED EQUAL.
    - 10.c. DEPRESSED CURB: EAST JORDAN IRON WORKS 5120 FRAME AND GRATE, OR APPROVED EQUAL.
    - 10.d. MOUNTABLE CURB: EAST JORDAN IRON WORKS 7525 FRAME AND GRATE, OR APPROVED EQUAL.
    - 10.e. NON-PAVED AREAS: EAST JORDAN IRON WORKS 6527 BEEHIVE GRATE, OR APPROVED EQUAL, ALTERNATELY IN AREAS WHERE THERE IS THE LIKELIHOOD OF PEDESTRIAN TRAFFIC, EAST JORDAN IRON WORKS 1022 FRAME WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL MAY BE USED.
11. THE STEEL CASING PIPE SHALL BE BITUMINOUS COATED, A MINIMUM OF 30 MILS THICKNESS INSIDE AND OUT, AND SHALL BE OF LEAK PROOF CONSTRUCTION, CAPABLE OF WITHSTANDING THE ANTICIPATED LOADINGS. SEE TABLE 200-1 IN THE NAPERVILLE STANDARD SPECIFICATIONS FOR THE MINIMUM WALL THICKNESS OF VARIOUS STEEL CASING DIAMETERS. THE STEEL CASING PIPE SHALL HAVE MINIMUM YIELD STRENGTH OF 35,000 PSI AND SHALL MEET THE REQUIREMENTS OF A139/A139M-04 (OR LATEST EDITION), GRADE B. RING DEFLECTION SHALL NOT EXCEED 2% OF THE NOMINAL DIAMETER. THE STEEL CASING PIPE SHALL BE DELIVERED TO THE JOBSITE WITH BEVELED ENDS TO FACILITATE FIELD WELDING.
12. ALL PIPE SHALL BE LAID TRUE TO LINE AND GRADE. DIRT AND OTHER FOREIGN MATERIAL SHALL BE PREVENTED FROM ENTERING THE PIPE OR PIPE JOINT DURING HANDLING OR LAYING OPERATIONS. ALL STORM SEWER PIPE TO PIPE CONNECTIONS SHALL BE SEALED WITH BUTYL MASTIC TO ENSURE WATER TIGHTNESS. LIFT HOLES TO BE SEALED USING BUTYL MASTIC AND CONCRETE PLUGS. AT NO TIME SHALL CONNECTIONS BETWEEN THE TWORM SEWER AND SANITARY SEWER BE ALLOWED.
13. FOR STRUCTURES LOCATED IN PAVED AREAS, A MINIMUM OF FOUR, 2-INCH DIAMETER HOLES SHALL BE DRILLED OR PRECAST INTO THE STRUCTURE WITHIN 1 FOOT OF THE LOWEST PIPE INVERT. THE HOLES SHALL BE DISTRIBUTED EQUIDISTANT AROUND THE PERIMETER OF THE STRUCTURE. A 1-FOOT BY 1-FOOT SECTION OF UNDERDRAIN FILTER CLOTH MATERIAL SHALL BE SUFFICIENTLY FIXED TO THE OUTSIDE OF THE MANHOLE WITH MASTIC MATERIAL TO PREVENT SLIPPAGE DURING BACKFILLING.
14. ALL STORM SEWER STRUCTURE FRAMES WITHOUT INSIDE FLANGES SHALL BE SHAPED WITH NON-SHRINKING HYDRAULIC CEMENT TO FORM A FILLET TO THE STRUCTURE OR ADJUSTING RINGS. WHEN ADJUSTMENTS ARE NECESSARY, ALL RINGS SHALL BE HIGH DENSITY POLYETHYLENE PLASTIC (HDPE), RECYCLED RUBBER, HIGH DENSITY EXPANDING POLYSTYRENE, EXPANDED POLYPROPYLENE (EPP) OR OTHER MATERIAL APPROVED BY THE CITY ENGINEER. PRECAST CONCRETE RINGS, BRICKS, ROCKS, SHIMS, OR CONCRETE BLOCKS WILL NOT BE ALLOWED. THE MAXIMUM HEIGHT OF ADJUSTMENTS SHALL BE 12 INCHES.

CITY OF NAPERVILLE WATER UTILITIES GENERAL NOTES

a. NEW WATER MAIN VALVES, INCLUDING PRESSURE TAP VALVES, ADJACENT TO AN EXISTING WATER MAIN, AND EXISTING WATER MAIN VALVES SHALL ONLY BE OPERATED BY THE CITY OF NAPERVILLE, DEPARTMENT OF PUBLIC UTILITIES CEE/CM DIVISION PERSONNEL WITH 48-HOUR NOTICE (MONDAY-FRIDAY). CONTACT NAPERVILLE TED BUSINESS GROUP AT 630-420-6082 FOR SCHEDULING.
b. ANY EXISTING UTILITY STRUCTURES REQUIRING ADJUSTMENT OR RECONSTRUCTION SHALL BE COMPLETED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER. ADJUSTMENTS AND/OR RECONSTRUCTIONS NOT CALLED FOR ON THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO MORE THAN A TOTAL OF 12 INCHES OF ADJUSTING RINGS AND/OR 2 ADJUSTING RINGS SHALL BE ALLOWED. ALL STRUCTURE FRAMES SHALL BE FLUSH WITH FINAL GRADE.
c. TREES SHALL BE INSTALLED A MINIMUM OF FIVE (5) FEET HORIZONTALLY FROM UNDERGROUND ELECTRICAL FEEDERS, SANITARY SEWERS, SANITARY SERVICES, WATER MAINS, AND WATER SERVICES. TREES SHALL BE INSTALLED A MINIMUM OF TEN (10) FEET HORIZONTALLY FROM UTILITY STRUCTURES AND APPURTENANCES, INCLUDING, BUT NOT LIMITED TO, MANHOLES, VALVE VAULTS, VALVE BOXES AND FIRE HYDRANTS. NO TREES, SHRUBS OR OBSTACLES WILL BE ALLOWED 10' IN FRONT OF, 5' ON THE SIDES, AND 7' TO THE REAR OF THE ELECTRICAL TRANSFORMER.
d. ALL RETAINER GLANDS WHEN REQUIRED TO RESTRAIN VALVES, FITTINGS, HYDRANTS, AND PIPE JOINTS SHALL BE MECHANICAL JOINT WEDGE ACTION TYPE MEGALUG 1100 SERIES AS MANUFACTURED BY EBBA IRON, INC. OR UNI-FLANGE BLOCKBUSTER 1400 SERIES AS MANUFACTURED BY FORD METER BOX CO. AND SHALL BE FOR USE ON DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51, FOR NOMINAL PIPE SIZES 3" THROUGH 48".
e. EXISTING DUCTILE IRON SYSTEMS FOR RESTRAINING PUSH-ON PIPE BELLS SHALL BE MEGALUG SERIES 1100HD OR FORD SERIES 1390.
f. EXISTING DUCTILE IRON SYSTEMS REQUIRING RESTRAINT SHALL BE MEGALUG SERIES 1100SD (SPLIT MEGALUG) FOR MECHANICAL JOINTS.
g. DUCTILE IRON WATER MAIN TO BE CLASS 52. ALL DUCTILE IRON PIPE IS TO BE ENCASED IN POLYETHYLENE FILM POLYTHYLENE ENCASEMENT TO BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5-05.
h. A SET OF AS-BUILT RECORD DRAWING SHALL BE GIVEN TO THE CITY OF NAPERVILLE UPON COMPLETION OF IMPROVEMENTS SHOWING THE ELEVATION AND LOCATION (TIED TO TWO POINTS) OF ALL NEW AND EXISTING STRUCTURES INCLUDING FIRE HYDRANTS, VALVE BOXES AND VAULTS, LINESTOP SLEEVES, WATER SERVICE CORPORATION STOPS, WATER MAIN FITTINGS/BENDS, MANHOLES, SANITARY SERVICE WYES (MEASURED FROM DOWNSTREAM MANHOLE), AND ABANDONED WATER OR SANITARY SERVICE LINES. ALL ELEVATIONS SHOULD BE REFERENCED TO THE SAME BENCHMARK DATUM AS THE ORIGINAL DESIGN PLANS. HORIZONTAL TIES SHALL BE REFERENCED TO LOT LINES, BACK OF CURB, OR PROPERTY CORNERS.
i. ALL SANITARY SEWER PIPING SHALL BE PVC PIPE MEETING THE REQUIREMENTS OF ASTM D-2241 WITH JOINTS CONFORMING TO ASTM D-3139. ALL SANITARY SEWER FITTINGS SHALL BE PVC MEETING THE FOLLOWING REQUIREMENTS: 4" TO 12" SHALL BE INJECTION MOLDED FITTINGS MEETING ASTM D-2241. GREATER THAN 12" SHALL BE FABRICATED FITTINGS MEETING ASTM D-2241 OR C905. MINIMUM PRESSURE RATING SHALL BE 150 PSI.
j. THE VALVES LESS THAN 16" SHALL BE STANDARD PATTERN, GATE VALVES AND SHALL HAVE THE NAME OR MARK OF THE MANUFACTURER, SIZE AND WORKING PRESSURE PLAINLY CAST IN RAISED LETTERS ON THE VALVE BODY. VALVES MAY BE APPROVED FROM ONE OF THE FOLLOWING MANUFACTURERS: AMERICAN, CLOW, WATEROUS OR KENNEDY.
k. STAINLESS STEEL NUTS, BOLTS/T-BOLTS, AND WASHERS, TYPE 304 OR BETTER, WILL BE REQUIRED ON ALL WATER MAIN INSTALLATIONS. THIS WOULD APPLY TO HYDRANTS, TAPPING SLEEVES, VALVES, FITTINGS, RESTRAINT, AND OTHER APPURTENANCES BURIED OR IN VALVE VAULTS. MECHANICAL JOINTS AND RESTRAINT GLANDS REQUIRE 304 STAINLESS STEEL T-BOLTS. AN ANTI-SEIZE COMPOUND SHALL BE FACTORY APPLIED TO NUTS OR BOLTS – ANY DAMAGE TO THIS COATING SHALL BE REPAIR WITH FIELD APPLIED APPROVED ANTI-SEIZE COMPOUND THAT IS A MOLYBDENUM-BASE LUBRICANT, BOSTIK NEVER-SEEZ OR APPROVED EQUAL.
l. THE CONTRACTOR SHALL ROTATE AND/OR ADJUST ANY EXISTING AND/OR NEW HYDRANT TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC UTILITIES.
m. WATER MAINS SHALL BE SUBJECTED TO A HYDROSTATIC/LEAKAGE TEST IN ACCORDANCE WITH NAPERVILLE STANDARD SPECIFICATIONS. TEST PRESSURE SHALL BE NO LESS THAN 150 PSI FOR A PERIOD OF 4 HOURS AND NOT VARY BY MORE THAN ± 5 PSI DURING THE TEST. THE TEST GAUGE SHALL BE APPROVED BY THE CITY AND SHALL BE GLYCERIN OR OIL FILLED, WITH A RANGE OF NOT MORE THAN 200 PSI AND INCREMENTS NOT GREATER THAN 5 PSI, A 4" MINIMUM DIAL SIZE. WATER RECOVERY TEST SHALL BE COMPLETED AT THE END OF THE TESTING PERIOD TO SHOW ACTUAL LEAKING AND THAT THE WATER MAIN DID NOT HAVE TOO MUCH TRAPPED AIR IN THE TESTED SECTION.
n. THE CITY OF NAPERVILLE PUBLIC UTILITIES DOES NOT GUARANTEE THAT ANY VALVE OR FITTING IN THE EXISTING WATER DISTRIBUTION SYSTEM WILL HOLD AGAINST A HYDROSTATIC/LEAKAGE TEST. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND ACCEPTABLE PRESSURE TEST WHICH SHALL INCLUDE PROVISIONS AROUND EXISTING VALVES AND FITTINGS.
o. FIRE HYDRANT SHOULD BE BAGGED "NOT IN SERVICE" UNTIL ALL TESTING AND DISINFECTION HAS BEEN COMPLETED AND NEW WATER MAIN SECTION IS SERVICE.
p. SANITARY SEWER AND WATER SHALL BE CONSTRUCTED, TESTED, AND PLACED INTO SERVICE IN ACCORDANCE WITH CITY OF NAPERVILLE STANDARD SPECIFICATION AND SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
q. ALL VALVE BOXES, VAULTS, HYDRANTS, AND MANHOLES SHALL NOT BE COVERED WITH CONSTRUCTION DEBRIS AND SHALL REMAIN ACCESSIBLE TO THE RESPECTIVE UTILITY COMPANY.
r. WATER SERVICE LINE SMALLER THAN 3" SHALL BE TYPE K COPPER. IF JOINTS ARE REQUIRED DUE TO LENGTH OF SERVICE, THEN ONLY COMPRESSION TYPE COUPLING SHALL BE PERMITTED. NO SOLDERED OR FLARED TYPE JOINTS ARE ALLOWED.
s. ALL SANITARY MANHOLES SHALL BE TESTED FOR LEAKAGE BY VACUUM TESTING. THE MANHOLE FRAME AND ADJUSTING RINGS SHALL BE IN PLACE WHEN TESTING. ANY LEAKS SHALL BE REPAIRED FROM EXTERIOR OF MANHOLE – PATCHING INSIDE OF MANHOLE SHALL NOT BE ACCEPTABLE. A VACUUM OF 10" (254 MM) HG SHALL BE PLACE ON THE MANHOLE AND THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9" (229 MM) HG. THE VACUUM SHALL NOT DROP BELOW 9" (229 MM) HG FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE OF MANHOLE:
   - a) 48-INCH DIAMETER – 60 SECONDS
   - b) 60-INCH DIAMETER – 75 SECONDS
   - c) 72-INCH DIAMETER – 90 SECONDS
   - d) 84-INCH DIAMETER – 105 SECONDS

   ANY MANHOLES THAT FAIL THE TEST SHALL BE SEALED AND RE-TESTED UNTIL ACCEPTABLE.
t. THE CONTRACTOR SHALL PROVIDE INTERNAL TELEVISED INSPECTION OF ALL INSTALLED SANITARY SEWER, LATERALS, MANHOLES AND CONNECTIONS TO THE PUBLIC SYSTEM. FOLLOWING COMPLETION OF TELEVISING WORK, THE CONTRACTOR SHALL SUBMIT VIDEO RECORDINGS ON DVD OR FLASH DRIVE ALONG WITH A COMPREHENSIVE TELEVISING REPORT WHICH WILL INDICATE THE LOCATION, FOOTAGES AND NATURE OF ANY DEFECTS. PRIOR TO FINAL ACCEPTANCE, THESE DEFECTS SHALL BE REPAIRED TO THE SATISFACTION OF THE WATER/WASTEWATER UTILITY AND RE-TELEVISED.
u. CONTRACTOR WORK HOURS ARE ONLY ALLOWED FROM 7:00 A.M. TO 5:00 P.M., MONDAY THROUGH SATURDAY. NO WORK SHALL BE PERMITTED ON SUNDAYS.
v. SANITARY PIPES WITH LESS THAN 4 FEET OR MORE THAN 25 FEET OF COVER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPING (CLASS 50, MINIMUM) AND ENCASED IN POLYWRAP.
w. ALL EXCAVATIONS MORE THAN 20 FEET DEEP MUST BE PROTECTED BY A SYSTEM DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
x. CONTRACTOR SHALL MAINTAIN 2" MINIMUM CLEARANCE BETWEEN EXISTING UTILITIES AND NEW FOUNDATIONS AND UNDERGROUND FACILITIES. IN AREAS WHERE FOUNDATIONS AND UNDERGROUND FACILITIES ARE PROPOSED ADJACENT TO EXISTING UTILITIES, THE CONTRACTOR SHALL POT HOLE BY VACUUM EXCAVATION OR HAND EXCAVATION TO LOCATE THE EXISTING UTILITY TO VERIFY MINIMUM CLEARANCE REQUIREMENT.
y. FENCES SHALL BE INSTALLED A MINIMUM OF 5 FEET FROM ANY WATER OR SANITARY MAINS WHEN RUNNING PARALLEL WITH THEM. WHERE FENCES ARE INSTALLED CROSSING WATER OR SANITARY MAINS, THE POSTS SHALL BE LOCATED TO HAVE THE MAIN BETWEEN THEM.
z. ALL BRASS COMPONENTS SHALL BE CERTIFIED TO BE LEAD FREE IN COMPLIANCE WITH NSF 61 AND NSF 372 AND IDENTIFIED WITH APPLICABLE MARKINGS.
aa. SANITARY FORCE MAIN – FORCE MAIN SHALL BE TESTED A MINIMUM OF 1 HOUR AT 1.5 THE SHUT OFF HEAD OF THE PUMP, 2.5 TIMES THE OPERATING PRESSURE, OR 20 PSI WHICHEVER IS GREATEST. ALLOWABLE LEAKAGE SHALL BE IN ACCORDANCE WITH SECTION 41-2.14C OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION.

NOTE: IF SPECIFICATIONS AND/OR DETAILS PROVIDED IN THESE PLANS CONFLICT WITH THE CITY OF NAPERVILLE SPECIFICATIONS AND/OR DETAILS, THE CITY OF NAPERVILLE SHALL SUPERCEDE.

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

CITY OF NAPERVILLE SPECIFICATIONS

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

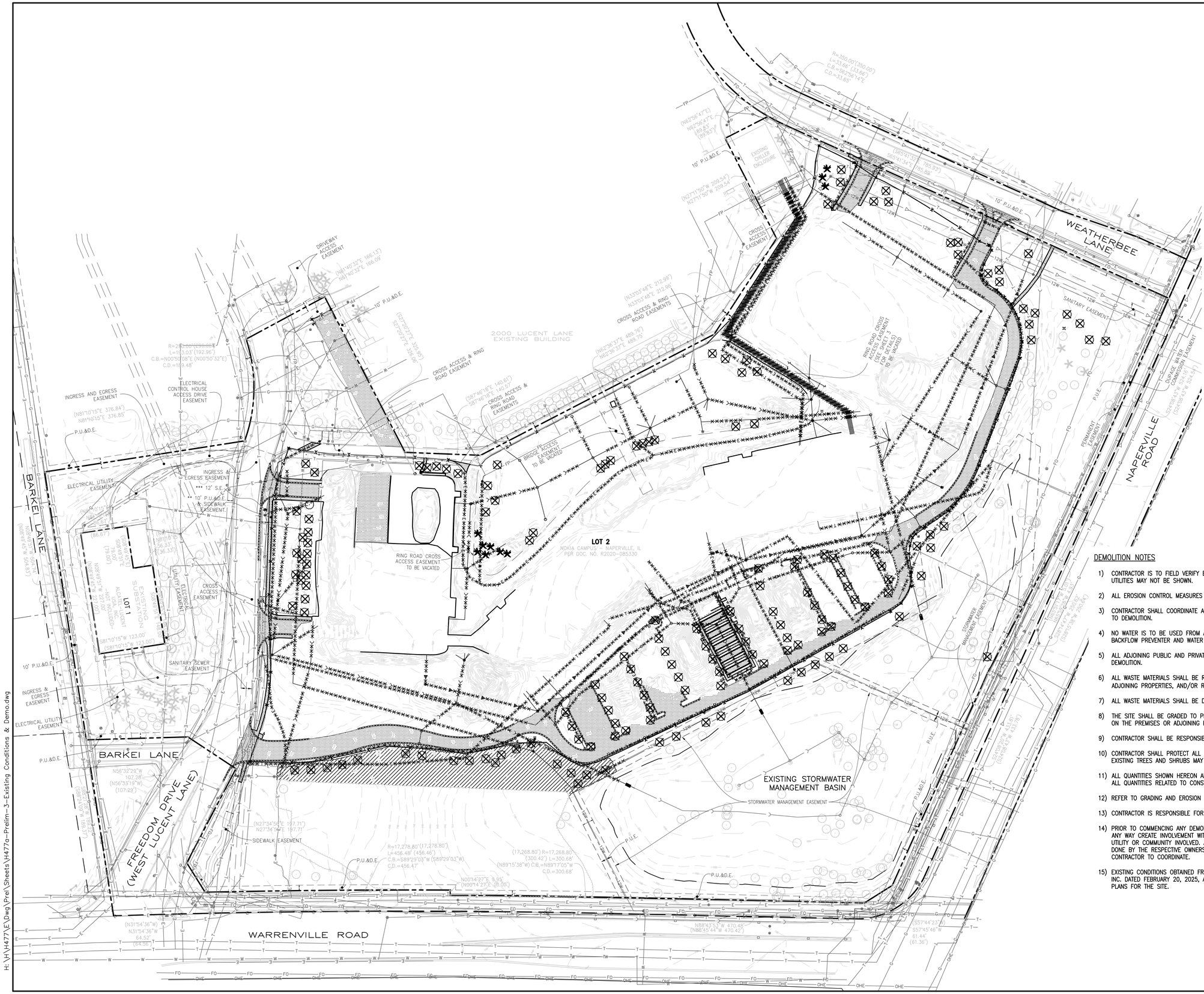
JACOB & HEFNER ASSOCIATES
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www.jacobandhefner.com

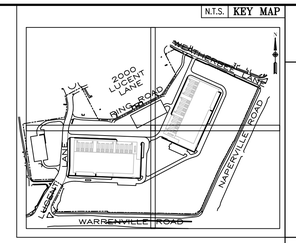
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N.T.S.

C2.1

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GRAPHIC SCALE 1"= 80'

0 40' 80' 160'

DEMOLITION LEGEND

- DENOTES EXISTING PAVEMENT TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- DENOTES EXISTING TREES & BRUSH REMOVAL.
- DENOTES EXISTING TREE REMOVAL.
- DENOTES EXISTING CURB & GUTTER TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- *DENOTES EXISTING STORM SEWER REMOVAL.
- *DENOTES EXISTING SANITARY SEWER REMOVAL.
- *DENOTES EXISTING WATERMAIN REMOVAL.
- *DENOTES EXISTING TELECOMMUNICATIONS REMOVAL.
- *DENOTES EXISTING ELECTRIC REMOVAL.

*CONTRACTOR TO DISPOSE OF ALL WASTE MATERIAL OFF-SITE

DEMOLITION NOTES

1) CONTRACTOR IS TO FIELD VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO DEMOLITION. SOME UTILITIES MAY NOT BE SHOWN.
2) ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION.
3) CONTRACTOR SHALL COORDINATE A RELEASE FROM THE ELECTRIC, GAS AND TELEPHONE COMPANIES PRIOR TO DEMOLITION.
4) NO WATER IS TO BE USED FROM A FIRE HYDRANT FOR DUST CONTROL WITHOUT A WATER METER, A BACKFLOW PREVENTER AND WATER DEPARTMENT APPROVAL.
5) ALL ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE CAUSED BY THE SITE DEMOLITION.
6) ALL WASTE MATERIALS SHALL BE REMOVED IN A MANNER THAT PREVENTS INJURY OR DAMAGE TO PERSONS, ADJOINING PROPERTIES, AND/OR RIGHT-OF-WAYS.
7) ALL WASTE MATERIALS SHALL BE DISPOSED OF OFFSITE IN AN APPROVED FACILITY.
8) THE SITE SHALL BE GRADED TO PREVENT THE ACCUMULATION OF WATER OR DAMAGE TO ANY FOUNDATIONS ON THE PREMISES OR ADJOINING PROPERTY.
9) CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS RELATED TO BUILDING DEMOLITION.
10) CONTRACTOR SHALL PROTECT ALL EXISTING TREES AND SHRUBS NOT INDICATED FOR REMOVAL. SOME EXISTING TREES AND SHRUBS MAY NOT BE SHOWN ON THE PLANS.
11) ALL QUANTITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS TO VERIFY ALL QUANTITIES RELATED TO CONSTRUCTION.
12) REFER TO GRADING AND EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES.
13) CONTRACTOR IS RESPONSIBLE FOR ANALYTICAL SAMPLING AND ANALYSIS ASSOCIATED WITH CCDD HAUL OFF.
14) PRIOR TO COMMENCING ANY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES ON THE PROJECT WHICH MAY IN ANY WAY CREATE INVOLVEMENT WITH EXISTING PUBLIC UTILITIES, THE CONTRACTOR SHALL CONTACT THE UTILITY OR COMMUNITY INVOLVED. ADJUSTMENT OF ANY PUBLIC UTILITIES WITHIN THIS PROJECT AREA WILL BE DONE BY THE RESPECTIVE OWNERS OF SAID UTILITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE.
15) EXISTING CONDITIONS OBTAINED FROM A TOPOGRAPHIC SURVEY, PROVIDED BY JACOB & HEFNER ASSOCIATES, INC. DATED FEBRUARY 20, 2025, ALONG WITH SUPPLEMENTAL ATLAS MAPS AND PREVIOUS DEMOLITIONS PLANS FOR THE SITE.

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
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4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

EXISTING CONDITIONS & DEMOLITION PLAN - OVERALL

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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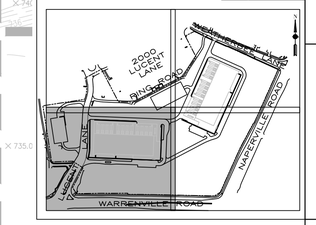
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1" = 80'

C3.0

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N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C3.0 FOR EXISTING CONDITIONS AND DEMOLITION NOTES. REFER TO SHEET C3.4 FOR UTILITY STRUCTURE TABLE.

DEMOLITION LEGEND

- DENOTES EXISTING PAVEMENT TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- DENOTES EXISTING TREES & BRUSH REMOVAL.
- DENOTES EXISTING TREE REMOVAL.
- DENOTES EXISTING CURB & GUTTER TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- *DENOTES EXISTING STORM SEWER REMOVAL.
- *DENOTES EXISTING SANITARY SEWER REMOVAL.
- *DENOTES EXISTING WATERMAIN REMOVAL.
- *DENOTES EXISTING TELECOMMUNICATIONS REMOVAL.
- *DENOTES EXISTING ELECTRIC REMOVAL.
- *CONTRACTOR TO DISPOSE OF ALL WASTE MATERIAL OFF-SITE

No.	Description	Date
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4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

EXISTING CONDITIONS & DEMOLITION PLAN - SOUTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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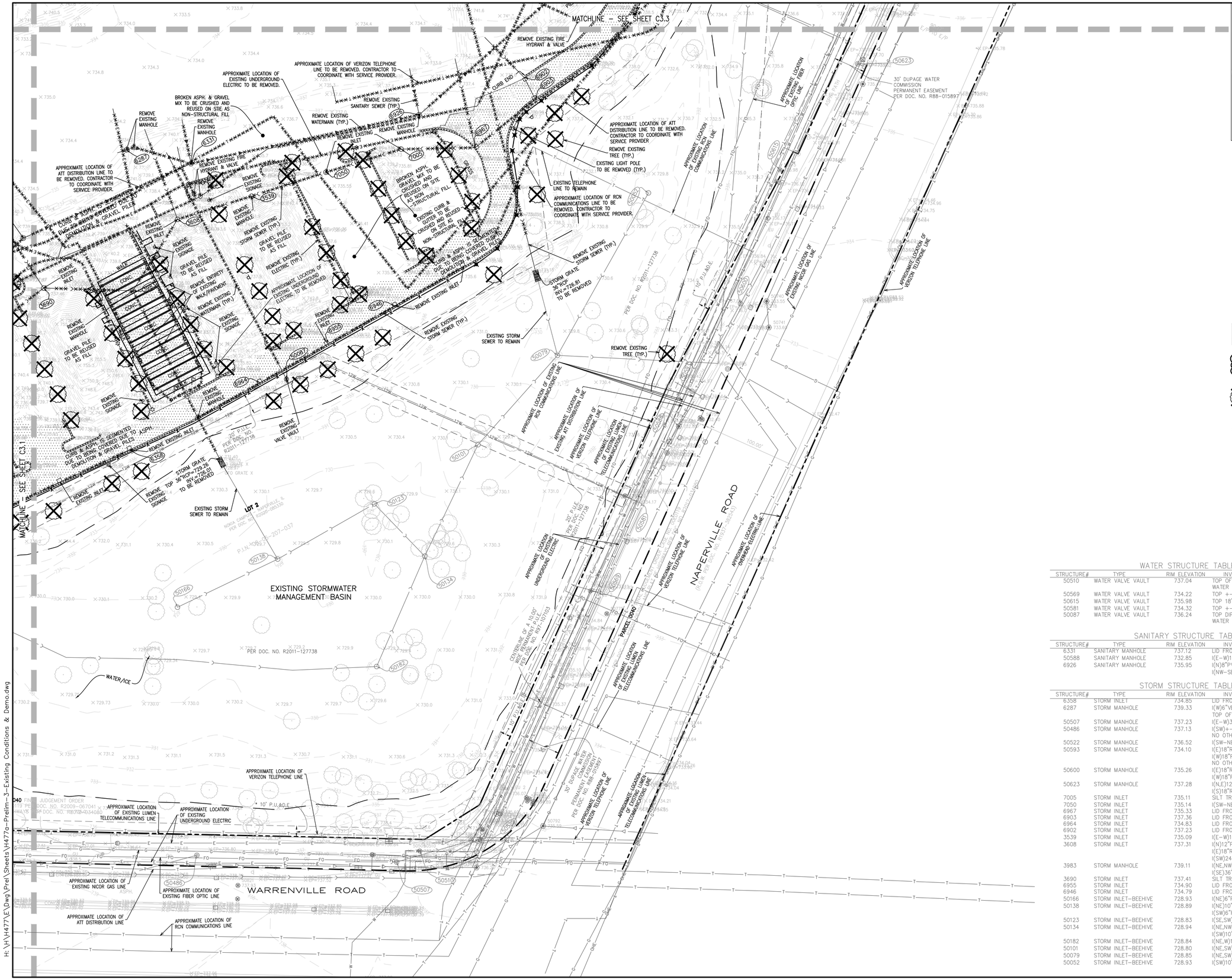
1" = 40'

C3.1

MATCHLINE - SEE SHEET C3.2

MATCHLINE - SEE SHEET C3.4

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MATCHLINE – SEE SHEET C3.3
MATCHLINE – SEE SHEET C3.1
REMOVE EXISTING FIRE HYDRANT & VALVE
APPROXIMATE LOCATION OF VERIZON TELEPHONE LINE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH SERVICE PROVIDER.
APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRIC TO BE REMOVED.
BROKEN ASPH. & GRAVEL MIX TO BE CRUSHED AND REUSED ON SITE AS NON-STRUCTURAL FILL
REMOVE EXISTING MANHOLE
REMOVE EXISTING SANITARY SEWER (TYP.)
REMOVE EXISTING WATERMAIN (TYP.)
REMOVE EXISTING INLET
APPROXIMATE LOCATION OF ATT DISTRIBUTION LINE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH SERVICE PROVIDER.
BUILDING & ASPH. TO BE REMOVED. CURB & GUTTER TO BE SEGMENTED DUE TO BEING COVERED DUE TO DEMOLITION & GRAVEL PILES
REMOVE EXISTING SIGNAGE
GRAVEL PILE TO BE REUSED AS FILL
REMOVE ENTIRETY OF EXISTING WALK/PAVEMENT
REMOVE EXISTING WATERMAIN (TYP.)
REMOVE EXISTING STORM SEWER (TYP.)
REMOVE EXISTING ELECTRIC (TYP.)
APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRIC TO BE REMOVED
REMOVE EXISTING VALVE VAULT
REMOVE TOP 36"RCP= 729.26 INV=726.01 TO BE REMOVED
STORM GRATE
EXISTING STORM SEWER TO REMAIN
LOT 2
EXISTING STORMWATER MANAGEMENT BASIN
PER DOC. NO. R2011-127738
WATER/ICE
APPROXIMATE LOCATION OF VERIZON TELEPHONE LINE
10' P.U.&D.E
APPROXIMATE LOCATION OF EXISTING LUMEN TELECOMMUNICATIONS LINE
APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRIC
APPROXIMATE LOCATION OF EXISTING NICOR GAS LINE
APPROXIMATE LOCATION OF EXISTING FIBER OPTIC LINE
APPROXIMATE LOCATION OF ATT DISTRIBUTION LINE
APPROXIMATE LOCATION OF RCN COMMUNICATIONS LINE
WARRENVILLE ROAD
REMOVE EXISTING CURB & GUTTER
REMOVE EXISTING INLET
REMOVE EXISTING STORM SEWER (TYP.)
EXISTING STORM SEWER TO REMAIN
STORM GRATE 36"RCP INV=726.81 TO BE REMOVED
REMOVE EXISTING TREE (TYP.)
APPROXIMATE LOCATION OF EXISTING RCN COMMUNICATIONS LINE
APPROXIMATE LOCATION OF EXISTING ATT DISTRIBUTION LINE
APPROXIMATE LOCATION OF VERIZON TELEPHONE LINE
APPROXIMATE LOCATION OF EXISTING LUMEN TELECOMMUNICATIONS LINE
APPROXIMATE LOCATION OF EXISTING UNDERGROUND ELECTRIC
APPROXIMATE LOCATION OF EXISTING FIBER OPTIC LINE
APPROXIMATE LOCATION OF ATT DISTRIBUTION LINE
APPROXIMATE LOCATION OF RCN COMMUNICATIONS LINE
NAPERVILLE ROAD
30' DUPAGE WATER COMMISSION PERMANENT EASEMENT PER DOC. NO. R88-015897
APPROXIMATE LOCATION OF EXISTING FIBER OPTIC LINE
APPROXIMATE LOCATION OF EXISTING RCN COMMUNICATIONS LINE
EXISTING TELEPHONE LINE TO REMAIN
APPROXIMATE LOCATION OF RCN COMMUNICATIONS LINE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH SERVICE PROVIDER.
APPROXIMATE LOCATION OF ATT DISTRIBUTION LINE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH SERVICE PROVIDER
REMOVE EXISTING TREE (TYP.)
EXISTING LIGHT POLE TO BE REMOVED (TYP.)
BROKEN ASPH. & GRAVEL MIX TO BE CRUSHED AND REUSED ON SITE AS NON-STRUCTURAL FILL
EXISTING CURB & GUTTER TO BE CRUSHED AND REUSED ON SITE AS NON-STRUCTURAL FILL
CURB & ASPH. IS SEGMENTED DUE TO BEING COVERED DUE TO DEMOLITION & GRAVEL PILES
PARCEL 0040
APPROXIMATE LOCATION OF EXISTING UNION TELECOMMUNICATIONS LINE
APPROXIMATE LOCATION OF EXISTING ELECTRIC LINE
APPROXIMATE LOCATION OF VERIZON TELEPHONE LINE
APPROXIMATE LOCATION OF POTENTIAL ELECTRIC LINE
APPROXIMATE LOCATION OF VERIZON TELEPHONE LINE
30' DUPAGE WATER COMMISSION PERMANENT EASEMENT PER DOC. NO. R88-015897
CENTERLINE OF A 10.00' WIDE PERMANENT P.U.E PER DOC. NO. R91-057103
10' P.U.E
20' P.U.E PER DOC. NO. R2011-127738
P.I.N. 07-07-207-037
NOKIA CAMPUS - NAPERVILLE, IL PER DOC. NO. R2008-085536
PER DOC. NO. R2009-067041 AND R2009-067042
PER DOC. NO. R2010-034080
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STORM STRUCTURE TABLE – SHEET C3.3

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
50632	STORM MANHOLE	739.43	I(N-S,E)12"RCP=731.23
50643	STORM MANHOLE	739.29	I(N-S,E)12"RCP=732.49
50685	STORM MANHOLE	737.98	I(E,S)12"RCP–NOT ACCESSIBLE NO OTHER PIPES VISIBLE
6312	STORM INLET	739.14	I(N–S),36"RCP=727.49 I(NE)24"RCP–OFFSET–NOT ACCESSIBLE
6309	STORM MANHOLE	741.98	I(SW)12"RCP=735.23 PIPES NW,N,NE,E ARE COVERED–POURED BOTTOM
3450	STORM INLET	740.60	I(SE,SW)36"RCP=728.45

STORM STRUCTURE TABLE – SHEET C3.3

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
2967	STORM MANHOLE	736.49	I(N)24 RCP–OFFSET–NOT ACCESSIBLE I(E–NW)36"RCP=728.44 I(SE)6"PVC=732.89
6638	STORM MANHOLE	737.27	I(N,SE,S,NW)–ALL COVERED WITH DIRT–NOT ACCESSIBLE TOP OF DIRT=733.92
2976	STORM MANHOLE	736.13	I(S)24"RCP=728.83 I(N,NW)18"RCP–NOT ACCESSIBLE I(W)6"PVC–NOT ACCESSIBLE
4410	STORM INLET	736.25	I(NW)12"RCP=733.90
4340	STORM INLET	736.39	I(SE)12"RCP=733.79 I(NW)12"RCP=733.64
7388	STORM INLET	736.73	I(N,W)8"RCP=733.68 I(SE,NW)6"HDPE=733.68–POURED BOTTOM
7389	STORM INLET	736.92	I(S)8"RCP=734.37
4285	STORM INLET–BEEHIVE	737.66	SILT TRAP FROZEN IN STRUCTURE–NOT ACCESSIBLE
4273	STORM INLET–BEEHIVE	738.09	I(NW)8"RCP=733.54
4277	STORM INLET	738.25	I(N)6"PVC=731.90 I(NE)12"PVC=731.90 I(SE)8"RCP=733.15
4306	STORM MANHOLE	738.87	I(NE,NW,S)18"RCP=728.62 I(E)8"PVC=728.82
7340	STORM MANHOLE	737.89	I(E–W)18"PVC=729.24
7341	STORM INLET	736.92	LID FROZEN–NOT ACCESSIBLE
3277	STORM INLET–BEEHIVE	735.51	LID FROZEN–NOT ACCESSIBLE
7431	STORM INLET	736.55	I(NW–SE)8"RCP=733.40
7399	STORM INLET	736.40	I(SE)8"RCP=733.60
7424	STORM MANHOLE	737.08	I(NW,SE)6"HDPE=734.73 I(NE)12"RCP=730.12
7460	STORM MANHOLE	737.47	I(SE)+–10"PVC=NOT ACCESSIBLE I(SW)=PLUGGED

STORM STRUCTURE TABLE – SHEET C3.3

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
7475	STORM INLET	735.10	I(NW)+–10"PVC=730.82 I(NE)12"RCP=734.53 I(NE)10"RCP=731.40 I(SE)8"CLAY–730.70
7482	STORM INLET	736.05	I(NE)12"RCP=733.95 SW IS PLUGGED–NO PIPE
4481	MANHOLE(?)	738.44	BURIED IN SNOW–NOT ACCESSIBLE
4900	STORM INLET	736.94	I(NE)15"RCP=733.69
4935	STORM MANHOLE	737.78	I(E–W)36"RCP=726.93
4941	MANHOLE(?)	738.46	BURIED IN SNOW–NOT ACCESSIBLE
4949	MANHOLE(?)	737.55	BURIED IN SNOW–NOT ACCESSIBLE
4924	STORM MANHOLE	738.75	I(W)18"CLAY=728.20
4667	STORM INLET	737.4	I(NE)18"RCP=732.36 I(SE)18"RCP–OFFSET–NOT ACCESSIBLE
4715	STORM INLET	737.24	I(NE)12"RCP=732.14
4770	STORM MANHOLE	737.57	I(NW,SW)36"RCP=726.22
4235	STORM INLET	736.97	I(N,NE)12"RCP=729.37 I(S)18"RCP=729.37
3192	STORM INLET	735.65	I(N–S)12"RCP=730.75
3281	STORM INLET–BEEHIVE	735.00	I(N)12"RCP=728.80 I(E)36"RCP=728.70 I(SW)36"RCP=728.70
4786	STORM INLET	736.09	I(NE–SW)12"RCP=733.64
4856	STORM MANHOLE	736.61	I(NE)15"RCP=728.41 I(NW–SE)+–36"RCP=726.46 I(SW)12"RCP–NOT ACCESSIBLE
4874	STORM MANHOLE	736.37	I(NE)15"RCP=728.87 I(SW)RESTRICTOR PLATE OVER 15"RCP=729.07
4848	STORM MANHOLE	737.75	I(NW–SE)+–36"RCP=726.40 I(SW)+–18"RCP=729.30
4842	STORM MANHOLE	737.88	I(NW–SE)+–36"RCP=726.43
4841	STORM MANHOLE	738.28	I(NW,NE)+–30"RCP=729.18 RIM IS OFF CENTER DOES NOT CONNECT TO 4842
4835	STORM MANHOLE	738.23	I(NW–SE)30"RCP=726.58
4808	STORM INLET	736.86	I(N)12"RCP–NOT ACCESSIBLE I(SE)30"RCP=729.16 I(NW)24"RCP=729.16
4577	STORM INLET	737.55	I(NW,NE)12"RCP=735.30
4578	STORM MANHOLE	738.22	TOP OF DIRT=735.92 NO PIPES VISIBLE
4662	STORM INLET	737.29	I(NW,NE)15"RCP=732.89 I(SW)12"RCP=732.89
4666	STORM INLET	737.22	I(SE)15"RCP=732.52 I(NW)18"RCP=732.52
50018	STORM MANHOLE	734.51	I(N–S)+–36"RCP=725.96

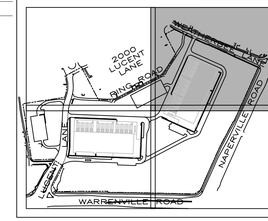
WATER STRUCTURE TABLE – SHEET C3.3

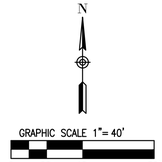
STRUCTURE#	TYPE	RIM ELEVATION	INVERT
50651	WATER VALVE VAULT	738.26	TOP +–18"DIP N–S,W=732.81
4286	WATER VALVE VAULT	738.13	TOP +–12"DIP SW–NE=732.63
7418	WATER VALVE VAULT	737.26	TOP OF WATER=733.46 WATER FILLED–NO ACCESSIBLE PIPES
7533	WATER VALVE VAULT	737.65	TOP 18"DIP N–S=730.20 TOP 12"DIP E=730.20

SANITARY STRUCTURE TABLE – SHEET C3.3

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
7614	SANITARY MANHOLE	739.68	I(SE,SW)12"CLAY(?)=727.63
4271	SANITARY MANHOLE	738.51	I(NW–SW)12"RCP=730.06
7532	SANITARY MANHOLE	737.87	I(NE,SE,SW,NW)+–10"PVC=722.12
4925	SANITARY MANHOLE	738.35	I(NW,SE)12"(RCP?)=724.05
4716	SANITARY MANHOLE	737.28	IN ROADWAY–LIMITED ACCESS
4242	SANITARY MANHOLE	737.44	I(NW,NE)+–10"PVC=729.54
4243	SANITARY MANHOLE	738.19	I(NW,SE)10"PVC=730.04 I(W)6"PVC=730.89
4852	SANITARY MANHOLE	737.19	I(NW–SE)=723.09–SIZE & MATERIAL UNKNOWN

N.T.S. **KEY MAP**





REFER TO SHEET C3.0 FOR EXISTING CONDITIONS AND DEMOLITION NOTES.

DEMOLITION LEGEND

- DENOTES EXISTING PAVEMENT TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON–STRUCTURAL AREAS.
- DENOTES EXISTING TREES & BRUSH REMOVAL.
- DENOTES EXISTING TREE REMOVAL.
- DENOTES EXISTING CURB & GUTTER TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON–STRUCTURAL AREAS.
- *DENOTES EXISTING STORM SEWER REMOVAL.
- *DENOTES EXISTING SANITARY SEWER REMOVAL.
- *DENOTES EXISTING WATERMAIN REMOVAL.
- *DENOTES EXISTING TELECOMMUNICATIONS REMOVAL.
- *DENOTES EXISTING ELECTRIC REMOVAL.
- *CONTRACTOR TO DISPOSE OF ALL WASTE MATERIAL OFF–SITE

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

EXISTING CONDITIONS & DEMOLITION PLAN – NORTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
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www.jacobandhefner.com

H477a

1" = 40'

C3.3

MATCHLINE – SEE SHEET C3.4

MATCHLINE SEE SHEET C3.2

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WATER STRUCTURE TABLE – SHEET C3.4

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
1346	WATER VALVE VAULT	738.65	TOP DIP=731.95 WATER FILLED
2031	WATER VALVE VAULT	740.33	TOP +-8"DIP N-S=734.88

STORM STRUCTURE TABLE – SHEET C3.4

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
1406	STORM INLET	737.62	I(NE)12"RCP=735.92 I(SW)12"RCP=735.77
1398	STORM MANHOLE	737.64	I(NE)12"RCP=735.44 I(SE)6"PLASTIC=735.54 I(NW)6"PLASTIC=735.44 DEBRIS FILLED
1399	MANHOLE(ELECTRIC?)	737.19	WATER FILLED-TOP OF WATER=731.29 EXPOSED ELECTRIC WIRES INSIDE
1414	STORM MANHOLE	738.79	I(NW)6"PLASTIC=736.29 I(S)6"PVC=736.39
1284	MANHOLE	739.21	FULL OF SOIL-TOP OF SOIL=738.01
1296	STORM INLET	737.65	I(SE)12"RCP=735.30
1377	STORM INLET	740.89	I(NE)12"CLAY=732.79 S. PORTION OF STRUCTURE RECESSED- NO OTHER ACCESSIBLE PIPES
1272	STORM MANHOLE	739.15	I(N)18"RCP=730.55 I(S)18"RCP=730.65 I(SW)12"RCP=734.05
1430	STORM INLET	739.62	I(NE-SW)12"RCP=737.12
1883	MANHOLE(?)	740.21	WATER FILLED-TOP OF WATER=736.91
2448	STORM INLET	738.76	I(N)8"RCP=736.16 I(W)12"RCP=736.16
2432	STORM INLET	738.68	I(N)8"PVC=736.23 I(S)8"RCP=736.18
2451	STORM INLET	739.05	I(N-SE)18"RCP=730.20 I(E)12"RCP-NOT ACCESSIBLE
2245	STORM MANHOLE	736.42	I(N-S)18"RCP=730.57
3050	STORM MANHOLE	736.19	I(SW)12"RCP=730.29 I(E)18"RCP=730.29
3269	STORM INLET-BEEHIVE	735.01	LID FROZEN-NOT ACCESSIBLE
3102	STORM INLET	735.54	I(N)18"RCP=729.64 I(S)24"RCP=729.64
3081	STORM INLET	736.16	I(SE)8"RCP=731.08
3273	STORM INLET-BEEHIVE	735.39	LID FROZEN-NOT ACCESSIBLE
3277	STORM INLET-BEEHIVE	735.51	LID FROZEN-NOT ACCESSIBLE
5789	STORM INLET	740.09	I(E,SW,S)12"RCP=737.54
5765	MANHOLE(?)	737.53	WATER LINE=731.38 BOTTOM OF STRUCTURE=727.33 TOP 2"STEEL PIPE(NE)736.63 LOOSE ELEC. WIRES INSIDE STRUCTURE
2017	STORM INLET-BEEHIVE	738.00	I(NE,SW)15"RCP=731.00 I(N)15"CLAY(DROP)ICED OVER-NOT ACCESSIBLE
5042	STORM INLET-BEEHIVE	736.50	I(NW)6"PVC=734.65
2046	STORM MANHOLE	738.46	I(NE-SW)8"PVC=731.76 I(SE)6"PVC=733.41
3204	STORM INLET	736.08	I(NW)6"CLAY=730.98 I(S)4"PVC=732.08

WATER STRUCTURE TABLE – SHEET C3.1

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
50324	WATER VALVE VAULT	740.50	TOP 12"DIP N=731.30 TOP +-18"DIP NW-SE=731.30
50149	WATER VALVE VAULT	737.45	TOP +-18"DIP NW-SE,SW-NE=731.40
50458	WATER VALVE VAULT	739.14	TOP +-12"DIP E-W=731.44 WATER LINE=733.14

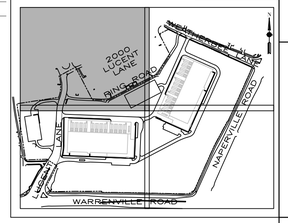
SANITARY STRUCTURE TABLE – SHEET C3.1

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
6156	SANITARY MANHOLE	737.95	I(N)6"DIP=733.00 I(SE)8"DIP=733.00
2351	SANITARY MANHOLE?	741.91	I(N,NE,E)8"PVC(DROP)NOT ACCESSIBLE I(SE)8"PVC(DROP)=735.26 I(W)RCP=733.61-SIZE UNKNOWN
50446	SANITARY MANHOLE	740.68	WATER LINE=735.68-NO PIPES VISIBLE

STORM STRUCTURE TABLE – SHEET C3.1

STRUCTURE#	TYPE	RIM ELEVATION	INVERT
1883	MANHOLE(?)	740.21	WATER FILLED-TOP OF WATER=736.91
1460	STORM INLET	746.46	I(NE)18"RCP=739.96 I(SW)18"RCP=739.76
1158	STORM MANHOLE	747.67	I(E-W)12"RCP=739.17
2504	STORM MANHOLE	744.30	I(N-S)24"RCP=729.60 I(NE)+-8"RCP(DROP)-NOT ACCESSIBLE
2512	STORM INLET	737.35	I(S)24"RCP=729.95 I(NW)18"RCP=729.95
2448	STORM INLET	738.76	I(N)8"RCP=736.16 I(W)12"RCP=736.16
2432	STORM INLET	738.68	I(N)8"PVC=736.23 I(S)8"RCP=736.18
2451	STORM INLET	739.05	I(N-SE)18"RCP=730.20 I(E)12"RCP-NOT ACCESSIBLE
1030	STORM INLET	752.08	I(S)12"RCP-NOT ACCESSIBLE
1101	STORM INLET-BEEHIVE	751.56	I(N)12"DIP=748.26
1013	STORM MANHOLE	756.14	I(NE)18"RCP-OFFSET-NOT ACCESSIBLE I(SE)24"RCP=748.34 I(NW,W)12"RCP(DROP)-OFFSET-NOT ACCESSIBLE
1023	STORM INLET	752.76	I(N)12"RCP=748.71 I(S)18"RCP=748.76
1012	STORM INLET	755.66	I(SE)12"RCP=750.86
1495	STORM MANHOLE	750.41	I(S)12"RCP=741.91 I(NW)RCP-NOT ACCESSIBLE
1650	STORM INLET	752.21	I(W)12"RCP=748.86 I(E)12"RCP-OFFSET-NOT ACCESSIBLE
1534	STORM INLET	752.28	I(E)12"RCP=749.13 I(NW)12"RCP=749.38
1547	STORM INLET	756.03	I(E)12"RCP=751.73
1676	STORM INLET	756.25	I(SE)12"RCP=749.80 I(W)12"RCP=750.15
1563	STORM INLET	762.09	I(NW)12"DIP=759.64
6150	STORM INLET-BEEHIVE	735.40	NOT ACCESSIBLE DUE TO ICE AND SILT
6038	STORM INLET	742.30	LID FROZEN-NOT ACCESSIBLE
6112	STORM MANHOLE(?)	736.44	LID FROZEN-NOT ACCESSIBLE
6062	STORM INLET	737.47	LID FROZEN-NOT ACCESSIBLE
6099	STORM INLET	735.02	LID FROZEN-NOT ACCESSIBLE
6350	STORM INLET	734.87	LID FROZEN-NOT ACCESSIBLE
50269	STORM INLET	750.30	I(NE,W)12"RCP=745.25
50277	MANHOLE	753.56	FULL OF DIRT-TOP OF DIRT=751.96
4018	STORM INLET	742.24	LID FROZEN-NOT ACCESSIBLE
3690	STORM INLET	737.41	SILT TRAP FROZEN IN STRUCTURE-NOT ACCESSIBLE
3837	STORM INLET	734.61	STRUCTURE DAMAGED-SILT TRAP FROZEN NOT ACCESSIBLE
3753	STORM INLET	734.80	I(E-W)18"RCP=730.25-STRUCTURE DAMAGED
6394	STORM INLET	734.88	SILT TRAP FROZEN IN STRUCTURE-NOT ACCESSIBLE
3050	STORM MANHOLE	736.19	I(SW)12"RCP=730.29 I(E)18"RCP=730.29
3037	STORM MANHOLE	736.30	I(NW)8"PVC(?)=732.65 I(NE)12"RCP=732.65 NO OTHER VISIBLE PIPES
3141	STORM INLET	736.05	LID FROZEN-NOT ACCESSIBLE
8067	STORM MANHOLE	744.44	I(NE)12"RCP=738.39 I(SW)4"PVC=738.54
5518	STORM INLET	742.72	I(W)12"PVC=740.52
5508	STORM INLET	742.68	I(E)12"PVC=740.43 I(W)12"RCP=740.43
5558	STORM MANHOLE	747.77	I(N,E)12"RCP=740.57 I(S)4"PVC(DROP)-NOT ACCESSIBLE
5384	STORM INLET-BEEHIVE	749.49	I(E)12"RCP=745.39
5419	STORM INLET-BEEHIVE	749.29	I(S,W)12"RCP=745.04
5368	STORM INLET	750.03	I(SW)12"RCP=746.93
5373	STORM INLET-BEEHIVE	748.75	I(N)12"RCP=745.15 I(NE)12"RCP=745.35 6"PVC=746.40
50166	STORM INLET-BEEHIVE	728.93	I(NE)6"PVC=726.48
50138	STORM INLET-BEEHIVE	728.89	I(NE)10"PVC=726.24 I(SW)6"PVC=726.24
50123	STORM INLET-BEEHIV	728.83	I(SE,SW)10"PVC=725.35
50134	STORM INLET-BEEHIVE	728.94	I(NE,NW)10"PVC=+-725.64 I(SW)10"PVC-NOT ACCESSIBLE
50182	STORM INLET-BEEHIVE	728.84	I(NE,W)10"CLAY=726.09
50101	STORM INLET-BEEHIVE	728.80	I(NE,SW)10"PVC=725.45
50079	STORM INLET-BEEHIVE	728.85	I(NE,SW)10"PVC=725.30
50052	STORM INLET-BEEHIVE	728.93	I(SW)10"PVC=725.78
50018	STORM MANHOLE	734.51	I(N-S)+-36"RCP=725.96 MANHOLE CUT OVER TOP OF EXISTING PIPE

N.T.S. **KEY MAP**



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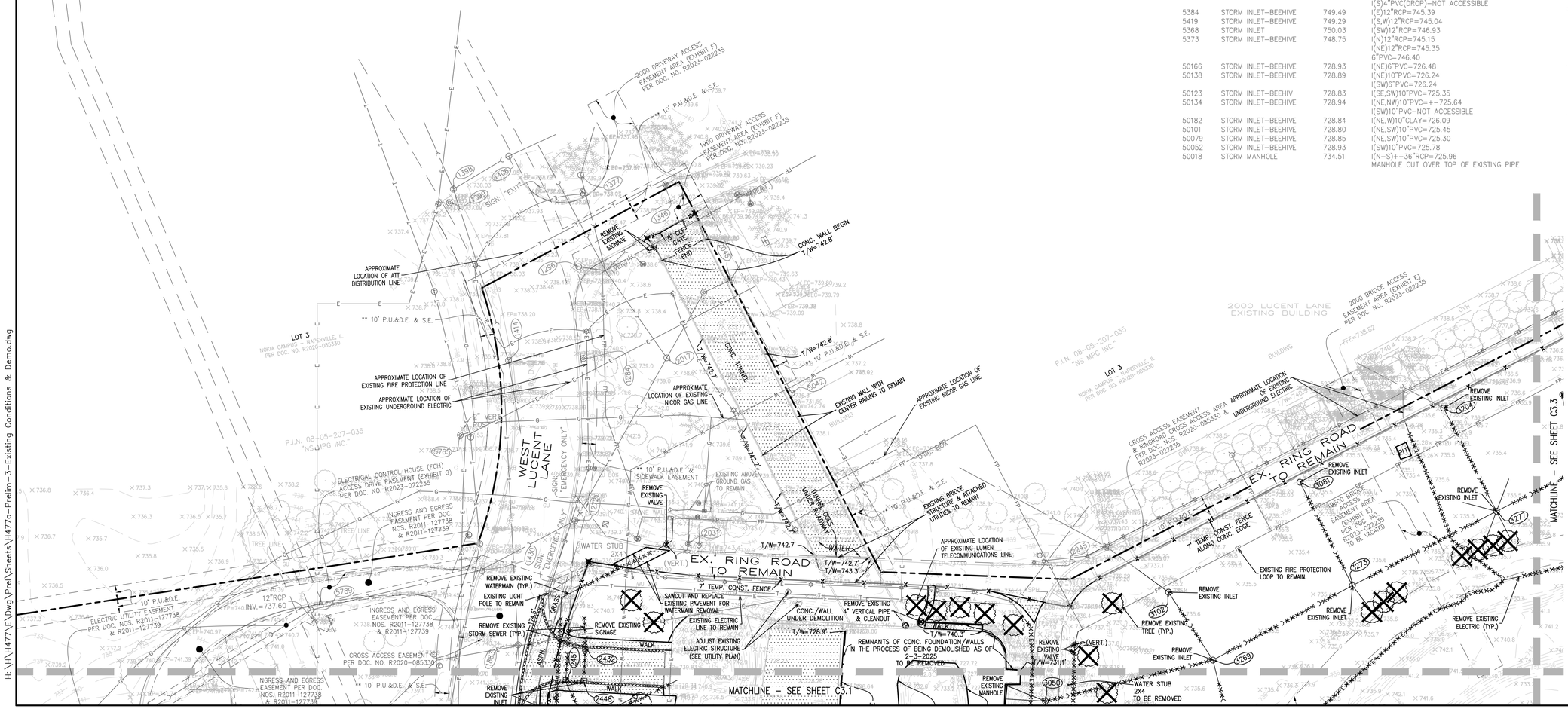
GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C3.0 FOR EXISTING CONDITIONS AND DEMOLITION NOTES.

DEMOLITION LEGEND

- DENOTES EXISTING PAVEMENT TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- DENOTES EXISTING TREES & BRUSH REMOVAL.
- DENOTES EXISTING TREE REMOVAL.
- DENOTES EXISTING CURB & GUTTER TO BE CRUSHED AND REUSED ON SITE AS FILL IN NON-STRUCTURAL AREAS.
- *DENOTES EXISTING STORM SEWER REMOVAL.
- *DENOTES EXISTING SANITARY SEWER REMOVAL.
- *DENOTES EXISTING WATERMAIN REMOVAL.
- *DENOTES EXISTING TELECOMMUNICATIONS REMOVAL.
- *DENOTES EXISTING ELECTRIC REMOVAL.
- *CONTRACTOR TO DISPOSE OF ALL WASTE MATERIAL OFF-SITE



5	REVISED PER CITY COMMENTS	10/31/25	
4	REVISED PER CITY COMMENTS	09/26/25	
3	REVISED PER CITY COMMENTS	07/31/25	
2	REVISED PER CITY COMMENTS	6/12/25	
1	ORIGINAL PLAN DATE	4/7/25	
No.	Description	Date	

EXISTING CONDITIONS & DEMOLITION PLAN – NORTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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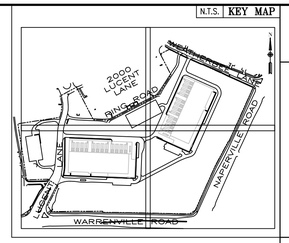
H477a

1" = 40'

C3.4

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N.T.S. KEY MAP



No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

DIMENSIONAL CONTROL & PAVING PLAN – OVERALL

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

N

GRAPHIC SCALE 1" = 80'

0 40' 80' 160'

PAVEMENT LEGEND

LIGHT DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
2.25" HMA BINDER COURSE, IL-19, N50
8.0" CA-6 AGGREGATE BASE COURSE

HEAVY DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
3.0" HMA BINDER COURSE, IL-19, N50
12.0" CA-6 AGGREGATE BASE COURSE

SIDEWALK PAVEMENT
5.0" PCC PAVEMENT (4,000 PSI UNREINFORCED, BROOM FINISH)
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 5' C-C
EXPANSION JOINTS @ 50' C-C

CONCRETE PAVEMENT
6.0" PCC PAVEMENT, 4,000 PSI, A/E
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 15' C-C MAX.
EXPANSION JOINTS @ 60' C-C

PROPOSED GRAVEL
12.0" CA-6 AGGREGATE BASE COURSE

SITE DATA:

LOT AREA = 41.43 ACRES

PROPOSED BUILDING SQUARE FOOTAGE (BUILDING IS 2 STORIES)
PROPOSED BUILDING – ±144,729 SF

MAXIMUM BUILDING HEIGHT = 60'

SETBACKS
FRONT YARD SETBACK = 30' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 40'
REAR/INTERIOR YARD SETBACK = 20' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 30'
SETBACK ADJACENT TO RESIDENTIAL = 100'

PARKING COUNTS
PROPOSED BUILDING – 60 STALLS (4 ADA)
LANDBANKED PARKING – 114 STALLS (5 ADA)

GEOMETRIC NOTES

1) ALL DIMENSIONS ARE FROM BACK OF CURB OR OUTSIDE FACE OF BUILDING UNLESS NOTED OTHERWISE.
2) INSTALL REVERSE PITCH B6.12 CURB AND GUTTER AT EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
3) REVERSE PITCH CURB AND GUTTER DENOTED BY: ═══
4) STANDARD PITCH CURB AND GUTTER DENOTED BY: ═══
5) DEPRESSED CURB AND GUTTER DENOTED BY: ═══
6) VARIABLE HEIGHT CURB AND GUTTER DENOTED BY: ═══
7) ALL RADII ARE 4-FT UNLESS NOTED OTHERWISE.
8) ALL PAVEMENT MARKINGS SHALL BE 4" PAINT CONFORMING TO MUNICIPAL STANDARDS, UNLESS NOTED OTHERWISE, OR AS PROVIDED FOR IN THE DETAILS.
9) THE CROSS SLOPE ON ALL SIDEWALKS SHALL NOT EXCEED 1.5%.
10) ALL SIDEWALKS INTERSECTING WITH CURB SHALL BE CONSTRUCTED WITH HANDICAP RAMPS.
11) STAIR AND DOORWAY LOCATIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO THE ARCHITECTURAL PLANS FOR DETAILS.
12) ALL LOT DIMENSIONS, SETBACK LINES, EASEMENTS, ETC., SHOWN ARE APPROXIMATE. SEE PLAT OF SUBDIVISION FOR EXACT DIMENSIONS.
13) FIBER EXPANSION JOINTS OF 3/4" FULL DEPTH BIT. FIBER MATERIAL SHALL BE INSTALLED AS REFERENCED IN THE PAVEMENT LEGEND (THIS SHEET) AND WHERE CONCRETE ABUTS ALL CURB, BUILDING, POLES OR OTHER STRUCTURES.
14) CONSTRUCTION JOINTS SHALL BE PLACED WHERE REQUIRED IN ACCORDANCE WITH ACI 330R GUIDE (LATEST EDITION) FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS.

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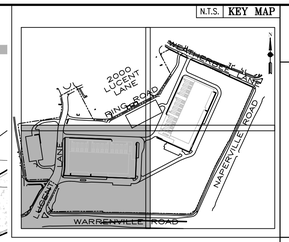
H477a
1" = 80'
C4.0

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MATCHLINE - SEE SHEET C4.4

MATCHLINE - SEE SHEET C4.2

N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C4.0 FOR GEOMETRIC NOTES.

PAVEMENT LEGEND

LIGHT DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
2.25" HMA BINDER COURSE, IL-19, N50
8.0" CA-6 AGGREGATE BASE COURSE

HEAVY DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
3.0" HMA BINDER COURSE, IL-19, N50
12.0" CA-6 AGGREGATE BASE COURSE

SIDEWALK PAVEMENT
5.0" PCC PAVEMENT (4,000 PSI UNREINFORCED, BROOM FINISH)
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 5' C-C
EXPANSION JOINTS @ 50' C-C

CONCRETE PAVEMENT
6.0" PCC PAVEMENT, 4,000 PSI, A/E
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 15' C-C MAX.
EXPANSION JOINTS @ 60' C-C

PROPOSED GRAVEL
12.0" CA-6 AGGREGATE BASE COURSE

CURB & GUTTER LEGEND

- REVERSE PITCH CURB & GUTTER
- STANDARD PITCH CURB & GUTTER
- DEPRESSED CURB & GUTTER
- VARIABLE HEIGHT CURB & GUTTER

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
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2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

DIMENSIONAL CONTROL & PAVING PLAN - SOUTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C4.1

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MATCHLINE – SEE SHEET C4.3

MATCHLINE – SEE SHEET C4.1

PROPOSED 8' BLACK IMPASSE SECURITY FENCE

FUTURE LANDBANKED PARKING AREA
114 PARKING STALLS

127' (14 STALLS @ 9')
118' (13 STALLS @ 9')
127' (14 STALLS @ 9')
91' (10 STALLS @ 9')
100' (11 STALLS @ 9')
154' (17 STALLS @ 9')
127' (14 STALLS @ 9')

18.5'
26'
27'
10'
15'

20' P.U.E. PER DOC. NO. R2011-127738

STORMWATER MANAGEMENT EASEMENT PER DOC. NO. R2011-127738

PROPOSED 40' FRONT YARD SETBACK

EXISTING STORMWATER MANAGEMENT BASIN

STORMWATER MANAGEMENT EASEMENT
PER DOC. NO. R2011-127738

CENTERLINE OF A 10.00' WIDE PERMANENT P.U.E. PER DOC. NO. RBP-107103

10' P.U.&D.E.

30' DUPAGE WATER COMMISSION PERMANENT EASEMENT PER DOC. NO. R88-015897

30' DUPAGE WATER COMMISSION PERMANENT EASEMENT PER DOC. NO. R88-015897

10' P.U.&D.E.

PROPOSED 40' FRONT YARD SETBACK

WARRENVILLE ROAD

ASPH.

CONC. MEDIAN

NAPERVILLE ROAD
(ILLINOIS ROUTE 59)

ASPH. PATH

CONC.

DRIVE

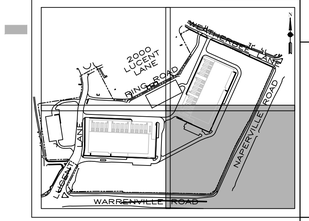
100.00'

45.0'

30'

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N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'
0 20' 40' 80'

REFER TO SHEET C4.0 FOR GEOMETRIC NOTES.

PAVEMENT LEGEND

LIGHT DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
2.25" HMA BINDER COURSE, IL-19, N50
8.0" CA-6 AGGREGATE BASE COURSE

HEAVY DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
3.0" HMA BINDER COURSE, IL-19, N50
12.0" CA-6 AGGREGATE BASE COURSE

SIDEWALK PAVEMENT
5.0" PCC PAVEMENT (4,000 PSI UNREINFORCED, BROOM FINISH)
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 5' C-C
EXPANSION JOINTS @ 50' C-C

CONCRETE PAVEMENT
6.0" PCC PAVEMENT, 4,000 PSI, A/E
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 15' C-C MAX.
EXPANSION JOINTS @ 60' C-C

PROPOSED GRAVEL
12.0" CA-6 AGGREGATE BASE COURSE

CURB & GUTTER LEGEND

- REVERSE PITCH CURB & GUTTER
- STANDARD PITCH CURB & GUTTER
- DEPRESSED CURB & GUTTER
- VARIABLE HEIGHT CURB & GUTTER

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

DIMENSIONAL CONTROL & PAVING PLAN – SOUTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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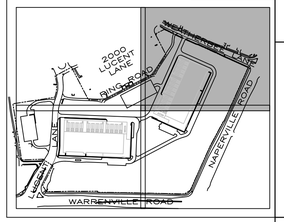
H477a
1" = 40'
C4.2

MATCHLINE – SEE SHEET C4.4

MATCHLINE – SEE SHEET C4.2

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N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C4.0 FOR GEOMETRIC NOTES.

PAVEMENT LEGEND

LIGHT DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
2.25" HMA BINDER COURSE, IL-19, N50
8.0" CA-6 AGGREGATE BASE COURSE

HEAVY DUTY ASPHALT PAVEMENT
2.0" SURFACE COURSE, MIX "D", N50
3.0" HMA BINDER COURSE, IL-19, N50
12.0" CA-6 AGGREGATE BASE COURSE

SIDEWALK PAVEMENT
5.0" PCC PAVEMENT (4,000 PSI UNREINFORCED, BROOM FINISH)
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 5' C-C
EXPANSION JOINTS @ 50' C-C

CONCRETE PAVEMENT
6.0" PCC PAVEMENT, 4,000 PSI, A/E
4.0" CA-6 BASE COURSE
CONTRACTION JOINTS @ 15' C-C MAX.
EXPANSION JOINTS @ 60' C-C

PROPOSED GRAVEL
12.0" CA-6 AGGREGATE BASE COURSE

CURB & GUTTER LEGEND

- REVERSE PITCH CURB & GUTTER
- STANDARD PITCH CURB & GUTTER
- DEPRESSED CURB & GUTTER
- VARIABLE HEIGHT CURB & GUTTER

No.	Description	Date
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5	REVISED PER CITY COMMENTS	10/31/25

DIMENSIONAL CONTROL & PAVING PLAN – NORTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

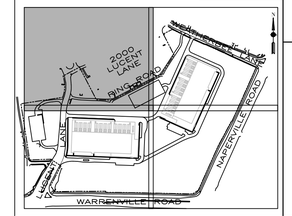
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H477a

1" = 40'

C4.3

N.T.S. | KEY MAP



N

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REFER TO SHEET C4.0 FOR GEOMETRIC NOTES.

PAVEMENT LEGEND

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- REVERSE PITCH CURB & GUTTER
- STANDARD PITCH CURB & GUTTER
- DEPRESSED CURB & GUTTER
- VARIABLE HEIGHT CURB & GUTTER

MATCHLINE - SEE SHEET C4.3

No.	Description	Date
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DIMENSIONAL CONTROL & PAVING PLAN - NORTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

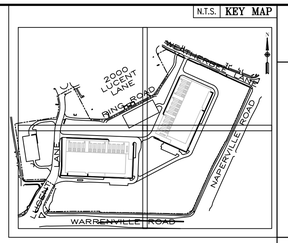
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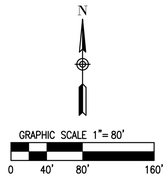
H477a

1" = 40'

C4.4

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CONTRACTOR TO BACKFILL EXISTING GARAGE ACCESS RAMP. DRAINAGE FROM RAMP AREA TO BE DIRECTED TO EXISTING STORM SEWER MANHOLE. REPLACE CLOSED LID WITH OPEN GRATE TO ALLOW DRAINAGE.

PROPOSED RAIN GARDEN WITH INFILTRATION TRENCH
HWL=735.85
BOTTOM=735.10
BOTTOM OF STONE=732.25
REFER TO DETAIL ON SHEET C9.2.

2000 LUCENT LANE
EXISTING BUILDING

EXISTING CHILLER ENCLOSURE

WEATHERBEE LANE

NAPERVILLE ROAD

BARKEI LANE

FUTURE EQUIPMENT YARD

EQUIPMENT YARD
±43,342 SF

FUTURE 2 STORY EXPANSION
FFE=739.00

INITIAL 2 STORY BUILDING
±144,729 SF
FFE=739.00

EXISTING SUBSTATION

EXISTING STORMWATER MANAGEMENT BASIN

FREEDOM DRIVE (WEST LUCENT LANE)

WARRENVILLE ROAD

GRADING LEGEND

- XXX.XX = PROPOSED SPOT GRADE
- T/WALL=XXX.XX = PROPOSED GRADE AT TOP OF WALL
- B/WALL=XXX.XX = PROPOSED GRADE AT BOTTOM OF WALL
- EP=XXX.XX = PROPOSED EDGE OF PAVEMENT
- BC=XXX.XX = PROPOSED BACK OF CURB
- TDC=XXX.XX = PROPOSED TOP OF DEPRESSED CURB
- EX=±XXX.XX = EXISTING ELEVATION
- ±XXX.XX(ME) = MATCH EXISTING ELEVATION
- = DRAINAGE FLOW ARROWS
- = EMERGENCY OVERLAND FLOW ROUTE

GRADING NOTES

1) ALL SPOT ELEVATIONS ARE THE TOP OF PAVEMENT OR FINISHED GRADE ELEVATIONS.
2) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION.
3) CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE DURING CONSTRUCTION.
4) ALL PROPOSED GRADES SHALL MATCH EXISTING GRADES AT THE PROPERTY LINE.
5) SEE SPECIFICATIONS FOR SUBGRADE AND STRUCTURAL FILL COMPACTION REQUIREMENTS.
6) THE CROSS SLOPE ON ALL SIDEWALKS SHALL NOT EXCEED 1.5%.
7) THE SLOPE THROUGHOUT ALL HANDICAP PARKING STALLS SHALL NOT EXCEED 1.5% IN ALL DIRECTIONS.
8) DRIVEWAY SLOPES SHALL BE BETWEEN 2% AND 4%. IF THE DRIVEWAY LAYOUT OR LOCATION IS ALTERED, THE SLOPE SHALL BE CHECKED FOR SLOPE LIMITS.
9) PROPOSED RETAINING WALLS SHALL BE DESIGNED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE STRUCTURAL DESIGN.
10) RETAINING WALL TYPE AND COLOR SHALL BE APPROVED BY THE OWNER AND ARCHITECT PRIOR TO CONSTRUCTION.
11) REFER TO ARCHITECTURAL PLANS FOR RAILING AND STAIRS DETAILS.

ADA GRADING NOTES

1) ALL SIDEWALKS INTERSECTING WITH CURBS SHALL BE CONSTRUCTED WITH HANDICAP ACCESSIBLE CURB RAMPS UNLESS OTHERWISE NOTED. SEE DETAIL FOR HANDICAP CURB RAMP CONSTRUCTION.
2) ALL HANDICAP ACCESSIBLE CURB RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING SURFACES. SEE DETAIL FOR DETECTABLE WARNING SURFACE CONSTRUCTION.
3) CROSS SLOPE WITHIN HANDICAP ACCESSIBLE ROUTE SHALL NOT EXCEED 1.5%. HANDICAP ACCESSIBLE ROUTE DENOTED BY:
4) THE CROSS SLOPE ON ALL SIDEWALKS SHALL NOT EXCEED 1.5%.
5) THE PAVEMENT SLOPE WITHIN HANDICAP ACCESSIBLE PARKING STALLS AND ADJACENT LOADING ZONES SHALL NOT EXCEED 1.5% IN ANY DIRECTION.

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
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5	REVISED PER CITY COMMENTS	10/31/25

GRADING PLAN - OVERALL

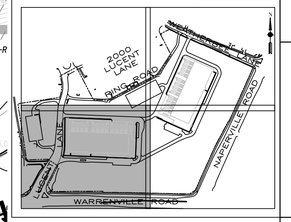
1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

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H477a
1" = 80'
C5.0

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N.T.S. | KEY MAP



MATCHLINE - SEE SHEET C5.4

MATCHLINE - SEE SHEET C5.2

EXISTING SUBSTATION

OUTSIDE FACE OF +-18.25 TALL PRECAST CONC. WALL AROUND INDIAN HILL SUBSTATION 1935 LUCENT LN -AREA NOT ACCESSIBLE-

FUTURE EQUIPMENT YARD

EQUIPMENT YARD ±43,342 SF

RETAINING WALL (BY OTHERS) 116-LF MAX HEIGHT 3.5'

RETAINING WALL (BY OTHERS) 80-LF MAX HEIGHT 3.5'

FUTURE 3 STORY EXPANSION FFE=739.00

INITIAL 2 STORY BUILDING ±144,729 SF FFE=739.00

BARKEI LANE

FREEDOM DRIVE (WEST LUCENT LANE)

WARRENVILLE ROAD

DAYLIGHT EXISTING PVC (UNDERDRAIN. REFER TO UTILITY PLAN.

EXISTING STORMWATER MANAGEMENT BASIN

N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C5.0 FOR GRADING NOTES.

GRADING LEGEND

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- = DRAINAGE FLOW ARROWS
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No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

GRADING PLAN - SOUTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C5.1

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MATCHLINE – SEE SHEET C5.3

MATCHLINE – SEE SHEET C5.1

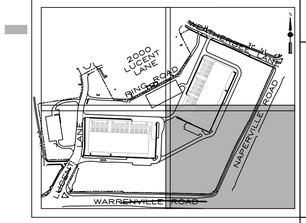
EXISTING STORMWATER MANAGEMENT BASIN

DAYLIGHT EXISTING PVC UNDERDRAIN. REFER TO UTILITY PLAN.

NAPERVILLE ROAD
(60.00' WIDE DOC. NO. R1973-58609)

WARRENVILLE ROAD

N.T.S. **KEY MAP**



N

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- ~~→ = DRAINAGE FLOW ARROWS
- ➡ = EMERGENCY OVERLAND FLOW ROUTE

STAGE STORAGE CALCULATIONS
EXISTING DETENTION BASIN

Project: 1960 West Lucent Lane
Location: Naperville, IL
Job #: H477

By: JMS **Date:** 7/29/2025
Checked: **Date:**

Detention Basin per As-Built Drawings

Elevation (ft)	Area (sf)	Volume (ac-ft)	Storage (ac-ft)	
729.00	-	0.00	0.00	NWL
730.00	-	0.90	0.90	
731.00	-	2.60	3.50	
732.00	-	4.10	7.60	
733.00	-	4.80	12.40	
734.00	-	5.40	17.80	
734.75	-	4.40	22.20	
735.00	-	1.50	23.70	HWL

- Refer to as-built stage storage table provided on historical Lucent Technologies R & D Facility record

Proposed Detention Basin Volume

Elevation (ft)	Area (sf)	Volume (ac-ft)	Storage (ac-ft)	
729.00	2,333	0.00	0.00	NWL
730.00	81,955	0.75	0.75	
731.00	160,440	2.73	3.48	
732.00	193,664	4.06	7.54	
733.00	217,298	4.71	12.26	
734.00	236,593	5.21	17.46	
735.00	259,396	5.69	23.16	
735.10	263,490	0.60	23.76	HWL

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5	REVISED PER CITY COMMENTS	10/31/25

GRADING PLAN – SOUTHEAST

1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS

KARIS CRITICAL

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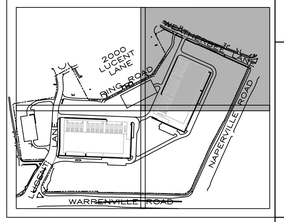
H477a

1" = 40'

C5.2

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N.T.S. | KEY MAP



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GRADING PLAN - NORTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C5.3

MATCHLINE - SEE SHEET C5.4

MATCHLINE - SEE SHEET C5.2

EXISTING RING ROAD REMAIN

WEATHERBEE LANE

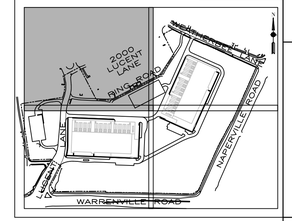
NAPERVILLE ROAD

EXISTING STORMWATER MANAGEMENT BASIN

EXISTING CHILLER ENCLOSURE

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MATCHLINE – SEE SHEET C5.3

MATCHLINE – SEE SHEET C5.1

CONTRACTOR TO BACKFILL EXISTING GARAGE ACCESS RAMP. DRAINAGE FROM RAMP AREA TO BE DIRECTED TO EXISTING STORM SEWER MANHOLE. REPLACE CLOSED LID WITH OPEN GRATE TO ALLOW DRAINAGE.

CONTRACTOR TO FILL UP TO EXISTING TOP OF WALL AND GRADE DOWN TOWARD SWALE POINT. EXISTING WALL SHOULD NOT BE EXPOSED POST DEVELOPMENT.

PROPOSED RAIN GARDEN WITH INFILTRATION TRENCH
HWL=735.85
BOTTOM=735.10
BOTTOM OF STONE=732.25
REFER TO DETAIL ON SHEET C9.2.

WEST LUCENT LANE

EX. RING ROAD TO REMAIN

2000 LUCENT LANE EXISTING BUILDING

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
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GRADING PLAN – NORTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C5.4

H:\H\H477\E\Dwg\Final\Sheets\H477a-Final-5-Grading & Drainage Plan.dwg

ADA GRADING NOTES

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2) ALL HANDICAP ACCESSIBLE CURB RAMPS SHALL BE CONSTRUCTED WITH DETECTABLE WARNING SURFACES. SEE DETAIL FOR DETECTABLE WARNING SURFACE CONSTRUCTION.

3) CROSS SLOPE WITHIN HANDICAP ACCESSIBLE ROUTE SHALL NOT EXCEED 1.5%. HANDICAP ACCESSIBLE ROUTE DENOTED BY: = = =

DEPARTMENT OF PUBLIC UTILITIES – ELECTRIC GENERAL NOTES

1) THE DEVELOPER SHALL COORDINATE SITE CONSTRUCTION WITH THE DEPARTMENT OF PUBLIC UTILITIES – ELECTRIC (DPU–E) TO ALLOW ELECTRIC FACILITIES TO BE INSTALLED PRIOR TO PAVING AND CURBING. DPU–E REQUIRES 30 WORKING DAYS ADVANCE WRITTEN NOTICE PRIOR TO PAVEMENT INSTALLATION TO ALLOW FOR THE INSTALLATION OF ELECTRIC FACILITIES. GRADE ELEVATION MUST BE WITHIN 4 INCHES OF FINAL GRADING BEFORE ELECTRIC FACILITIES CAN BE INSTALLED.

2) ELECTRIC FACILITIES SHALL BE INSTALLED PURSUANT TO SECTION 8–1C–3 OF THE CITY OF NAPERVILLE MUNICIPAL CODE, WHICH REQUIRES A CONSTRUCTION FEE PAYMENT FOR INSTALLATION OF ELECTRIC FACILITIES.

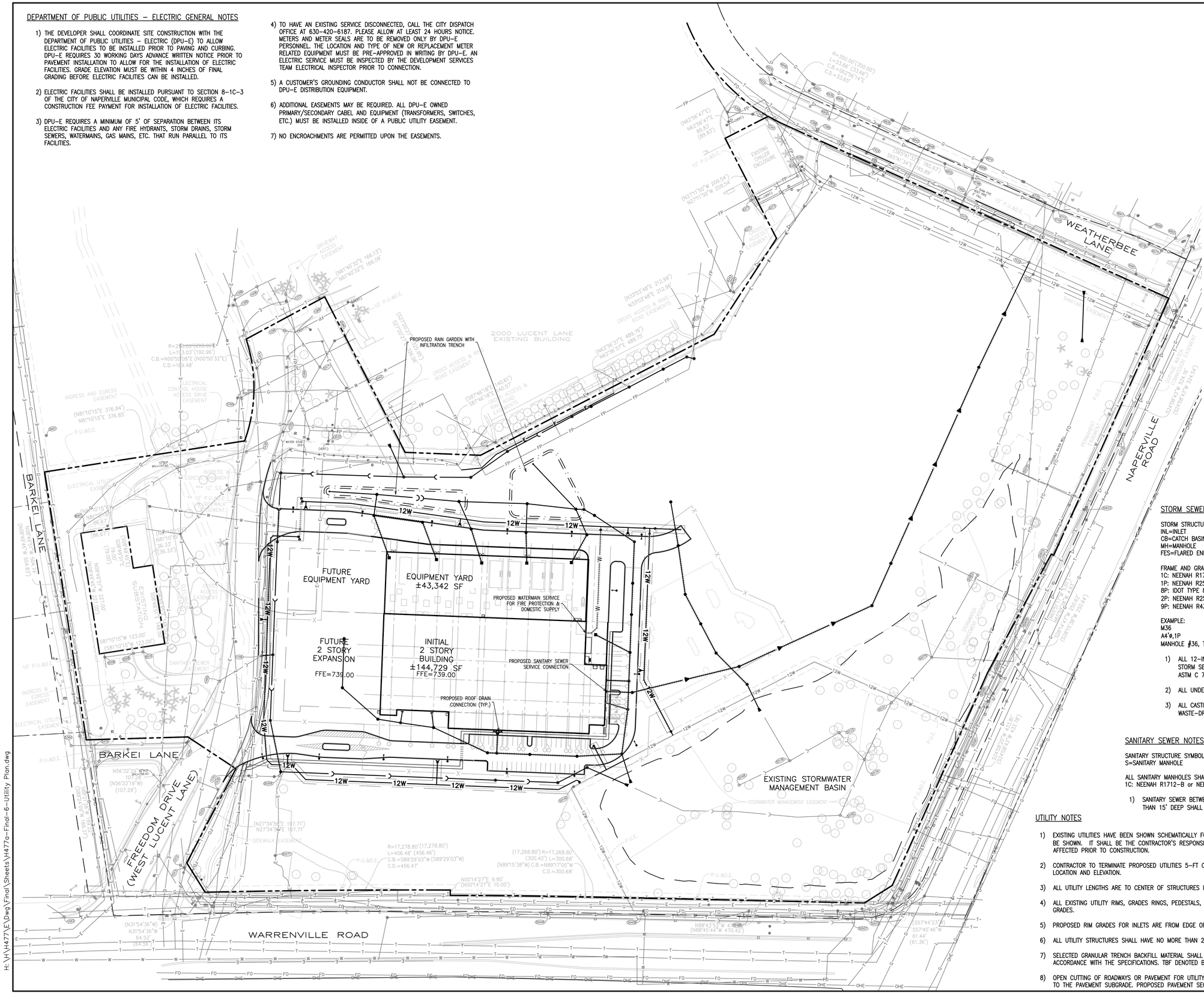
3) DPU–E REQUIRES A MINIMUM OF 5' OF SEPARATION BETWEEN ITS ELECTRIC FACILITIES AND ANY FIRE HYDRANTS, STORM DRAINS, STORM SEWERS, WATERMAINS, GAS MAINS, ETC. THAT RUN PARALLEL TO ITS FACILITIES.

4) TO HAVE AN EXISTING SERVICE DISCONNECTED, CALL THE CITY DISPATCH OFFICE AT 630–420–6187. PLEASE ALLOW AT LEAST 24 HOURS NOTICE. METERS AND METER SEALS ARE TO BE REMOVED ONLY BY DPU–E PERSONNEL. THE LOCATION AND TYPE OF NEW OR REPLACEMENT METER RELATED EQUIPMENT MUST BE PRE–APPROVED IN WRITING BY DPU–E. AN ELECTRIC SERVICE MUST BE INSPECTED BY THE DEVELOPMENT SERVICES TEAM ELECTRICAL INSPECTOR PRIOR TO CONNECTION.

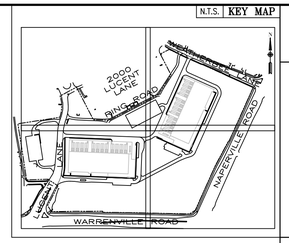
5) A CUSTOMER'S GROUNDING CONDUCTOR SHALL NOT BE CONNECTED TO DPU–E DISTRIBUTION EQUIPMENT.

6) ADDITIONAL EASEMENTS MAY BE REQUIRED. ALL DPU–E OWNED PRIMARY/SECONDARY CABEL AND EQUIPMENT (TRANSFORMERS, SWITCHES, ETC.) MUST BE INSTALLED INSIDE OF A PUBLIC UTILITY EASEMENT.

7) NO ENCROACHMENTS ARE PERMITTED UPON THE EASEMENTS.



N.T.S. **KEY MAP**



N

GRAPHIC SCALE 1"= 80'

0 40' 80' 160'

WATER MAIN NOTES

WATERMAIN STRUCTURE SYMBOL LEGEND:
Vv=VALVE VAULT
VB=VALVE BOX
FH=FIRE HYDRANT ASSEMBLY
PC=PRESSURE CONNECTION

1) ALL WATER MAIN SHALL BE DIP CLASS 52, UNLESS NOTED OTHERWISE ON THE PLANS.

2) ALL FIRE HYDRANT LEADS SHALL BE 6–INCH, CLASS 52 DIP UNLESS NOTED OTHERWISE ON THE PLANS.

3) BRASS WEDGES FOR LOCATING WATER MAINS SHALL BE INSTALLED PER SECTION 41–2.05C OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, AS AMENDED.

4) MAINTAIN A MINIMUM OF 5.5–FT OF COVER AS MEASURED FROM THE PROPOSED GRADE OVER THE WATER MAIN. MAINTAIN HORIZONTAL SEPARATION WITH OTHER UTILITIES PER IEPA REQUIREMENTS.

5) ALL PROPOSED WATER MAIN INSTALLED WITHIN FILL MATERIAL SHALL BE RESTRAINED USING U.S. PIPE FIELD–LOK GASKETS OR APPROVED EQUIVALENT TO A POINT 50–FT PAST ON EACH SIDE THE AREA WHERE THE WATER MAIN IS INSTALLED WITHIN FILL.

STORM SEWER NOTES

STORM STRUCTURE SYMBOL LEGEND:
INL=INLET
CB=CATCH BASIN
MH=MANHOLE
FES=FLARED END SECTION WITH GRATE

FRAME AND GRATE/LID SYMBOL LEGEND:
1C: NEENAH R1772, EJIW 1022–2 TYPE A SOLID COVER
1P: NEENAH R2502 (TYPE D GRATE), EJIW 1022–2 (TYPE M1 GRATE)
8P: IDOT TYPE 8, NEENAH R4340–B, EJIW 6527
2P: NEENAH R2580–C (TYPE G GRATE)
9P: NEENAH R4349–D (BEEHIVE GRATE)

EXAMPLE:
M36
A4'ø,1P
MANHOLE #36, TYPE A, 4–FT DIAMETER, NEENAH R2502–D FRAME AND GRATE (OPEN)

1) ALL 12–INCH AND 15–INCH STORM SEWER SHALL BE RCP CLASS V. ALL OTHER STORM SEWERS SHALL BE REINFORCED CONCRETE CULVERT PIPE (RCP) CLASS IV, ASTM C 76, WITH "O" RING RUBBER GASKET JOINTS CONFORMING TO ASTM C–443.

2) ALL UNDERDRAINS SHALL BE PER IDOT STANDARDS OR AS SPECIFIED IN THE DETAIL.

3) ALL CASTINGS SHALL BE EMBOSSED WITH A FISH IMAGE AND "DUMP NO WASTE–DRAINS TO WATERWAYS" MESSAGE.

SANITARY SEWER NOTES

SANITARY STRUCTURE SYMBOL LEGEND:
S=SANITARY MANHOLE

ALL SANITARY MANHOLES SHALL HAVE THE FOLLOWING FRAME & GRATE:
1C: NEENAH R1712–B or NEENAH R1772–B

1) SANITARY SEWER BETWEEN 15' AND 20' DEEP SHALL BE PVC SDR 21 AND SEWER LESS THAN 15' DEEP SHALL BE PVC SDR 26.

UTILITY NOTES

1) EXISTING UTILITIES HAVE BEEN SHOWN SCHEMATICALLY FOR THE CONTRACTOR'S GUIDANCE ONLY. ALL EXISTING UTILITIES MAY NOT BE SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION AND ELEVATION OF ALL UTILITIES THAT MAY BE AFFECTED PRIOR TO CONSTRUCTION.

2) CONTRACTOR TO TERMINATE PROPOSED UTILITIES 5–FT OUTSIDE OF BUILDING FACE UNLESS NOTED OTHERWISE. PLUG AND STAKE LOCATION AND ELEVATION.

3) ALL UTILITY LENGTHS ARE TO CENTER OF STRUCTURES IN LINEAR FEET.

4) ALL EXISTING UTILITY RIMS, GRADES RINGS, PEDESTALS, ETC., SHALL BE RAISED OR LOWERED AS REQUIRED TO MEET PROPOSED GRADES.

5) PROPOSED RIM GRADES FOR INLETS ARE FROM EDGE OF PAVEMENT.

6) ALL UTILITY STRUCTURES SHALL HAVE NO MORE THAN 2 PRECAST ADJUSTING RINGS WITH 6" MAXIMUM HEIGHT ADJUSTMENT.

7) SELECTED GRANULAR TRENCH BACKFILL MATERIAL SHALL BE PLACED AS INDICATED ON THE PLANS AND CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS. TBF DENOTED BY:

8) OPEN CUTTING OF ROADWAYS OR PAVEMENT FOR UTILITY INSTALLATION SHALL BE FILLED WITH COMPACTED TRENCH BACKFILL UP TO THE PAVEMENT SUBGRADE. PROPOSED PAVEMENT SECTION SHALL MATCH EXISTING.

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

UTILITY PLAN – OVERALL

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
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H477a

1" = 80'

C6.0

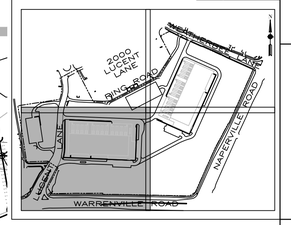
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MATCHLINE – SEE SHEET C6.4

MATCHLINE – SEE SHEET C6.4

MATCHLINE – SEE SHEET C6.2

N.T.S. KEY MAP



GRAPHIC SCALE 1"= 40'
0 20' 40' 80'

REFER TO SHEET C6.0 FOR UTILITY NOTES.

REFER TO SHEET C3.1 FOR EXISTING UTILITY STRUCTURE TABLE

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

UTILITY PLAN – SOUTHWEST

1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C6.1

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MATCHLINE – SEE SHEET C6.3

MATCHLINE – SEE SHEET C6.1

CB–206
A5'@.9P
R=735.10
I=729.25(S)

83'–30"
@ 0.30%

12" WATER MAIN STUB
PLUG & STAKE

UTIL XING
PG=736.21
B/STM=728.80
T/WTR=727.30
LOWER WATER MAIN

CB–205
A5'@.1P
R=735.50
I=729.00(S)
I=729.00(N)

92'–42"
@ 0.26%

CB–204
A7'@.8P
R=735.10
I=728.76(N)
I=728.76(SE)

62'–48"
@ 0.27%

CB–203
A7'@.9P
R=735.10
I=728.59(NW)
I=728.59(SE)

61'–48"
@ 0.26%

CB–202
A7'@.8P
R=735.10
I=728.43(NW)
I=728.43(SE)

82'–48"
@ 0.27%

UTIL XING
PG=735.94
B/STM=727.90
T/SAN=727.40

205'–8"
@ 0.45%

BEND

Wv–106
R=737.05

55'–48"
@ 0.38%

S–102
R=736.15
I=725.03(SW)
I=725.03(NE)

S–103
R=735.70
I=725.42(SW)
I=725.42(NE)

86'–8"
@ 0.45%

S–104
R=736.05
I=726.65(W)
I=726.65(NE)

272'–8"
@ 0.45%

MH–201
A7'@.1C
R=735.50
I=728.21(NW)
I=728.21(SE)

FES
W/ GRATE
48"ø
I=728.00

DAYLIGHT EXISTING 10"
PVC UNDERDRAIN. INSTALL
MITERED DRAIN OR
APPROVED EQUAL

CONNECT TO
EXISTING WATER MAIN
12" TEE

EXISTING STORMWATER
MANAGEMENT BASIN

STORMWATER MANAGEMENT EASEMENT
PER DOC. NO. R2011–127738

30' DUPAGE WATER
COMMISSION
PERMANENT EASEMENT
PER DOC. NO. R86–015897

NAPERVILLE ROAD
(R.O.W. PER DOC. NO. R1955–38600)

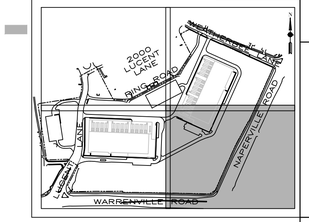
WARRENVILLE ROAD

ASPH.

CONC. MEDIAN

12W

N.T.S. | KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C6.0 FOR UTILITY NOTES.

REFER TO SHEET C3.2 FOR EXISTING UTILITY STRUCTURE TABLE

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

UTILITY PLAN – SOUTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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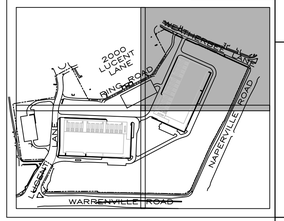
H477a

1" = 40'

C6.2

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N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C6.0 FOR UTILITY NOTES.

REFER TO SHEET C3.3 FOR EXISTING UTILITY STRUCTURE TABLE

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

UTILITY PLAN – NORTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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H477a

1" = 40'

C6.3

MATCHLINE – SEE SHEET C6.4

MATCHLINE – SEE SHEET C6.2

REPLACE EXISTING FRAME AND GRATE WITH 8P

ADJUST RIM RIM=735.60

REPLACE EXISTING FRAME AND GRATE WITH 8P

3" DIAM PVC VENT PIPE 2' TALL

WEATHERBEE LANE

CONNECT TO EXISTING SANITARY STRUCTURE

PROPOSED 15" PU&DE

ADJUST RIM RIM=744.50 CONTRACTOR TO COORDINATE WITH TELECOM PROVIDER

UTIL XING PG=739.34± B/WTR=729.14± T/SAN=723.02

S-100 R=737.76 I=722.25(SW) I=±722.12(SE-EXISTING)

ADJUST RIM RIM=739.30

UTIL XING PG=739.93 B/TELE=735.93± T/SAN=723.21

217'-8" @ 0.45%

FES W/ GRATE 12"ø I=736.00

UTIL XING PG=738.53 B/STM=735.83 T/WTR=±731.12

95'-12" @ 0.00%

FES W/ GRATE 12"ø I=736.00

S-101 R=737.60 I=723.23(SW) I=723.23(NE)

EXISTING STORMWATER MANAGEMENT BASIN

POSSIBLE WATER MAIN

409'-8" @ 0.45%

NAPERVILLE ROAD

PARCEL 0040PE

PARCEL 0040PE

EX. RING ROAD TO REMAIN

EXISTING STORM SEWER 18" RCP @ -1.70%

UTIL XING PG=736.22 B/FP=±730.22 T/STM=728.72

14'-18" @ 0.18%

49'-24" @ 0.18%

MH-115 A4'Ø,1C R=737.05 I=727.02(W) I=±730.43(N)-EX

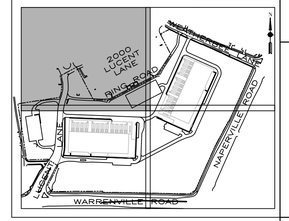
MH-114 A4'Ø,1C R=735.65 I=730.37(SW) I=726.99(E)

CONTRACTOR TO VERIFY THE EXISTING ELEVATION OF THE FIRE PROTECTION MAIN. CONTRACTOR TO CONTACT ENGINEER IF ELEVATIONS DIFFER FROM PLANS.

CB-206 A5'Ø,9P R=735.10 I=729.25(S)

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N.T.S. **KEY MAP**



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C6.0 FOR UTILITY NOTES.

REFER TO SHEET C3.4 FOR EXISTING UTILITY STRUCTURE TABLE

MATCHLINE - SEE SHEET C6.3

MATCHLINE - SEE SHEET C6.1

WEST LUCENT LANE

EX. RING ROAD TO REMAIN

2000 LUCENT LANE EXISTING BUILDING

REPLACE EXISTING FRAME AND GRATE WITH 8P

CONTRACTOR TO FIELD VERIFY LOCATION & DEPTH OF ALL EXISTING UTILITIES AND CHECK FOR CROSSING CONFLICTS PRIOR TO INSTALLATION. CONTACT DESIGN ENGINEER IF CONFLICTS ARE PRESENT

EXISTING STORM SEWER 18" RCP @ 0.38%

EXISTING ABOVE GROUND GAS TO REMAIN

UTIL XING PG=740.18 B/WTR=±734.25 T/STM=732.32

UTIL XING PG=738.75 B/ELEC=±737.40 T/STM=732.39

WATER STUB 2X4

MH-106 A7'Ø,1C R=739.70 I=728.92(S) I=728.92(E) I=730.36(N)-EX

UTIL XING PG=739.74 B/ELEC=±736.60 T/STM=732.23

12"RCP INV.=737.60

CONTRACTOR TO COORDINATE WITH CITY OF NAPERVILLE

FES W/ GRATE 12"Ø I=730.00

ADJUST RIM RIM=739.40

ADJUST RIM RIM=739.15

229'-36" @ 0.18%

67'-12" @ 1.08%

INSTALL VALVE VAULT ONTO EXISTING WATERMAIN Vv=108 R=739.75

PC-100 R=739.85

CONTRACTOR TO CONFIRM LOCATION & DEPTH OF EXISTING ELECTRIC LINE AND LOWER/RELOCATE AS NEEDED

CLEANOUT RIM=735.10 I=732.85(E)

88'-4" PERF. PVC @ 0.00%

HWL=735.85

JOINT DEFLECTION AS NEEDED. DEFLECTION TO MEET AWWA C600 REQUIREMENTS.

BTM=735.10

154'-4" PERF. PVC @ 0.00%

56'-15"

CB-310 DRY WELL

MH-107 A5'Ø,1C R=739.55 I=729.28(NW) I=729.33(W) I=729.33(E)

UTIL XING PG=737.20 B/FP=±729.70 T/STM=728.20

MH-108 A5'Ø,1C R=738.00 I=724.82(NE) I=729.55(W)

83'-36" @ 0.18%

PROPOSED RAIN GARDEN WITH INFILTRATION TRENCH HWL=735.80 BOTTOM=735.10 BOTTOM OF STONE=732.35 REFER TO DETAIL ON SHEET C9.2.

RELOCATE EXISTING LIGHTING ELECTRICAL LOOP 322-LF

MH-109 A6'Ø,1C R=736.90 I=726.69(NE) I=724.97(SW) I=±730.10(NW)-EX

CLEANOUT RIM=735.10 I=732.85(SE)

EXISTING STORM SEWER 18" RCP @ 1.65%

UTIL XING PG=735.94 B/FP=±730.61 T/STM=729.11

137'-24" @ 0.18%

127'-4" PERF. PVC @ 0.00%

116'-4" PERF. PVC @ 0.00%

91'-4" PERF. PVC @ 0.00%

CONTRACTOR TO VERIFY THE EXISTING ELEVATION OF THE FIRE PROTECTION MAIN. CONTRACTOR TO CONTACT ENGINEER IF ELEVATIONS DIFFER FROM PLANS.

15'-4" PERF. PVC @ 0.00%

MH-427 A4'Ø,1C R=735.85 I=731.55(SE)

22'-12" @ 0.67%

CB-426 A5'Ø,8P R=735.25

80'-24" @ 0.18%

MH-110 A4'Ø,1C R=735.55 I=729.94(NE) I=726.92(SW)

40'-24" @ 0.18%

MH-112 A4'Ø,1C R=735.90 I=730.16(NE) I=730.16(SW)

CB-111 A4'Ø,8P R=735.15 I=730.01(NE) I=730.01(SW) I=±730.98(NW)-EX

71'-24" @ 0.18%

CB-113 A4'Ø,8P R=735.15 I=730.29(NE) I=730.29(SW)

49'-24" @ 0.18%

14'-18" @ 0.18%

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

UTILITY PLAN - NORTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

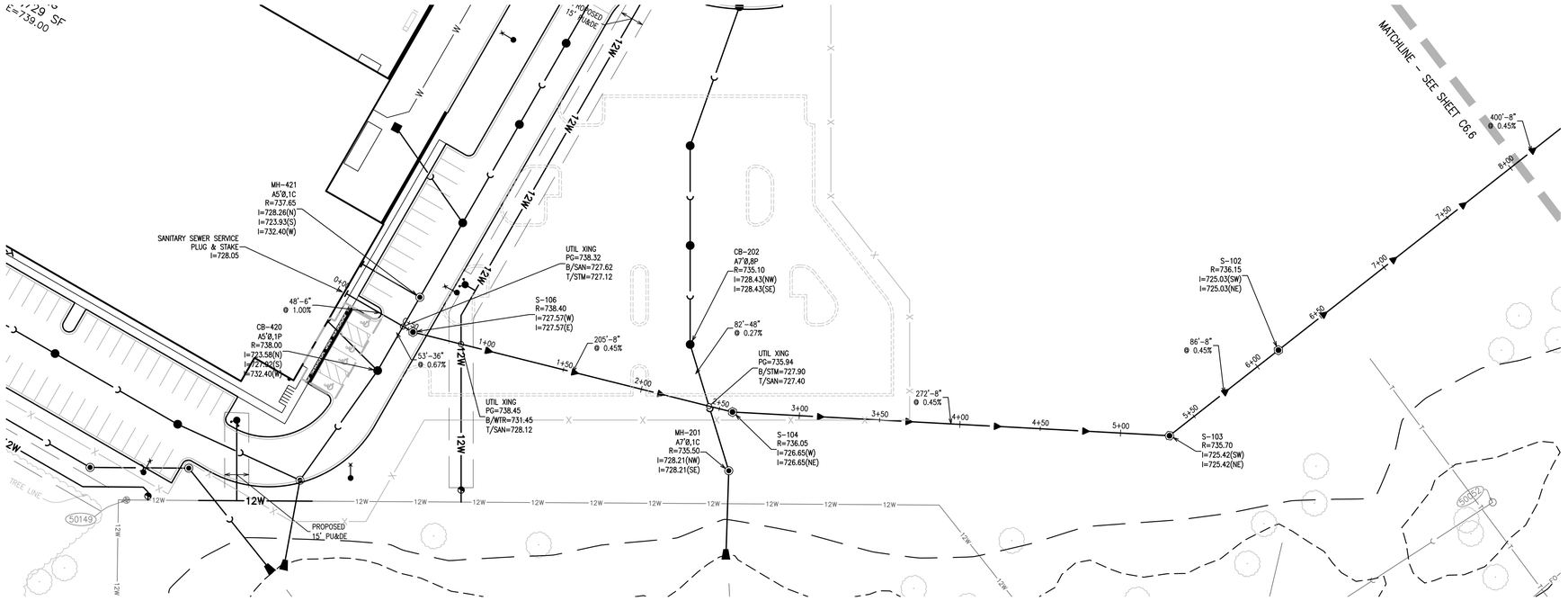
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H477a

1" = 40'

C6.4

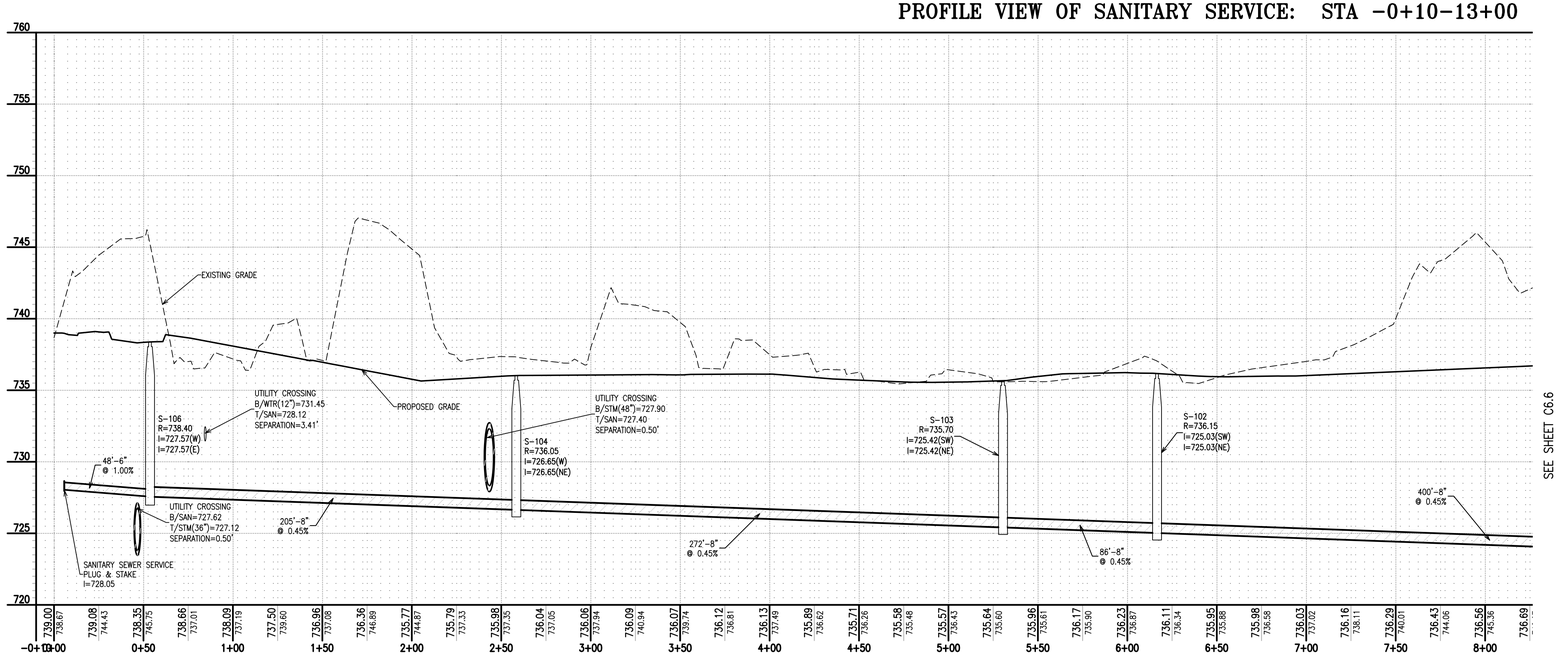
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GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

PROFILE VIEW OF SANITARY SERVICE: STA -0+10-13+00



PLAN AND PROFILE NOTES

SEE SHEET C6.0 FOR UTILITY NOTES

PROFILE LEGEND

- PROPOSED GROUND SURFACE
- EXISTING GROUND SURFACE
- STORM SEWER
- SANITARY SEWER

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
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4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

SANITARY PLAN & PROFILE

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

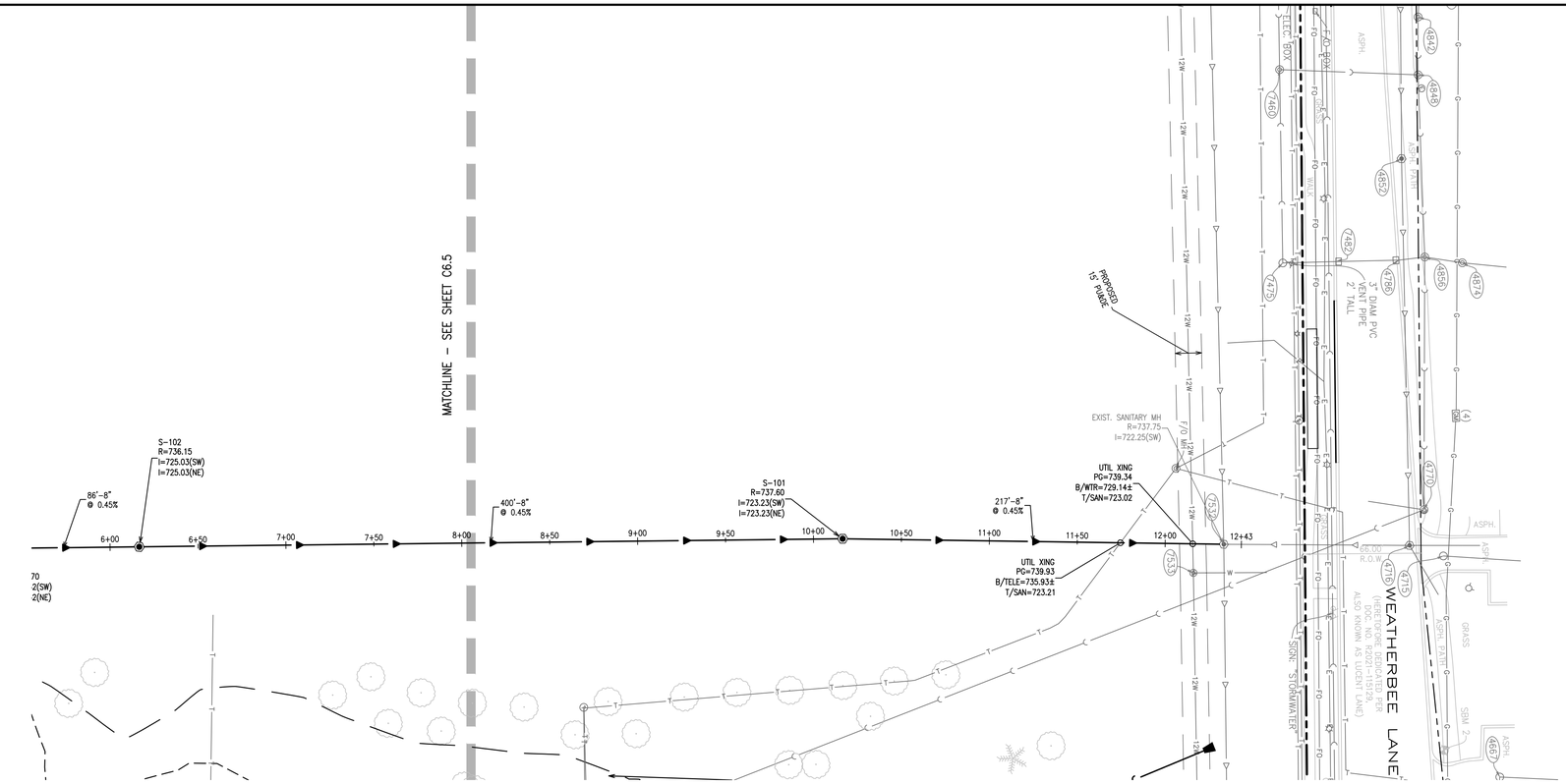
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H477a

H: 1"=40'
V: 1"=5'

C6.5

H:\H\H477\E\Dwg\Final\Sheets\H477a-Final-6.5-Sanitary P&P.dwg



No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

SANITARY PLAN & PROFILE

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

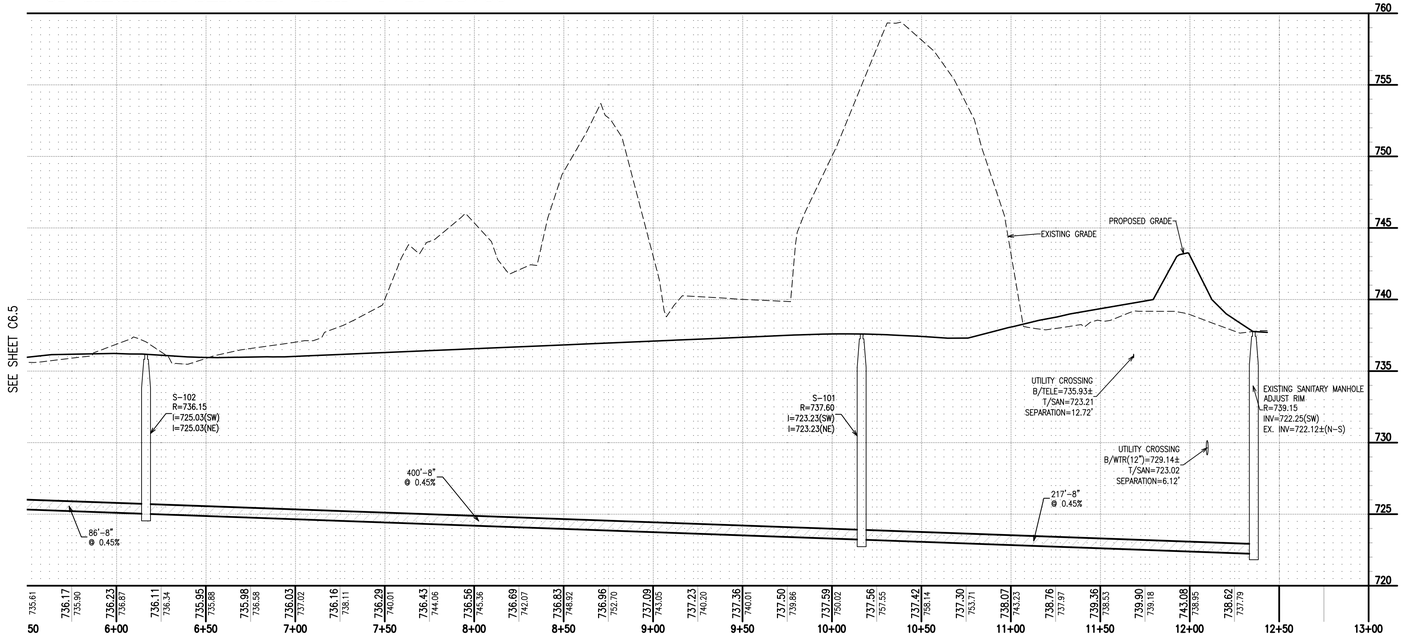
PLAN AND PROFILE NOTES

SEE SHEET C6.0 FOR UTILITY NOTES

PROFILE LEGEND

- PROPOSED GROUND SURFACE
- EXISTING GROUND SURFACE
- STORM SEWER
- SANITARY SEWER

OF SANITARY SERVICE: STA -0+10-13+00



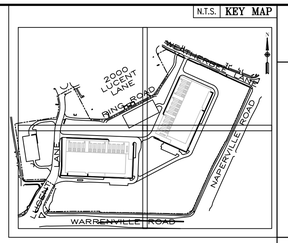
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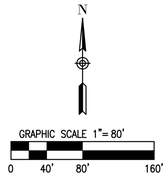
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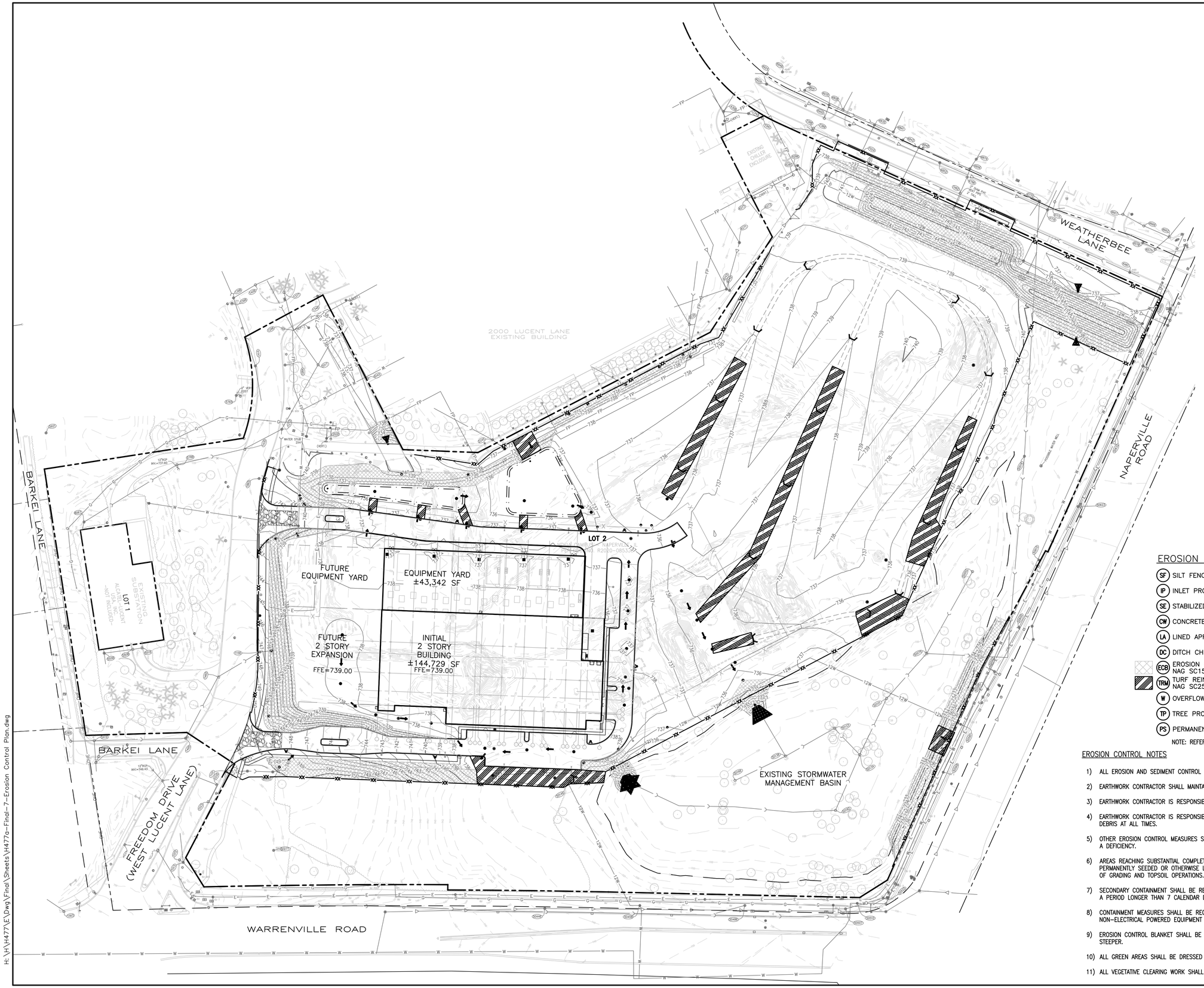
H: 1"=40'
V: 1"=5'

C6.6

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EROSION CONTROL LEGEND

- (SF) SILT FENCE
- (IP) INLET PROTECTION
- (SE) STABILIZED CONSTRUCTION ENTRANCE
- (CW) CONCRETE WASHOUT
- (LA) LINED APRON
- (DC) DITCH CHECK
- (ECB) EROSION CONTROL BLANKET NAG SC150 (OR APPROVED EQUAL)
- (TRM) TURF REINFORCEMENT MAT NAG SC250 (OR APPROVED EQUAL)
- (W) OVERFLOW WEIR
- (TP) TREE PROTECTION
- (PS) PERMANENT SEEDING

NOTE: REFER TO SWPP PLAN SHEETS AND DETAILS FOR ADDITIONAL INFORMATION.

EROSION CONTROL NOTES

1) ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION.
2) EARTHWORK CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE DURING CONSTRUCTION.
3) EARTHWORK CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL.
4) EARTHWORK CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CLEAN PUBLIC ROADWAYS, FREE OF DIRT AND DEBRIS AT ALL TIMES.
5) OTHER EROSION CONTROL MEASURES SHALL BE IMPLEMENTED SHOULD AN INSPECTION OF THE SITE INDICATE A DEFICIENCY.
6) AREAS REACHING SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL PLACEMENT OPERATIONS SHALL BE PERMANENTLY SEEDED OR OTHERWISE LANDSCAPED WITHIN 14 DAYS FROM THE SUSPENSION OR COMPLETION OF GRADING AND TOPSOIL OPERATIONS.
7) SECONDARY CONTAINMENT SHALL BE REQUIRED FOR ANY BULK FUEL STORAGE THAT REMAINS ON-SITE FOR A PERIOD LONGER THAN 7 CALENDAR DAYS.
8) CONTAINMENT MEASURES SHALL BE REQUIRED FOR GENERATORS, PUMPS, MIXERS AND OTHER NON-ELECTRICAL POWERED EQUIPMENT THAT ARE TO BE STATIONED FOR LONGER THAN 24 HOURS.
9) EROSION CONTROL BLANKET SHALL BE PROVIDED IN ALL GREEN AREAS WITH SIDE SLOPES OF 4:1 OR STEEPER.
10) ALL GREEN AREAS SHALL BE DRESSED WITH A MINIMUM OF 7" OF TOPSOIL AND PERMANENT SEEDING.
11) ALL VEGETATIVE CLEARING WORK SHALL BE COMPLETED BETWEEN AUGUST 16TH AND APRIL 30TH.

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
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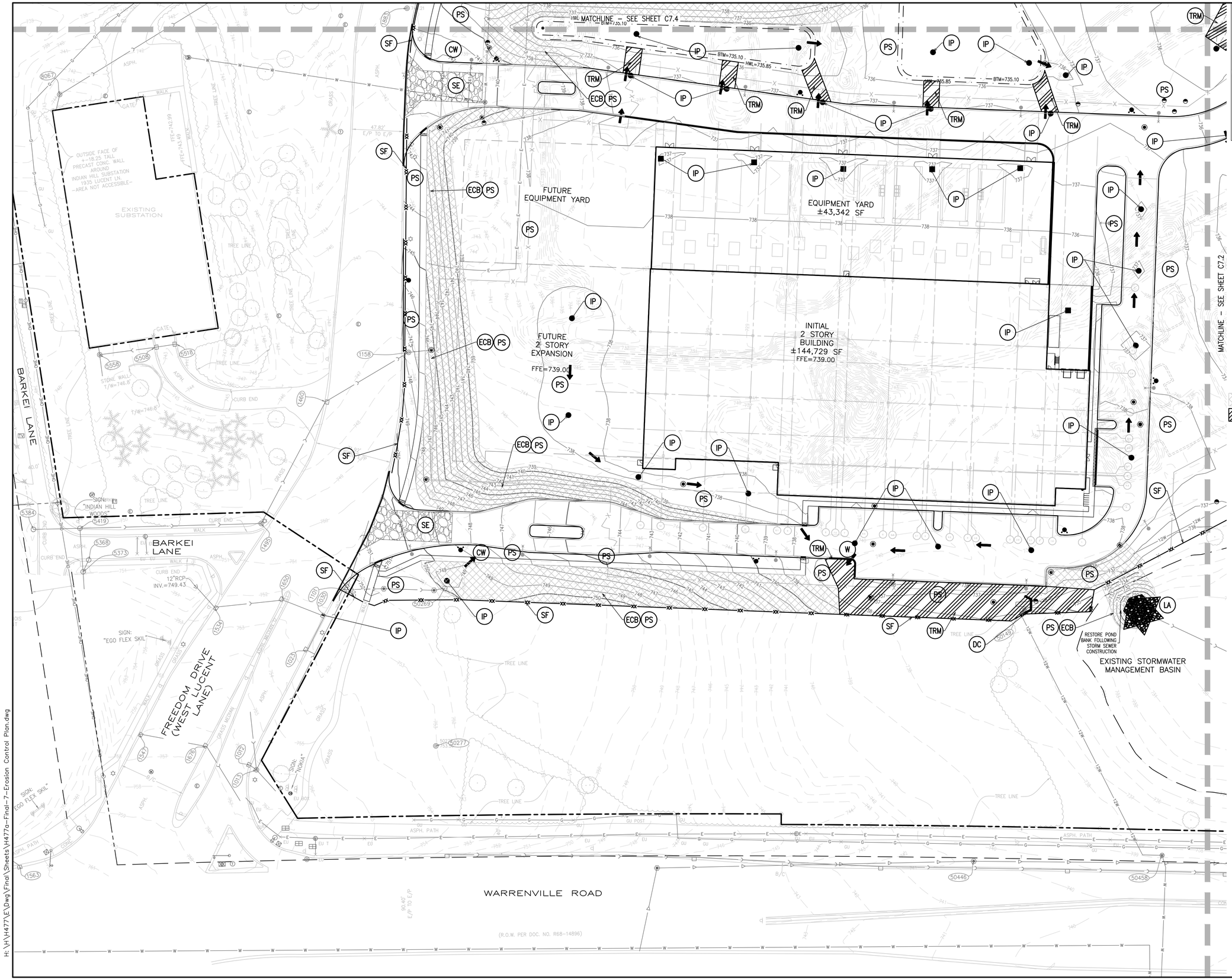
EROSION CONTROL PLAN - OVERALL

1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

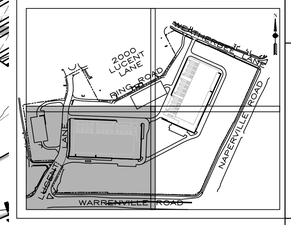
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H477a
1" = 80'
C7.0

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N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C7.0 FOR EROSION CONTROL NOTES.

EROSION CONTROL LEGEND

- (SF) SILT FENCE
- (IP) INLET PROTECTION
- (SE) STABILIZED CONSTRUCTION ENTRANCE
- (CW) CONCRETE WASHOUT
- (LA) LINED APRON
- (DC) DITCH CHECK
- (ECB) EROSION CONTROL BLANKET NAG SC150 (OR APPROVED EQUAL)
- (TRM) TURF REINFORCEMENT MAT NAG SC250 (OR APPROVED EQUAL)
- (W) OVERFLOW WEIR
- (TP) TREE PROTECTION
- (PS) PERMANENT SEEDING

NOTE: REFER TO SWPP PLAN SHEETS AND DETAILS FOR ADDITIONAL INFORMATION.

No.	Description	Date
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EROSION CONTROL PLAN - SOUTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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MATCHLINE – SEE SHEET C7.3

MATCHLINE – SEE SHEET C7.1

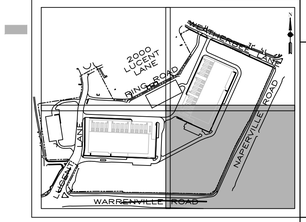
RESTORE POND BANK FOLLOWING STORM SEWER CONSTRUCTION

EXISTING STORMWATER MANAGEMENT BASIN

WARRENVILLE ROAD

NAPERVILLE ROAD

N.T.S. KEY MAP



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C7.0 FOR EROSION CONTROL NOTES.

EROSION CONTROL LEGEND

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1	ORIGINAL PLAN DATE	4/7/25

EROSION CONTROL PLAN – SOUTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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C7.2

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MATCHLINE – SEE SHEET C7.4

MATCHLINE – SEE SHEET C7.2

EX. RING ROAD TO REMAIN

WEATHERBEE LANE

NAPERVILLE ROAD

EXISTING STORMWATER MANAGEMENT BASIN

POSSIBLE WATER WELL

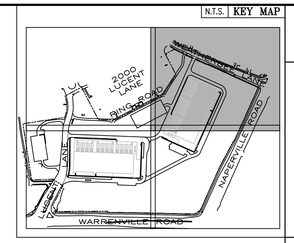
EXISTING CHILLER ENCLOSURE

3" DIAM. PVC VENT PIPE 2' TALL

SIGN "NO OUTLET"

SIGN "STOP"

N.T.S. **KEY MAP**



N

GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

REFER TO SHEET C7.0 FOR EROSION CONTROL NOTES.

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EROSION CONTROL PLAN – NORTHEAST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

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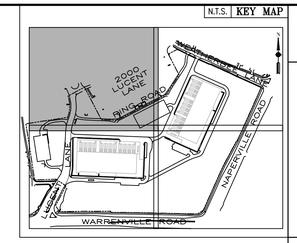
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1" = 40'

C7.3

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N.T.S. **KEY MAP**



No.	Description	Date
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3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

EROSION CONTROL PLAN - NORTHWEST

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

N

GRAPHIC SCALE 1"= 40'

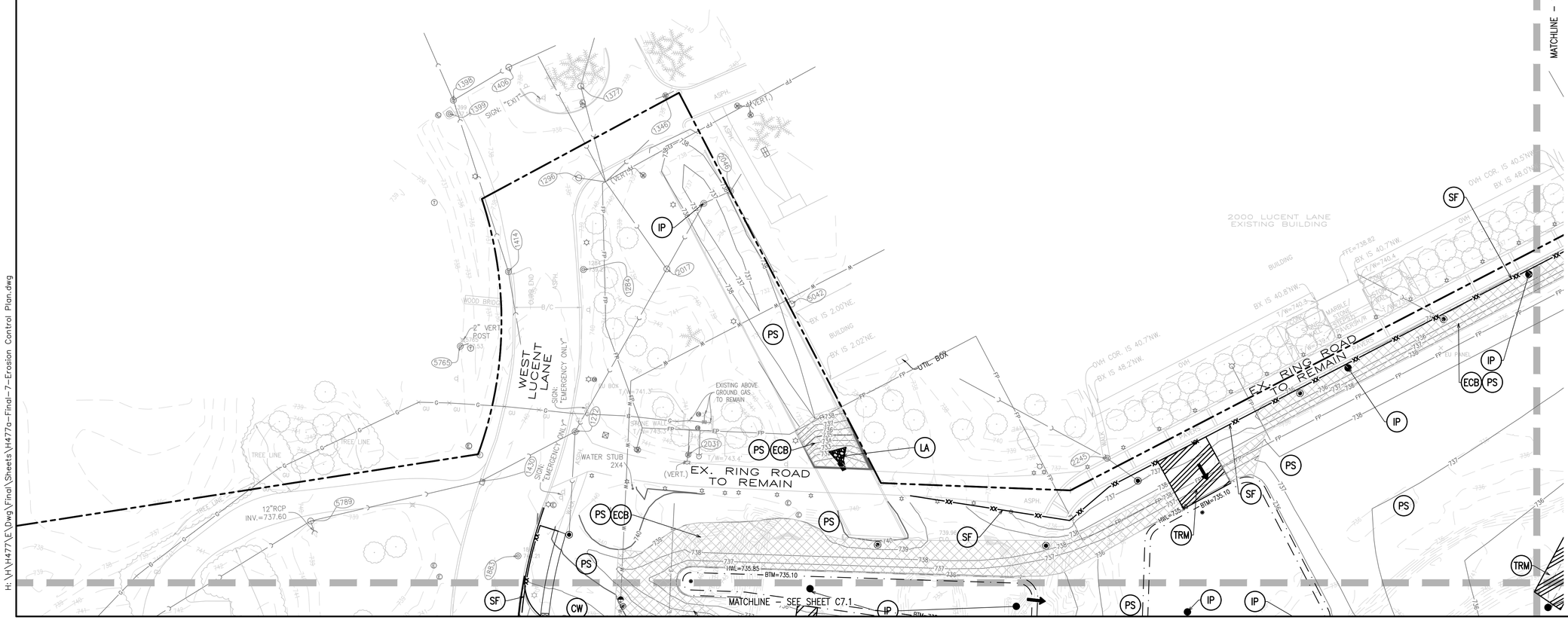
0 20' 40' 80'

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NOTE: REFER TO SWPP PLAN SHEETS AND DETAILS FOR ADDITIONAL INFORMATION.



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CONTROL MEASURE GROUP	CONTROL MEASURE	APPL.	KEY	CONTROL MEASURE CHARACTERISTICS	TEMP.	PERMANT	MAINTENANCE FREQUENCY
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	X	TS	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.	X		REDO ANY FAILING AREAS.
	PERMANENT SEEDING	X	PS	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS SEDIMENT FROM WATER. MAY BE PART OF FINAL LANDSCAPE PLAN.		X	REDO ANY FAILING AREAS.
	DORMANT SEEDING	X	DS	SAME AS PERMANENT SEEDING EXCEPT IS DONE DURING DORMANT SEASON. HIGHER RATES OF SEED APPLICATION ARE REQUIRED.	X	X	RE-SEED IF NEEDED.
	SODDING	X	SO	QUICK PERMANENT COVER TO CONTROL EROSION. QUICK WAY TO ESTABLISH VEGETATION FILTER STRIP. CAN BE USED ON STEEP SLOPES OR IN DRAINAGE WAYS WHERE SEEDING MAY BE DIFFICULT.	X	X	N/A
NON VEGETATIVE SOIL COVER	MACHINE TRACKING	X	MC	PROVIDES SOIL ROUGHING FOR EROSION CONTROL.		X	N/A
	POLYMER	X	P	ADDED INSURANCE OF A SUCCESSFUL TEMPORARY OR PERMANENT SEEDING. PROVIDES TEMPORARY COVER WHERE VEGETATION CANNOT BE ESTABLISHED.	X	X	REAPPLY EVERY 1½ MONTHS.
	AGGREGATE COVER	X	AG	PROVIDES SOIL COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.	X	X	CLEAN UP DIRT FROM STONE AS NEEDED.
	PAVING	X	PV	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.		X	N/A
DIVERSIONS	RIDGE DIVERSION	X	RD	TYPICALLY USED ABOVE SLOPES TO COLLECT FLOW AND TRANSFER DOWNSLOPE.	X	X	CLEAN SILT OUT WHEN HALF-FULL.
	CHANNEL DIVERSION	X	CD	TYPICALLY USED TO DIVERT FLOW.	X	X	REPLACE PROTECTION WHEN NEEDED.
	COMBINATION DIVERSION	X	DIC	TYPICALLY USED ANYWHERE ON A SLOPE. SOIL TAKEN OUT OF CHANNEL IS USED TO BUILD THE RIDGE.	X	X	REPLACE PROTECTION WHEN NEEDED.
	CURB AND GUTTER	X	CG	SPECIAL CASE OF DIVERSION USED IN CONJUNCTION WITH A STREET TO DIVERT WATER FROM AN AREA NEEDING PROTECTION.		X	N/A
	BENCHES	X	B	SPECIAL CASE OF DIVERSION CONSTRUCTED WHEN WORKING ON CUT SLOPES TO SHORTEN LENGTH OF SLOPE AND ADD SLOPE STABILITY.	X	X	N/A
WATERWAYS	VEGETATIVE CHANNEL	X	VC	PROVIDED ADDED STABILITY TO CHANNEL. USED WHEN VELOCITY OF FLOW IS NOT EXTREMELY FAST.	X	X	REDO ANY FAILING AREAS.
	LINED CHANNEL	X	LC	USED WHEN VEGETATION WILL NOT PROTECT THE CHANNEL AGAINST HIGH VELOCITIES OF FLOW OR WHERE VEGETATION CANNOT BE ESTABLISHED.	X	X	REPLACE PROTECTION WHEN NEEDED.
ENCLOSED DRAINAGE	STORM SEWER	X	STM	CAN BE USED TO CONVEY SEDIMENT LADEN WATER TO SEDIMENT BASIN OR IN CONJUNCTION WITH A WATERWAY.		X	CLEAN SEDIMENT OUT.
	UNDER DRAIN	X	UD	USED TO LOWER WATER TABLE AND INTERCEPT GROUNDWATER FOR BETTER VEGETATION GROWTH AND SLOPE STABILITY. USED TO CARRY BASE FLOW IN WATERWAYS AND TO DEWATER SEDIMENT BASINS.	X	X	N/A
SPILLWAYS	STRAIGHT PIPE SPILLWAY	X	SPS	USED FOR RELATIVELY SMALL VERTICAL DROPS AND SMALL FLOWS OF WATER.		X	CLEAN OUT CONSTRUCTION DEBRIS.
	DROP INLET PIPE SPILLWAY	X	DIS	SAME AS PIPE SPILLWAY EXCEPT LARGER FLOWS AND LARGE VERTICAL DROPS CAN BE ACCOMMODATED.		X	CLEAN OUT CONSTRUCTION DEBRIS.
	WEIR SPILLWAY	X	W	USED FOR RELATIVELY SMALL VERTICAL DROPS AND FLOWS MUCH GREATER THAN PIPE STRUCTURES.	X	X	CLEAN OUT CONSTRUCTION DEBRIS.
	BOX INLET WEIR SPILLWAY	X	BS	SAME AS WEIR SPILLWAY EXCEPT LARGER FLOWS CAN BE ACCOMMODATED BECAUSE OF LOWER WEIR LENGTH.	X	X	CLEAN OUT CONSTRUCTION DEBRIS.
OUTLETS	LINED APRON	X	LA	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURES.	X	X	REPAIR DISLODGED STONES OR EROSION UNDER RIP-RAP AS NEEDED
SEDIMENT BASINS	SEDIMENT BASIN	X	SB	USED TO COLLECT SMALLER PARTICLES - DETAIN WATER WITH CONTROLLED RELEASE.	X	X	CLEAN SEDIMENT OUT WHEN HALF-FULL.
	SEDIMENT TRAP	X	ST	USED TO COLLECT LARGER PARTICLES - DETAIN WATER WITH CONTROLLED RELEASE.	X	X	CLEAN SEDIMENT OUT WHEN HALF-FULL.
SEDIMENT FILTERS	SILT FENCE	X	SF	USED FOR SINGLE LOTS OR DRAINAGE AREAS LESS THAN 1/2 ACRE TO FILTER SEDIMENT FROM RUNOFF.	X		CLEAN SEDIMENT OUT WHEN SILT IS HALF-FULL. REPAIR ANY DAMAGED SILT FENCE WHEN NEEDED.
	VEGETATIVE FILTER	X	VF	USED ALONG DRAINAGE WAYS OR PROPERTY LINES TO FILTER SEDIMENT FROM RUNOFF. SIZE MUST BE INCREASED IN PROPORTION TO DRAINAGE AREA.	X	X	REDO ANY FAILING AREAS.
MUD AND DUST CONTROL	STABILIZED CONST. ENTRANCE	X	SE	PREVENT MUD FROM BEING PICKED UP AND CARRIED OFF-SITE.	X	X	SCRAPE MUD AND REPLACE STONE AS NEEDED.
	DUST CONTROL	X	DT	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.	X	X	RE-APPLY AS NEEDED.
EROSION CONTROL	EROSION CONTROL BLANKET	X	ECB	PROTECTS SOIL, SEED AND HELPS GROW VEGETATION.			REPLACE AS NEEDED
	TURF REINFORCEMENT MAT	X	TRM	REINFORCES TURF IN CHANNELS AND SHORELINES.			REPLACE AS NEEDED
	CELLULAR CONFINEMENT	X	CF	USED TO HOLED TOPSOIL ON STEEP SLOPES.			REPLACE AS NEEDED
	GABIONS	X	GA	USED TO PREVENT EROSION IN VERY HIGH FLOW AREAS.			REPLACE AS NEEDED
	GEOTEXTILE FABRIC	X	GF	USED FOR EROSION / SEDIMENT CONTROL/ SEPARATION / STABILIZATION.			REPLACE AS NEEDED
	GEOBLOCK POROUS PAVEMENT	X	PP	USED FOR FIRE LANE ACCESS / VEGETATIVE PAVEMENT.			REPLACE AS NEEDED
SEDIMENT CONTROL	INLET PROTECTION	X	IP	USED FOR PROTECTION OF INLETS.			REPLACE OR CLEAN WHEN CLOGGED.
	SLOPE INTERRUPT	X	SI	USED TO BREAK UP THE FLOW ON A SLOPE.			CLEAN OUT WHEN HALF-FULL OF SILT.
	DITCH CHECK	X	DC	USED FOR FLOW SEDIMENT CONTROL IN SWALES AND CHANNELS.			CLEAN OUT WHEN HALF-FULL OF SILT.
	FLOC LOG	X	FL	USED TO CLARIFY WATER THAT HAS SEDIMENT IN THE WATERY COLUMN.			REPLACE WHEN HALF DISSOLVED.
	SILT CURTAIN	X	SC	USED FOR SEDIMENT CONTROL IN STREAM / POND.			REPLACE WHEN FABRIC IS TORN OR HOLES BEGIN TO FORM.
	PUMPING DISCHARGE BAG	X	PB	USED FOR PUMP DISCHARGE LINES.			REPLACE WHEN HALF-FULL, FABRIC IS TORN, OR HOLES BEGIN TO FORM.
	CONCRETE WASHOUT	X	CW	FOR CONCRETE TRUCKS TO WASHOUT.			CLEAN OUT WHEN HALF-FULL, CLEAN WASHOUT GRAVEL AREA AS NEEDED.
	STREET SWEEPING	X	SS	USED TO PREVENT SILT BUILD UP IN STREETS.			CLEAN ONCE A WEEK, OR AS NEEDED TO KEEP STREET CLEAN.

SEEDING CHART

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			C**						→			
MULCHING	F											→

A KENTUCKY BLUEGRASS 90 LBS./ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS./ACRE.

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.

*** MOW LAWNS AS NECESSARY

OBSERVATION & MAINTENANCE SCHEDULE

ACTIVITY	RESPONSIBLE PARTY	DURATION
STABILIZATION DURING CONSTRUCTION-MAINTENANCE	CONTRACTOR	DURING CONSTRUCTION
STABILIZATION DURING CONSTRUCTION-OBSERVATION	DEVELOPER/OWNER	WEEKLY & AFTER EACH RAINFALL EVENT IN EXCESS OF 0.5".
VEGETATION MAINTENANCE	CONTRACTOR	1 YEAR FROM COMPLETION
VEGETATION STABILIZATION MAINTENANCE	DEVELOPER/OWNER	ONGOING FROM CONSTRUCTION COMPLETION

NOTES:

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for Stormwater Discharges from Construction Site Activities and Soil Erosion and Sediment Control Ordinance for the County.

1. Site Description.

a. The following is a description of the construction activity following mass grading which is the subject of this plan:

The proposed development consists of construction of Industrial Development
The construction activities for site improvements will include:
mass grading, pavement construction, installation of utilities including storm sewers, soil erosion and sedimentation control measures, as a minimum.

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation, and grading:

The sequence of the construction activities may be as follows: 1) install silt filter fence and stabilized construction entrance, 2) mass grading, 3) underground utilities installation, 4) fine grading in pavement area and 5) pavement construction. The soil erosion and sedimentation control items will be constructed as needed during the above construction activities.

c. The total area of the construction site is estimated to be 41.43 acres.

The total area of the site that it is estimated to be disturbed by excavation, grading, or other activities, is ±23.94 acres.

d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study, titled Stormwater Management for 1960 West Lucent Lane prepared by Jacob & Hefner Associates, Inc. which is hereby incorporated by reference in this plan.
The estimated proposed overall site runoff coefficient is .____

e. Existing data describing soils or quality of discharge (soils report if available) Poor/Fair/Good/Not Available

f. Name of receiving water(s): Eastern Branch of the DuPage River
g. Name of ultimate receiving water(s): DuPage River
h. Wetland acreage: 0.00 acre

2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b above. For each measure discussed, the contractors will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan.

a. Erosion and Sediment Controls.

(i) STABILIZATION PRACTICES. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated within 1 working day in portions of the site where construction activities have temporarily or permanently ceased and must be completed within 14 calendar days after the construction activity in that portion of the site has ceased on all disturbed portions of the site where construction activity will not occur for a period of 14 or more calendar days.

Where the initiation of stabilization measures after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall by initiated as soon as practicable thereafter.

The following interim and permanent stabilization practices, as a minimum, will be implemented to stabilize the disturbed area of the site:

1. Permanent seeding
2. Silt filter fence
3. Vegetative Filter
4. Stabilized construction entrance
5. Barrier filter

(ii) STRUCTURAL PRACTICES. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Detention Pond
2. Storm sewer system
3. Rip-rap for outlet protection
4. Permanent seeding

(iii) DUST CONTROL: Dust Control shall be provided per standard 825 of Illinois Urban Manual. Following are the dust control that can be used.

1. Irrigation
2. Spray on adhesive
3. Vegetative cover
4. Mulching

b. Stormwater Management.

(i) Provided below is a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The practices selected for implementation were determined on the basis of the technical guidance contained in IEPA's Standard Specifications for Soil Erosion and Sedimentation Control, and other ordinances listed in the Specifications.

The stormwater pollutant control measures shall include:

1. Silt filter fence
2. Barrier filters
3. Storm sewers
4. Retention/Detention ponds

(ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Stormwater Management Control includes:

1. Rip-rap for outlet protection
2. Ditch check

c. Other Controls.

(i) Waste Disposal. The solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed off-site by the contractor. The contractor is responsible to acquire any permit required for such disposal. Burning on the site will not be permitted. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.

(ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

The sanitary sewage will be discharged to the proposed sanitary sewer constructed per IEPA and local standards.

d. Approved State or Local Plans.

The management practices, controls, and other provisions contained in this plan are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Standards and Specifications for Soil Erosion and Sediment Control dated October 1987, Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Plan, and the Municipal Subdivision Ordinance. Requirements specified in sediment and erosion control site plans or site permits or stormwater management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan and Standard Specifications.

Stabilized construction entrance: The entrance shall be maintained to prevent tracking of sediment onto public streets. This will be done by top dressing with additional stones, remove and replace top layer of stones or washing the entrance. The sediment washed on the public right-of-way will be removed immediately.

Vegetative erosion control measures: The vegetative growth of temporary and permanent seeding, sodding, vegetative channels, vegetative filter, etc. shall be maintained periodically and supply adequate watering and fertilizer. The vegetative cover shall be removed and reseeded as necessary.

Sedimentation basins/traps: The sediments shall be removed when 40-50 percent of the total original capacity is occupied by the sediment. In no case shall the sediment be built up to more than 1 foot below the crest elevation. At this stage, the basin shall be cleaned out to restore its original volume.

Silt filter fence: The damaged silt filter fence shall be restored to meet the standards or removed and replaced as needed

Straw bale barrier filters: The straw bale barrier filter shall be inspected frequently and shall be repaired or removed and replaced as needed.

Rip-Rap outlet protection: It shall be inspected after high flows for any scour beneath the Rip-Rap or for stones that have been dislodged. It shall be repaired immediately.

4. Inspections

The Owner, or Owner's representative shall provide qualified personnel to inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and location where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm (or by the end of the following business or work day) that consists of 0.5 inches or greater of rainfall or a discharge occurs due to snowmelt.

a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.

b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.

c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the stormwater pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI.G of the general permit.

d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall 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. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit. The report of noncompliance shall be mailed to the following address:

ALL PACKAGES:
Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
2520 Iles Ave
Springfield, IL 62794-9276

ALL LETTERS:
Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
Post Office Box 19276
Springfield, IL 62794-9276

5. Non-Stormwater Discharge

Except for flows from fire fighting activities, sources of non-stormwater that may be combined with stormwater discharges associated with the residential activity addressed in this plan, are described below:

1. Water main flushing
2. Fire hydrant flushing
3. Watering for dust control
4. Irrigation drainage for vegetative growth for seeding, etc.

The pollution prevention measures, as described below, will be implemented for non-stormwater components of the discharge:

The fire hydrant and water main shall not be flushed directly on the exposed area or subgrade of the pavement. Hoses shall be used to direct the flow into the storm sewer system.

The erosion due to irrigation of seeding shall be considered minor.

NPDES CERTIFICATE

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR00000000, issued by the Environmental Protection Agency on

PROJECT TITLE: SITE IMPROVEMENT PLANS FOR 1960 WEST LUCENT LANE

PROJECT LOCATION: NAPERVILLE (CITY/VILLAGE) DUPAGE (COUNTY) ILLINOIS (STATE)

DEVELOPER: KARIS CRITICAL

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature: _____ Date: _____

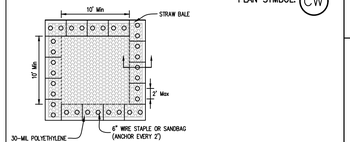
CONTRACTOR/SUBCONTRACTOR CERTIFICATION STATEMENT

Name:	Signature

RIP-RAP DIMENSION TABLE

STRUCTURE NUMBER/POND	INLET PIPE SIZE d (IN)	DISCHARGE Q (CFS)	LENGTH OF APRON La (FT)	MEDIAN RIPRAP SIZE C (IN)	WIDTH OF APRON U/S FACE 3d (FT)	WIDTH OF APRON D/S FACE 3d+La (FT)	DEPTH OF RIP RAP Y (IN)	AREA OF RIP RAP (SQ.YDS.)	VOLUME OF RIP RAP (CU.YDS.)
ALL	12		10	6 (IDOT RR 3)	3.00	13.00	15	8.89	3.7
ALL	15		10	6 (IDOT RR 3)	3.75	13.75	15	9.72	4.1
ALL	18		15	9 (IDOT RR 4)	4.50	19.50	20	20.00	11.1
ALL	21		15	9 (IDOT RR 4)	5.25	20.25	20	21.25	11.8
ALL	24		18	9 (IDOT RR 4)	6.00	24.00	20	30.00	16.7
ALL	27		18	9 (IDOT RR 4)	6.75	24.75	20	31.50	17.5
ALL	30		20	9 (IDOT RR 4)	7.50	27.50	20	38.89	21.6
ALL	36		24	12 (IDOT RR 5)	9.00	33.00	28	56.00	43.6
ALL	42		27	12 (IDOT RR 5)	10.5	37.50	30	72.00	60.0
ALL	48		27	15 (IDOT RR 6)	12.0	39.00	32	76.50	68.0
ALL	54		27	15 (IDOT RR 6)	13.5	40.50	32	81.00	72.0
ALL	60		36	15 (IDOT RR 6)	15.0	51.00	32	132.00	118.0
ALL	72		44	18 (IDOT RR 7)	18.0	62.00	32	195.56	174.0

PLAN SYMBOL: (CW)



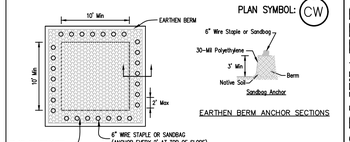
NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
3. Each straw bale is to be staked in place using (2) 2"x2"x4' wooden stakes.

NOTE: A PLASTIC LINED DUMPSTER IS AN ACCEPTABLE ALTERNATIVE

TEMPORARY CONCRETE WASHOUT FACILITY – STRAW BALE

PLAN SYMBOL: (CW)



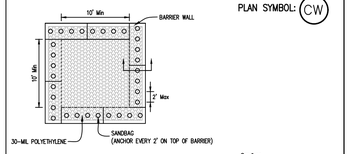
NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

NOTE: A PLASTIC LINED DUMPSTER IS AN ACCEPTABLE ALTERNATIVE

TEMPORARY CONCRETE WASHOUT FACILITY – EARTHEN TYPE

PLAN SYMBOL: (CW)



NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

NOTE: A PLASTIC LINED DUMPSTER IS AN ACCEPTABLE ALTERNATIVE

TEMPORARY CONCRETE WASHOUT FACILITY – BARRIER WALL

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

STORMWATER POLLUTION PREVENTION PLAN

1960 WEST LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

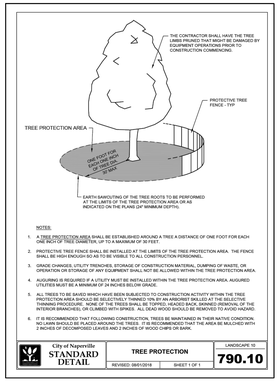
JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

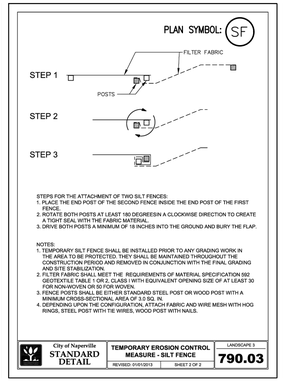
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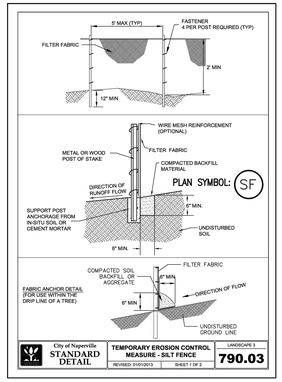
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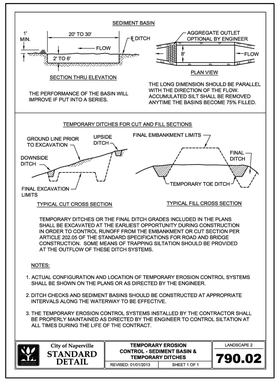
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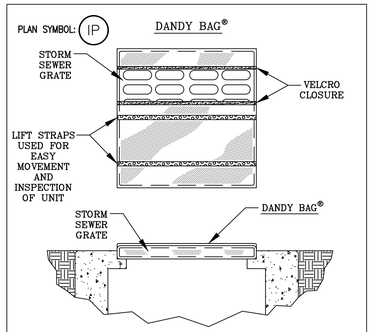
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DANDY BAG® SPECIFICATIONS

HI-FLOW DANDY BAG® (SAFETY ORANGE)

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.40 (90)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
UV Resistence	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
Flow Rate	ASTM D 4491	l/min/m² (gal/min/ft²)	5907 (145)
Permitivity	ASTM D 4491	Sec⁻¹	2.1

*Note: All Dandy Bags® can be ordered with our optional oil absorbent pillows

NOTE: THE DANDY BAG® WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

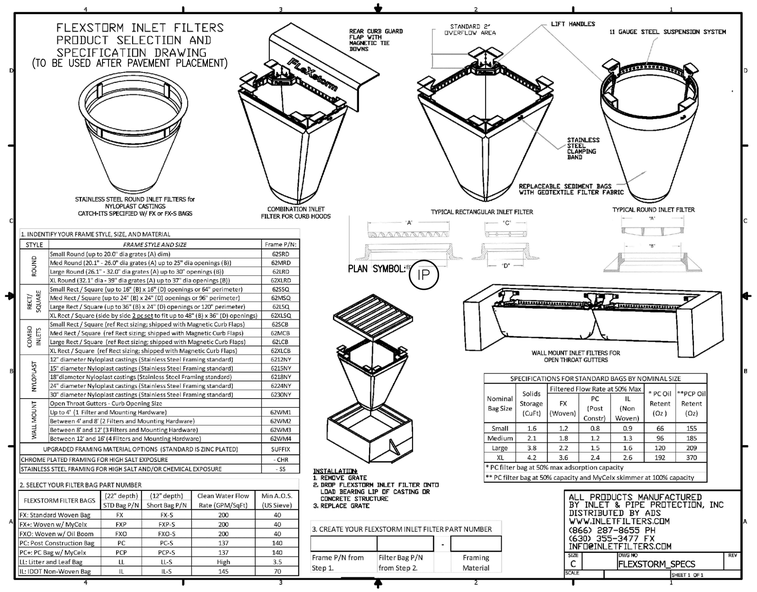
DETAIL OF INLET SEDIMENT CONTROL DEVICE
(TO BE USED PRIOR TO PAVEMENT PLACEMENT)

PROJECT:	DR. BY:
CITY/STATE:	DATE: DR. NO:

INLET PROTECTION PRACTICES

1) INLET PROTECTION BASKETS SHALL BE FLEXSTORM (OR APPROVED EQUAL). INLET PROTECTION BASKETS SHALL BE USED ON EXISTING INLETS THAT ARE LOCATED WITHIN PAVED AREAS

2) INLET PROTECTION BAGS SHALL BE DANDYBAG (OR APPROVED EQUAL). INLET PROTECTION BAGS SHALL BE USED ON ALL ON-SITE STORM SEWER GRATES UNTIL UPSTREAM TRIBUTARY AREAS OF STORM STRUCTURES ARE STABILIZED.



1. INDENTIFY YOUR FRAME STYLE, SIZE, AND MATERIAL

STYLE	FRAME STYLE AND SIZE	Frame P/N:
ROUND	Small Round (up to 20.0" dia grates (A) dims)	625RD
	Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (Bi)	626MD
	Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (Ii))	632RD
	XL Round (32.1" dia - 39" dia grates (A) up to 33" dia openings (Bi))	626XRD
RECT/ SQUARE	Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	625SQ
	Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	624MSQ
	Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	625LSQ
	XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	626LSQ
COMBO INLETS	Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	625CB
	Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	626MCB
	Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	632CB
	XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	626LCB
TAYLOR-DUNN	12" diameter Nylofast castings (Stainless Steel Framing standard)	623NY
	15" diameter Nylofast castings (Stainless Steel Framing standard)	623SNY
	18" diameter Nylofast castings (Stainless Steel Framing standard)	623BNY
	24" diameter Nylofast castings (Stainless Steel Framing standard)	624NY
	30" diameter Nylofast castings (Stainless Steel Framing standard)	623ONY
SMALL MOUNT	Open Throat Gutters - Curb Opening Size: Up to 4" (1 Filter and Mounting Hardware)	62VNM1
	Between 4" and 8" (2 Filters and Mounting Hardware)	62VNM2
	Between 8" and 12" (3 Filters and Mounting Hardware)	62VNM3
	Between 12" and 16" (4 Filters and Mounting Hardware)	62VNM4
	UPGRADED FRAME/HG MATERIAL OPTIONS (STANDARD IS ZINC PLATED)	SUFFIX
CHROME PLATED FRAME/LG FOR HIGH SALT EXPOSURE		-CHR
STAINLESS STEEL FRAMING FOR HIGH SALT AND/OR CHEMICAL EXPOSURE		- SS

2. SELECT YOUR FILTER BAG PART NUMBER

FLEXSTORM FILTER BAGS	(22" depth) STD Bag P/N	(12" depth) Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
FX- Standard Woven Bag	FX	FX-S	200	40
FX+: Woven w/ MyCelx	FXP	FXP-S	200	40
FXO: Woven w/ Oil Boom	FXO	FXO-S	200	40
PC: Post Construction Bag	PC	PC-S	137	140
PC+: PC Bag w/ MyCelx	PCP	PCP-S	137	140
LL: Litter and Leaf Bag	LL	LL-S	High	1.5
IL: IDOT Non-Woven Bag	IL	IL-S	145	70

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

Frame P/N from Step 1.	Filter Bag P/N from Step 2.	-	Framing Material

INSTALLATION
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER INTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

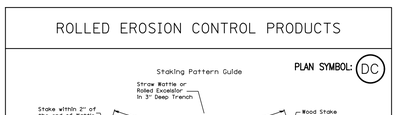
Nominal Bag Size	Solids Storage (Cu/Ft)	Filtered Flow Rate at 50% Max FX (Woven)	PC (Post Const)	IL (Non Woven)	* PC Oil Retent (Oz.)	**PCP Oil Retent (Oz)
Small	1.6	1.2	0.8	0.9	66	155
Medium	2.1	1.8	1.2	1.3	96	185
Large	3.8	2.2	1.5	1.6	120	209
XL	4.2	3.6	2.4	2.6	192	370

* PC filter bag at 50% max adsorption capacity
** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC
DISTRIBUTED BY ADS
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM

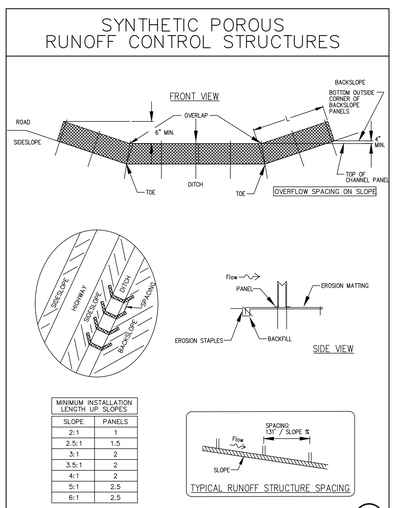
SIZE C | DWG NO. FLEXSTORM_SPECS | REV
SCALE: | SHEET 1 OF 1

ROLLED EROSION CONTROL PRODUCTS



REFERENCE	STANDARD DWG. NO.
Project _____	IUM-514
Designed _____ Date _____	SHEET 1 OF 1
Checked _____ Date _____	DATE 2-19-18
Approved _____ Date _____	

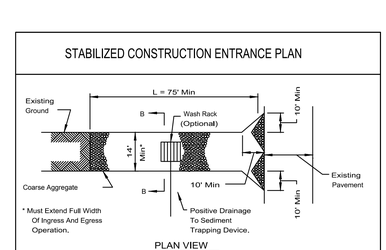
SYNTHETIC POROUS RUNOFF CONTROL STRUCTURES



MINIMUM INSTALLATION LENGTH UP SLOPES	
SLOPE	PANELS
2:1	1
2.5:1	1.5
3:1	2
3.5:1	2
4:1	2
5:1	2.5
6:1	2.5

REFERENCE	STANDARD DWG. NO.
Project _____	IUM-514
Designed _____ Date _____	SHEET 1 OF 1
Checked _____ Date _____	DATE 08-19-2011
Approved _____ Date _____	

STABILIZED CONSTRUCTION ENTRANCE PLAN

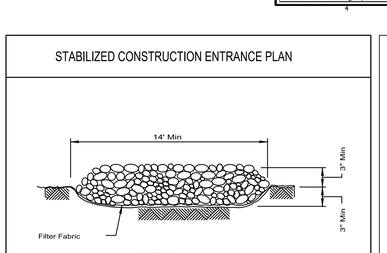


NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class _ or _ and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class _ compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE	STANDARD DWG. NO.
Project _____	IL-630
Designed _____ Date _____	SHEET 1 OF 2
Checked _____ Date _____	DATE 8-18-94
Approved _____ Date _____	

NRCS Natural Resources Conservation Service

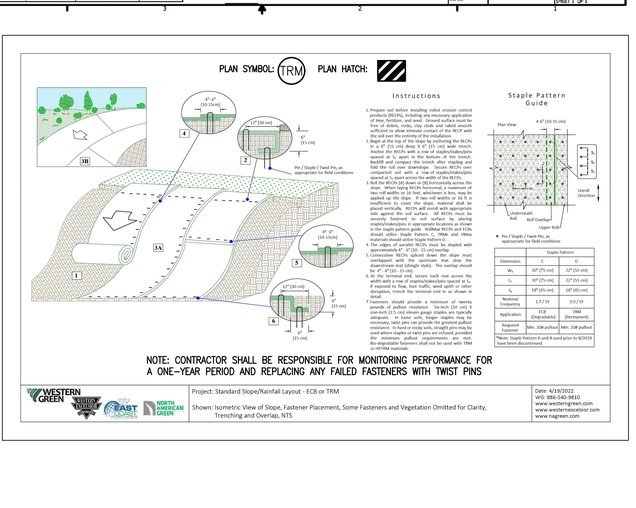
STABILIZED CONSTRUCTION ENTRANCE PLAN

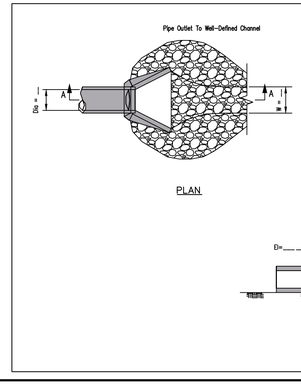


NOTE: FODS TRACKOUT CONTROL MAT SHALL BE AN APPROVED ALTERNATIVE TO THIS STABILIZED CONTRUCTION ENTRANCE PLAN

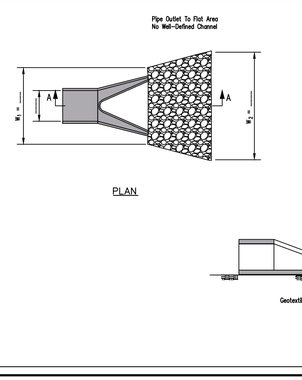
REFERENCE	STANDARD DWG. NO.
Project _____	IL-630
Designed _____ Date _____	SHEET 2 OF 2
Checked _____ Date _____	DATE 8-18-94
Approved _____ Date _____	

NRCS Natural Resources Conservation Service





NOTES:
1. The rock riprap shall meet IDOT requirements for Gradation No. _____ , Quality Designation "A" or as designated by engineer.
2. Geotextile (non-woven, needle punched) Minimum criteria:
   Grab tensile strength (lb) ASTM D 4632 202
   Elongation at failure (%) ASTM D 4632 ..... > 50
   Trapezoidal tear strength (lb) ASTM D 4533 79
   Puncture strength (lb) ASTM D 6241 433
   Ultraviolet light (% retained strength) ASTM D 4355 ..... min 50
   Apparent opening size (AOS) ASTM D 4751 ..... max 0.22 mm (US sieve size 70)
   Permittivity sec⁻¹/ ASTM D 4491 ..... min 0.70
3. Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.
4. Apron shall extend across the channel bottom and up the channel banks to an elevation one foot above the minimum tailwater depth or to the top of bank.
5. Rock thickness d shall be at least 1.5 times the riprap D_{90} size.
6. Apron length L_a and rock riprap shall be sized according to Illinois Urban Manual Rock Outlet Protection standard 910 minimum L_a = 10 ft.



NOTES:
1. The rock riprap shall meet IDOT requirements for Gradation No. _____ , Quality Designation "A" or as designated by engineer.
2. Geotextile (non-woven, needle punched) Minimum criteria:
   Grab tensile strength (lb) ASTM D 4632 202
   Elongation at failure (%) ASTM D 4632 ..... > 50
   Trapezoidal tear strength (lb) ASTM D 4533 79
   Puncture strength (lb) ASTM D 6241 433
   Ultraviolet light (% retained strength) ASTM D 4355 ..... min 50
   Apparent opening size (AOS) ASTM D 4751 ..... max 0.22 mm (US sieve size 70)
   Permittivity sec⁻¹/ ASTM D 4491 ..... min 0.70
3. Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.
4. Apron width W, shall be at least 3 times the culvert pipe diameter. Apron width W_a shall be at L_a plus the pipe diameter.
5. Rock thickness d shall be at least 1.5 times the riprap D_{90} size.
6. Apron length L_a and rock riprap shall be sized according to Illinois Urban Manual Rock Outlet Protection standard 910 minimum L_a = 10 ft.

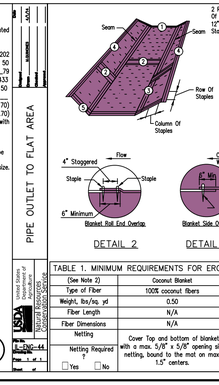
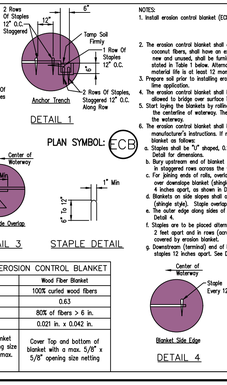
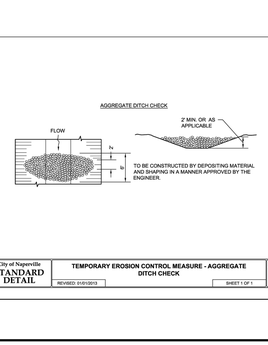


TABLE 1. MINIMUM REQUIREMENTS FOR EROSION CONTROL BLANKET		
(See Note 3)	Coconut Blanket	Wood Fiber Blanket
Type of Fiber	100% coconut fibers	100% curled wood fibers
Weight, lbs/sq. yd	0.50	0.63
Fiber Length	N/A	80% of fibers > 6 in.
Fiber Dimensions	N/A	0.021 in. x 0.042 in.
Netting		
Netting Required ? ☐ Yes ☐ No	Cover Top and bottom of blanket with a max. 5/8" x 5/8" opening size netting, bound to the mat on max. 1.5" centers.	Cover Top and bottom of blanket with a max. 5/8" x 5/8" opening size netting

NOTES:
1. Install erosion control blanket (ECB) over waterway: Waterway Width ____ft
   ECB width _____ ft
   length _____ ft
   Sta. _____ to _____
2. The erosion control blanket shall consist of a machine produced mat of curled wood or coconut fibers, shall have an expected material life of at least 12 months, shall be new and unused, shall be furnished in rolls, and shall meet the minimum requirements stated in Table 1 below. Alternative material may be used as long as the expected material life is at least 12 months.
3. Prepare soil prior to installing erosion control blanket, including seeding, fertilizing, and lime application.
4. The erosion control blanket shall be placed in firm contact with the soil and not be stretched to the extent that it creates open surface irregularities. The blanket shall not be stretched.
5. Start laying the blankets by rolling center blanket in the direction of flow, centered on the centerline of waterway. There shall not be an overlap of blankets at the center of the waterway.
6. The erosion control blanket shall be anchored, overlapped, and stapled according to manufacturer's instructions. If no manufacturer's instructions are available, install the blanket as follows:
   a. Staples shall be "U" shaped, 0.12 in diameter wire or greater (#11 gauge). See Staple Detail for dimensions.
   b. Bury upstream end of blanket in a trench 6 inch wide by 6 inch deep and stapled in staggered rows across the width as shown in Detail 1.
   c. For joining ends of rolls, overlap end of upslope blanket a minimum of 6 inches over downslope blanket (shingle style). Use a double row of staggered staples 4 inches apart, as shown in Detail 2.
   d. Blankets on side slopes shall overlap a minimum 6 inches over the blanket below (shingle style). Staple overlap at 12 inch intervals. See Detail 3.
   e. The outer edge along sides of the blanket shall be stapled every 12 inches. See Detail 3.
   f. Staples are to be placed alternately in columns (in the direction of the waterway) 2 feet apart and in rows (across the waterway) 3 feet apart, throughout the area covered by erosion blanket.
   g. Downstream (terminal) end of blanket shall be stapled with a double row of staggered staples 12 inches apart. See Detail 5.



TEMPORARY EROSION CONTROL MEASURE - AGGREGATE DITCH CHECK



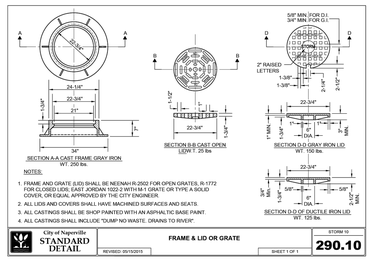
REVISIONS	
5	REVISED PER CITY COMMENTS 10/31/25
4	REVISED PER CITY COMMENTS 09/26/25
3	REVISED PER CITY COMMENTS 07/31/25
2	REVISED PER CITY COMMENTS 6/12/25
1	ORIGINAL PLAN DATE 4/7/25
No.	Description Date

SWPPP DETAILS
1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

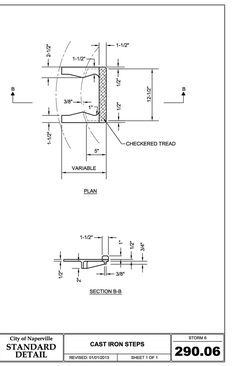
JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

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N.T.S.
C8.1

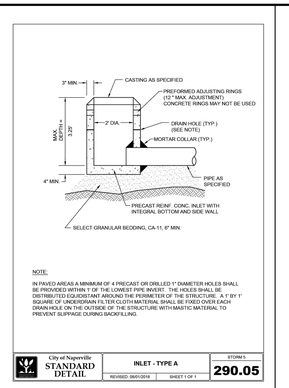
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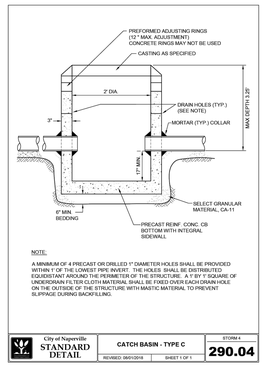
City of Naperville STANDARD DETAIL — FRAME & LID OR GRATE — REVISED: 05/15/2015 — SHEET 1 OF 1 — STORM 10 — **290.10**



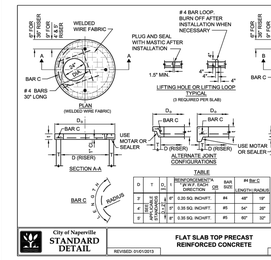
City of Naperville STANDARD DETAIL — CAST IRON STEPS — REVISED: 01/01/2013 — SHEET 1 OF 1 — STORM 6 — **290.06**



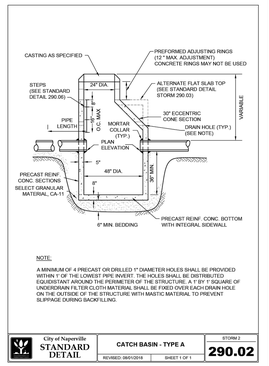
City of Naperville STANDARD DETAIL — INLET - TYPE A — REVISED: 09/01/2016 — SHEET 1 OF 1 — STORM 5 — **290.05**



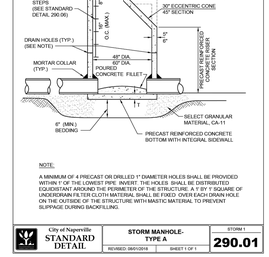
City of Naperville STANDARD DETAIL — CATCH BASIN - TYPE C — REVISED: 09/01/2016 — SHEET 1 OF 1 — STORM 4 — **290.04**



City of Naperville STANDARD DETAIL — FLAT SLAB TOP PRECAST REINFORCED CONCRETE — REVISED: 01/01/2013 — SHEET 1 OF 1 — STORM 3 — **290.03**

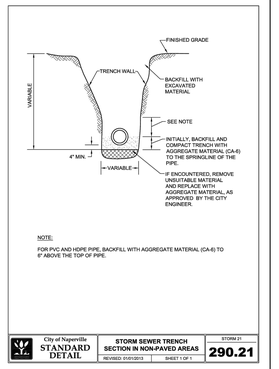


City of Naperville STANDARD DETAIL — CATCH BASIN - TYPE A — REVISED: 09/01/2016 — SHEET 1 OF 1 — STORM 2 — **290.02**

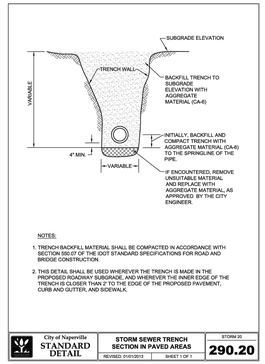


City of Naperville STANDARD DETAIL — STORM MANHOLE-TYPE A — REVISED: 09/01/2016 — SHEET 1 OF 1 — STORM 1 — **290.01**

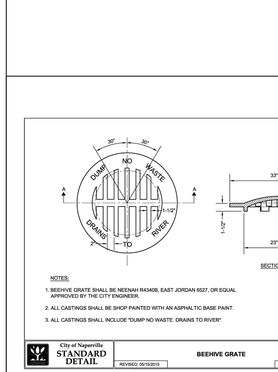
City of Naperville STANDARD DETAIL — GRATING FOR CONCRETE FLARED END SECTION — REVISED: 01/01/2013 — SHEET 1 OF 1 — STORM 22 — **290.22**



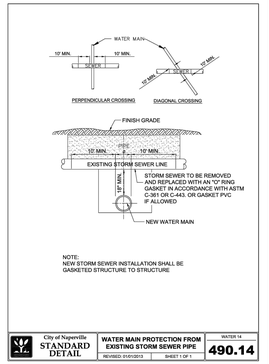
City of Naperville STANDARD DETAIL — STORM SEWER TRENCH SECTION IN NON-PAVED AREAS — REVISED: 01/01/2013 — SHEET 1 OF 1 — STORM 21 — **290.21**



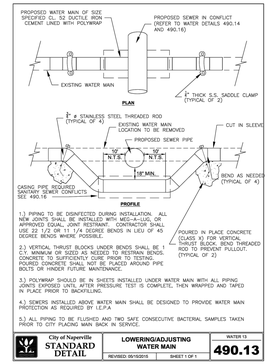
City of Naperville STANDARD DETAIL — STORM SEWER TRENCH SECTION IN PAVED AREAS — REVISED: 01/01/2013 — SHEET 1 OF 1 — STORM 20 — **290.20**



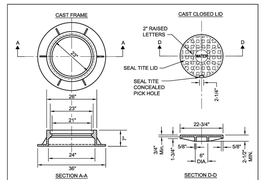
City of Naperville STANDARD DETAIL — BEEHIVE GRATE — REVISED: 05/15/2015 — SHEET 1 OF 1 — STORM 14 — **290.14**



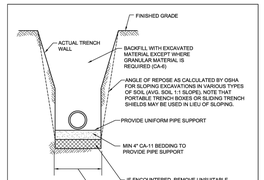
City of Naperville STANDARD DETAIL — WATER MAIN PROTECTION FROM EXISTING STORM SEWER PIPE — REVISED: 01/01/2013 — SHEET 1 OF 1 — WATER 14 — **490.14**



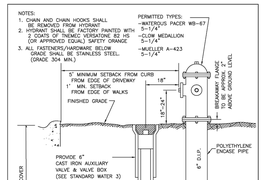
City of Naperville STANDARD DETAIL — LOWERING/ADJUSTING WATER MAIN — REVISED: 05/15/2015 — SHEET 1 OF 1 — WATER 13 — **490.13**



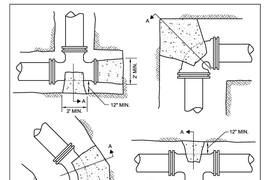
City of Naperville STANDARD DETAIL — WATER MAIN TRENCH SECTION — REVISED: 01/01/2013 — SHEET 1 OF 1 — WATER 10 — **490.10**



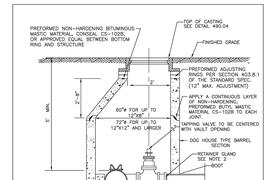
City of Naperville STANDARD DETAIL — WATER MAIN TRENCH SECTION — REVISED: 01/01/2013 — SHEET 1 OF 1 — WATER 10 — **490.10**



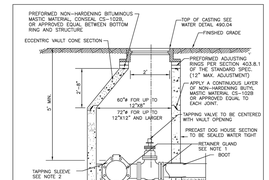
City of Naperville STANDARD DETAIL — HYDRANT — REVISED: 05/15/2015 — SHEET 1 OF 1 — WATER 8 — **490.06**



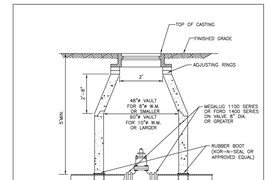
City of Naperville STANDARD DETAIL — THRUST BLOCK — REVISED: 05/15/2015 — SHEET 1 OF 1 — WATER 11 — **490.11**

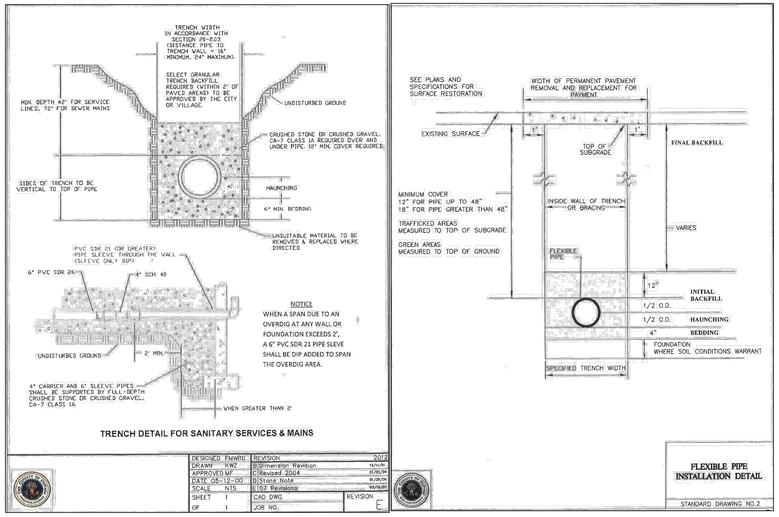


City of Naperville STANDARD DETAIL — VALVE VAULT WITH STAINLESS STEEL SLEEVE PRESSURE TAP — REVISED: 01/01/2013 — SHEET 1 OF 1 — WATER 3 — **490.03**



City of Naperville STANDARD DETAIL — VALVE VAULT WITH CAST/DUCTILE IRON SLEEVE PRESSURE TAP — REVISED: 01/01/2013 — SHEET 1 OF 1 — WATER 2 — **490.02**


TOP OF CASTING
FINISHED GRADE
ADJUSTING RINGS
2'-6"
5' MIN.
45° VAULT FOR 8"Ø W.M. OR SMALLER 60" DIA. VAULT FOR 10"Ø W.M. OR LARGER
MEGALUG 1100 SERIES OR FORD 1400 SERIES OR VALVE OR GREATER
RUBBER BOOT (FOR-N-SEAL OR APPROVED EQUAL)
6"
6" MIN.
CA-11 BEDDING
SOLID PRECAST INTEGRAL BOTTOM
6" MIN.
6" MIN.
6" MIN.
PRECAST CONC. BLOCK SUPPORT
1. VALVE MUST ALIGN WITH THE CENTER OF VAULT OPENINGS.
2. CONCENTRIC CON



DESIGNED FM/RD	REVISION	2012
DRAWN KW	B Dimension Revision	10/01/09
APPROVED MF	C Revised 2004	01/05/04
DATE 05-12-00	D Slope Note	01/05/04
SCALE NTS	E 07 Revisions	05/15/07
SHEET 1	CAD DWG.	REVISION E
OF 1	JOB NO.	

ALT. MATERIALS FOR WALLS	D	T (MIN.)
PRECAST REIN. CONCRETE SECT.	4 FEET	4 IN
	5 FEET	5 IN
	6 FEET	6 IN

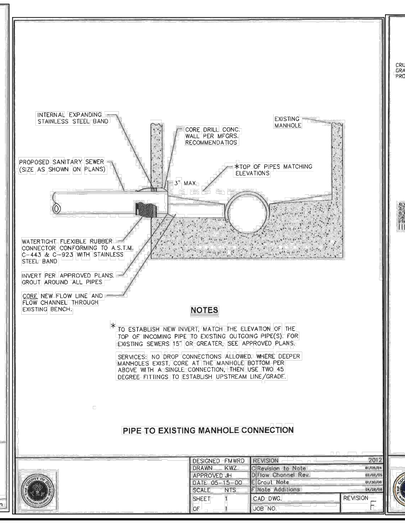
NOTE: SANITARY MANHOLES SUBJECT TO SATURATED SOIL CONDITIONS OR SURFACE SUBSURFACE AND ASHPHALT EMULSION SHALL BE EQUIPPED WITH CHIMNEY SEALS AND WATER TIGHT MANHOLE COVERS FOR ALL DUPAGE COUNTY MANHOLES.

NOTE: MANHOLE STEPS WHEN REQUIRED, SHALL BE FURNISHED AND INSTALLED AS SHOWN ON THE PLANS IN ACCORDANCE WITH ARTICLE 32-5

TYPICAL SANITARY MANHOLE "A"

REFERENCE SECTION 32 FOR SANITARY SEWER MANHOLE SPECIFICATIONS — STANDARD DRAWING NO.3asn

DESIGNED FM/RD	REVISION	2012
DRAWN KW	G Revision to Note	01/05/09
APPROVED JH	Offset Channel Rec	01/05/09
DATE 05-15-00	Grout Note	01/05/09
SCALE NTS	Note Additions	01/05/09
SHEET 1	CAD DWG.	REVISION F
OF 1	JOB NO.	



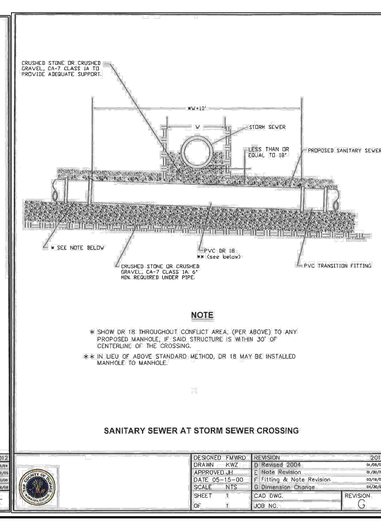
NOTES

* TO ESTABLISH NEW INVERT; MATCH THE ELEVATION OF THE TOP OF INCOMING PIPE TO EXISTING OUTGOING PIPE(S). FOR EXISTING SEWERS 15" OR GREATER, SEE APPROVED PLANS.

SERVICES: NO DROP CONNECTIONS ALLOWED. WHERE DEEPER MANHOLES EXIST, CORE AT THE MANHOLE BOTTOM PER ABOVE WITH A SINGLE CONNECTION, THEN USE TWO 45 DEGREE FITINGS TO ESTABLISH UPSTREAM LINE/GRADE.

PIPE TO EXISTING MANHOLE CONNECTION

DESIGNED FM/RD	REVISION	2012
DRAWN KW	D Revised 2004	01/05/04
APPROVED JH	C Note Revision	01/05/09
DATE 05-15-00	F Fitting & Note Revision	05/15/07
SCALE NTS	D Dimension Change	01/05/09
SHEET 1	CAD DWG.	REVISION G
OF 1	JOB NO.	



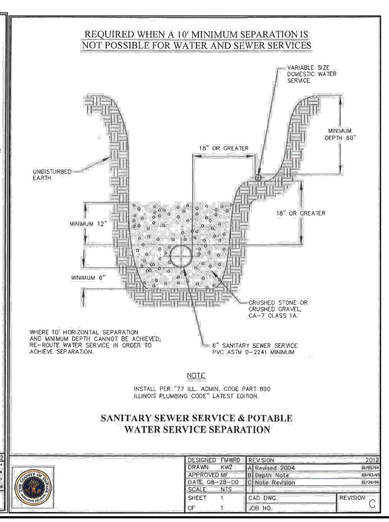
NOTE

* SHOW DR 18 THROUGHOUT CONFLICT AREA, (PER ABOVE) TO ANY PROPOSED MANHOLE, IF SAID STRUCTURE IS WITHIN 30' OF CENTERLINE OF THE CROSSING.

** IN LIEU OF ABOVE STANDARD METHOD, DR 18 MAY BE INSTALLED MANHOLE TO MANHOLE.

SANITARY SEWER AT STORM SEWER CROSSING

DESIGNED FM/RD	REVISION	2012
DRAWN KW	D Revised 2004	01/05/04
APPROVED MF	C Note Revision	01/05/09
DATE 05-15-00	D Dimension Change	01/05/09
SCALE NTS		
SHEET 1	CAD DWG.	REVISION C
OF 1	JOB NO.	

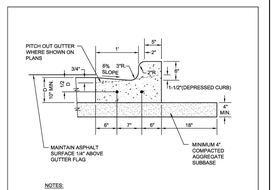


NOTE

INSTALL PER "77 ILL. ADMIN. CODE PART 890 ILLINOIS PLUMBING CODE" LATEST EDITION.

SANITARY SEWER SERVICE & POTABLE WATER SERVICE SEPARATION

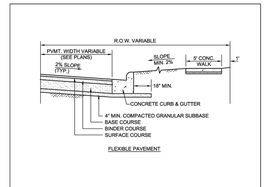
DESIGNED FM/RD	REVISION	2012
DRAWN KW	A Revised 2004	01/05/04
APPROVED MF	B Depth Note	05/15/07
DATE 08-15-00	C Note Revision	01/05/09
SCALE NTS		
SHEET 1	CAD DWG.	REVISION C
OF 1	JOB NO.	



NOTES:

1. THE TRENCH SHALL BE BACKFILLED WITH AGGREGATE (CA-6) AND COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY. TRENCH SPOILS OR EXCAVATED MATERIAL SHALL BE DISCARDED BY THE CONTRACTOR, AT HIS EXPENSE, AT DUMP SITES OR IN A SUITABLE FASHION AS APPROVED BY THE CITY ENGINEER.
2. PRIOR TO PLACING OF P.C.C. CONCRETE, THE EXPOSED EDGES OF ALL EXISTING PAVEMENT SHALL BE SAW CUT TO PROVIDE A SMOOTH, CLEAN EDGE, FREE OF LOOSE MATERIAL.
3. EXCAVATIONS SHALL BE PROTECTED BY BARRICADES WITH FLASHING LIGHTS. A 1" STEEL PLATE SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR AT LOCATIONS WHERE ADJUSTMENTS ARE LOCATED IN TRAVEL LANES UNTIL THE SURFACE RESTORATION IS COMPLETE. THE PLATE SHALL BE PROTECTED FROM SLIDING AND PROVIDED WITH BITUMINOUS RAMPS.
4. TRENCH TO BE COMPACTED IN CONFORMANCE WITH ARTICLE 603.08(METHOD 3) OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

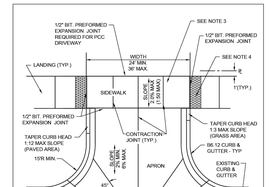
City of Naperville STANDARD DETAIL	UTILITY TRENCH PAVING SECTION (RIGID PAVEMENTS)	PAVEMENT 12
	REVISED: 01/01/2013 SHEET 1 OF 1	590.12



NOTES:

1. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
2. SIDEWALK THICKNESS AT CURB RAMPS SHALL BE A MINIMUM OF 6" PCC ON 2" AGGREGATE SUB BASE.
3. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
4. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

City of Naperville STANDARD DETAIL	TYPICAL PAVEMENT DETAILS	PAVEMENT 10
	REVISED: 01/01/2013 SHEET 1 OF 1	590.10



NOTES:

1. ALL AGGREGATE SUB BASE SHALL BE MECHANICALLY COMPACTED.
2. SIDEWALK SHALL CONTINUE THROUGH DRIVEWAYS.
3. SIDEWALK THICKNESS ACROSS DRIVEWAYS SHALL BE A MINIMUM OF 8" PCC ON 4" AGGREGATE SUB BASE.
4. EXPANSION JOINT MATERIAL MUST MATCH THE FULL DEPTH OF THE PAVEMENT.
5. DETECTABLE WARNINGS SHALL ONLY BE INSTALLED AT DRIVEWAYS WITH PERMANENT TRAFFIC CONTROL DEVICES.
6. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
7. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

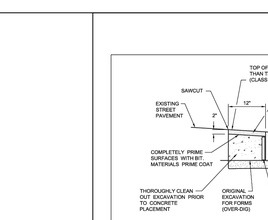
City of Naperville STANDARD DETAIL	TYPICAL COMMERCIAL DRIVEWAY DETAIL	PAVEMENT 5
	REVISED: 09/01/2016 SHEET 1 OF 1	590.05



NOTE:

FOR MULTIPLE ACCESSIBLE PARKING SPACES IN A ROW, THE DESIGN ENGINEER HAS THE OPTION OF USING THE ABOVE SHOWN UNIT IN A COMBINATION OF LEFT-HANDED AND RIGHT-HANDED LAYOUTS IF IT PROVIDES FOR BETTER SITE DESIGN.

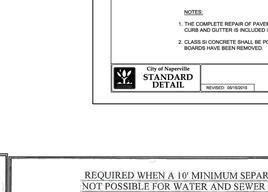
City of Naperville STANDARD DETAIL	ACCESSIBLE PARKING SPACE MARKINGS	PAVEMENT 35
	REVISED: 10/04/2023 SHEET 2 OF 3	590.35



NOTES:

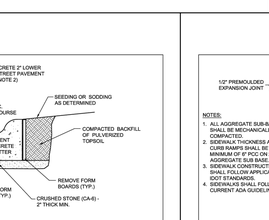
1. SPACING BETWEEN PAVEMENT MARKINGS MAY BE INCREASED TO A MAXIMUM OF 2.5' TO AVOID WHEEL PATHS.

SCHOOL AND PEDESTRIAN



BICYCLE AND EQUESTRIAN (TRAIL CROSSINGS)

City of Naperville STANDARD DETAIL	CROSSWALK	PAVEMENT 33
	REVISED: 06/14/2013 SHEET 1 OF 1	590.33



NOTES:

1. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
2. DETECTABLE WARNINGS AT CURB RAMPS SHALL BE A MINIMUM OF 6" PCC ON 4" AGGREGATE SUB BASE.
3. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
4. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

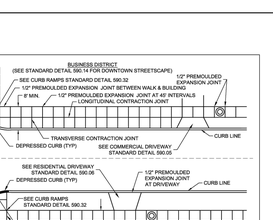
APPLICABLE IDOT STANDARD DETAILS (USE LATEST REVISION:

424001-XX PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-XX DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-XX CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-XX MID-BLOCK CURB RAMPS FOR SIDEWALKS
424021-XX DEPRESSED CORNER FOR SIDEWALKS
424031-XX MEDIAN CURB RAMPS FOR CROSSINGS
424031-XX MEDIAN PEDESTRIAN CROSSINGS
606001-XX CONCRETE CURB TYPE B AND COMBI CONCRETE CURB AND GUTTER

APPROVED ADA DETECTABLE WARNING TILES:

1. ADA SOLUTIONS - CAST IN PLACE REPLACEABLE
2. ARMOR TILE - CAST IN PLACE
3. DETECTILE - SLIMTEK 3
4. TUFTILE - POLYMER WET-SET

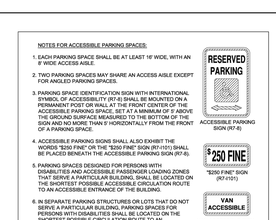
City of Naperville STANDARD DETAIL	CURB RAMPS	PAVEMENT 32
	REVISED: 09/01/2016 SHEET 1 OF 1	590.32



NOTES:

1. CONCRETE SHALL BE IDOT CLASS SI.
2. MINIMUM SIDEWALK THICKNESS SHALL BE 4".
3. SIDEWALK THICKNESS ACROSS DRIVEWAYS SHALL BE AT A MINIMUM 8" FOR RESIDENTIAL DRIVEWAYS AND 9" FOR COMMERCIAL DRIVEWAYS.
4. MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 5% (20:1). FOR ANY SLOPE IN EXCESS OF 5%, ALL REQUIREMENTS OF THE ILLINOIS ACCESSIBILITY CODE (LATEST EDITION) SHALL BE MET.
5. MINIMUM TRANSVERSE SLOPE SHALL BE 1.0% (1:100). MAXIMUM TRANSVERSE SLOPE SHALL BE 2.0% (1:50).
6. A MINIMUM 2' AGGREGATE SUBBASE (CA-6) SHALL BE PROVIDED. (4" THROUGH DRIVEWAYS AND ALLEYS)
7. AGGREGATE SUBBASE SHALL BE MECHANICALLY COMPACTED.
8. ALL SIDEWALKS SHALL BE PROMPTLY BACKFILLED AND PROTECTED FROM DAMAGE.
9. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
10. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

City of Naperville STANDARD DETAIL	SIDEWALK	PAVEMENT 30
	REVISED: 01/01/2013 SHEET 1 OF 1	590.30



NOTES:

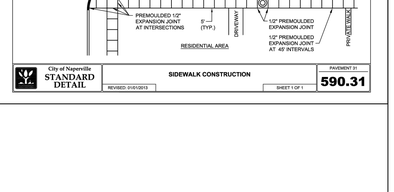
1. GRATE & CASTING SHALL BE EAST JORDAN 7220 OR NEENAH R-3278-A OR AS APPROVED BY THE CITY ENGINEER.
2. ALL CASTINGS SHALL BE SHOP PAINTED WITH AN ASPHALTIC BASE.

City of Naperville STANDARD DETAIL	B6.12 BARRIER CURB & GUTTER AT CURB INLETS	PAVEMENT 21
	REVISED: 01/01/2013 SHEET 1 OF 1	590.21

NOTES:

1. THE COMPLETE REPAIR OF PAVEMENTS ADJACENT TO THE REPLACEMENT CONCRETE CURB AND GUTTER IS INCLUDED IN THE COST OF THE NEW CURB AND GUTTER.
2. CLASS SI CONCRETE SHALL BE POURED SEPARATELY FROM THE CURB ONCE THE FORM BOARDS HAVE BEEN REMOVED.

City of Naperville STANDARD DETAIL	CURB REPLACEMENT	PAVEMENT 24
	REVISED: 09/15/2015 SHEET 1 OF 1	590.24



NOTE:

1. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
2. SIDEWALK THICKNESS AT CURB RAMPS SHALL BE A MINIMUM OF 6" PCC ON 2" AGGREGATE SUB BASE.
3. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
4. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

City of Naperville STANDARD DETAIL	SIDEWALK CONSTRUCTION	PAVEMENT 31
	REVISED: 01/01/2013 SHEET 1 OF 1	590.31



# OF ACCESSIBLE SPACES REQUIRED PER # OF OFF STREET PARKING	
TOTAL OFF STREET PARKING SPACES REQUIRED	REQUIRED MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES
1 TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 500	9
501 TO 1000	2% OF TOTAL NUMBER
OVER 1000	20 PLUS 1 FOR EACH 100 OVER 1000

City of Naperville STANDARD DETAIL	ACCESSIBLE PARKING SPACE MARKINGS	PAVEMENT 35
	REVISED: 10/04/2023 SHEET 3 OF 3	590.35

NOTE: IF SPECIFICATIONS AND/OR DETAILS PROVIDED IN THESE PLANS CONFLICT WITH THE CITY OF NAPERVILLE SPECIFICATIONS AND/OR DETAILS, THE CITY OF NAPERVILLE SHALL SUPERCEDE.

No.	Description	Date
1	ORIGINAL PLAN DATE	4/7/25
2	REVISED PER CITY COMMENTS	6/12/25
3	REVISED PER CITY COMMENTS	07/31/25
4	REVISED PER CITY COMMENTS	09/26/25
5	REVISED PER CITY COMMENTS	10/31/25

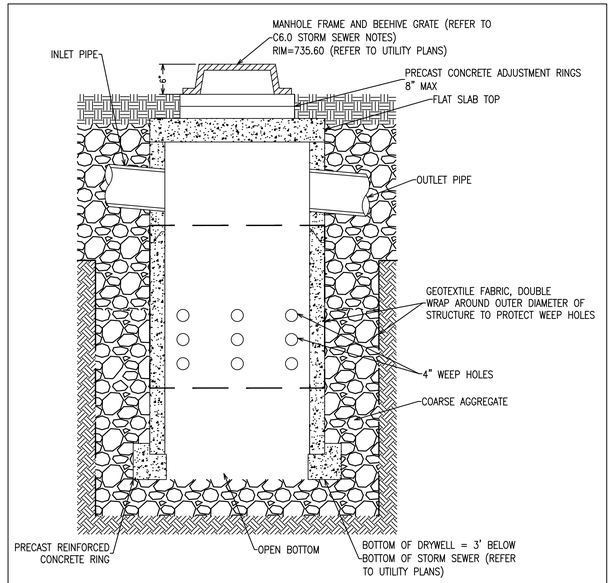
DETAILS

1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

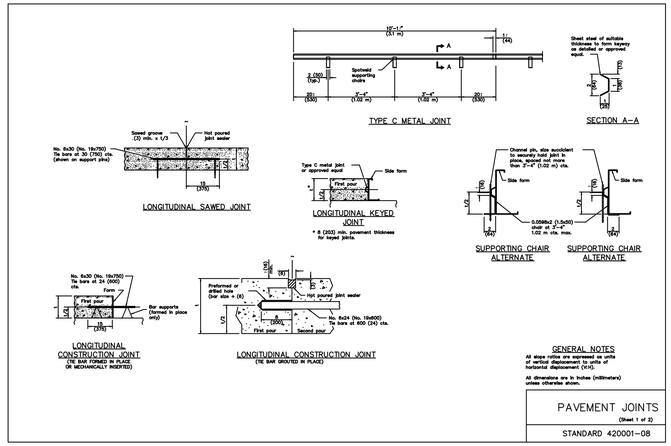
JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

H477a
N.T.S.
C9.1

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DRYWELL DETAIL



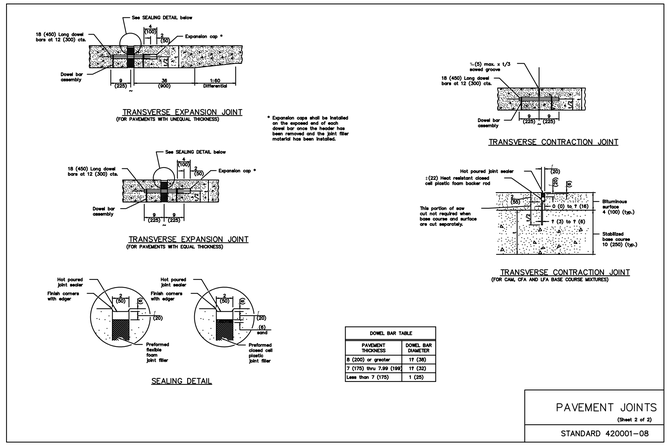
GENERAL NOTES

All slope rates are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

PAVEMENT JOINTS (Sheet 1 of 2)

STANDARD 420001–08



* Expansion caps shall be installed at the ends of the dowel bar once the header has been removed and the joint filler material has been installed.

DOWEL BAR TABLE	
PAVEMENT THICKNESS	DOWEL BAR DIAMETER
8 (200) or greater	1T (38)
7 (175) thru 7.99 (199)	1T (32)
Less than 7 (175)	1 (25)

PAVEMENT JOINTS (Sheet 2 of 2)

STANDARD 420001–08

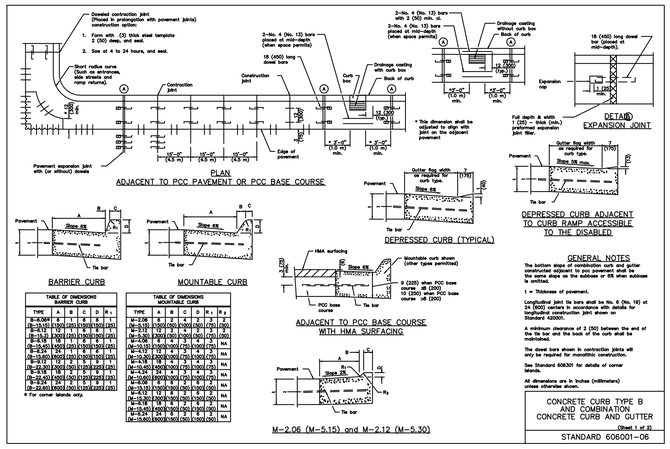


TABLE OF DIMENSIONS BARRIER CURB								
TYPE	A	B	C	D	R1	R2		
B-6.24	6	9	6	15	3	12	(150)	(225)
B-6.12	6	9	6	15	3	12	(150)	(225)
B-6.06	6	9	6	15	3	12	(150)	(225)
B-6.00	6	9	6	15	3	12	(150)	(225)
B-5.24	6	9	6	15	3	12	(150)	(225)
B-5.12	6	9	6	15	3	12	(150)	(225)
B-5.06	6	9	6	15	3	12	(150)	(225)
B-5.00	6	9	6	15	3	12	(150)	(225)
B-4.24	6	9	6	15	3	12	(150)	(225)
B-4.12	6	9	6	15	3	12	(150)	(225)
B-4.06	6	9	6	15	3	12	(150)	(225)
B-4.00	6	9	6	15	3	12	(150)	(225)

* For corner islands only.

TABLE OF DIMENSIONS MOUNTABLE CURB								
TYPE	A	B	C	D	R1	R2		
M-6.06	6	7	6	13	3	12	(150)	(300)
M-6.00	6	7	6	13	3	12	(150)	(300)
M-5.24	6	7	6	13	3	12	(150)	(300)
M-5.18	6	7	6	13	3	12	(150)	(300)
M-5.12	6	7	6	13	3	12	(150)	(300)
M-5.06	6	7	6	13	3	12	(150)	(300)
M-5.00	6	7	6	13	3	12	(150)	(300)
M-4.24	6	7	6	13	3	12	(150)	(300)
M-4.18	6	7	6	13	3	12	(150)	(300)
M-4.12	6	7	6	13	3	12	(150)	(300)
M-4.06	6	7	6	13	3	12	(150)	(300)
M-4.00	6	7	6	13	3	12	(150)	(300)

M-2.06 (M-5.15) and M-2.12 (M-5.30)

GENERAL NOTES

The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or ER when subbase is omitted.

t = Thickness of pavement.

Longitudinal joint tie bars shall be No. 6 (No. 19) at 24 (600) centers in accordance with details for longitudinal construction joint shown on Standard 420001.

A minimum clearance of 2 (50) between the end of the tie bar and the back of the curb shall be maintained.

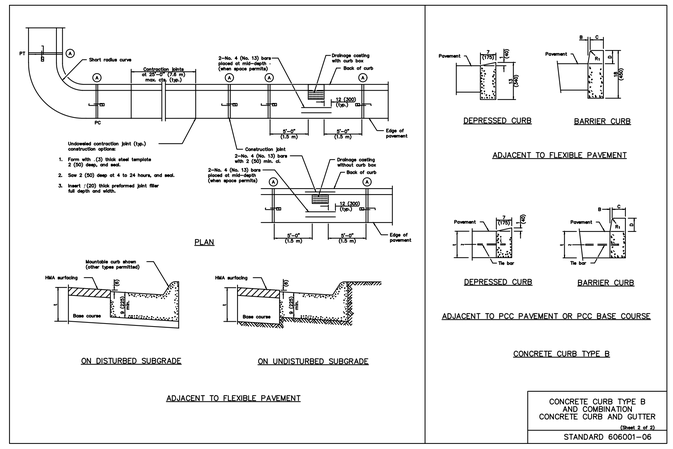
The dowel bars shown in contraction joints will only be required for monolithic construction.

See Standard 606301 for details of corner islands.

All dimensions are in inches (millimeters) unless otherwise shown.

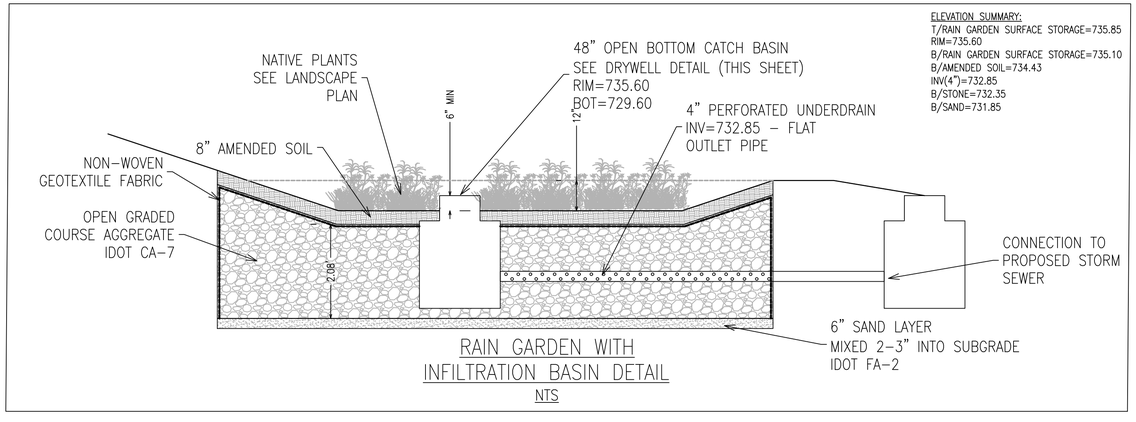
CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER (Sheet 1 of 2)

STANDARD 606001–06



CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER (Sheet 2 of 2)

STANDARD 606001–06



ELEVATION SUMMARY:
T/RAIN GARDEN SURFACE STORAGE=735.85
RIM=735.60
B/RAIN GARDEN SURFACE STORAGE=735.10
B/AMENDED SOIL=734.43
INV(4")=732.85
B/STONE=732.35
B/SAND=731.85

RAIN GARDEN WITH INFILTRATION BASIN DETAIL

NTS

NOTE: IF SPECIFICATIONS AND/OR DETAILS PROVIDED IN THESE PLANS CONFLICT WITH THE CITY OF NAPERVILLE SPECIFICATIONS AND/OR DETAILS, THE CITY OF NAPERVILLE SHALL SUPERCEDE.

No.	Description	Date
5	REVISED PER CITY COMMENTS	10/31/25
4	REVISED PER CITY COMMENTS	09/26/25
3	REVISED PER CITY COMMENTS	07/31/25
2	REVISED PER CITY COMMENTS	6/12/25
1	ORIGINAL PLAN DATE	4/7/25

DETAILS

1960 WEST LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd, Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

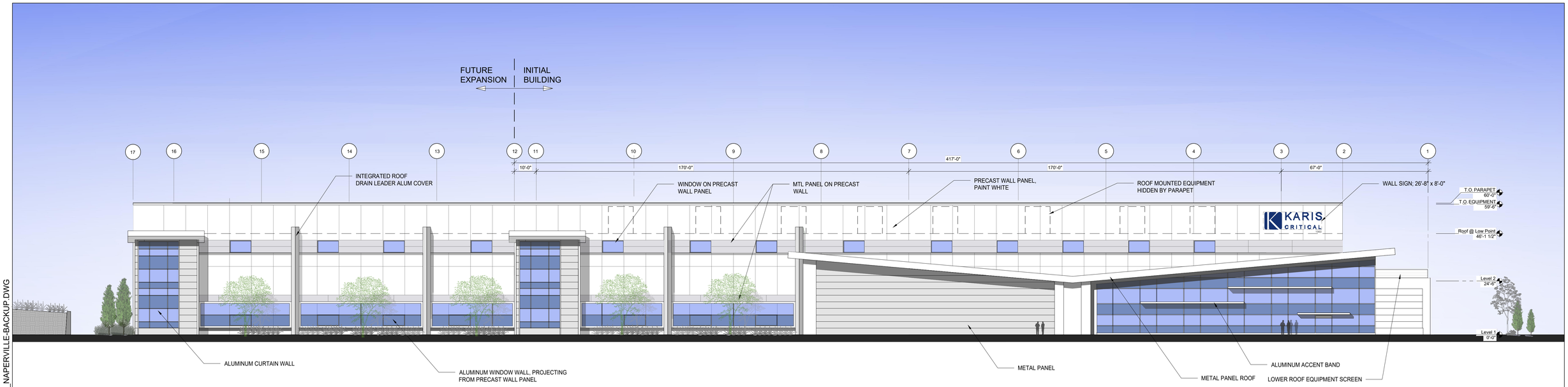
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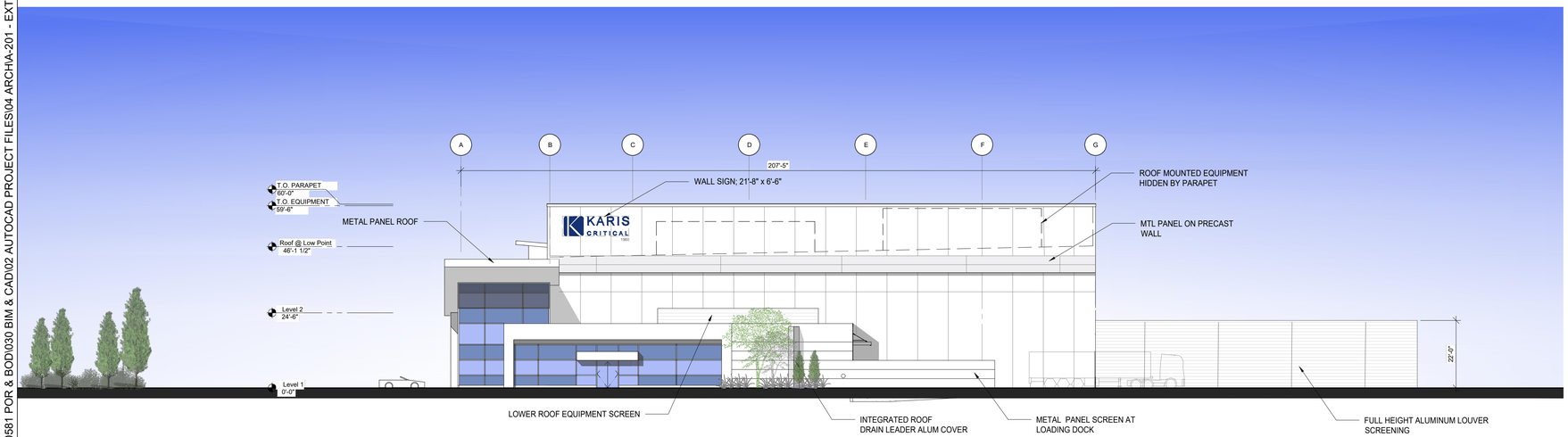
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EXHIBIT E
BUILDING ELEVATIONS



1 SOUTH ELEVATION

1:250



2 EAST ELEVATION

1:250

YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 4	09/26/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 3	07/23/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 2	06/11/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 1	04/14/25
YH	GT	ELEVATION CONCEPTUAL DESIGN	04/08/25
CHKD BY	APPVD BY	DESCRIPTION	DATE

ISSUANCE

CARLSON Design Group
Carlson Architectural Services of America
Carlson Engineering Services of America
5550 Peachtree Parkway, Suite 125
Peachtree Corners, GA 30092
carlsondesigngroup.com
Tel: 313.963.8000

KARIS MISSION CRITICAL, LLC

NOT FOR CONSTRUCTION

PROJECT TITLE: KARIS NAPERVILLE DATA CENTER
1960 W LUCENT LANE
NAPERVILLE, IL

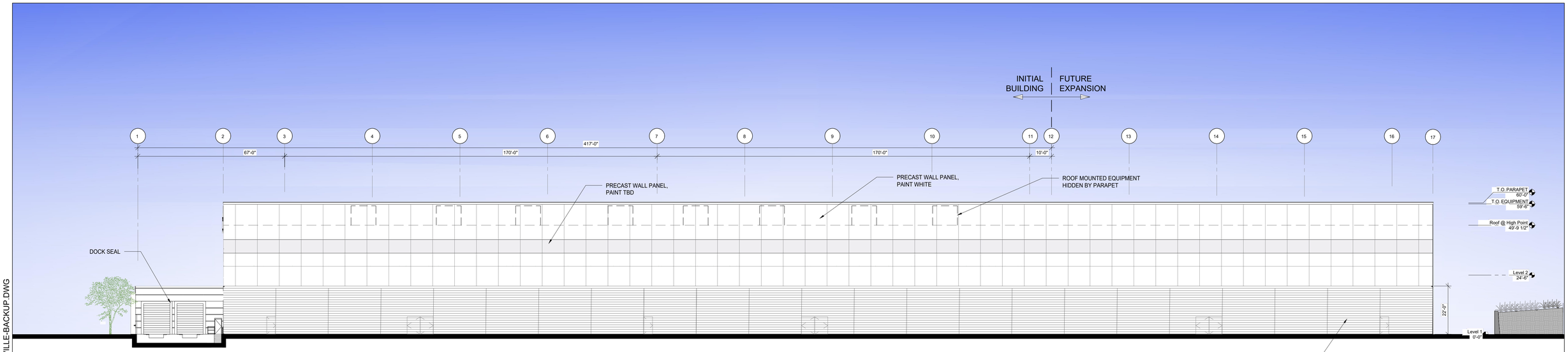
SHEET TITLE: EXTERIOR ELEVATIONS

PROJECT NUMBER: 250194

SHEET NUMBER: A-201

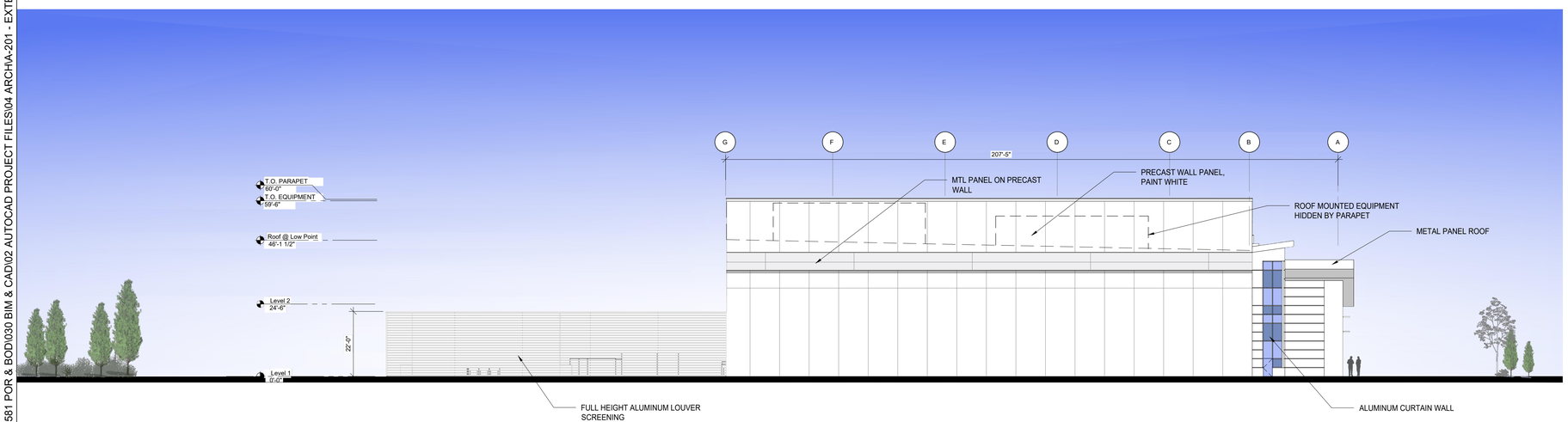
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1 NORTH ELEVATION

1:250



2 WEST ELEVATION

1:250

YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 4	09/26/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 3	07/23/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 2	06/11/25
YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 1	04/14/25
YH	GT	ELEVATION CONCEPTUAL DESIGN	04/08/25
CHKD BY	APPVD BY	DESCRIPTION	DATE

ISSUANCE

CARLSON Design Group
Carlson Architectural Services of America
Carlson Engineering Services of America
5550 Peachtree Parkway, Suite 125
Peachtree Corners, GA 30092
carlsondesigngroup.com
Tel: 313.963.8000

KARIS CRITICAL
KARIS MISSION CRITICAL, LLC

NOT FOR CONSTRUCTION

PROJECT TITLE
KARIS NAPERVILLE DATA CENTER
1960 W LUCENT LANE
NAPERVILLE, IL

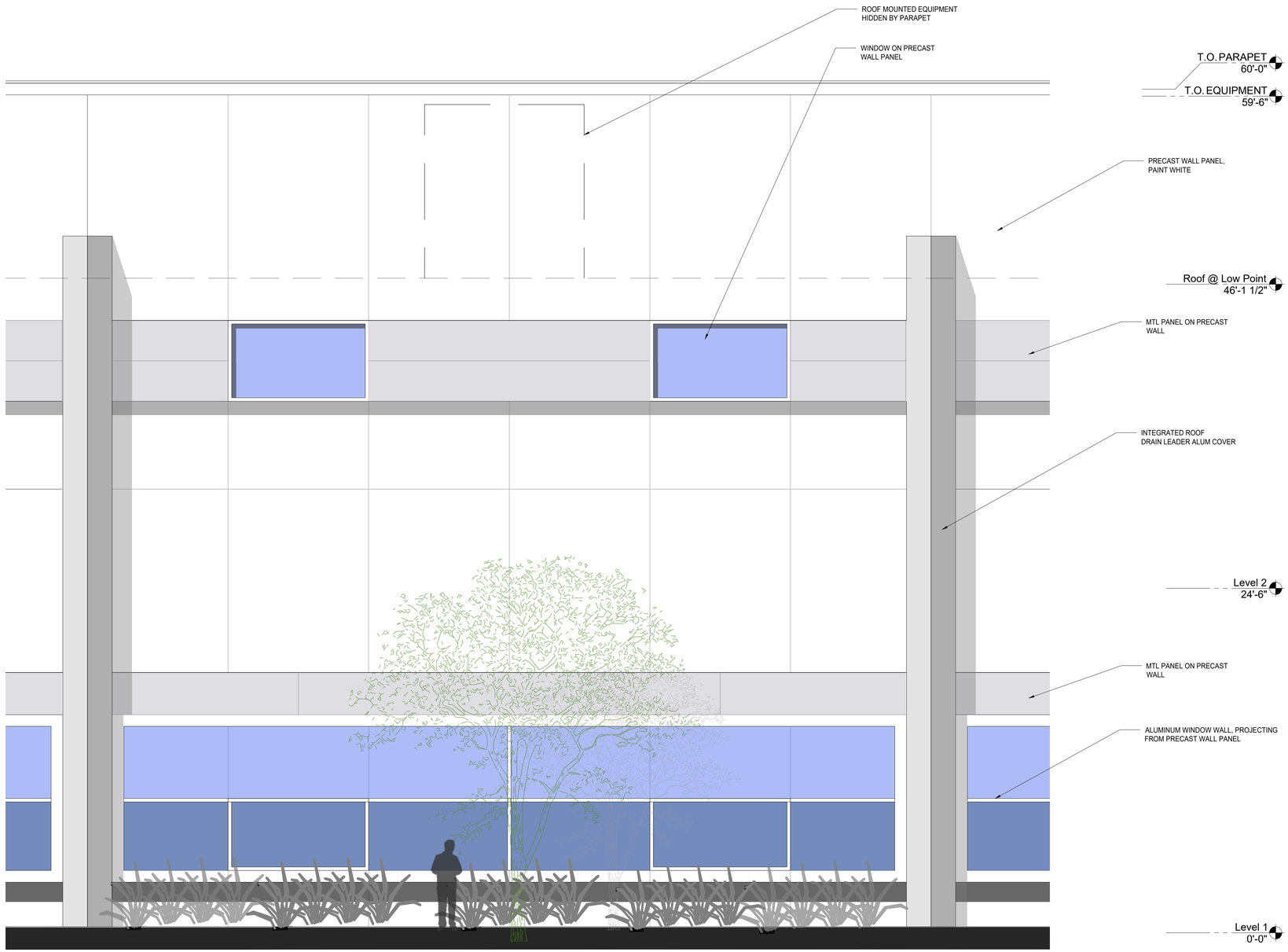
SHEET TITLE
EXTERIOR ELEVATIONS

PROJECT NUMBER
250194

SHEET NUMBER
A-202

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1 PARTIAL SOUTH ELEVATION

¼" = 1'-0"

YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 4	09/26/25
CHKD BY	APPVD BY	DESCRIPTION	DATE

ISSUANCE

CARLSON Design Group
Carlson Architectural Services of America
Carlson Engineering Services of America
5550 Peachtree Parkway, Suite 125
Peachtree Corners, GA 30092
carlsondesigngroup.com
Tel: 313.963.8000

KARIS MISSION CRITICAL, LLC

NOT FOR CONSTRUCTION

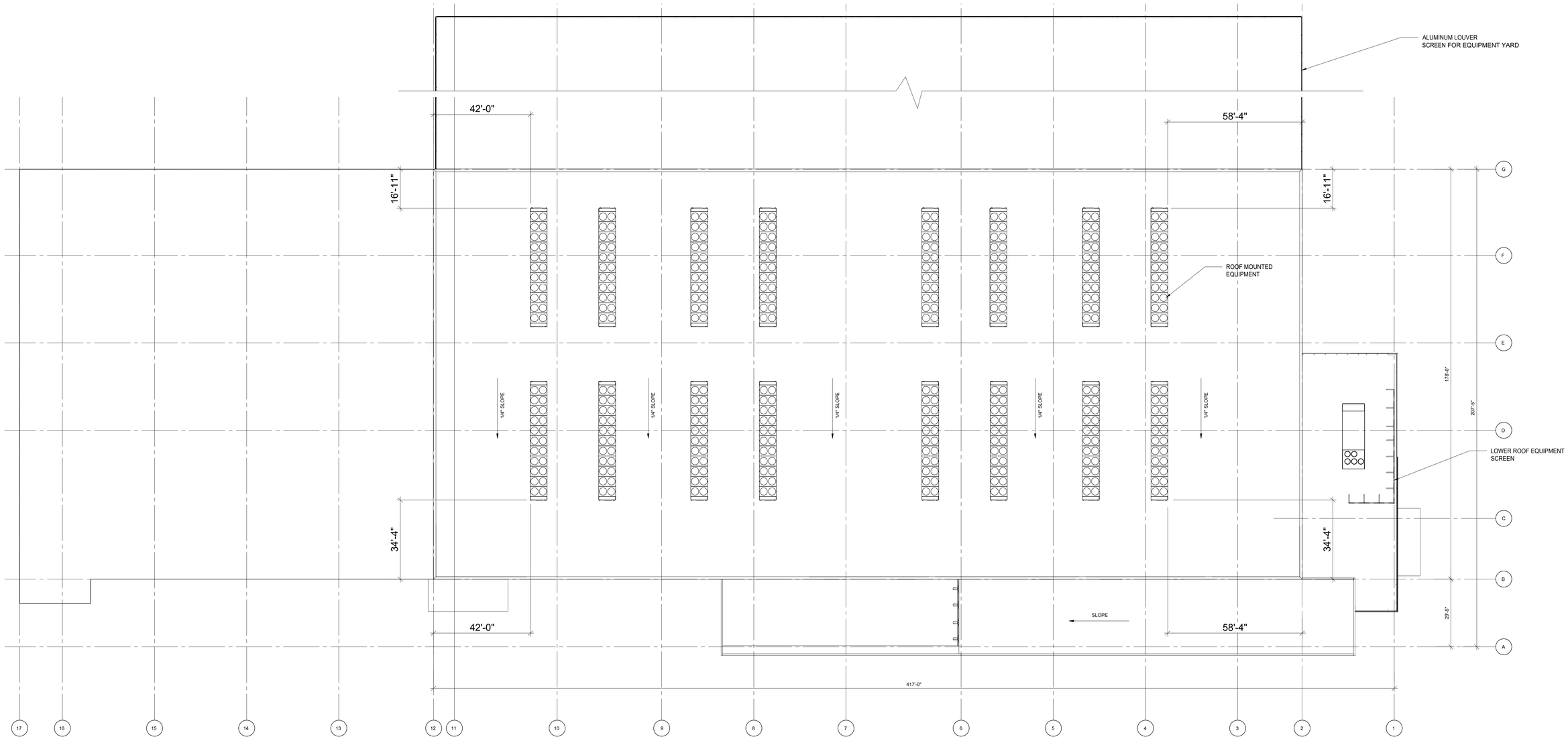
PROJECT TITLE
KARIS NAPERVILLE DATA CENTER
1960 W LUCENT LANE
NAPERVILLE, IL

SHEET TITLE
PARTIAL EXTERIOR ELEVATIONS

PROJECT NUMBER	SHEET NUMBER
250194	A-203

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1 ROOF PLAN
1:250

FUTURE EXPANSION | INITIAL BUILDING

N

YH	GT	ELEVATION CONCEPTUAL DESIGN - REV 4	09/26/25
CHKD BY	APPVD BY	DESCRIPTION	DATE

ISSUANCE

CARLSON Design Group
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Carlson Engineering Services of America
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Peachtree Corners, GA 30092
carlsondesigngroup.com
Tel: 313.963.8000

KARIS CRITICAL
KARIS MISSION CRITICAL, LLC

NOT FOR CONSTRUCTION

PROJECT TITLE: KARIS NAPERVILLE DATA CENTER
1960 W LUCENT LANE
NAPERVILLE, IL

SHEET TITLE: ROOF PLAN

PROJECT NUMBER: 250194

SHEET NUMBER: A-204

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EXHIBIT F
FINAL LANDSCAPE PLAN

Final Landscape Plan

1960 W. Lucent

Naperville, Illinois

September 26, 2025

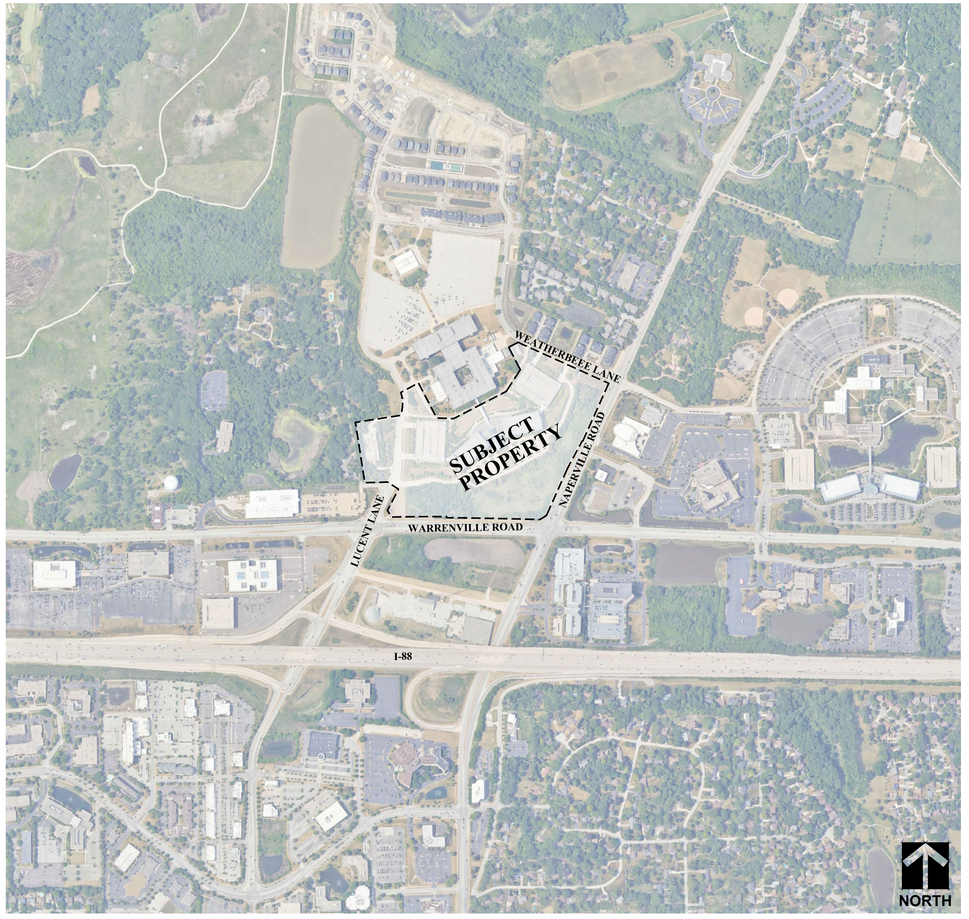
CONSULTANTS:

LANDSCAPE ARCHITECT:

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

CIVIL ENGINEER:

JACOB & HEFNER
1333 BUTTERFIELD ROAD, SUITE #300
DOWNERS GROVE, ILLINOIS 60515



LOCATION MAP

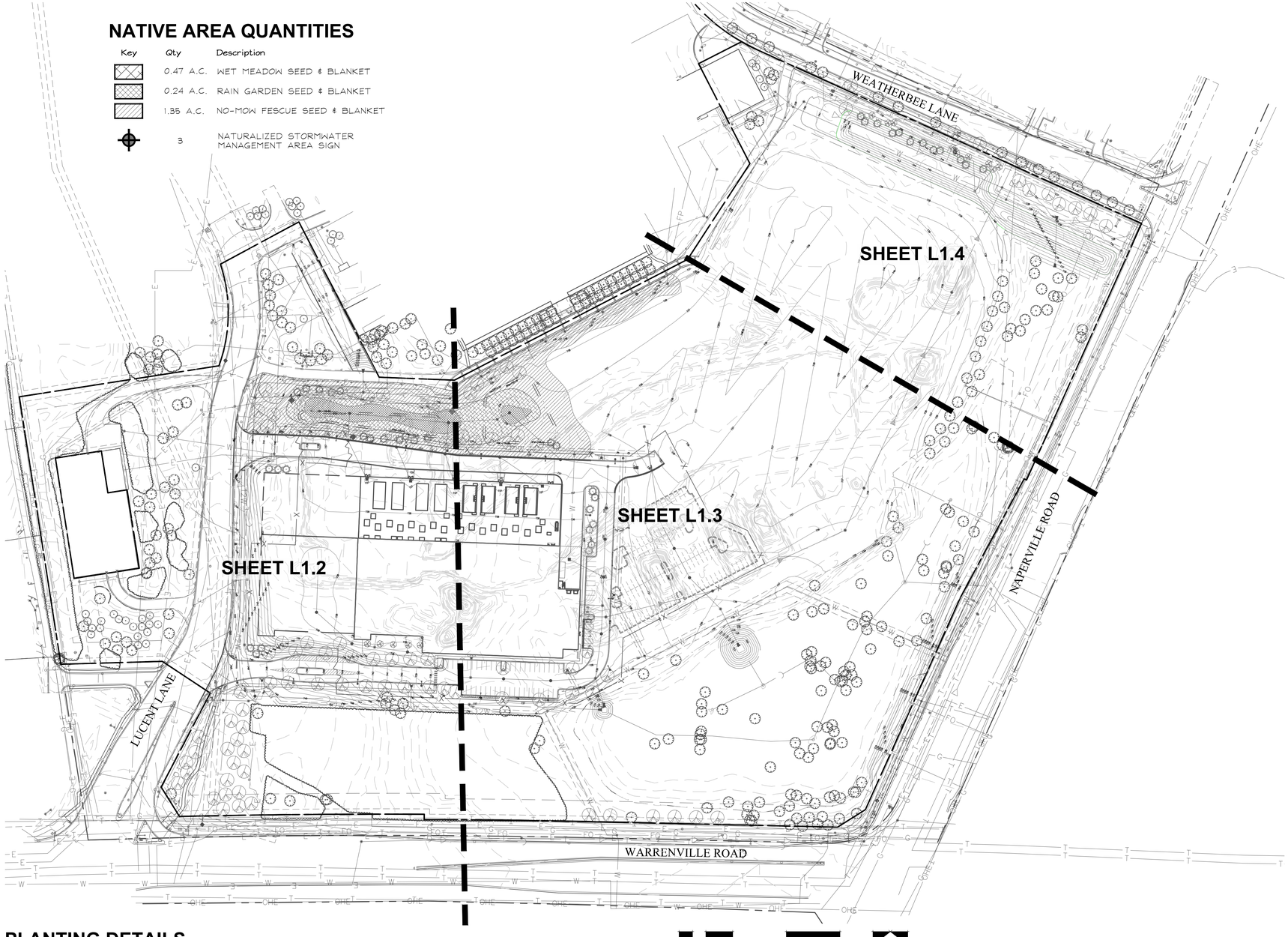
SCALE: 1"=600'

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
L1.0	COVER SHEET
L1.1	OVERALL LANDSCAPE PLAN
L1.2	LANDSCAPE PLAN WEST
L1.3	LANDSCAPE PLAN CENTRAL
L1.4	LANDSCAPE PLAN EAST
L1.5	TREE PRESERVATION PLAN WEST
L1.6	TREE PRESERVATION PLAN CENTRAL
L1.7	TREE PRESERVATION PLAN EAST
L1.8	TREE INVENTORY
L1.9	LANDSCAPE SPECIFICATIONS

NATIVE AREA QUANTITIES

Key	Qty	Description
	0.47 A.C.	WET MEADOW SEED & BLANKET
	0.24 A.C.	RAIN GARDEN SEED & BLANKET
	1.35 A.C.	NO-MOW FESCUE SEED & BLANKET
	3	NATURALIZED STORMWATER MANAGEMENT AREA SIGN



0' 50' 100' 200' 300'
SCALE: 1"=100'

NORTH

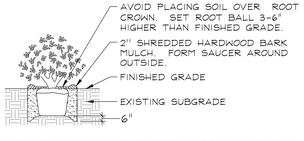
PLANT LIST

Key	Qty	Botanical/Common Name	Size	Remarks
		SHADE TREES		
AF	12	Acer x freemanii 'Marmo' MARMO FREEMAN MAPLE	2 1/2" Cal.	
AM	14	Acer miyabei 'Morton' STATE STREET MAPLE	2 1/2" Cal.	
AS	2	Acer saccharum 'Green Mountain' GREEN MOUNTAIN SUGAR MAPLE	2 1/2" Cal.	
CO	13	Celtis occidentalis COMMON HACKBERRY	2 1/2" Cal.	
GD	5	Gymnocladus dioicus 'Espresso-JFS' ESPRESSO KENTUCKY COFFEETREE	2 1/2" Cal.	
LT	4	Liriodendron tulipifera TULIPTREE	2 1/2" Cal.	
PM	3	Platanus x acerifolia 'Morton Circle' EXCLAMATION! LONDON PLANETREE	2 1/2" Cal.	
QB	11	Quercus bicolor SWAMP WHITE OAK	2 1/2" Cal.	
QI	6	Quercus imbricaria SHINGLE OAK	2 1/2" Cal.	
QM	1	Quercus macrocarpa BUR OAK	2 1/2" Cal.	
TC	3	Tilia cordata 'Greenspire' GREENSPIRE LITTLELEAF LINDEN	2 1/2" Cal.	
TT	4	Tilia tomentosa 'Sterling' STERLING SILVER LINDEN	2 1/2" Cal.	
UC	8	Ulmus carpinifolia 'New Horizon' NEW HORIZON SMOOTH LEAF ELM	2 1/2" Cal.	
UM	8	Ulmus 'Morton Glossy' TRIUMPH ELM	2 1/2" Cal.	
		ORNAMENTAL TREES		
AG	6	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Clump Form
CC	3	Cercis canadensis EASTERN REDBUD	6' Ht.	Multi-stem
SR	5	Syringa reticulata 'Ivory Silk' IVORY SILK JAPANESE TREE LILAC	2" Cal.	Single Stem
		EVERGREEN TREES		
PA	16	Picea abies NORWAY SPRUCE	8' Ht.	
PO	8	Picea omorika SERBIAN SPRUCE	8' Ht.	
PS	15	Pinus strobus EASTERN WHITE PINE	8' Ht.	
		DECIDUOUS SHRUBS		
DK	37	Diervilla x KODIAK ORANGE	24" Tall	4' O.C.
		PERENNIALS		
AB	981	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
HP	981	Hemerocallis 'Happy Returns' HAPPY RETURNS DAYLILY	#1	18" O.C.
		GROUNDCOVERS		
LS	981	Liriope spicata CREEPING LILYTURF	#SP4	18" O.C.
		MISC. MATERIALS		
	41	SHREDDED HARDWOOD MULCH	C.Y.	
	40	SHREDDED LEAF MULCH	C.Y.	
	16.5	TURF SEED & EROSION CONTROL BLANKET	AC.	
	3	NSMA PROECTION SIGN	E.A.	

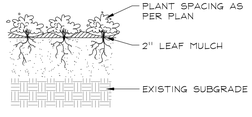
GENERAL LANDSCAPE NOTES

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 plant materials 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. Contractor shall monitor landscape throughout the installation process and ensure regular manual watering of all plants and turf areas is sufficient for normal establishment.
8. See General Conditions and Specifications for landscape work for additional requirements.

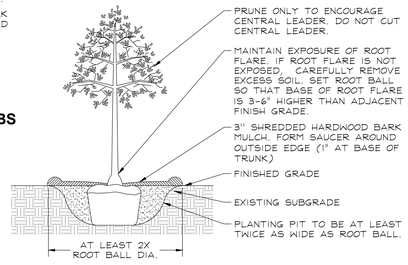
PLANTING DETAILS



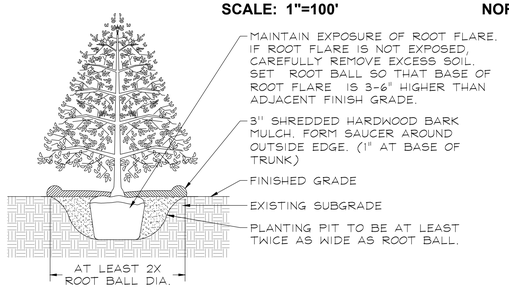
DECIDUOUS AND EVERGREEN SHRUBS
NOT TO SCALE



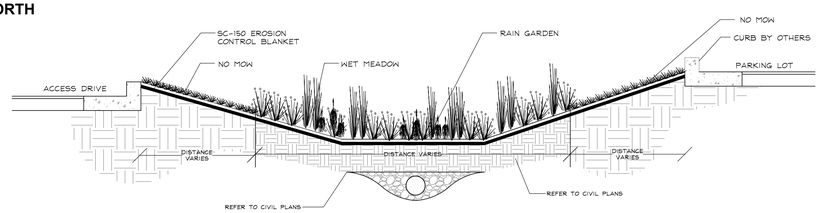
PERENNIALS AND GROUNDCOVERS
NOT TO SCALE



DECIDUOUS TREES
NOT TO SCALE



EVERGREEN TREES
NOT TO SCALE



RAIN GARDEN SECTION DETAIL
NOT TO SCALE

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LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CIVIL ENGINEER
JACOB & HEFNER ASSOCIATES
1333 BUTTERFIELD ROAD
SUITE 300
DOWNERS GROVE, ILLINOIS 60515

1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

OVERALL LANDSCAPE PLAN

3	09.25.2025
2	07.31.2025
1	06.12.2025

REVISIONS

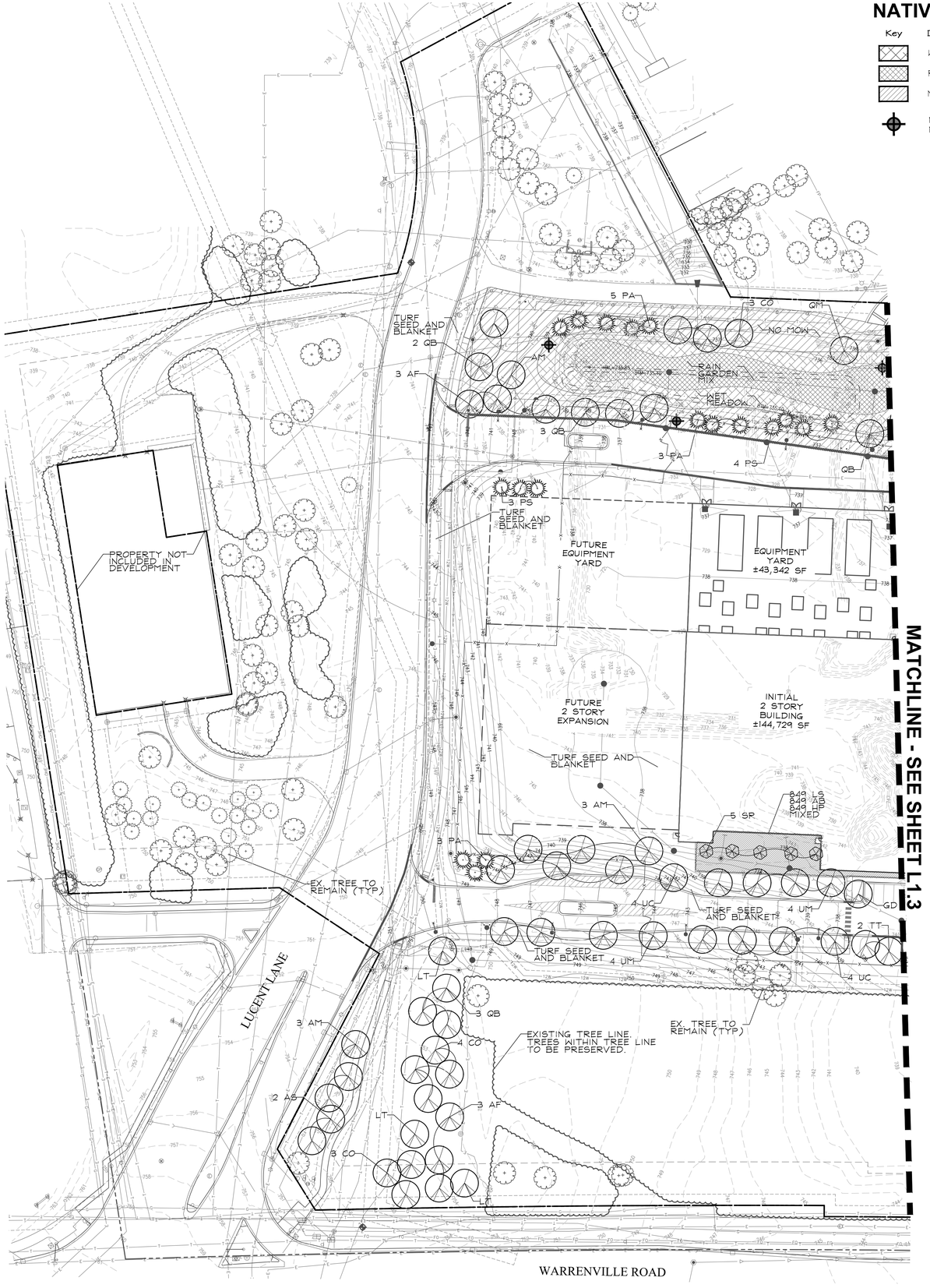
DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB

SHEET NO.

L1.1

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

XREFS:
PLOT CONFIG:



NATIVE SEED LEGEND

Key	Description
	WET MEADOW SEED & BLANKET
	RAIN GARDEN SEED & BLANKET
	NO-MOW FESCUE SEED & BLANKET
⊕	NATURALIZED STORMWATER MANAGEMENT AREA SIGN

NATIVE SEED MIXTURES

Temporary Cover Crop

Cover crops shall be installed in all planting areas containing dry mesic, mesic, and wet mesic soils to, stabilize soils, and combat weed pressure during the germination and establishement of the native seeding area.

Botanical Name	Common Name	lbs / AC
Cover Crop		
Avena sativa	Seed Oats	40.000

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 cristatella	Crested Oval Sedge	0.060
Carex molesta	Field Oval Sedge	0.250
Carex normalis	Speading Oval Sedge	0.015
Carex scorparia	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
Eupatorium perfoliatum	Common Boneset	0.015
Euthamia grammifolia	Grassleaved Goldenrod	0.300
Helenium autumnale	Sneezeweed	0.063
Hibiscus laevis	Halberd-leaved Rose Mallow	0.380
Iris virginica shrevei	Blue Flag Iris	1.000
Lobelia siphilitica	Great Blue Lobelia	0.031
Mimulus ringens	Monkey Flower	0.031
Physostegia virginiana	Obedient Plant	0.031
Pycnanthemum virginianum	Common Mountain Mint	0.063
Solidago rigida	Stiff Goldenrod	0.125
Symphyotrichium novae-angliae	New England Aster	0.250
Vernonia fasciculata	Common Ironweed	0.380
Verbena hastata	Blue Vervain	0.380
Zizia aurea	Golden Alexanders	0.500
	Total Forbs	**3.895**
	Total Wet Meadow Seed Mix	**11.616**

Raingarden Seed Mix

Botanical Name	Common Name	lbs / AC
Grasses		
Bouteloua curtipendula	Side Oats Grama	2.000
Carex brevior	Plains-Oval Sedge	0.250
Carex cristatella	Crested Sedge	0.250
Carex normalis	Spreading Oval Sedge	0.250
Carex stipata	Common Fox Sedge	0.500
Carex vulpinoidea	Brown Fox Sedge	0.500
Elymus canadensis	Canada Wild Rye	2.000
Elymus virginicus	Virginia Wild Rye	3.000
Panicum virgatum	Switch Grass	3.000
Schizachyrium scoparium	Little Bluestem	3.000
Sporobolus heterolepis	Prairie Dropseed	2.000
	Total Grasses	**16.750**
Wildflowers/Broadleaves		
Allium cemuum	Nodding Wild Onion	0.250
Asclepias incarnata	Swamp Milkweed	0.125
Echinacea pallida	Pale Purple Coneflower	0.500
Echinacea purpurea	Purple Coneflower	0.500
Helenium autumnale	Sneezeweed	0.125
Iris virginica shrevei	Blue Flag Iris	0.500
Liatris spicata	Marsh Blazing Star	0.250
Lobelia siphilitica	Great Blue Lobelia	0.031
Monarda fistulosa	Wild Bergamont	0.125
Solidago rigida	Stiff Goldenrod	0.125
Pycnanthemum virginianum	Common Mountain Mint	0.063
Rudbeckia fulgida	Showy Black-eyed Susan	0.250
Rudbeckia subtomentosa	Sweet Black-eyed Susan	0.250
	Total Wildflowers / Broadleaves	**3.094**

No Mow Fescue Seed Mixture - Mixture -7 lbs. / 1,000 sq. ft.

Festuca longifolia	Hard Fescue	25%
Festuca rubra var. commutate	Chewing Fescue	25%
Festuca rubra var. rubra	Creeping Red Fescue	25%
Festuca ovina	Sheeps Fescue	25%

0' 25' 50' 100' 150'
SCALE: 1"=50'

NORTH

GARY R. WEBER ASSOCIATES, INC.
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402 WEST LIBERTY DRIVE
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CIVIL ENGINEER
JACOB & HEFNER ASSOCIATES
1333 BUTTERFIELD ROAD
SUITE 300
DOWNERS GROVE, ILLINOIS 60515

1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

LANDSCAPE PLAN WEST

3	09.25.2025
2	07.31.2025
1	06.12.2025

REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	

L1.2

Know what's below. Call before you dig.

XREFS:
PLOT DWGS:

NATIVE SEED LEGEND

Key	Description
	WET MEADOW SEED & BLANKET
	RAIN GARDEN SEED & BLANKET
	NO-MOW FESCUE SEED & BLANKET
	NATURALIZED STORMWATER MANAGEMENT AREA SIGN

MATCHLINE - SEE SHEET L1.4

MATCHLINE - SEE SHEET L1.2

NO MOW

2 QI

TURF SEED AND BLANKET

NO MOW

3 AF

RAIN GARDEN

2 QB

WET MEADOW

3 AF

LT 2 PS

TURF SEED AND BLANKET

3 PQ

EQUIPMENT YARD ±43,342 SF

2 PA

LAND BANKED PARKING

2 PS

TURF SEED AND BLANKET

INITIAL 2 STORY BUILDING ±144,729 SF

SEE SHEET L1.2 FOR QUANTITIES AND SPECIES

TT

FIRE DEPARTMENT CONNECTION BY OTHERS

GD

TURF SEED AND BLANKET

TT

TC

37 DK

TC

3 GD

EXISTING STORMWATER MANAGEMENT AREA

EX. TREE TO REMAIN (TYP)

EX. TREE TO REMAIN (TYP)

EXISTING TREE LINE. TREES WITHIN TREE LINE TO BE PRESERVED.

2 PM

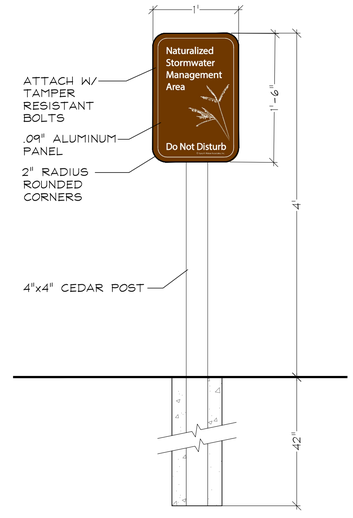
4 AM

WARRENVILLE ROAD

NAPERVILLE ROAD

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 AND COLOR SAMPLE FOR THE STORMWATER MANAGEMENT AREA SIGN FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO FABRICATION AND INSTALLATION.



NOT TO SCALE

NATURALIZED AREA SIGN DETAIL

0' 25' 50' 100' 150'

SCALE: 1"=50'

NORTH

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
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CIVIL ENGINEER
JACOB & HEFNER ASSOCIATES
1333 BUTTERFIELD ROAD
SUITE 300
DOWNERS GROVE, ILLINOIS 60515

1960 W. LUCENT LANE

NAPERVILLE, ILLINOIS

LANDSCAPE PLAN CENTRAL

3	09.25.2025
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1	06.12.2025

REVISIONS

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PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	L1.3

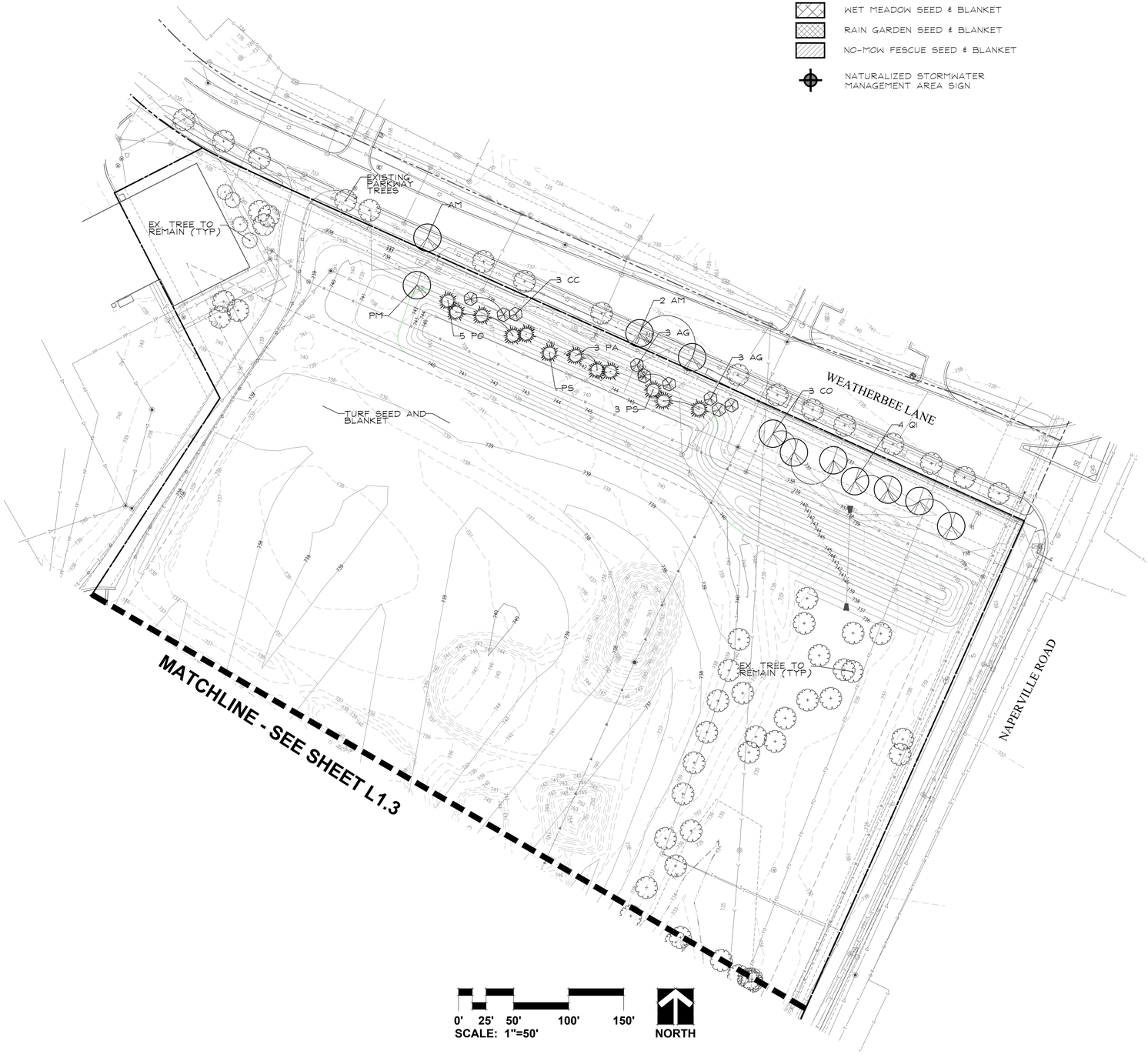
Know what's below. Call before you dig.

XREFS

PLOT CONFIG

NATIVE SEED LEGEND

Key	Description
	WET MEADOW SEED & BLANKET
	RAIN GARDEN SEED & BLANKET
	NO-MOW FESCUE SEED & BLANKET
	NATURALIZED STORMWATER MANAGEMENT AREA SIGN



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JACOB & HEFNER ASSOCIATES
1333 BUTTERFIELD ROAD
SUITE 300
DOWNERS GROVE, ILLINOIS 60515

1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

LANDSCAPE PLAN EAST

3	09.25.2025
2	07.31.2025
1	06.12.2025

REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB

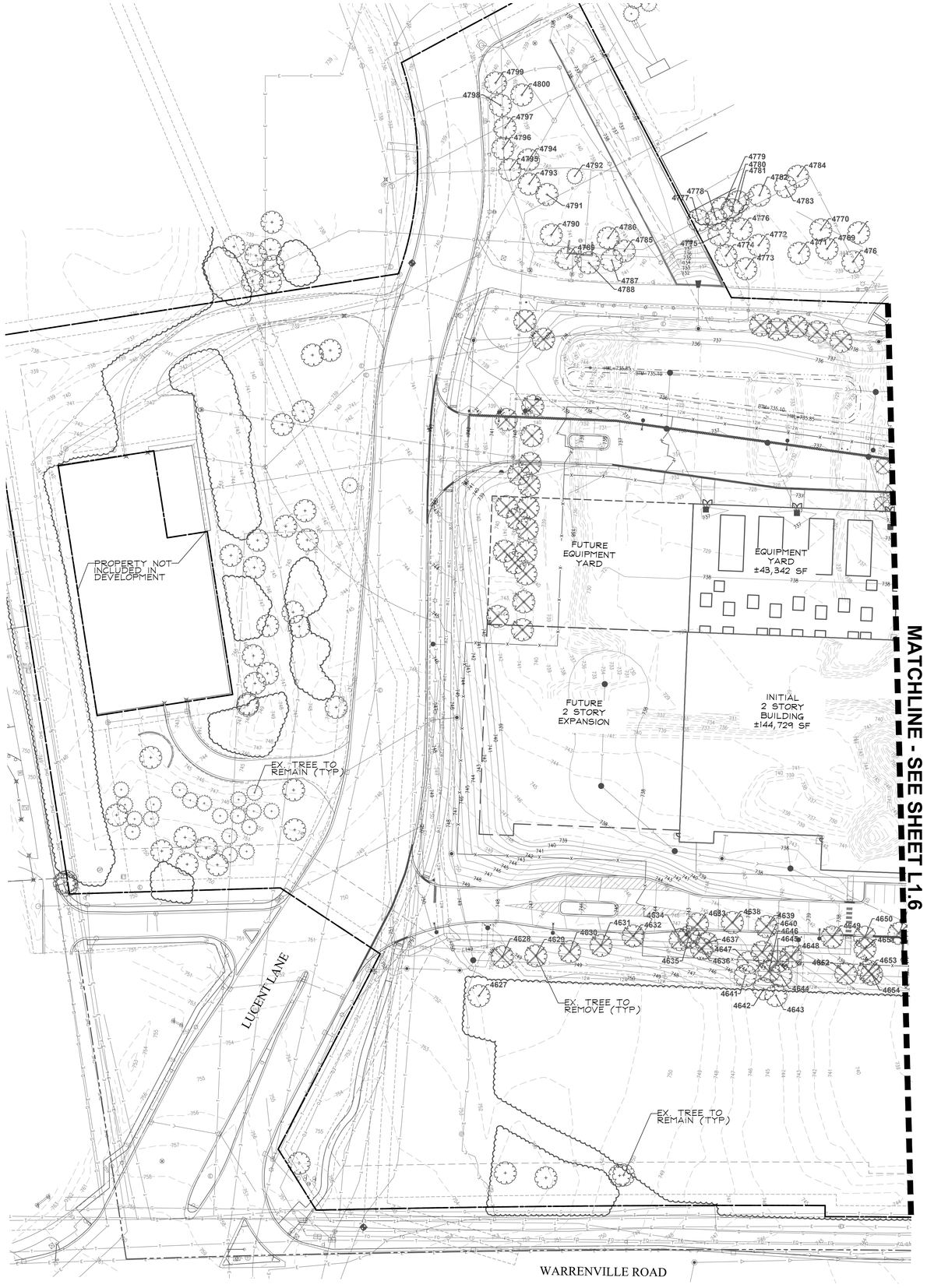
SHEET NO.

L1.4

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

XREFS

PLOT CONFIG



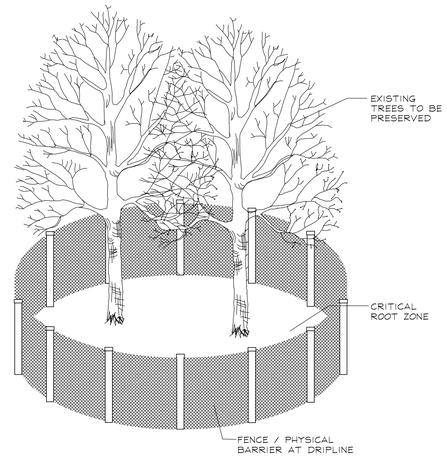
0' 25' 50' 100' 150'
SCALE: 1"=50'

NORTH

TREE PRESERVATION NOTES

1. Property line shall be located and staked by a professional land surveyor prior to tree removal.
2. Tree locations are shown utilizing a Trimble Catalyst GPS which does not constitute a professionally licensed survey. If survey-grade location and elevation of tagged trees is desired, a professional surveyor should be engaged.
3. 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.
4. Contractor shall take extreme care to protect the root system of existing trees. Should root pruning be necessary it shall not exceed 25% of the tree's root system and shall be done in accordance with recognized horticulture practices under the supervision of a professional arborists, Landscape Architect or Horticulturist.
5. 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.
6. Broken or badly bruised branches shall be removed with a clean cut. If recommended by the professional Arborist, Landscape Architect or Horticulturist.
7. 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.
8. 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.
9. When underground utilities are proposed within 5' of a preserved tree trunk, they must be augered if possible.

SEE TREE INVENTORY SHEET L1.8



TREE PRESERVATION DETAIL

(NOT TO SCALE)
SEE NOTES

LEGEND

EXISTING TREE TO BE PRESERVED

EXISTING TREE TO BE REMOVED

GR WA
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1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

TREE PRESERVATION PLAN WEST

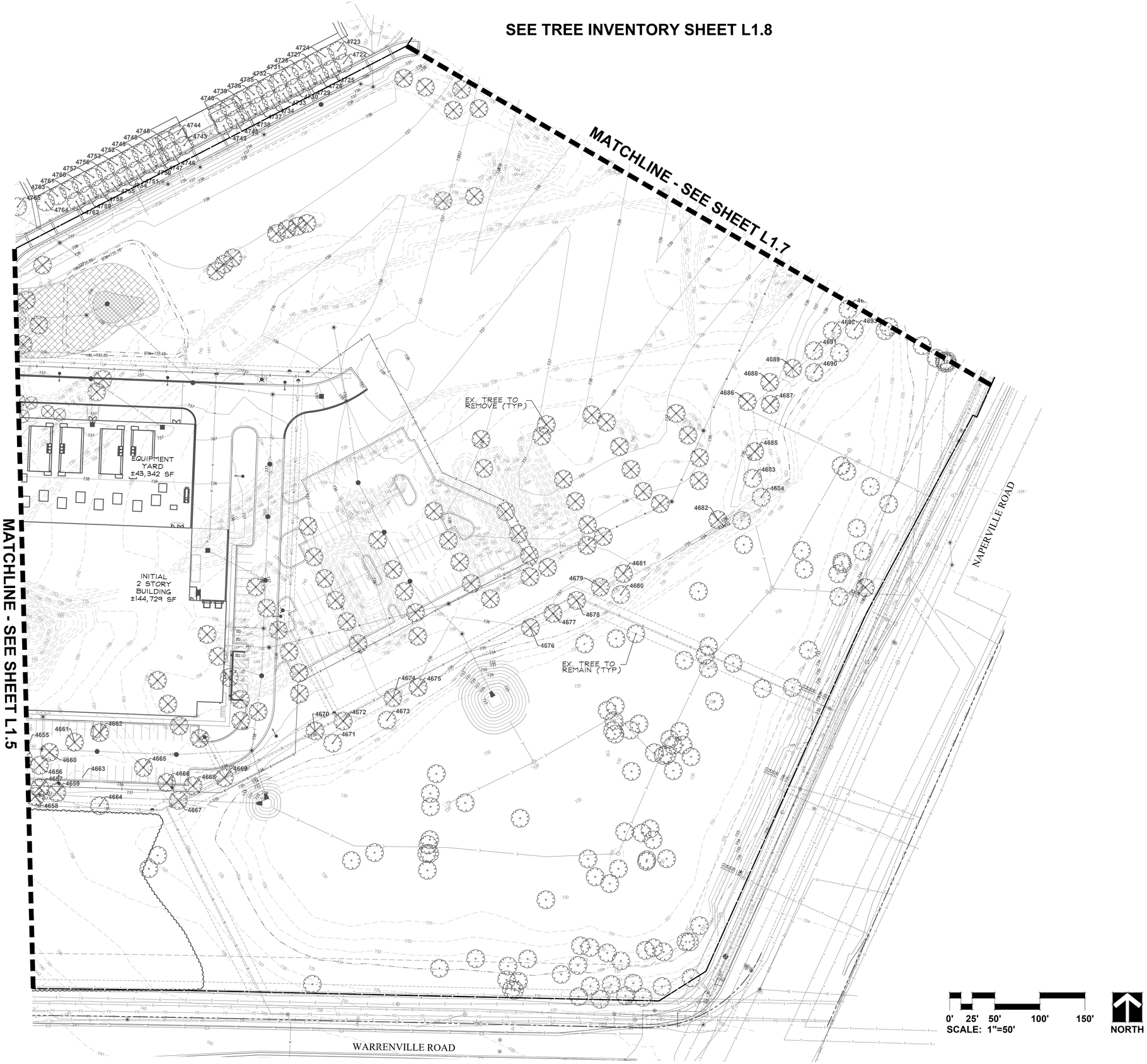
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REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	L1.5

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

SEE TREE INVENTORY SHEET L1.8



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WHEATON, ILLINOIS 60187
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CIVIL ENGINEER
JACOB & HEFNER ASSOCIATES
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1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

TREE PRESERVATION PLAN CENTRAL

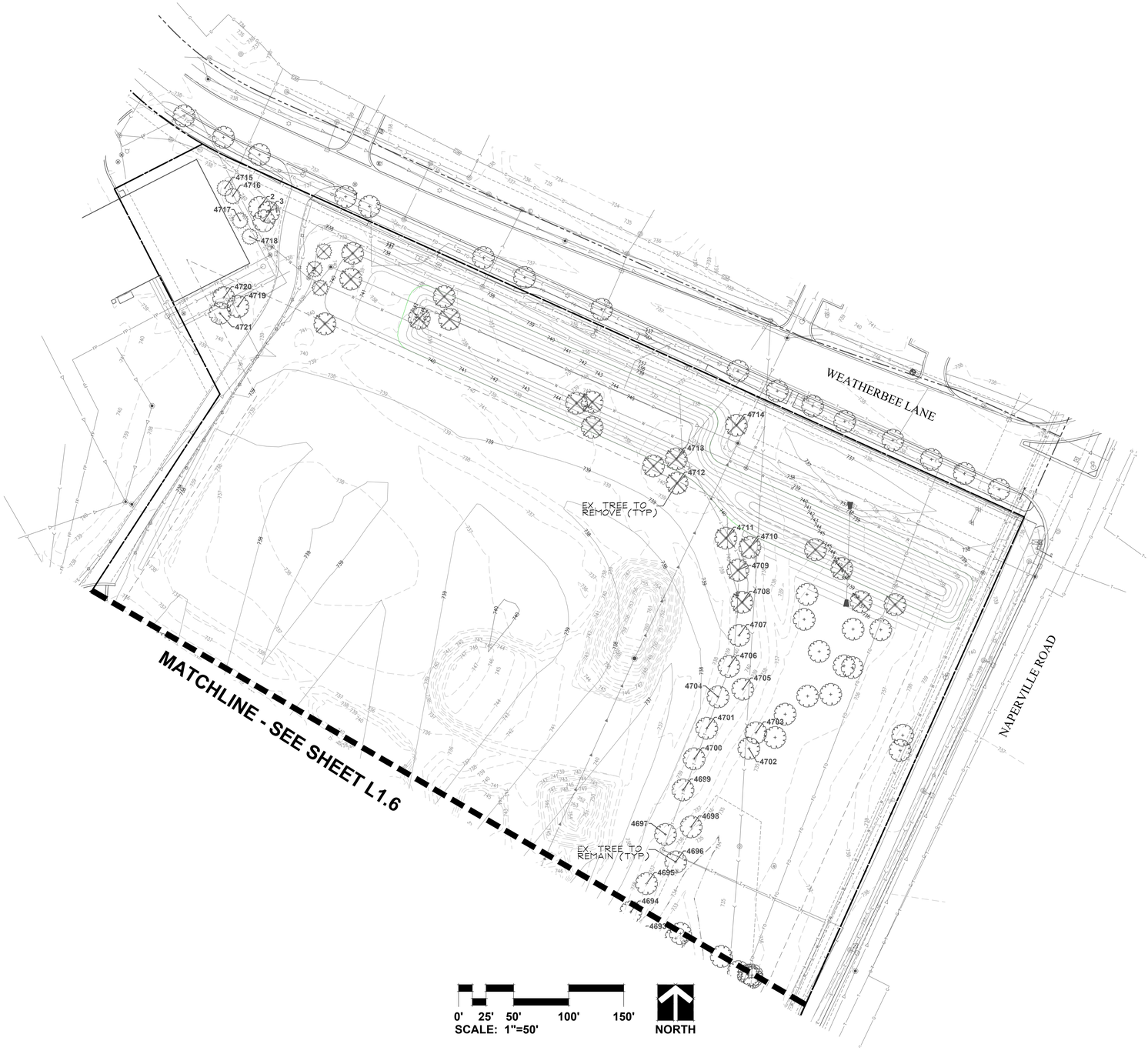
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2	07.31.2025
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REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	L1.6

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

SEE TREE INVENTORY SHEET L1.8



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SUITE 300
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1960 W. LUCENT LANE

NAPERVILLE, ILLINOIS

TREE PRESERVATION PLAN EAST

3	09.25.2025
2	07.31.2025
1	06.12.2025

REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB

SHEET NO.

L1.7

Know what's below. Call before you dig.

XREFS

PLOT CONFIG

RATING AND SURVEY CRITERIA

1) Trees measured at 4.5 ft above the ground - DBH (diameter Breast Height)
2) All trees 4" DBH and above tagged. Dead trees were tagged for removal. Invasive shrubs were not tagged.
3) Health Rating:

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.	SCIENTIFC NAME	COMMON NAME	DBH (inches)	CONDITION	STRUCTURE	HEALTH	PROPOSED ACTION
1	*Picea pungens*	Colorado Spruce	2, 6' Tall	2 - Good			PRESERVE
2	*Picea pungens*	Colorado Spruce	2, 8' Tall	2 - Good			PRESERVE
3	*Picea pungens*	Colorado Spruce	2, 6' Tall	2 - Good			PRESERVE
4627	*Quercus macrocarpa*	Bur Oak	40	3 - Fair		10% dead wood, Fungus-Root	PRESERVE
4628	*Acer saccharum*	Sugar Maple	12	2 - Good			PRESERVE
4629	Acer saccharum	Sugar Maple	14	2 - Good		10% dead wood	PRESERVE
4630	*Acer saccharum*	Sugar Maple	14	4 - Fair/Poor		Dead Leader, Wood rot, Trunk Scar	PRESERVE
4631	*Acer saccharum*	Sugar Maple	14	2 - Good			REMOVE
4632	*Acer saccharum*	Sugar Maple	15	3 - Fair		10% dead wood, Sparse foliage	REMOVE
4633	*Acer saccharum*	Sugar Maple	15	2 - Good		10% dead wood	REMOVE
4634	*Morus alba*	White Mulberry	9,6,6	4 - Fair/Poor	V-shaped joint, Multi Leader, Split Risk, Lean, Crowded		REMOVE
4635	*Pinus nigra*	Austrian Pine	14	4 - Fair/Poor	Crowded	30% dead wood, Sparse foliage	REMOVE
4636	*Pinus nigra*	Austrian Pine	13	6 - Dead			REMOVE
4637	*Acer platanoides*	Norway Maple	6	3 - Fair	Lean, Crown Lean, Crowded		REMOVE
4638	*Acer saccharum*	Sugar Maple	16	3 - Fair	Unbalanced, Crown Lean	Trunk Scar	REMOVE
4639	*Acer saccharum*	Sugar Maple	14	3 - Fair	Crown Lean	10% dead wood	REMOVE
4640	*Acer saccharum*	Sugar Maple	7	3 - Fair	Crown Lean, Crowded		REMOVE
4641	*Gleditsia triacanthos*	Honey Locust	28	3 - Fair	Unbalanced, Crowded, Broken Limb	20% dead wood	PRESERVE
4642	*Gleditsia triacanthos*	Honey Locust	24	3 - Fair	Unbalanced, Crown Lean	30% dead wood	PRESERVE
4643	*Gleditsia triacanthos*	Honey Locust	26	6 - Dead			PRESERVE
4644	*Gleditsia triacanthos*	Honey Locust	22	3 - Fair	Crown Lean	30% dead wood	PRESERVE
4645	*Gleditsia triacanthos*	Honey Locust	24	3 - Fair	Unbalanced, Crown Lean	20% dead wood	REMOVE
4646	*Gleditsia triacanthos*	Honey Locust	26	3 - Fair	Crown Lean, Broken Limb	20% dead wood	REMOVE
4647	*Acer saccharum*	Sugar Maple	5	3 - Fair	Crown Lean, Crowded		PRESERVE
4648	*Gleditsia triacanthos*	Honey Locust	2	3 - Fair	Unbalanced, Crown Lean, Broken Limb	20% dead wood	REMOVE
4649	*Acer saccharum*	Sugar Maple	16	2 - Good			REMOVE
4650	*Acer saccharum*	Sugar Maple	17	2 - Good			REMOVE
4651	*Fraxinus spp.*	Ash	14	6 - Dead			REMOVE
4652	*Acer saccharum*	Sugar Maple	36	2 - Good	Broken Limb	10% dead wood	REMOVE
4653	*Morus alba*	White Mulberry	4	3 - Fair	Crown Lean, Crowded		REMOVE
4654	*Morus alba*	White Mulberry	7	3 - Fair	Lean, Crown Lean, Crowded		REMOVE
4655	*Acer saccharum*	Sugar Maple	14	3 - Fair	Crown Lean	10% dead wood, Dead Limbs	REMOVE
4656	*Acer saccharum*	Sugar Maple	15	2 - Good			REMOVE
4657	*Juglans nigra*	Black Walnut	11	2 - Good			REMOVE
4658	*Quercus rubra*	Red Oak	8	2 - Good			REMOVE
4659	-	Unknown	24	6 - Dead			PRESERVE
4660	*Acer saccharum*	Sugar Maple	12	4 - Fair/Poor		50% dead wood	REMOVE
4661	*Acer saccharum*	Sugar Maple	14	2 - Good			REMOVE
4662	*Acer saccharum*	Sugar Maple	15	2 - Good			REMOVE
4663	*Acer saccharum*	Sugar Maple	26	4 - Fair/Poor	Crown Lean	30% dead wood, Dead Limbs, Cavity	PRESERVE
4664	*Juglans nigra*	Black Walnut	7	3 - Fair	Crown Lean, Crowded		PRESERVE
4665	*Tilia cordata*	Littleleaf Linden	17	2 - Good			REMOVE
4666	*Tilia cordata*	Littleleaf Linden	17	2 - Good			REMOVE
4667	*Tilia cordata*	Littleleaf Linden	18	2 - Good			REMOVE
4668	*Tilia cordata*	Littleleaf Linden	17	4 - Fair/Poor	Broken Limb	Cavity	REMOVE
4669	*Tilia cordata*	Littleleaf Linden	18	2 - Good			REMOVE
4670	*Tilia cordata*	Littleleaf Linden	16	2 - Good			REMOVE
4671	*Tilia cordata*	Littleleaf Linden	17	2 - Good			PRESERVE
4672	*Tilia cordata*	Littleleaf Linden	15	2 - Good			REMOVE
4673	*Tilia cordata*	Littleleaf Linden	18	2 - Good			PRESERVE
4674	*Tilia cordata*	Littleleaf Linden	15	2 - Good			REMOVE
4675	*Tilia cordata*	Littleleaf Linden	13	4 - Fair/Poor		Cavity, Trunk Scar	REMOVE
4676	*Tilia cordata*	Littleleaf Linden	14	3 - Fair		Trunk Scar	REMOVE
4677	*Tilia cordata*	Littleleaf Linden	16	2 - Good			REMOVE
4678	*Tilia cordata*	Littleleaf Linden	14	2 - Good			REMOVE
4679	*Tilia cordata*	Littleleaf Linden	14	2 - Good			REMOVE
4680	*Tilia cordata*	Littleleaf Linden	16	3 - Fair		10% dead wood	PRESERVE
4681	*Tilia cordata*	Littleleaf Linden	15	2 - Good			REMOVE
4682	*Tilia cordata*	Littleleaf Linden	18	2 - Good			REMOVE
4683	*Tilia cordata*	Littleleaf Linden	15	2 - Good			PRESERVE
4684	*Tilia cordata*	Littleleaf Linden	20	2 - Good			PRESERVE
4685	*Tilia cordata*	Littleleaf Linden	17	2 - Good			REMOVE
4686	*Acer saccharum*	Sugar Maple	10	3 - Fair		Trunk Scar	REMOVE
4687	*Acer saccharum*	Sugar Maple	10	3 - Fair		Trunk Scar	REMOVE
4688	*Acer saccharum*	Sugar Maple	10	2 - Good			REMOVE
4689	*Acer saccharum*	Sugar Maple	11	3 - Fair		Trunk Damage	REMOVE
4690	*Acer saccharum*	Sugar Maple	13	4 - Fair/Poor		30% dead wood, Tip die-back	PRESERVE
4691	*Acer saccharum*	Sugar Maple	12	2 - Good			PRESERVE
4692	*Acer saccharum*	Sugar Maple	13	2 - Good			PRESERVE
4693	*Acer saccharum*	Sugar Maple	12	2 - Good			PRESERVE
4694	*Acer saccharum*	Sugar Maple	14	2 - Good			PRESERVE
4695	*Acer saccharum*	Sugar Maple	13	2 - Good			PRESERVE
4696	*Acer saccharum*	Sugar Maple	13	4 - Fair/Poor	Broken Leader	30% dead wood, Trunk Scar	PRESERVE
4697	*Acer saccharum*	Sugar Maple	15	2 - Good			PRESERVE
4698	*Acer saccharum*	Sugar Maple	13	2 - Good			PRESERVE
4699	*Acer saccharum*	Sugar Maple	14	2 - Good			PRESERVE
4700	*Acer saccharum*	Sugar Maple	16	2 - Good			PRESERVE
4701	*Acer saccharum*	Sugar Maple	15	2 - Good			PRESERVE
4702	*Acer saccharinum*	Silver Maple	25	2 - Good	Crown Lean		PRESERVE
4703	*Acer saccharinum*	Silver Maple	24	4 - Fair/Poor	Crown Lean, Crowded, Broken Limb	10% dead wood, Cavity	PRESERVE
4704	*Acer saccharum*	Sugar Maple	14	2 - Good			PRESERVE
4705	*Acer saccharum*	Sugar Maple	12	2 - Good			PRESERVE
4706	*Acer saccharum*	Sugar Maple	13	2 - Good			PRESERVE
4707	*Acer saccharum*	Sugar Maple	15	2 - Good			PRESERVE
4708	*Acer saccharum*	Sugar Maple	16	2 - Good			REMOVE
4709	*Acer saccharum*	Sugar Maple	14	2 - Good			REMOVE
4710	*Acer saccharum*	Sugar Maple	13	2 - Good			REMOVE
4711	*Acer saccharum*	Sugar Maple	7	6 - Dead			REMOVE
4712	*Acer saccharum*	Sugar Maple	11	2 - Good			REMOVE
4713	*Acer saccharum*	Sugar Maple	12	2 - Good			REMOVE
4714	*Acer rubrum*	Red Maple	18	4 - Fair/Poor	Crown Lean	Cavity, Tip die-back	REMOVE
4715	*Picea omorika*	Serbian Spruce	8, 30' Tall	2 - Good			PRESERVE
4716	*Picea omorika*	Serbian Spruce	8, 30' Tall	3 - Fair	Poor Form		PRESERVE
4717	*Picea omorika*	Serbian Spruce	8, 25' Tall	3 - Fair	Poor Form		PRESERVE
4718	*Picea omorika*	Serbian Spruce	7, 20' Tall	3 - Fair	Poor Form , Crowded		PRESERVE
4719	*Acer rubrum*	Red Maple	10	3 - Fair		Trunk Scar	PRESERVE
4720	*Acer rubrum*	Red Maple	9	3 - Fair		20% dead wood, Tip die-back	PRESERVE
4721	*Acer rubrum*	Red Maple	9	3 - Fair		Trunk Scar	PRESERVE
4722	*Acer spp.*	Maple Cultivar	22	5 - Poor		>50% dead wood, Peeling Bark	PRESERVE
4723	*Acer spp.*	Maple Cultivar	12	2 - Good			PRESERVE
4724	*Acer spp.*	Maple Cultivar	14	3 - Fair		Trunk Scar	PRESERVE
4725	*Acer spp.*	Maple Cultivar	11	5 - Poor		50% dead wood	PRESERVE
4726	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood	PRESERVE
4727	*Acer spp.*	Maple Cultivar	13	2 - Good			PRESERVE
4728	*Acer spp.*	Maple Cultivar	14	2 - Good			PRESERVE
4729	*Acer spp.*	Maple Cultivar	11	6 - Dead			PRESERVE
4730	*Acer spp.*	Maple Cultivar	11	6 - Dead			PRESERVE
4731	*Acer spp.*	Maple Cultivar	14	2 - Good			PRESERVE
4732	*Acer spp.*	Maple Cultivar	14	2 - Good			PRESERVE
4733	*Acer spp.*	Maple Cultivar	11	5 - Poor		50% dead wood	PRESERVE
4734	*Acer spp.*	Maple Cultivar	10	5 - Poor		>50% dead wood	PRESERVE
4735	*Acer spp.*	Maple Cultivar	13	3 - Fair		Trunk Scar	PRESERVE
4736	*Acer spp.*	Maple Cultivar	11	4 - Fair/Poor		30% dead wood	PRESERVE
4737	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood, Trunk Scar	PRESERVE
4738	*Acer spp.*	Maple Cultivar	7	5 - Poor		>50% dead wood, Dead Leader, Trunk Damage	PRESERVE
4739	*Acer spp.*	Maple Cultivar	11	5 - Poor		50% dead wood, Trunk Scar, Peeling Bark	PRESERVE
4740	*Acer spp.*	Maple Cultivar	8	5 - Poor		50% dead wood, Trunk Scar, Peeling Bark	PRESERVE
4741	*Acer spp.*	Maple Cultivar	11	4 - Fair/Poor		40% dead wood	PRESERVE
4742	*Acer spp.*	Maple Cultivar	9	5 - Poor		40% dead wood, Cavity, Trunk Scar	PRESERVE
4743	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood, Wood rot, Cavity	PRESERVE
4744	*Acer spp.*	Maple Cultivar	8	5 - Poor		>50% dead wood	PRESERVE
4745	*Acer spp.*	Maple Cultivar	7	5 - Poor		50% dead wood, Dead Leader, Tip die-back	PRESERVE
4746	*Acer spp.*	Maple Cultivar	10	5 - Poor		50% dead wood, Dead Leader	PRESERVE
4747	*Acer spp.*	Maple Cultivar	8	5 - Poor		>50% dead wood, Dead Leader	PRESERVE
4748	*Acer spp.*	Maple Cultivar	11	4 - Fair/Poor		30% dead wood	PRESERVE
4749	*Acer spp.*	Maple Cultivar	13	2 - Good		10% dead wood	PRESERVE
4750	*Acer spp.*	Maple Cultivar	13	5 - Poor		50% dead wood	PRESERVE
4751	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood	PRESERVE
4752	*Acer spp.*	Maple Cultivar	13	2 - Good			PRESERVE
4753	*Acer spp.*	Maple Cultivar	12	2 - Good			PRESERVE
4754	*Acer spp.*	Maple Cultivar	11	4 - Fair/Poor		30% dead wood	PRESERVE
4755	*Acer spp.*	Maple Cultivar	11	6 - Dead			PRESERVE
4756	*Acer spp.*	Maple Cultivar	12	2 - Good			PRESERVE
4757	*Acer spp.*	Maple Cultivar	14	2 - Good			PRESERVE
4758	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood	PRESERVE
4759	*Acer spp.*	Maple Cultivar	10	6 - Dead			PRESERVE
4760	*Acer spp.*	Maple Cultivar	12	2 - Good			PRESERVE
4761	*Acer spp.*	Maple Cultivar	14	2 - Good			PRESERVE
4762	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood	PRESERVE
4763	*Acer spp.*	Maple Cultivar	13	3 - Fair	Broken Limb	Trunk Scar	PRESERVE
4764	*Acer spp.*	Maple Cultivar	11	5 - Poor		>50% dead wood	PRESERVE
4765	*Acer rubrum*	Red Maple	10	2 - Good			PRESERVE
4766	*Acer rubrum*	Red Maple	8	2 - Good			PRESERVE
4767	*Acer rubrum*	Red Maple	9	2 - Good			PRESERVE
4768	*Picea pungens*	Colorado Spruce	4	4 - Fair/Poor	Lean, Poor Form , Crown Lean		PRESERVE
4769	*Acer rubrum*	Red Maple	9	2 - Good			PRESERVE
4770	*Acer rubrum*	Red Maple	8	2 - Good			PRESERVE
4771	*Acer rubrum*	Red Maple	7	2 - Good			PRESERVE
4772	*Acer rubrum*	Red Maple	9	2 - Good			PRESERVE
4773	*Acer rubrum*	Red Maple	10	2 - Good			PRESERVE
4774	*Acer rubrum*	Red Maple	9	3 - Fair		10% dead wood, Tip die-back	PRESERVE
4775	*Acer rubrum*	Red Maple	9	2 - Good		10% dead wood	PRESERVE
4776	*Acer rubrum*	Red Maple	9	2 - Good			PRESERVE
4777	*Picea omorika*	Serbian Spruce	5, 12' Tall	4 - Fair/Poor	Poor Form , Crowded, Broken Leader		PRESERVE
4778	*Picea omorika*	Serbian Spruce	4,4, 20' Tall	4 - Fair/Poor	V-shaped joint, Double Leader, Split Risk		PRESERVE
4779	*Picea omorika*	Serbian Spruce	7, 20' Tall	3 - Fair	Crowded		PRESERVE
4780	*Picea omorika*	Serbian Spruce	6, 20' Tall	3 - Fair	Poor Form		PRESERVE
4781	*Picea omorika*	Serbian Spruce	7, 15' Tall	3 - Fair	Poor Form , Crown Lean		PRESERVE
4782	*Picea omorika*	Serbian Spruce	8, 25' Tall	2 - Good			PRESERVE
4783	*Picea omorika*	Serbian Spruce	8, 25' Tall	2 - Good			PRESERVE
4784	*Picea omorika*	Serbian Spruce	6, 25' Tall	2 - Good			PRESERVE
4785	*Acer rubrum*	Red Maple	7	4 - Fair/Poor		30% dead wood	PRESERVE
4786	*Acer rubrum*	Red Maple	7	4 - Fair/Poor		20% dead wood, Tip die-back, Trunk Scar	PRESERVE
4787	*Acer rubrum*	Red Maple	7	3 - Fair		Tip die-back	PRESERVE
4788	*Acer rubrum*	Red Maple	7	5 - Poor		>50% dead wood, Dead Leader	PRESERVE
4789	*Acer rubrum*	Red Maple	8	4 - Fair/Poor		40% dead wood	PRESERVE
4790	*Acer rubrum*	Red Maple	8	3 - Fair		Tip die-back	PRESERVE
4791	*Fraxinus spp.*	Ash	15	5 - Poor		50% dead wood, Insect damage	PRESERVE
4792	*Picea pungens*	Colorado Spruce	7, 30' Tall	2 - Good			PRESERVE
4793	*Fraxinus spp.*	Ash	15	5 - Poor		30% dead wood, Insect damage, Trunk Scar	PRESERVE
4794	*Fraxinus spp.*	Ash	13	5 - Poor		40% dead wood, Insect damage, Trunk Scar	PRESERVE
4795	*Fraxinus spp.*	Ash	13	4 - Fair/Poor		30% dead wood, Insect damage	PRESERVE
4796	*Fraxinus spp.*	Ash	14	5 - Poor		40% dead wood, Insect damage, Trunk Scar	PRESERVE
4797	*Fraxinus spp.*	Ash	14	5 - Poor		30% dead wood, Insect damage, Trunk Scar	PRESERVE
4798	*Fraxinus spp.*	Ash	11	5 - Poor		40% dead wood, Insect damage, Trunk Scar	PRESERVE
4799	*Fraxinus spp.*	Ash	14	5 - Poor		40% dead wood, Insect damage, Trunk Scar	PRESERVE
4800	*Acer rubrum*	Red Maple	15	2 - Good			PRESERVE

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1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

TREE INVENTORY

3	09.25.2025
2	07.31.2025
1	06.12.2025

REVISIONS

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	L1.8

Know what's below. Call before you dig.

XREFS:
PLOT DOMOS:

LANDSCAPE WORK PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

The work shall consist of furnishing, transporting and installing all seeds, plants and other materials required for:

1. The establishment of trees, shrubs, perennial, annual and lawn areas as shown on Landscape Plan;
2. The provision of post-planting management as specified herein;
3. Any remedial operations necessary in conformance with the plans as specified in this document;
4. The design, furnishing and installation of a complete underground sprinkler system; and
5. Permits which may be required.

1.2 QUALITY ASSURANCE

A. Work shall conform to State of Illinois Horticultural Standards and local municipal requirements.

B. Quality Control Procedures:

1. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.

2. Do not make substitutions. If specified landscape material is not obtainable, submit to Landscape Architect proof of non-availability and proposal for use of equivalent material.

3. Analysis and Standards: Package standard products with manufacturers certified analysis.

C. Insect Control

1. For areas containing standing water less than 3-ft that persist for greater than 7 days, mosquito control may be necessary. Mosquito control should be limited to larvicides applications such as Natular or Vectolex FG, per the EPA and CDC guidance. Larvicide application should be provided by a qualified professional. Contract the North Shore Mosquito Abatement District for service.

1.3 SUBMITTALS

A. Planting Schedule

Submit three (3) copies of the proposed planting schedule showing dates for each type of planting

B. Maintenance Instruction - Landscape Work

Submit two (2) copies of typewritten instructions recommending procedures to be established by the Owner for the maintenance of landscape work for one full year. Submit prior to expiration of required maintenance periods.

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 provided ten (10) days prior to request for inspection for final acceptance. Landscape Architect shall receive copies of all instructions when issued.

C. Submit two (2) copies of soil test of existing topsoil with recommendations for soil additive requirement to Landscape Architect for review and written approval.

D. 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.

E. Nursery packing lists indicating the species and quantities of material installed must be provided to the Owner and/or City upon request.

1.4 JOB CONDITIONS

A. Examine and evaluate grades, soils and water levels. Observe the conditions under which work is to be performed and notify Landscape Architect 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 local utility location service; 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. Excavation: When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions or obstructions, notify Landscape Architect before planting.

1.5 GUARANTEES

A. Guarantee seeded and sodded areas through the specified maintenance period and until final inspection.

B. Guarantee trees, shrubs, groundcover and perennials for a period of one year after date of acceptance against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Installer's control.

C. Native Planting Area Performance Criteria

1st Full Growing Season: 90% 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.

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.

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 & 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).

LANDSCAPE WORK PART 2 - PLANT MATERIALS

2.1 LAWN SOD

Provide strongly rooted sod, not less than two (2) years old and free of weeds and undesirable native grasses. Provide only sod capable of growth and development when planted (viable, not dormant) and in strips not more than 18" wide x 4' long. Provide sod composed of a 5-way blend of Kentucky Bluegrass such as: Midnight, Allure, Viva, Washington, Liberty.

2.2 LAWN SEED MIXTURE

Grass Seed: Provide fresh, clean, new crop seed complying with the tolerance for purity and germination established by the Official Seed Analysts of North America. Provide seed of the grass species, proportions and maximum percentage of weed seed, as specified.

A. Lawn Seed Mixture - 5 lbs. / 1,000 sq. ft.
50% Kentucky Bluegrass (98/85)
15% Cutter Perennial Ryegrass
10% Spartan Hard Fescue
10% Edge Perennial Ryegrass
10% Express Perennial Ryegrass
5% Pennlawn Creeping Red Fescue

B. Temporary Lawn Seed Mixture - 5 lbs. / 1,000 sq. ft.
40% Kentucky Bluegrass (98/85)
40% Perennial Ryegrass
20% Annual Ryegrass

C. Highlands Fescue Seed Mixture - Mixture-7 lbs. / 1,000 sq. ft.
25% Discovery Hard Fescue
25% Tiffany Chewings Fescue
25% Florentine Creeping Red Fescue
25% Bighorn Sheeps Fescue

D. Detention Seed Mixture - 7 lbs. / 1000 sq. ft.
70% Kentucky 31 Tall Fescue
30% Perennial Ryegrass

2.3 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 east 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.

2.4 GROUNDCOVERS, PERENNIALS AND ANNUALS

Provide plants established and well-rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size shown or listed.

2.5 TREES AND SHRUBS

A. Name and Variety: Provide nursery grown plant material true to name and variety.

B. Quality: Provide trees, shrubs and other plants complying with the recommendations and requirements of ANSI Z60.1 "Standard for Nursery Stock" and as further specified.

C. Deciduous Trees: Provide trees of height and caliper listed or shown and with branching configuration recommended by ANSI Z60.1 for type and species required. Provide single stem trees except where special forms are shown or listed. Provide balled and burlapped (B&B) deciduous trees.

D. Deciduous Shrubs: Provide shrubs of the height shown or listed and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required. Provide balled and burlapped (B&B) deciduous shrubs.

E. Coniferous Evergreen: Provide evergreens of the sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types. Provide quality evergreens with well-balanced form complying with requirements for other size relationships to the primary dimension shown. Provide balled and burlapped (B&B) evergreen trees and containerized shrubs.

F. Inspection: All plants shall be subject to inspection and review at the place of growth or upon delivery and conformity to specification requirements as to quality, right of inspection and rejection upon delivery at the site or during the progress of the work for size and condition of balls or roots, diseases, insects and latent defects or injuries. Rejected plants shall be removed immediately from the site.

2.6 PLANTING SOIL MIXTURE

Provide planting soil mixture consisting of clean uncompacted topsoil (stockpiled at site) for all planting pits, perennial, annual and groundcover areas. Topsoil shall be conditioned based on any recommendations resulting from the soil test in 1.3.C.

2.7 EROSION CONTROL

A. Lawn Seed Areas Erosion Control Blanket: North American Green DS75, or equivalent approved equal.

B. Native Areas Erosion Control Blanket: North American Green S150, or equivalent approved equal.

C. Shoreline and Sloped Berm Areas Erosion Control Blanket: North American Green SC150, or equivalent approved equal. To be installed per manufacturer's recommendations.

D. Refer to latest Engineering & Erosion Control Plans for any areas to receive permanent or long-term blanket installation.

E. Hydroseed Mulch: Conweb 2000 wood fiber mulch with tackifier. Other mulches may be used subject to approval of Landscape Architect.

2.8 MULCH

Provide mulch consisting of premium shredded hardwood bark. Provide sample to Landscape Architect for approval prior to ordering materials.

LANDSCAPE WORK PART 3 - EXECUTION

3.1 PLANTING SCHEDULE

At least thirty (30) days prior to the beginning of work in each area, submit a planting schedule for approval by the Landscape Architect.

3.2 PLANTINGS

A. Sodding New Lawns

1. Remove existing grass, vegetation and turf. Dispose of such material legally off-site, do not turn over into soil being prepared for lawns.

2. Till to a depth of not less than 6"; apply soil amendments as needed; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, remove lumps, clods, stones over 1" diameter, roots and other extraneous matter. Dispose of such material legally off-site.

3. Sodded areas shall receive an application of commercial fertilizer at the rate of 10 lbs. per 1,000 sq. ft. and shall have an analysis of 16-8-8.

4. Lay sod within 24 hours from time of stripping.

5. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass.

6. Water sod thoroughly with a fine spray immediately after planting.

B. Seeding New Lawns

1. Remove existing grass, vegetation and turf. Dispose of such material legally off-site. Do not turn over into soil being prepared for lawns.

2. Till to a depth of not less than 6"; apply soil amendments; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, remove lumps, clods, stones over 1" diameter, roots and other extraneous matter. Dispose of such material legally off-site.

3. Seeded lawn areas shall receive an application of commercial fertilizer at the rate of 5 lbs. per 1,000 sq. ft. and shall be 6-24-24. Fertilizer shall be uniformly spread and mixed into the soil to a depth of 1" inches.

4. Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage.

5. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds five (5) miles per hour. Distribute seed evenly over entire area by sowing equal quantity in two directions at right angles to each other.

6. Sow not less than specified rate.

7. Rake lawn seed lightly into top 1" of soil, roll lightly and water with a fine spray.

8. After the seeding operation is completed, spray a wood fiber mulch (Conweb 2000 with tackifier or approved equal) over the entire grassed area at the rate of 2,000 lbs. per acre. Use a mechanical spray unit to insure uniform coverage. Exercise care to protect buildings, automobiles and people during the application of the mulch.

9. DO NOT MOW HIGHLANDS FESCUE SEED MIXTURE.

C. Seeding Native Areas

1. The period for planting prairie seed shall be from April 1 to May 15 or November 1 to just before the first frost. Seeding outside of these timeframes must be approved by the landscape architect. Native seed planted outside of specified timeframes must have at least 60 days of growth prior to frost. Dormant seeding in winter is possible if soil conditions allow

2. The General Contractor and Native Landscape Contractor shall be responsible for performing all work necessary to achieve and maintain an acceptable seedbed prior to seeding. All areas must be properly prepared before seeding begins. Equipment having low unit pressure ground contact shall be utilized within the planting areas.

3. 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 to 18 inches of the soil horizon prior to disking.

4. Prior to seeding, planting areas shall have at least twelve inches of clean un-compacted topsoil. Clumps, clods, stones over 2" diameter, roots and other extraneous matter shall be removed and disposed of legally off-site.

5. Granular mycorrhizal inoculants shall be installed with the seed mix at a rate of 40lbs/ acre. Inoculant can be banded under seed, worked into seed or added into spray tanks. Native areas shall not receive fertilizer.

6. 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.

7. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for 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.

8. 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.

9. Seeding and soil tracking/firming shall not be done during periods of rain, severe drought, high winds, excessive moisture, frozen ground, or other conditions that preclude satisfactory results.

10. Wet mesic and emergent areas shall be planted, and seed allowed to germinate (if possible), prior to 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.

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

12. Emergent plugs shall be planted in natural groupings within designed areas containing saturated soils or shallow inundation. Plants within groupings shall be planted at 2 foot centers.

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

E. Groundcover and Perennial Beds

Groundcover, perennials, and annuals shall be planted in continuous beds of planting soil mixture a minimum of 8" deep. Install per spacing indicated on plan.

F. Trees and Shrubs

1. Set balled and burlapped (B&B) stock plumb and in center of pit or trench with top of ball at an elevation that will keep the root flare exposed upon backfill and mulching. Remove burlap from top and sides of balls; retain on bottoms. When set, place additional topsoil backfill around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.

2. Dish top of backfill to allow for mulching. Provide additional backfill berm around edge of excavations to form shallow saucer to collect water.

3. Mulch pits, trenches and planted areas. Provide not less than 3" thickness of mulch and work into top of backfill and finish level with adjacent finish grades. Maintain exposed root flare at all times.

4. Prune only injured or dead branches from flowering trees, if any. Protect central leader of tree during shipping and pruning operations. Prune shrubs to retain natural character in accordance with standard horticultural practices.

5. Remove and replace excessively pruned or ill-formed stock resulting from improper pruning.

6. The Contractor shall be wholly responsible for assuring that all trees are planted in a vertical and plumb position and remain so throughout the life of this contract and guarantee period. Trees may or may not be staked and guyed depending upon the individual preference of the Contractor; however, any bracing procedure(s) must be approved by the Owner prior to its installation.

3.3 INITIAL MAINTENANCE

A. Begin maintenance immediately after planting, continuing until final acceptance. A minimum of thirty (30) days.

B. Maintain planted and seeded areas by watering, rolling/regrading, replanting and implementing erosion control as required to establish vegetation free of eroded or bare areas.

C. Highlands Fescue and Native Planting areas are to be mowed only once per spring during the initial three year establishment period.

3.4 NATIVE LANDSCAPED AREAS

CONTINUED MONITORING & MAINTENANCE

A. Monitoring

The Owner shall notify the County upon completion of plantings. The Owner's Environmental Specialist shall inspect the plantings and provide the County with a copy of the planting locations, species, and quantities for verification by the County.

The Owner's Environmental Specialist shall inspect the plantings at least twice per year during the three-year term of the Establishment and Maintenance Cash Bond or Letter of Credit, to determine compliance with the minimum annual performance criteria (See 1.5C Guarantees). A monitoring report will be provided to the County by January 31st following each inspection.

B. Maintenance:

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.

Second Season

Control of undesirable plant 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 growing season and as needed to 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.

Third, Fourth, and Fifth Years:

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.

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.

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 indicating 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.

C. Long Term Wetland and Prairie Management/Maintenance

A final compliance report and Long-Term Operation and Maintenance Plan shall be submitted by the Developer/Owner's Environmental Specialist no less than 60 days prior to the expiration of any landscape Cash Bond or Letter of Credit posted for the native areas. Final acceptance and release shall be determined by the County/City/USACE upon inspection of the site to verify compliance.

The Long -Term Operation and Maintenance Plan shall be written to include guidelines and schedules for burning, mowing, application of herbicide, debris/litter removal and inspection schedule for storm structures and sediment removal.

3.5 CLEAN UP AND PROTECTION

A. During landscape work, store materials and equipment where directed. Keep pavements clean and work areas and adjoining areas in an orderly condition.

B. Protect landscape work and materials from damage due to landscape operations, operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed by Landscape Architect.

3.6 INSPECTION AND ACCEPTANCE

A. The Landscape Architect reserves the right to inspect seeds, plants, trees and shrubs either at place of growth or at site before planting for compliance with requirements for name, variety, size, quantity, quality and mix proportion.

B. Supply written affidavit certifying composition of seed mixtures and integrity of plant materials with respect to species, variety and source.

C. Notify the Landscape Architect within five (5) days after completing initial and/or supplemental plantings in each area.

D. When the landscape work is completed, including maintenance, the Landscape Architect will, upon request, make a final inspection to determine acceptability. After final acceptance, the Owner will be responsible for maintenance.

GRWA
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ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
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PHONE: 630-668-7197

CIVIL ENGINEER
JACOB & HEFNER ASSOCIATES
1333 BUTTERFIELD ROAD
SUITE 300
DOWNERS GROVE, ILLINOIS 60515

1960 W. LUCENT LANE
NAPERVILLE, ILLINOIS

LANDSCAPE SPECIFICATIONS

3	09.25.2025
2	07.31.2025
1	06.12.2025
REVISIONS	

DATE	04.07.2025
PROJECT NO.	JH25224
DRAWN	EAN
CHECKED	TSB
SHEET NO.	L1.9

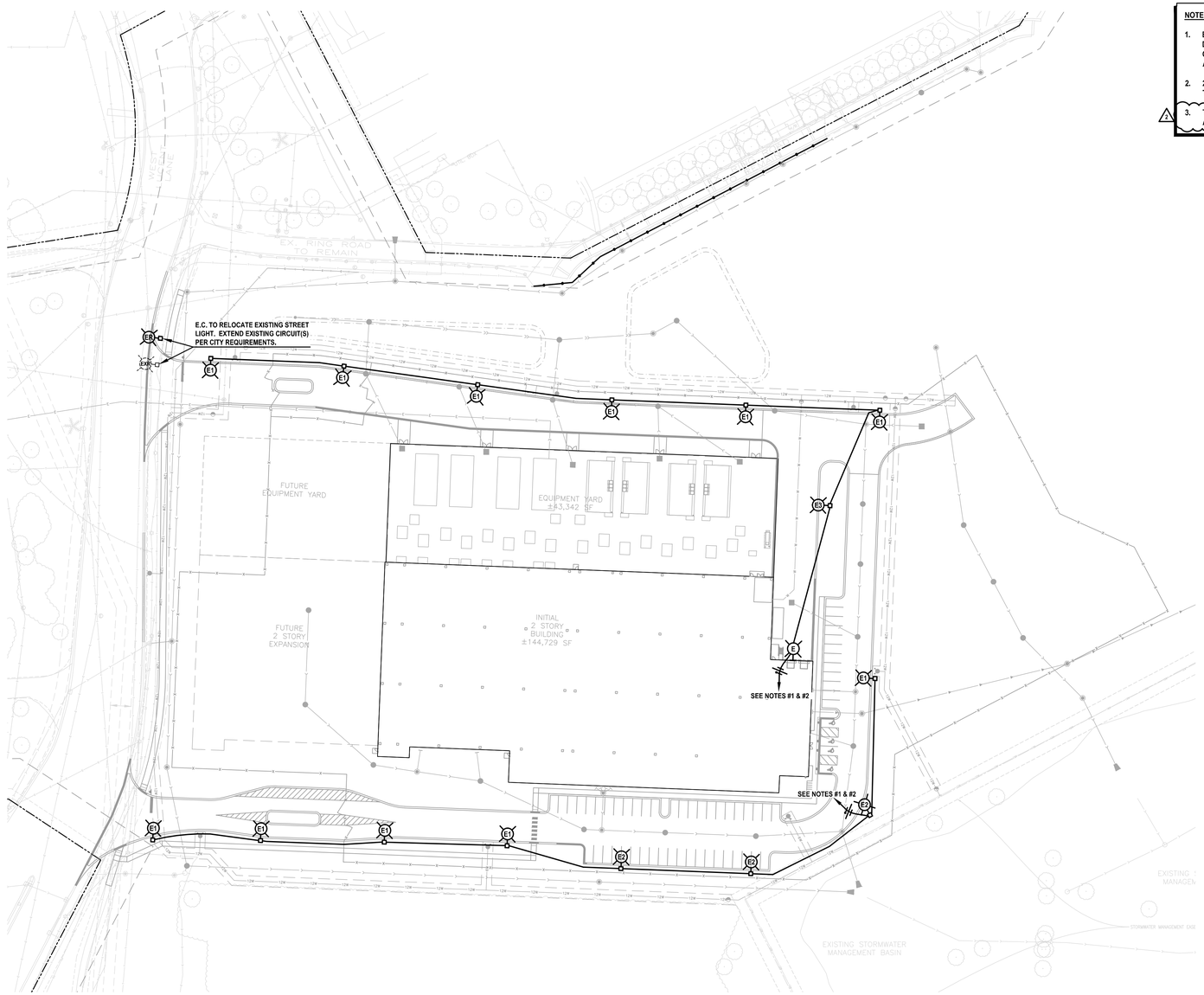
811 Know what's below. Call before you dig.

XREFS
PLOT COMING

EXHIBIT G
PHOTOMETRIC PLAN

NOTES:

1. EACH LIGHT FIXTURE TO HAVE MOTION SENSOR CONTROL. LIGHT FIXTURES TO DIM TO 33% AFTER 15 MINUTES OF NO MOTION DETECTED. ALL LIGHTS ON THAT CIRCUIT TO COME TO FULL BRIGHTNESS WHEN ONE MOTION SENSOR IS ACTIVATED ON THAT CIRCUIT.
2. 2 #8 THWN & 1 #8 GND. IN 3/4" C. TO LIGHTING PANEL VIA PHOTOCELL-ON, TIMECLOCK-OFF.
3. THESE PLANS COMPLY WITH NAPERVILLE MUNICIPAL CODE SECTION 6-14-4:3 AND ALL LIGHT FIXTURES ARE "DARK SKY" COMPLIANT.



ELECTRICAL SITE PLAN
SCALE: 1"=60'-0"

No.	Description	Date
	ISSUED FOR PERMIT	06/12/25
1	PERMIT REVIEW COMMENTS	07/31/25
2	PERMIT REVIEW COMMENTS	09/22/25

INITIAL BUILDING ELECTRICAL SITE PLAN

1960 W LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
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KORNACKI & ASSOCIATES, INC.
Electrical Design Consultants
262-784-3323
2845 S. Moorland Rd., New Berlin, WI 53151

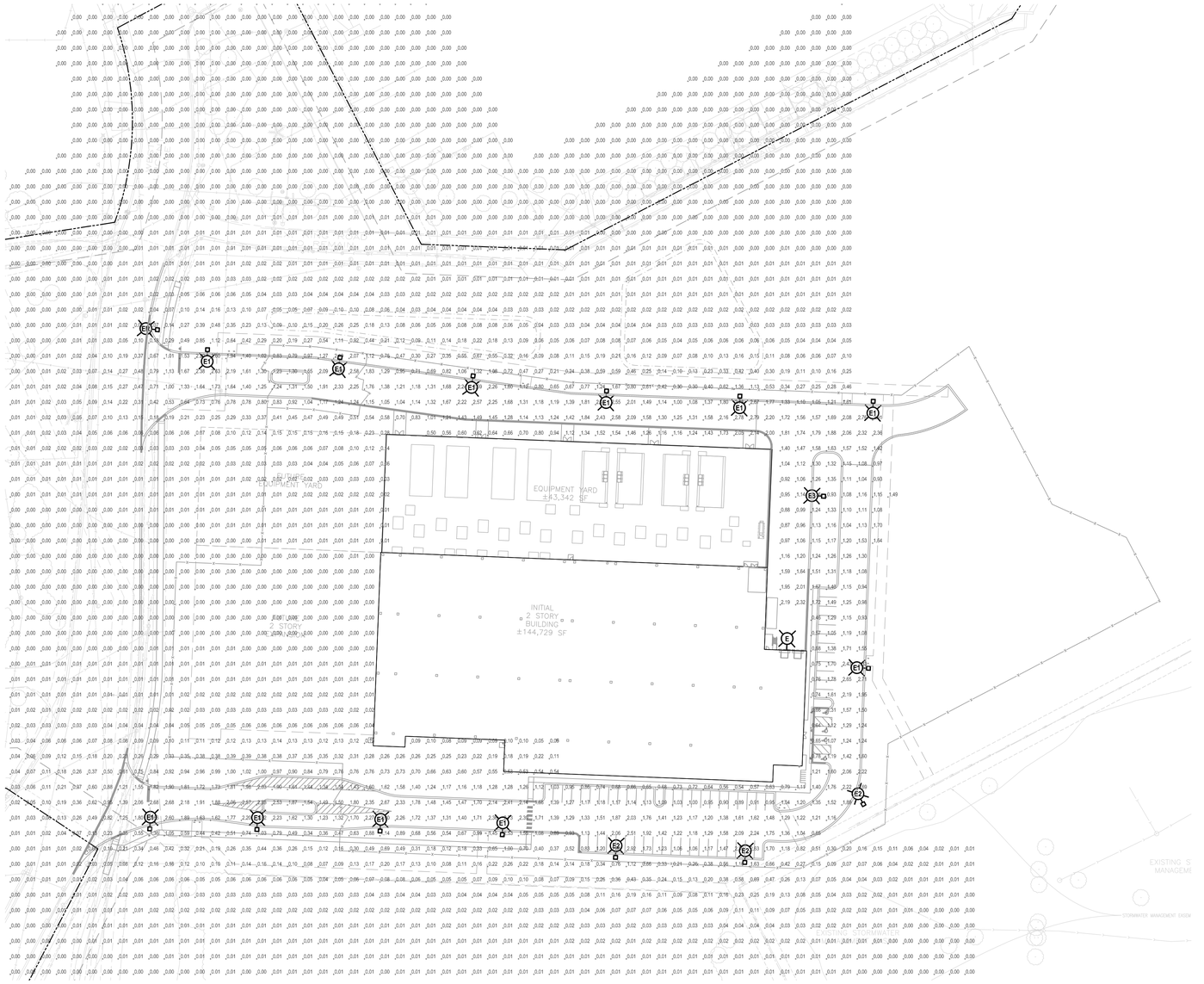
LICENSED PROFESSIONAL ENGINEER
DAVID B. KORNACKI
062.052986
STATE OF ILLINOIS

Date: 09/22/25
Lic. Exp.: 11/30/25

AS NOTED

25057IB

E1



PHOTOMETRIC SITE PLAN

SCALE: 1"=60'-0"

LIGHTING ANALYSIS NOTES: (NAPERVILLE REQUIREMENTS)

1. AVERAGE FOOTCANDLES: > 0.8
2. MAXIMUM FOOTCANDLES: NA
3. MINIMUM FOOTCANDLES: > 0.2
4. MAXIMUM/MINIMUM RATIO: NA
5. AVERAGE/MINIMUM RATIO: < 4:1

LIGHTING ANALYSIS NOTES: (PAVED AREAS ONLY)

1. AVERAGE FOOTCANDLES: 1.58
2. MAXIMUM FOOTCANDLES: 2.92
3. MINIMUM FOOTCANDLES: 0.53
4. MAXIMUM/MINIMUM RATIO: 5.5:1
5. AVERAGE/MINIMUM RATIO: 3.0:1

NOTES:

1. THESE PLANS COMPLY WITH NAPERVILLE MUNICIPAL CODE SECTION 6-14-4:3 AND ALL LIGHT FIXTURES ARE "DARK SKY" COMPLIANT.

No.	Description	Date
1	PERMIT REVIEW COMMENTS	09/22/25
2	PERMIT REVIEW COMMENTS	07/31/25
	ISSUED FOR PERMIT	06/12/25

INITIAL BUILDING PHOTOMETRIC SITE PLAN

1960 W LUCENT LANE

NAPERVILLE, ILLINOIS

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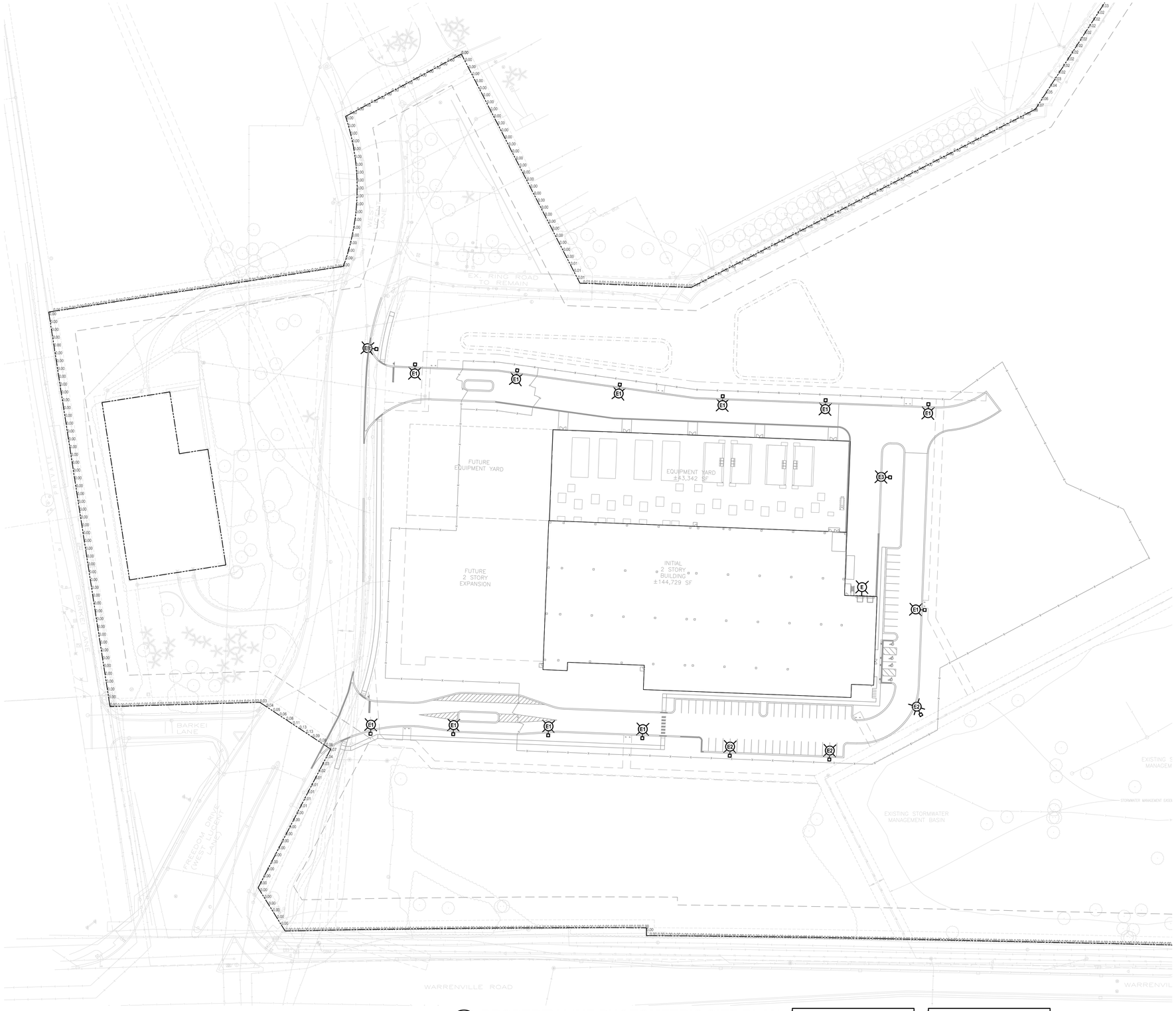
LICENSED PROFESSIONAL ENGINEER
DAVID B. KORNACKI
062.052986
STATE OF ILLINOIS

Date: 09/22/25
Lic. Exp.: 11/30/25

AS NOTED

25057IB

E2



NOTES:

1. THESE PLANS COMPLY WITH NAPERVILLE MUNICIPAL CODE SECTION 6-14-4:3 AND ALL LIGHT FIXTURES ARE "DARK SKY" COMPLIANT.

PROPERTY LINE PHOTOMETRIC SITE PLAN

SCALE: 1"=60'-0"

LIGHTING ANALYSIS NOTES: (NAPERVILLE REQUIREMENTS)

1. MAXIMUM AT PROPERTY LINE TO BE LESS THAN 2.0 FOOTCANDLES.

LIGHTING ANALYSIS NOTES:

1. MAXIMUM AT PROPERTY LINE IS LESS THAN 0.5 FOOTCANDLES.

LICENSED PROFESSIONAL ENGINEER
DAVID B. KORNACKI
062.052986
STATE OF ILLINOIS

Date: 09/22/25
Lic. Exp.: 11/30/25

INITIAL BUILDING PHOTOMETRIC SITE PLAN

1960 W LUCENT LANE

NAPERVILLE, ILLINOIS

KARIS CRITICAL

No.	Description	Date
1	ISSUED FOR PERMIT	06/12/25
2	PERMIT REVIEW COMMENTS	07/31/25
3	PERMIT REVIEW COMMENTS	09/22/25

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AS NOTED

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E3

FIXTURE SCHEDULE

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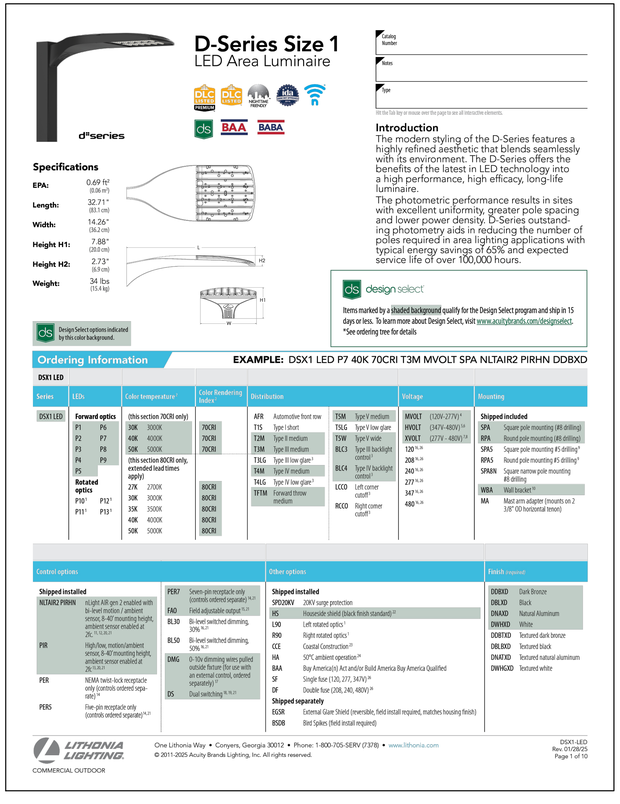
TYPE	INPUT WATTS	VOLTS	LUMENS	COLOR TEMP	CRI 70+	CRI 80+	CRI 90+	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	BUG RATING	SHIELDING	FINISH	MOUNTING	CONTROLS INTEGRAL	CONTROLS REMOTE	SEE NOTES
E	124	277	14799	4000K	●			EXTERIOR WALL BRACKET	LITHONIA	DSX1 LED-P4-40K-70CRI-T4M-MVOLT-WBA-NLTAIR2 PIRHN	202	ACRYLIC	SBA	WALL 25' A.F.G.	OS	PHOTO ON TC OFF	#1
E1	124	277	16032	4000K	●			POLE & LUMINAIRE	LITHONIA	DSX1 LED-P4-40K-70CRI-T3M-MVOLT-SPA-NLTAIR2 PIRHN	204	ACRYLIC	SBA	SEE DETAIL 1/E4	OS	PHOTO ON TC OFF	#1
E2	124	277	14799	4000K	●			POLE & LUMINAIRE	LITHONIA	DSX1 LED-P4-40K-70CRI-T4M-MVOLT-SPA-NLTAIR2 PIRHN	202	ACRYLIC	SBA	SEE DETAIL 1/E4	OS	PHOTO ON TC OFF	#1

FIXTURE SCHEDULE NOTES:

1. EACH LIGHT FIXTURE TO HAVE MOTION SENSOR CONTROL. LIGHT FIXTURES TO DIM TO 33% AFTER 15 MINUTES OF NO MOTION DETECTED. ALL LIGHTS ON THAT CIRCUIT TO COME TO FULL BRIGHTNESS WHEN ONE MOTION SENSOR IS ACTIVATED ON THAT CIRCUIT.
2. THESE PLANS COMPLY WITH NAPERVILLE MUNICIPAL CODE SECTION 6-14-4:3 AND ALL LIGHT FIXTURES ARE "DARK SKY" COMPLIANT.

SYMBOLS / ABBREVIATIONS

	WALL BRACKET/WALL SCONCE FIXTURE - SEE FIXTURE SCHEDULE
	SURFACE/PENDANT FIXTURE - SEE FIXTURE SCHEDULE
	RECESSED DOWNLIGHT FIXTURE - SEE FIXTURE SCHEDULE
	POLE & LUMINAIRE(S) FIXTURE - SEE FIXTURE SCHEDULE
	SWITCHED CIRCUIT
	BRANCH CIRCUIT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFI	ARC FAULT INTERRUPTER
AMP	AMPERES/AMPERAGE
AV	AUDIO VISUAL
BB	BATTERY BACKUP
BFC	BELOW FINISHED CEILING
BOL	BUILT-IN OVERLOAD
BRKR	BREAKER
BWE	BAKED WHITE ENAMEL
CBA	COLOR BY ARCHITECT
CP	CONTROL PANEL
CRCT	CIRCUIT
CTL	CONTROL
DCP	DOCK EQUIPMENT CONTROL PANEL
DISC	DISCONNECT
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
ER	EXISTING RELOCATED
ETC	ELECTRONIC TIME CLOCK CONTROL
EX	EXISTING TO REMAIN
EXD	EXISTING TO BE DEMO'D
EXR	EXISTING TO BE RELOCATED
EWC	ELECTRIC WATER COOLER
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FLSW	FLOAT SWITCH
FPC	FIRE PROTECTION CONTRACTOR
FURN	FURNISHED
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HOA	HAND-OFF-AUTOMATIC SWITCH
HP	HORSEPOWER
HVAC	HEATING AND VENTILATING CONTRACTOR
IG	ISOLATED GROUND
INT	INTEGRAL
IR	IN ROOM
IU	IN UNIT
JB	JUNCTION BOX
KW	KILOWATTS
LCP	LIGHTING CONTROL PANEL
LOC	LOCATION
LT	LOW TEMPERATURE
LTSW	LIGHT SWITCH
LVT	LOW VOLTAGE THERMOSTAT
MAG	MAGNETIC STARTER
MAN	MANUAL STARTER
MCA	MINIMUM CIRCUIT AMPS
MSPL	MANUAL STARTER WITH PILOT LIGHT
NL	NIGHT LIGHT
NU	NEAR UNIT
OHP	OVERHEAT PROTECTION
OS	OCCUPANCY SENSOR
OU	ON UNIT
PB	PUSH BUTTON
PC	PLUMBING CONTRACTOR
PESW	PNEUMATIC ELECTRIC SWITCH
PHOTO	PHOTOCELL
PW	PREWIRED
RC	REFRIGERATION CONTRACTOR
RCC	REFRIGERATION CONTROL CONTRACTOR
RECEPT	RECEPTACLE
SBA	SELECTED BY ARCHITECT
SC	SEPARATE CIRCUIT
SPSW	SPEED SWITCH
SS	SOFT START
ST	SHUNT TRIP
SW	SWITCH
T	LINE VOLTAGE THERMOSTAT
TBD	TO BE DETERMINED
TC	TIME CLOCK
TCC	TEMPERATURE CONTROL CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
UM	UNIT MANUFACTURER
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
WP	WEATHER PROOF ("WHILE-IN-USE")
XFMR	TRANSFORMER



D-Series Size 1
LED Area Luminaire

dsseries

Catalog Number
Notes
Type

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

Specifications

EPA: 0.69 ft² (0.06 m²)
Length: 32.71" (83.1 cm)
Width: 14.26" (36.2 cm)
Height H1: 7.88" (20.0 cm)
Height H2: 2.73" (6.9 cm)
Weight: 34 lbs (15.4 kg)

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Design Select options indicated by this color background.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

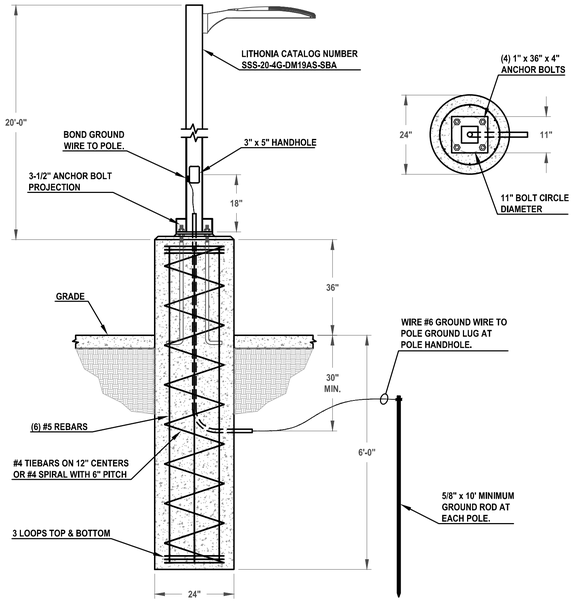
Series	LEDs	Color temperature[1]	Color Rendering Index[1]	Distribution	Voltage	Mounting
DSX1 LED	Forward optics: P1 P6; P2 P7; P3 P8; P4 P9; P5	(this section 70CRI only): 30K 3000K; 40K 4000K; 50K 5000K	70CRI; 70CRI; 70CRI	AFR Automotive front row; T1S Type I short; T2M Type II medium; T3M Type III medium; T4M Type IV medium; T4LG Type IV low glare[1]; TFTM Forward throw medium; T5M Type V medium; T5LG Type V low glare; T5W Type V wide; BLC1 Type III backlight control[1]; BLC4 Type IV backlight control[1]; LCCO Left corner cutoff[1]; RCCO Right corner cutoff[1]	MVOLT (120V-277V)[2,4]; HVOLT (347V-480V)[3,4]; XVOLT (277V - 480V)[3,4]; 120[4,26]; 208[4,26]; 240[4,26]; 277[4,26]; 347[4,26]; 480[4,26]	Shipped included: SPA Square pole mounting (#8 drilling); RPA Round pole mounting (#8 drilling); SPA5 Square pole mounting #5 drilling[5]; RPA5 Round pole mounting #5 drilling[5]; SPA3N Square narrow pole mounting #8 drilling; WBA Wall bracket[31]; MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)
	Rotated optics: P18[1] P12[1]; P11[1] P13[1]	(this section 80CRI only, extended lead times apply): 27K 2700K; 30K 3000K; 35K 3500K; 40K 4000K; 50K 5000K	80CRI; 80CRI; 80CRI; 80CRI; 80CRI			

Control options		Other options		Finish (required)	
Shipped installed: NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8–40' mounting height, ambient sensor enabled at 2fc.[11,12,20,21]; PIR High/low, motion/ambient sensor, 8–40' mounting height, ambient sensor enabled at 2fc.[11,20,21]; PER NEMA twist-lock receptacle only (controls ordered separately)[14]; PERS Five-pin receptacle only (controls ordered separately)[14,27]	PER7 Seven-pin receptacle only (controls ordered separately)[14,27]; FAO Field adjustable output[11,27]; BL30 Bi-level switched dimming, 30%[8,27]; BL50 Bi-level switched dimming, 50%[8,27]; DMG 0–10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[27]; DS Dual switching[16,19,27]	Shipped installed: SPD20KV 20kV surge protection; HS Houseside shield (black finish standard)[32]; L90 Left rotated optics[1]; R90 Right rotated optics[1]; CCE Coastal Construction[22]; HA 50°C ambient operation[28]; BAA Buy America(n) Act and/or Build America Buy America Qualified; SF Single fuse (120, 277, 347V)[29]; DF Double fuse (208, 240, 480V)[29]. Shipped separately: BSSR External Glare Shield (reversible, field install required, matches housing finish); BSDB Bird Spikes (field install required)	DDBXD Dark Bronze; DBLXD Black; DNAXD Natural Aluminum; DWHXD White; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white	

LITHONIA LIGHTING
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DSX1-LED
Rev. 01/28/25
Page 1 of 10



1 ELECTRICAL
FIXTURE TYPES 'E1, E2' MOUNTING DETAIL
NOT TO SCALE

No.	Description	Date
	ISSUED FOR PERMIT	06/12/25
1	PERMIT REVIEW COMMENTS	07/31/25
2	PERMIT REVIEW COMMENTS	09/22/25

INITIAL BUILDING SCHEDULES

1960 W LUCENT LANE
NAPERVILLE, ILLINOIS
KARIS CRITICAL

JACOB & HEFNER ASSOCIATES
1333 Butterfield Rd. Suite 300, Downers Grove, IL 60515
PHONE: (630) 652-4600, FAX: (630) 652-4601
www.jacobandhefner.com

Corporation Registration # 184.005374
KORNACKI & ASSOCIATES, INC.
Electrical Design Consultants
262-784-3323
2848 S. Moorland Rd., New Berlin, WI 53151

LICENSED PROFESSIONAL ENGINEER
DAVID B. KORNACKI
062.052986
STATE OF ILLINOIS
Date: 09/22/25
Lic. Exp.: 11/30/25

AS NOTED
25057IB
E4

EXHIBIT H
GENERATOR DEPICTION

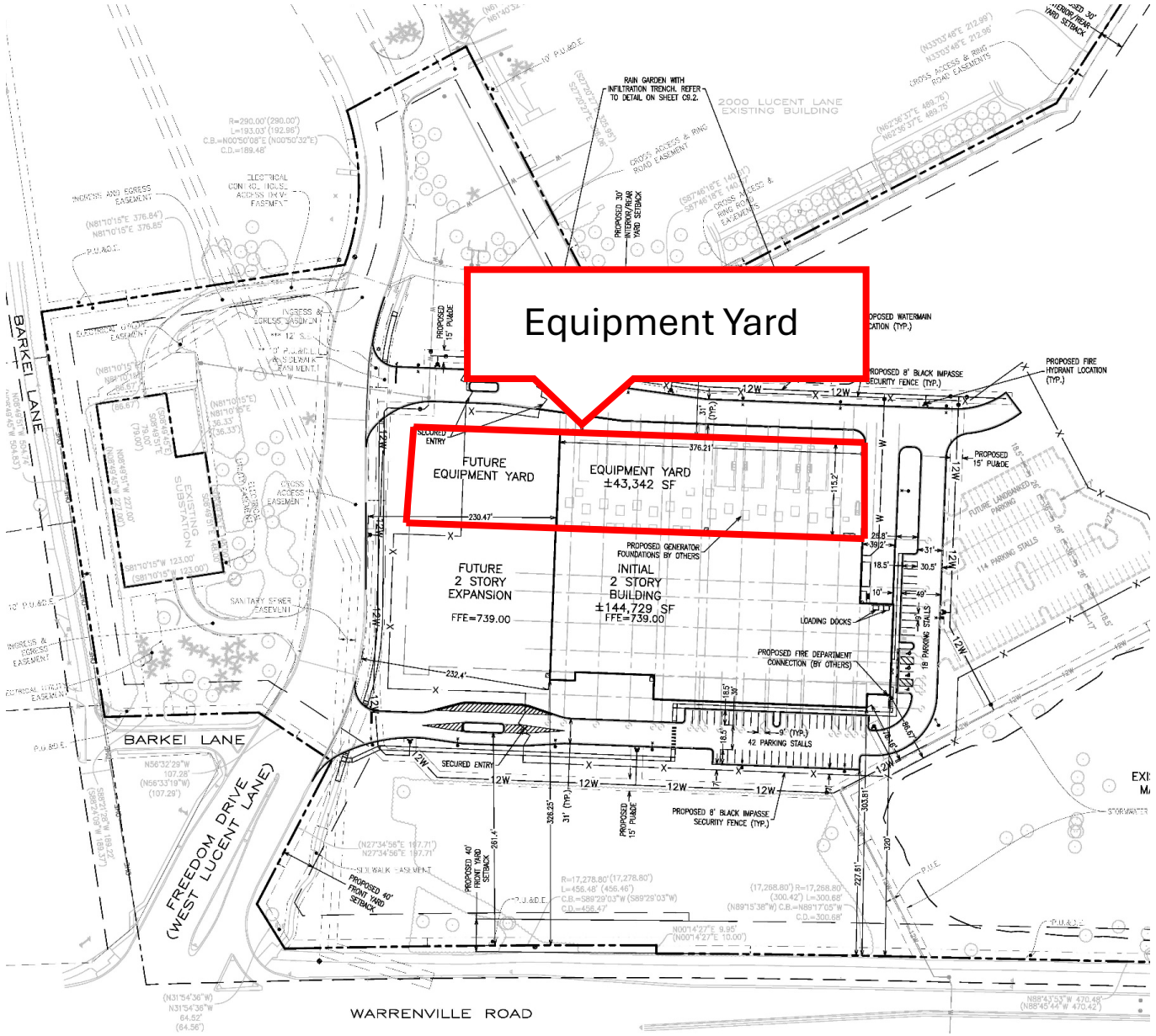

Equipment Yard
FUTURE EQUIPMENT YARD
EQUIPMENT YARD ±43,342 SF
FUTURE 2 STORY EXPANSION
FFE=739.00
INITIAL 2 STORY BUILDING ±144,729 SF FFE=739.00
2000 LUCENT LANE EXISTING BUILDING
BARKEI LANE
FREEDOM DRIVE (WEST LUCENT LANE)
WARRENVILLE ROAD
EXISTING SUBSTATION
RAIN GARDEN WITH INFILTRATION TRENCH. REFER TO DETAIL ON SHEET C9.2.
PROPOSED GENERATOR FOUNDATIONS BY OTHERS
LOADING DOCKS
PROPOSED FIRE DEPARTMENT CONNECTION (BY OTHERS)
42 PARKING STALLS
114 PARKING STALLS
18 PARKING STALLS
PROPOSED 8' BLACK IMPASSE SECURITY FENCE (TYP.)
PROPOSED FIRE HYDRANT LOCATION (TYP.)
PROPOSED 15' PUA&DE
PROPOSED 40' FRONT YARD SETBACK
PROPOSED 30' INTERIOR/REAR YARD SETBACK
SECURED ENTRY
FUTURE LANDBANKED PARKING
CROSS ACCESS & RING ROAD EASEMENTS
INGRESS AND EGRESS EASEMENT
SANITARY SEWER EASEMENT
STORMWATER

EXHIBIT I
DARK SKY COMPLIANCE LETTER

KORNACKI & ASSOCIATES, INC.
CONSULTING ELECTRICAL ENGINEERS

September 26, 2025

Kristen Burns
Jacob & Hefner Associates, Inc.
1333 Butterfield Road, Suite 300
Downers Grove, IL 60515

Re: 1960 Lucent Lane

Dear Kristen,

All light fixtures specified for the exterior lighting on the project mentioned above are “Dark Sky” compliant.

Should you have any questions, please contact me.

Sincerely,

David B. Kornacki

David B. Kornacki
Executive Vice-President



2845 S. Moorland Rd., New Berlin, Wisconsin 53151 - Phone (262)784-3323

EXHIBIT J
PARKING EXHIBIT

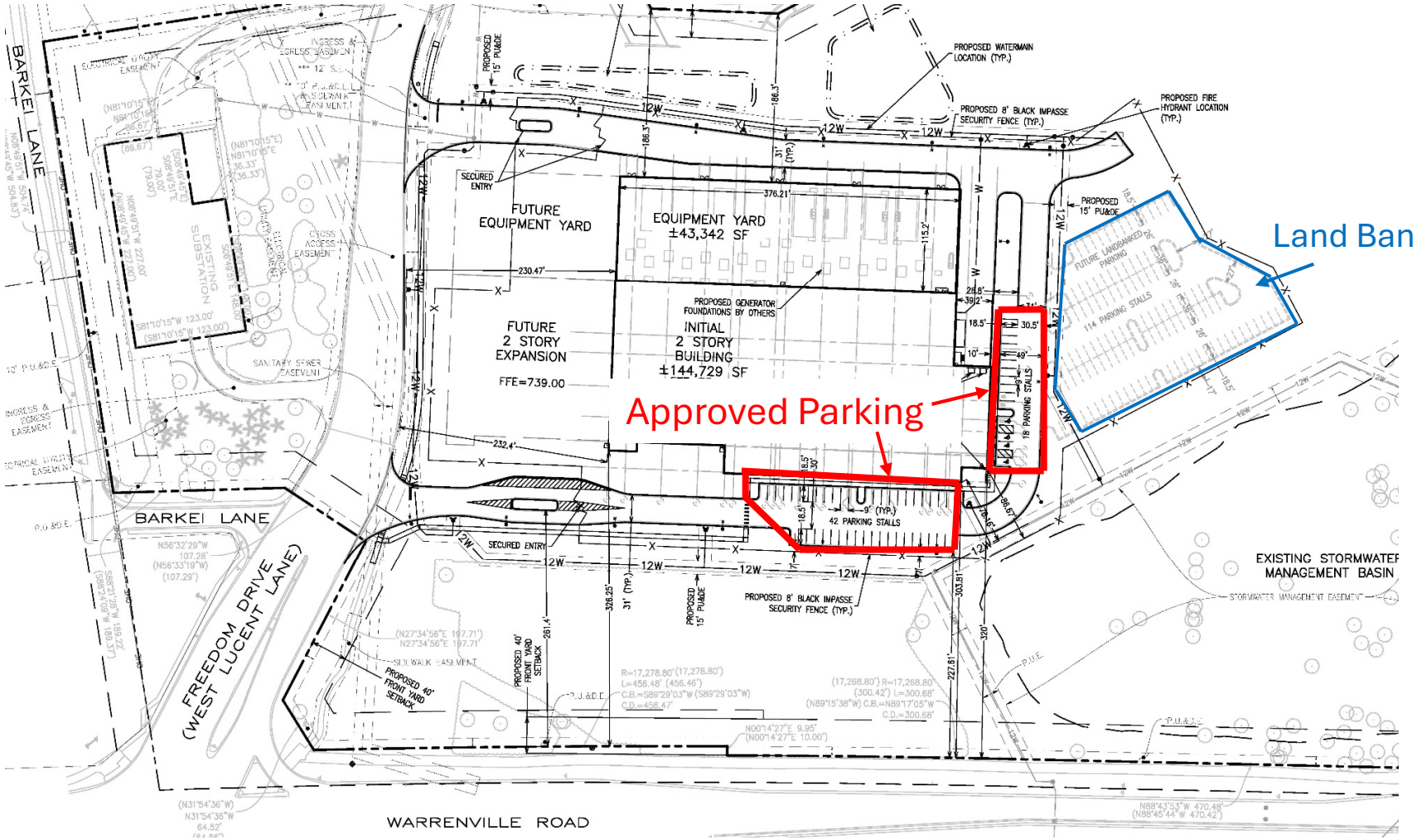

BARKEI LANE
FUTURE EQUIPMENT YARD
EQUIPMENT YARD ±43,342 SF
FUTURE 2 STORY EXPANSION
INITIAL 2 STORY BUILDING ±144,729 SF
FFE=739.00
EXISTING SUBSTATION
SECURED ENTRY
PROPOSED GENERATOR FOUNDATIONS BY OTHERS
PROPOSED WATERMAIN LOCATION (TYP.)
PROPOSED 8' BLACK IMPASSE SECURITY FENCE (TYP.)
PROPOSED FIRE HYDRANT LOCATION (TYP.)
PROPOSED 15' PU&DE
FUTURE LANDBANKED PARKING
114 PARKING STALLS
18' PARKING STALLS
42 PARKING STALLS
Approved Parking
Land Banked Parking
EXISTING STORMWATER MANAGEMENT BASIN
STORMWATER MANAGEMENT EASEMENT
FREEDOM DRIVE (WEST LUCENT LANE)
WARRENVILLE ROAD
PROPOSED 40' FRONT YARD SETBACK

EXHIBIT K
STEWARDSHIP PLEDGE

KARIS CRITICAL STEWARDSHIP PLEDGE

Throughout the design and planning phase, Karis Critical Member, LLC, ("Karis") has incorporated best practices and undertaken several site-specific stewardship initiatives to ensure that the proposed Data Center operates in accordance with the environmental values and expectations of the company, its future tenants, the City of Naperville, and the State of Illinois. These initiatives represent tens of millions of dollars of investment in best-in-class design and operating technologies to ensure that the Data Center operates sustainably and efficiently for decades to come.

Karis presents this Stewardship Pledge, to be incorporated as an essential component of the conditional use for the proposed Data Center, as a representation of its voluntary commitments to the community. Karis makes the following pledges:

Responsible Operations:

- *Ownership & Operations.* Karis intends to obtain zoning approvals, acquire the underlying 40 acre parcel, finance, and ultimately develop the proposed 36 MW Data Center as more specifically detailed in the development plans submitted to the City of Naperville (the "Data Center"). Karis will partner with an experienced third-party operator who will be responsible for the day-to-day operations. Karis' third-party operations agreement will incorporate this Stewardship Pledge, ensuring that the operations team is readily aware of the commitments contained herein.
- *Prohibition on Crypto-Mining Operations.* The Data Center is intended to support the growing needs of today's cloud-connected society. To this end, the Data Center shall not house speculative and resource-intensive cryptocurrency mining operations.

Renewably Powered:

- *Enrollment in Green Energy Certificate Program (RECs).* Karis is required to purchase 100% of its electricity from the City of Naperville. As a good corporate citizen and steward of the environment, Karis will enroll in the City's Green Energy Certificate Program to pruchase renewable energy certificates (RECs) and certify that 100% of its MWh IT Load energy usage (24-36MW) is matched to renewable energy generation placed on the grid. The RECs shall be purchased through the City of Naperville and the City shall retire the RECs on utilization.
    - Commitments for the procurements of RECs shall occur decennially between the City and the Data Center, and be subject to reasonable modification by the parties based on changes to the City's sourcing of generation, market conditions, and technological advancements.
    - Initially, the 10-year commitment will be to buy RECs from wind and solar projects constructed in Illinois or the broader M-RETS region within the last three-year period.

Local Investment:

- *Utility Infrastructure Improvements.* The City has confirmed that sufficient electrical load is available at the Indian Hill Substation to power the Data Center. Karis will fund 100% of the expense for necessary improvements to the Indian Hill Substation and for the extension of electrical feeds from the Indian Hill Substation to the Data Center.
- *Total Karis Investment.* Karis will make a minimum investment of Two Hundred and Fifty Million Dollars in the Data Center. Karis' investment is exclusive of tenant IT infrastructure which will represent additional investment of hundreds of millions of dollars.
- *No Local Subsidy.* Karis will not seek any subsidy or rebate from the City of Naperville regarding the development of the Data Center.

Environmentally Conscious Design & Operations:

- *Battery Backup.* The Data Center will rely on containerized battery systems to provide bridging power between the time of a power outage and back-up generators coming on-line. Each 2MWh containerized battery system will be housed in a 1-hour fire rated room. Karis has coordinated with the Naperville Fire Department regarding the proposed battery storage and has committed to meeting standards of the 2024 International Fire Code (City is currently operating on 2018 IFC) for all battery storage systems.
- *Backup Generators.* The Data Center will rely on twenty-four diesel generators to provide emergency power in the event of an electrical outage. Karis commits that the generators will be used solely for emergency purposes- i.e. they will not be utilized for peak shaving.
- *Generator Standards*. Karis commits to using diesel generators that meet U.S. EPA Tier 4 emission standards. The generators shall be part of a containerized system that provides sound attention and integral fuel containment.
- *Water Usage.* Karis commits to using an air-cooled, closed-loop chiller system that minimizes the use of potable water. Karis reasonably anticipates that the Data Center will use less water than the office building that previously occupied the property.
- *Sound Attenuation.* Karis commits to operating in compliance with applicable City of Naperville noise regulations. Essential infrastructure for the Data Center shall be programmed, constructed, and operated with sound attention consistent with the assumptions set forth in the Noise Impact Assessment submitted to the City of Naperville.
- *Dark-Sky Compliance.* Karis commits that all exterior lighting for the Data Center shall be dark sky compliant.
- *Prohibit Use of Coal Tar Sealants.* Karis commits that no coal tar sealants shall be utilized on privately owned drive-aisles or parking lots associated with the operation of the Data Center.
- *Electronic Waste Recycling Program.* Karis commits to the establishment of an electronic waste recycling program for the Data Center.
- *Electrical Usage.* Karis commits to capping leasable IT load of the Data Center to 36MW.

Oversight & Accountability:

- *Annual Property Stewardship Report.* For the first five years of commercial operations, Karis shall file a Property Stewardship Report detailing key operations of the campus, including the delivery of services from the city's electric and water utilities, statistics regarding reliability and operations of on-site backup generation, a property tax and fiscal impact summary, aggregate statistics for any requests for emergency services, and other operational information. The report shall detail any complaints or findings of violations that occurred during the calendar year, as well as the mitigation steps taken by the campus in response to these incidents. At the city's request, the obligation to submit the report can be renewed annually after the initial five-year period has elapsed.
- *Emergency Response and Safety Plan.* The campus shall establish and update, as necessary, an Emergency Response and Safety Plan that coordinates the potential responses of the City of Naperville, the Naperville Police Department, and the Naperville Fire Department to the property.
- *Point of Contact.* The Data Center operations team shall establish a primary and secondary point of contact for the City of Naperville (the "Emergency Contacts"). The Emergency Contacts shall be responsible for twenty-four seven communications with the City of Naperville.

EXHIBIT L
NOISE IMPACT ASSESSMENT

JACOB & HEFNER ASSOCIATES

Noise Impact Assessment

of

Proposed Data Center at
1960 W. Lucent Lane, Naperville, Illinois 60563



Prepared for:
Karis Critical
2150 Goodlette-Frank Road, Suite 700
Naples, FL 34102

Prepared by:
Jacob & Hefner Associates, Inc.
1333 Butterfield Road, Suite 300
Downers Grove, Illinois 60515

JHA Ref. No. H477
December 2, 2025

This Noise Impact Assessment for a proposed data center located at 1960 W. Lucent Lane, Naperville, Illinois (the "Site") has been prepared by Jacob & Hefner Associates, Inc. (JHA) on behalf of Karis Critical (the Client).

Prepared by:



Austin Wallerstedt
Project Scientist

Reviewed by:



David Kulczycki, P.G.
Regional Manager – Environmental Services

FIGURES, TABLES, ATTACHMENTS

FIGURES

Figure 1.0 Site Location
Figure 2.0 Sound Level Meter Monitoring Locations
Figure 3.0 Daily Leq of HVAC, Traffic, and Generators Model
Figure 4.0 Nighttime Leq of HVAC and Traffic Model
Figure 5.0 Single Hour Generator Run

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Table 1 Naperville Noise Ordinance Decibel Limits
Table 2 IAC 901 Noise Limits – Class C Emitter to Class A Receiver
Table 3 IAC 901 Noise Limits – Class C Emitter to Class B Receiver
Table 4 Recorded Baseline Noise Levels
Table 5 Receiver Table for HVAC, Traffic, and Generator Model (Leq, d and Leq, n)
Table 6 IPCB Table for HVAC, Traffic, and Generator Model (Leq, d)-Residential
Table 7 IPCB Table for HVAC, Traffic, and Generator Model (Leq, n)-Residential
Table 8 Summary of Decibel Increases and Perceived Noise Levels Emanating From Proposed Data Center Operations – Situation 1
Table 9 Receiver Table for 1-Hour Generator Run (Daytime)
Table 10 IPCB Table for HVAC, Traffic, and Generator Model (Leq, maxhr)-Residential
Table 11 Summary of Decibel Increases and Perceived Noise Levels Emanating From Proposed Data Center Operations – Situation 2

GRAPHS

Graph 1 Baseline Noise Levels (Station N1) Compared to Residential Background Limit
Graph 2 Baseline Noise Levels (Station N2) Compared to Residential Industrial Limit
Graph 3 Baseline Noise Levels (Station N3) Compared to Residential Background Limit
Graph 4 Baseline Noise Levels (Station N4) Compared to Industrial Background Limit

ATTACHMENTS

Attachment 1 Conceptual Site Plan

1 INTRODUCTION

1.0 Introduction and Purpose of Noise Study

JHA has prepared this Noise Impact Assessment (NIA) of the proposed Site development for a future data center facility to be located at the northwest corner of the intersection of Warrenville Rd. and Naperville Rd., Naperville, IL 60563. This report has been prepared for Karis Critical to address the potential risk of excess noise exposure at the Site perimeters in accordance with City of Naperville's noise ordinance. The primary goal of the NIA is to determine if the proposed routine operation of the data center will comply with Naperville's Code of ordinances (Title 6, Chapter 14 (6-14-4), and with Illinois Pollution Control Board (IPCB) regulations (IAC 901). Additionally, this NIA measured the existing background (baseline noise levels) at the perimeters of the proposed development area to determine the current noise levels in the area. The modeled noise from the proposed development was compared to the baseline noise levels to estimate the overall change in noise levels along the Site perimeters. In particular, the NIA will be used to model or predict the level of impact produced by truck and vehicle traffic, roof-mounted HVAC equipment, and emergency generators, from the proposed development on surrounding properties, and determine if the predicted noise levels are within accepted noise regulations or guidelines.

2 SITE BACKGROUND

2.0 Site Location and Description

The Site consists of one parcel totaling approximately 41.54-acres, irregular in shape and is located at the northwest corner of Warrenville Road and Naperville Road, in the City of Naperville, DuPage County, Illinois. The Site is situated within an Office, Research, and Light Industrial (ORI) district with several residences situated along the northeast and west perimeters. The Site is situated immediately adjacent to several arterial roads including: (i) Warrenville Road adjacent to the south perimeter, (ii) Naperville Road adjacent to the east/southeast perimeter, and (iii), the I-88 corridor located approximately 800 feet south perimeter of the Site. The Site was historically home to Bell Labs, Lucent, and Nokia. Currently, it is vacant following the demolition of a former 600,000 square foot office building and two former parking decks. The Parcel Index Number (PIN) associated with the Site is 08-05-207-037.

2.1 Surrounding Land Use and Future Use

The Site is currently under re-development. The Site currently consists of several stockpiles and exposed soil from the demolition of the former office building and two former parking decks. Additionally, the southern portion of the Site consists of a low-lying vegetated area and a portion of West Lucent Lane and public right-of-way sidewalks are located along the west portion of the Site. The location of the Site is shown in **Figure 1.0**.

The proposed development plan is currently for one building (211,160 square feet) that will house a data center. As of 2023, data centers are allowed as a conditional use in the City of Naperville's ORI district. The building will be developed with associated parking lots, truck docks, and access roads/drives. Additionally, a generator yard will be located on the north side of the proposed building and will be visually screened using a 22-foot-high screen wall. Building cooling will be provided via rooftop HVAC units that will be screened using a nine-foot 10-inch-tall (9'10" tall) parapet wall along the entire rooftop perimeter. Phase 1 of the development will consist of construction of approximately two thirds of the building. The building may be expanded to the full footprint (211,160 square feet) in the future. A proposed development plan is provided as **Attachment 1.**

3 NOISE IMPACT ASSESSMENT

3.0 Scope of Study

The scope of the NIA was to conduct a short-term noise monitoring program to determine the existing background (baseline noise levels) in the proposed development area, assess how the proposed future development could affect local noise levels, and determine if the predicted noise levels are within accepted noise regulations or guidelines.

3.1 Noise Regulations – City of Naperville, Illinois

Karis Critical's proposed development of a data center facility must comply with applicable noise level requirements as specified in applicable standards from the City of Naperville. In particular, the focus was on abiding by both the City of Naperville's municipal code for noise standards Title 6, Chapter 14 (6-14-4), and evaluating the change in sound levels from existing baseline noise levels.

According to the City of Naperville's noise ordinance, noise levels are divided into two time slices (7:00-19:00 for daytime hours, and 19:00-7:00 for nighttime hours). Properties are divided into four categories, residential, commercial, light industrial, and industrial. The Site and surrounding properties were determined to consist of a combination of light industrial and residential areas. The sound pressure limits for each property type are summarized in the following table:

Table 1: Naperville Noise Ordinance Decibel Limits

Property Type	Allowable Octave Band Sound Pressure Levels (dBA) of Sound Emitted for Daytime and Nighttime Intervals	
	Daytime (7:00-19:00)	Nighttime (19:00-7:00)
Residential	**55**	**50**
Commercial	**62**	**55**
Light Industrial	**70**	**70**
Industrial	**80**	**80**

Limits based on octave pressure bands are not provided in the Naperville Ordinance Title 6, Chapter 14 (6-14-4), and are not individually evaluated in this NIA.

3.2 Noise Regulations – Illinois Pollution Control Board (IPCB)

In addition to the noise regulations from the City of Naperville, the Illinois EPA maintains noise regulations under IAC 901. Unlike the City of Naperville's noise ordinance, IAC 901 defines center frequencies for octave pressure bands; however, the noise limits are dependent on the designated property class of both the emitter and receiver. Karis Critical. proposed future data center development is considered a Class C use under IAC 901. Adjacent residential properties are considered Class A, and adjacent commercial/industrial properties are considered either Class B or Class C. There are no noise propagation standards in IAC 901 for receiver properties designated under Class C; however, there are standards for Class B receiver properties. The relevant and applicable regulations for the Site under IAC 901 are summarized below:

Table 2: IAC 901 Noise Limits- Class C Emitter to Class A Receiver

Allowable Octave Band Sound Pressure Levels (dBz)(Lp) of Sound Emitted for Daytime and Nighttime Intervals – Class C Emitter to Class A Receiver		
Octave Band Center Frequency (Hz)	Daytime (7:00-23:00)	Nighttime (23:00-7:00)
31.5	**75**	**69**
63	**74**	**67**
125	**69**	**62**
250	**64**	**54**
500	**58**	**47**
1000	**52**	**41**
2000	**47**	**36**
4000	**43**	**32**
8000	**40**	**32**

Notes:
dBz = Unweighted decibel
Hz = Cycles per second
Lp = Sound pressure level

Table 3: IAC 901 Noise Limits- Class C Emitter to Class B Receiver

Allowable Octave Band Sound Pressure Levels (dBz)(Lp) of Sound Emitted for Daytime and Nighttime Intervals – Class C Emitter to Class B Receiver	
Octave Band Center Frequency (Hz)	Day-Night
31.5	**80**
63	**79**
125	**74**
250	**69**
500	**63**
1000	**57**
2000	**52**
4000	**48**
8000	**45**

Notes:
dBz = Unweighted decibel
Hz = Cycles per second
Lp = Sound pressure level

3.3 Ambient Noise Measurement and Assessment

For the NIA activities, JHA procured equipment to measure ambient sound levels at four perimeter locations over approximately three (3) days. The goal of this assessment was to determine background noise levels at the Site perimeters. Since the new facility has not yet been constructed, the goal was to record the ambient noise in the area and understand the level of existing nuisance noise.

3.3.1 Sound Level Meter Installation

On March 28, 2025 through April 1, 2025, JHA set up sound level meters at four separate locations (N1-N4). They were placed at locations at the Site boundary in order to capture representative data from select residential and light industrial properties bordering the Site as shown in **Figure 2.0**.

Noise levels were collected utilizing the Casella CEL-63 Type 1 Sound Level Meters. The A-weighting curve was applied to instrument-measured sound levels to account for the relative loudness perceived by the human ear, as the ear is less sensitive to low audio frequencies. Noise level readings that were A-weighted (in decibel [dBA]) were collected each second and averaged in to 15-minute averages. The 15-minute readings were averaged into 1-hour readings, presented on graphs, and combined into average readings for daytime and nighttime, time slices. Tables and graphs of background noise recordings are discussed in Section 3.2.2 below.

JHA did not average the data collected on Friday night and Saturday morning from meter location N2, on account of exceptionally loud readings. These readings lasted approximately 18 hours from 19:00-11:00. It is possible that loud noises were emanating from Warrenville Road and may be related to loud traffic or illegal mufflers. The removal of this data was deemed necessary since the unusually loud readings were not recorded in any of the other meters and they are unlikely to be representative of the typical background readings. JHA "Omitted" these readings so that they do not skew the baseline noise levels high.

3.3.2 Noise Level Readings Assessment

Table 2 summarizes the averaged A-weighted baseline noise levels using data collected during the 3-day background monitoring event.

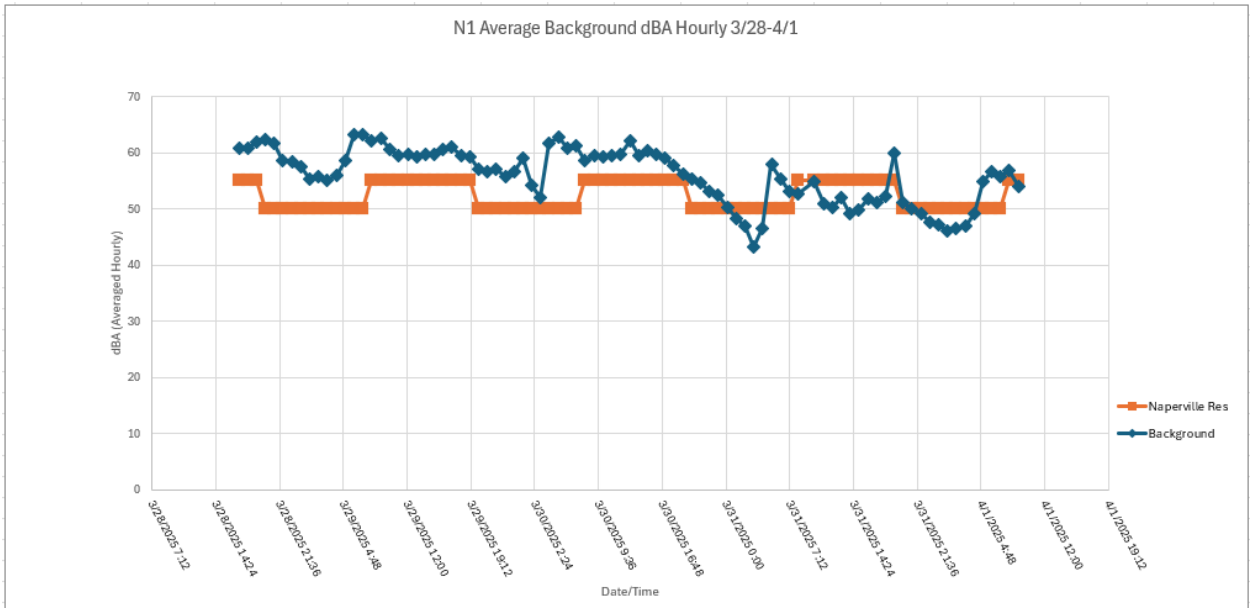
Table 4: Recorded Baseline Noise Levels

Table 1 -Measured Background Sound Pressure Levels dB(A)				
	Stations			
Date	**N1**	**N2**	**N3**	**N4**
~~03/28 Night~~	~~59.9~~	~~Omitted~~	~~61.9~~	~~61.1~~
03/29 Day	60.5	65.5	64.4	62.2
03/29 Night	59.0	60.3	59.7	58.8
03/30 Day	59.5	63.6	62.5	61.3
~~03/30 Night~~	~~53.1~~	~~57.5~~	~~54.3~~	~~55.4~~
03/31 Day	53.5	59.2	52.6	54.8
03/31 Night	51.7	57.4	55.4	51.1
Total Average (Day-Night)				
All Night Average	56.7	59.1	58.1	56.6
All Day Average	58.7	63.5	62	60.4
Ordinance Type	Res	Ind	Res	Ind

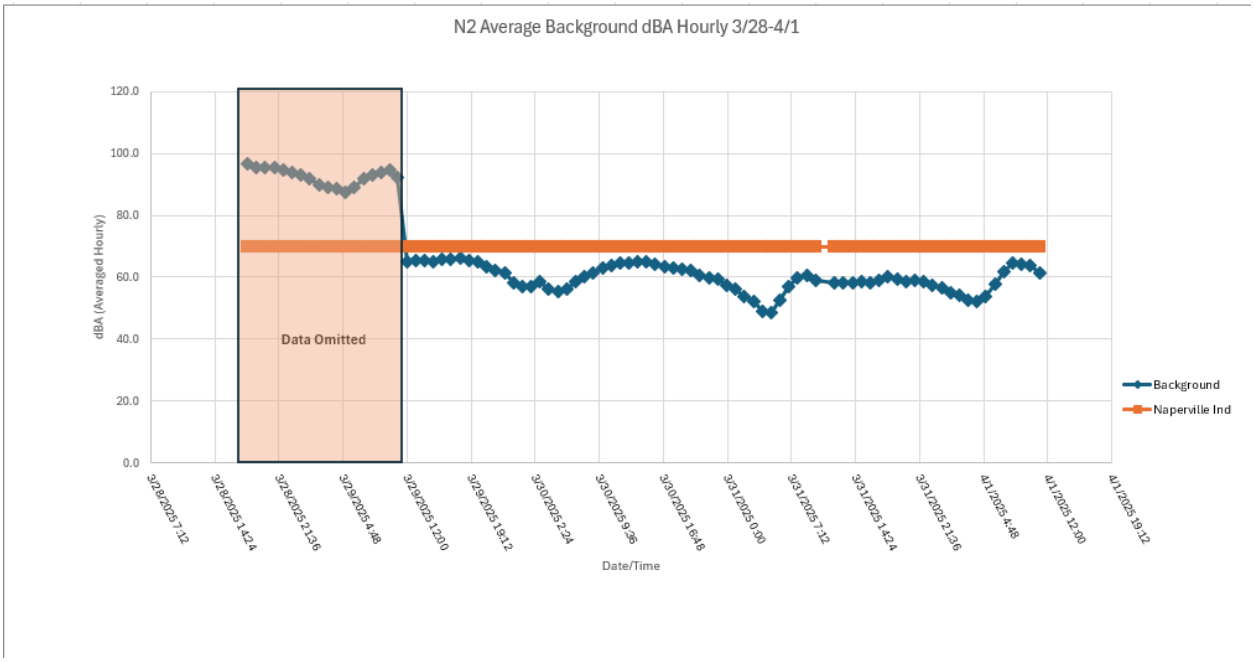
Notes
Ind = Industrial

~~Gray~~ = Data removed from averaging
Res = Residential

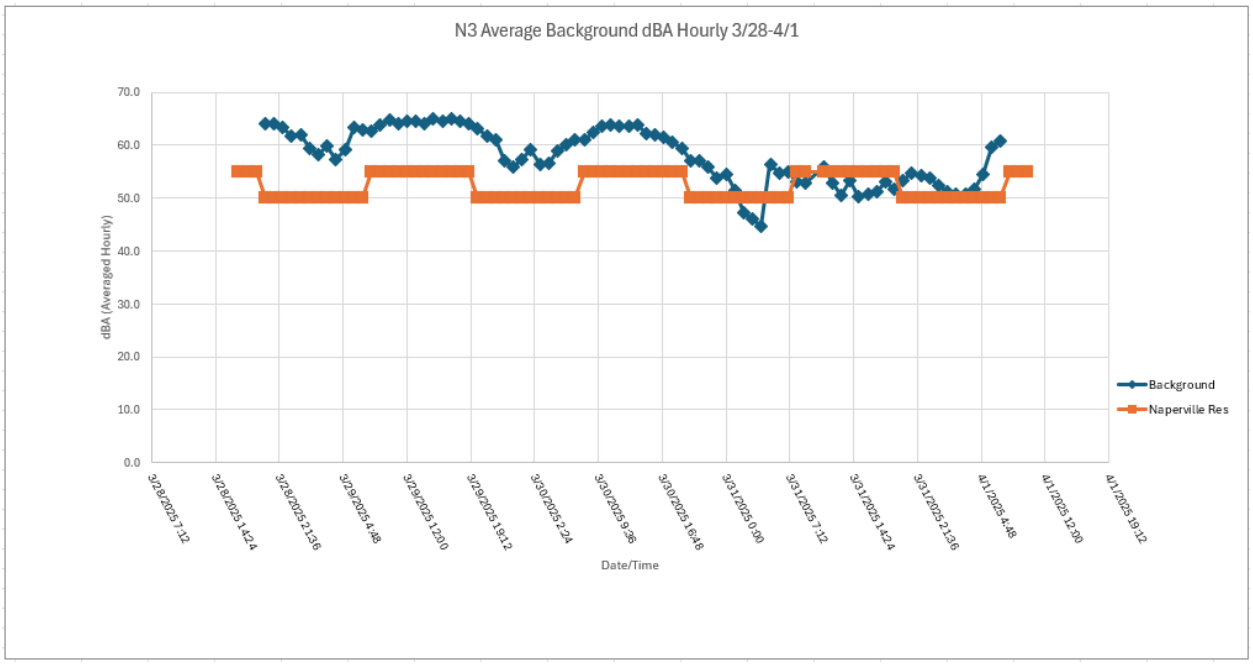
Graph 1- Background Noise Levels (N1) Compared to Residential Background Limit



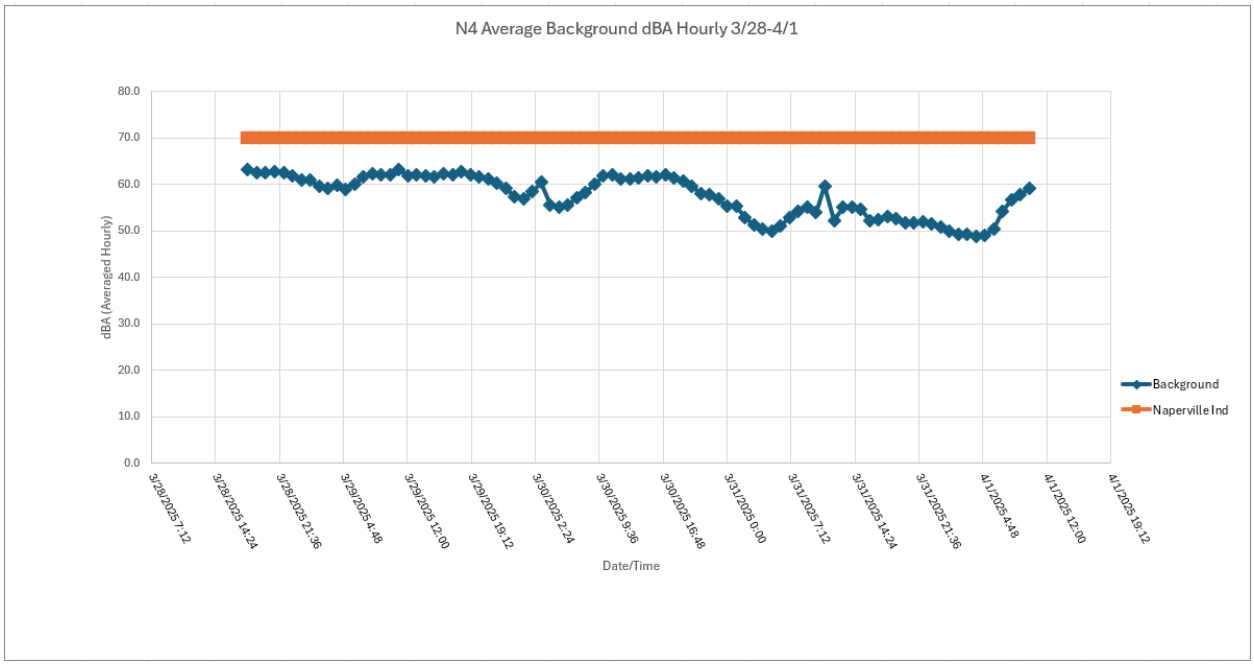
Graph 2- Baseline Noise Levels (N2) Compared to Industrial Background Limit



Graph 3- Baseline Noise Levels (N3) Compared to Residential Background Limit



Graph 4- Baseline Noise Levels (N4) Compared to Industrial Background Limit



Based on the average readings for daytime and nighttime time slices, the lowest average baseline noise level readings were recorded at N1 (located near the residences on the east perimeter of the Site). The loudest baseline noise levels were recorded along the southwest corner of the Site (N2) near Warrenville Road.

3.4 Sound Modeling

To predict sound levels created from the operations of the proposed data facility, the internationally accepted sound modeling program, SoundPlan™ was utilized. This program calculates sound levels at distant points based on the noise source, topography, reflections from buildings and ground surfaces, absorption by the atmosphere, vegetation, and any shielding from berms or structures. Subsequently, this software was used to incorporate the proposed Site-specific conditions to generate sound-level contours (as a color flood) and identify the sound levels at any receptor within the model. For the proposed data facility, SoundPlan™ was used to simulate the time-slice-averaged levels generated based on the projected number of vehicles entering and leaving the proposed Site based on the traffic study, roof-mounted HVAC equipment, and backup emergency generators. The time-weighted daytime (Leq, d) and nighttime (Leq, n) averages are observed along with the most intense single hour during generator testing/service (Leq, max hr). The models and figures representing these situations are described below:

Situation 1 - Roof-Mounted HVAC Equipment, Parking Lot Traffic, and Generator Model

This situation model identifies the sound emissions for the traffic, HVAC equipment, and generator testing schedule that may be used for the Site development. Parameters used for modeling this scenario are presented below:

- Generators
  a. Assumed spectrum emission of a 3MW diesel generator used.
  b. It is assumed that the generators will be surrounded with an enclosure capable of providing a sound pressure reading of 77 decibels at 30 feet (total sound energy Lw estimated at 104.2 dBA emanating from enclosure walls.
  c. The dimensions of typical 3MW generators suggest that the exhaust is approximately 9.5 feet above the ground surface. As the exhaust is the loudest part of a typical generator, the source was elevated to 15 feet above grade to account for added heights from enclosures and mufflers.
  d. Frequency of generator operation is assumed to be up to 2 generators running for 30 minute increments (four generators running for a half hour each within one hour) for testing purposes.
  e. A total of 24 generators will run behind the data center. Each generator will only be tested for one 30-minute interval on a monthly basis.
  f. The model represents the loudest day when testing is performed for the backup generators.

- HVAC
  a. Spectrum profile of HVAC units is assumed based on similar-type HVAC equipment for 300 and 400-ton units.
  b. Maximum total sound power is assumed at 96dBA per unit running at a continuous 60% load for the daytime level and 93dBA per unit running at a continuous 50% load for the nighttime level.
  c. A maximum total of 24 units are placed on the building roof in six (6) clusters of four (4) and elevated to at least 6 feet above the building roof.

d. HVAC units are modeled to be running for 24-hours through the day and night at 60 % capacity for the day and 50% capacity at night.

- Roads/Drives and Parking Lots
  a. Modeled after KLOA traffic report daytime and nighttime estimates on facility traffic (3 shifts with 45 employees from 7:00-16:30, 10 employees from 16:30-23:30, and 10 employees from 23:30-7:00). Additional visitor volume in central parking lot assumed at ½ capacity of parking area (approximately 50-60 vehicles).

- Walls
  a. A 22-foot visual screen will surround the generator yard. This wall may offer some minor noise attenuation; however, it has been excluded from this model in order to provide a conservative noise model.
  b. An 9-foot 10-inch concrete parapet wall is assumed to be installed surrounding the perimeter of the building roofline (Rw value = 47; reflection loss 1dB).

This condition was modeled to represent the sound emissions of the facility for the loudest day when generators are being tested. This represents a typical daytime and nighttime sound emission where each generator on the building is tested for 30 minutes during the day. The generator schedule is set so each enclosed generator runs for 30 minutes without any additional noise mitigation from the 22-foot visual generator wall; thereby representing a conservative model approach. Receptors are placed surrounding the property perimeter to simulate noise contribution readings at the perimeter, as identified in the Naperville municipal code, Title 6, Chapter 14 (6-14-4). The color flood maps identify modeled sound pressure levels located 5.9-6.5 feet off the ground surface, and receptors are placed 5.9-6.5 feet off the ground surface. Both daytime (Leq, d) and nighttime (Leq, n) figures and receiver tables are displayed below.

Figure 3: Daily Leq of HVAC, Traffic, and Generators Model



Figure 4: Nighttime Leq of HVAC and Traffic Model

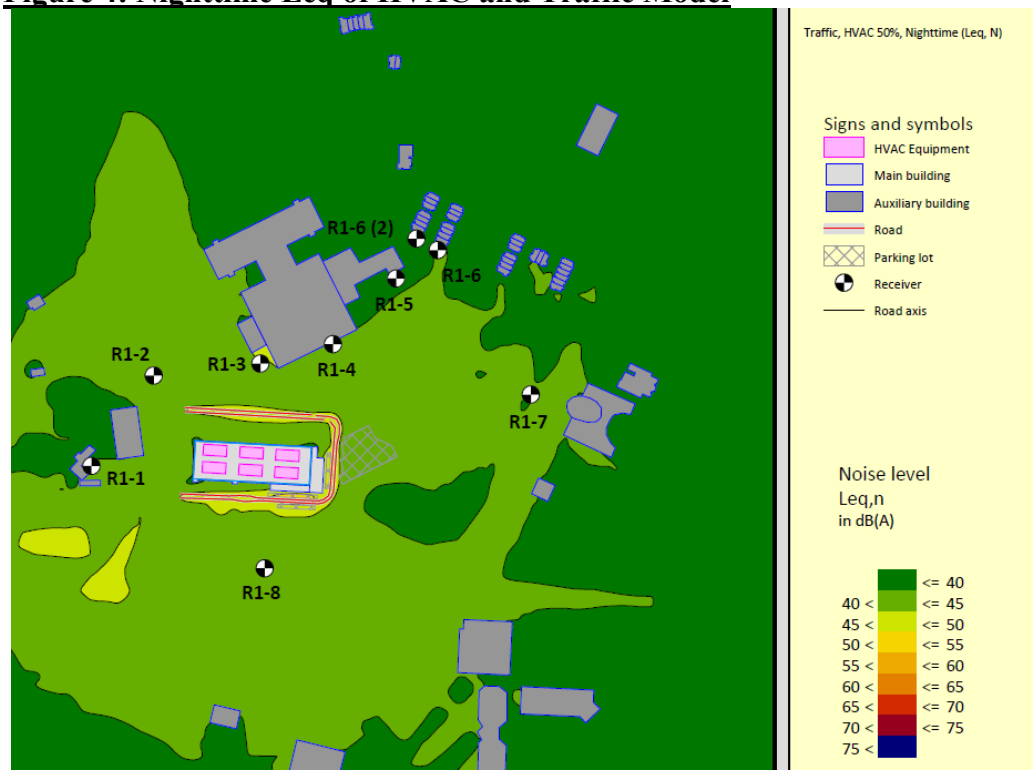


Table 5 – Receiver Table for HVAC, Traffic, and Generator Model (Leq, d and Leq, n)

Receiver	Usage	Fl	Leq,d dB(A)
R1-1	SCR	GF	46.7
R1-2	COM	GF	51.4
R1-3	COM	GF	54.2
R1-4	COM	GF	51.9
R1-4	COM	1.FL	53.2
R1-4	COM	2.FL	53.6
R1-4	COM	3.FL	54.0
R1-5	COM	GF	42.8
R1-5	COM	1.FL	44.2
R1-6	SCR	GF	44.9
R1-6	SCR	1.FL	46.2
R1-6(2)	SCR	GF	42.4
R1-6(2)	SCR	1.FL	44.1
R1-7	COM	GF	43.8
R1-8	COM	GF	46.3

Receiver	Usage	Fl	Leq,n dB(A)
R1-1	SCR	GF	43.3
R1-2	COM	GF	42.3
R1-3	COM	GF	44.0
R1-4	COM	GF	44.0
R1-4	COM	1.FL	45.1
R1-4	COM	2.FL	46.0
R1-4	COM	3.FL	46.9
R1-5	COM	GF	37.5
R1-5	COM	1.FL	38.8
R1-6	SCR	GF	40.3
R1-6	SCR	1.FL	41.5
R1-6(2)	SCR	GF	37.6
R1-6(2)	SCR	1.FL	39.3
R1-7	COM	GF	39.7
R1-8	COM	GF	43.1

Table 6 – IPCB Table for HVAC, Traffic, and Generator Model (Leq, d)-Residential

001 Situation 1 Leq-D - Property Class C									
Octave Pressure Band	Units	IPCB Limits Class C Emitted to Class A	R1-1		R1-6 (2 and floor)		R1-6 (2) (2 and floor)	
		Day (Z)	Day (A)	Day (Z)	Day (A)	Day (Z)	Day (A)	Day (Z)
31.5 Hz	dBA/dBZ	75						
63 Hz	dBA/dBZ	74	24.1	50.3	21.2	47.4	19.7	45.9
125 Hz	dBA/dBZ	69	33.8	49.9	29.2	45.3	28	44.1
250 Hz	dBA/dBZ	64	38.6	47.2	38.9	47.5	37.5	46.1
500 Hz	dBA/dBZ	58	41.1	44.3	41.8	45	39.5	42.7
1000 Hz	dBA/dBZ	52	43.1	43.1	41.3	41.3	39	39
2000 Hz	dBA/dBZ	47	34.7	33.5	35.7	34.5	33.8	32.6
4000 Hz	dBA/dBZ	43	25.2	24.2	25.8	24.8	24.3	23.3
8000 Hz	dBA/dBZ	40	6.1	7.2	-4.4	-3.3	-5.3	-4.2
		Sum	**46.7**	**54.9**	**46.2**	**52.9**	**44.1**	**51.3**

Table 7 – IPCB Table for HVAC, Traffic, and Generator Model (Leq, n)-Residential

002 Situation 1 Leq-N - Property Class C										
Octave Pressure Band	Units	IPCB Limits Class C Emitted to Class A	R1-1			R1-6 (2 and floor)			R1-6 (2) (2 and floor)		
		Night (Z)	~~Day~~	Night (A)	Night (Z)	~~Day~~	Night (A)	Night (Z)	~~Day~~	Night (A)	Night (Z)
31.5 Hz	dBA/dBZ	69									
63 Hz	dBA/dBZ	67		21.3	47.5		16.7	42.9		15.8	42
125 Hz	dBA/dBZ	62		31	47.1		26.2	42.3		24.9	41
250 Hz	dBA/dBZ	54		34.6	43.2		33.8	42.4		32.3	40.9
500 Hz	dBA/dBZ	47		38	41.2		37.3	40.5		34.9	38.1
1000 Hz	dBA/dBZ	41		40	40		37.2	37.2		34.7	34.7
2000 Hz	dBA/dBZ	36		29.6	28.4		28.3	27.1		26.1	24.9
4000 Hz	dBA/dBZ	32		16	15		11.6	10.6		10.1	9.1
8000 Hz	dBA/dBZ	32		-0.1	1		-18.9	-17.8		-20.1	-19
		Sum		**43.3**	**51.8**		**41.5**	**48.5**		**39.3**	**47.0**

The figures and tables above display the sound emissions for the proposed facility on a typical day of operation. None of the receivers reported sound pressure levels over their respective residential or light industrial limits for daytime or nighttime operation in accordance with the City of Naperville. Additionally, IPCB limits are met for a Class C emitter to a Class A property. The assumptions for Situation 1 are listed above but include utilizing up to 24 rooftop HVAC units that each operate at or below 96 dBA of sound energy (Lw) during the day and 93dBA of sound energy at night. This sound energy is based on data provided for a 400-ton unit operating at or below 60% capacity during the day and 50% capacity at night. Additionally, generator enclosures are expected to meet specifications that reduce total sound pressure readings to 77 dBA at a distance of 30 feet. Additionally, the frequency of regular generator operations will be for testing purposes and include up to 2 generators running for 30 minute increments (four generators running for a half hour each within one hour). Up to 24 generators will be tested in a day.

Additionally, the propagated noise levels expected to be emanating from the proposed data center are reported below the recorded background noise levels surrounding the Site. The modeled noise levels from the proposed data center operation were added to the recorded background noise levels to determine if a receptor is likely to perceive any significant increase in noise levels. Generally, noise level increases below one decibel are considered negligible and would not be perceived by a receptor. Noise level increases from 1-2 decibels are barely perceptible and increases at or above three (3) decibels are considered perceptible. All expected noise level increases from the proposed data center operations are considered barely perceptible or negligible. The table below summarizes the perceived difference in noise levels for all receptors that may be caused by the proposed operation of the data center:

Table 8 – Summary of Decibel Increases and Perceived Noise Levels Emanating From Proposed Data Center Operations – Situation 1

Station	Time Duration	Property Type	Background (dBA)	Modeled Emission (dBA)	Total Sum (dBA)	Increase (dBA)	Loudness Perception
R1-1	Day (7:00-19:00)	Residential	62	46.7	62.1	0.1	Negligible
	Night (19:00-7:00)	Residential	58.1	43.3	58.2	0.1	Negligible
R1-2	Day (7:00-19:00)	Industrial	59.9	51.4	60.5	0.6	Negligible
	Night (19:00-7:00)	Industrial	56.5	42.3	56.7	0.2	Negligible
R1-3	Day (7:00-19:00)	Industrial	59.9	54.2	60.9	1.0	Barely Perceptible
	Night (19:00-7:00)	Industrial	56.5	44	56.7	0.2	Negligible
R1-4 (GF)	Day (7:00-19:00)	Industrial	59.9	51.9	60.5	0.6	Negligible
	Night (19:00-7:00)	Industrial	56.5	44	56.7	0.2	Negligible

R1-4 (1F)	Day (7:00-19:00)	Industrial	59.9	53.2	60.7	0.8	Negligiable
	Night (19:00-7:00)	Industrial	56.5	45.1	56.8	0.3	Negligible
R1-4 (2F)	Day (7:00-19:00)	Industrial	59.9	53.6	60.8	0.9	Negligible
	Night (19:00-7:00)	Industrial	56.5	46	56.9	0.4	Negligible
R1-4 (3F)	Day (7:00-19:00)	Industrial	59.9	54	60.9	1.0	Barely Perceptible
	Night (19:00-7:00)	Industrial	56.5	46.9	57.0	0.5	Negligible
R1-5 (GF)	Day (7:00-19:00)	Industrial	58.7	42.8	58.8	0.1	Negligible
	Night (19:00-7:00)	Industrial	56.7	37.5	56.8	0.1	Negligible
R1-5 (1F)	Day (7:00-19:00)	Industrial	58.7	44.2	58.9	0.2	Negligible
	Night (19:00-7:00)	Industrial	56.7	38.8	56.8	0.1	Negligible
R1-6 (GF)	Day (7:00-19:00)	Residential	58.7	44.9	58.9	0.2	Negligible
	Night (19:00-7:00)	Residential	56.7	40.3	56.8	0.1	Negligible
R1-6 (1F)	Day (7:00-19:00)	Residential	58.7	46.2	58.9	0.2	Negligible
	Night (19:00-7:00)	Residential	56.7	41.5	56.8	0.1	Negligible
R1-6 (2) (GF)	Day (7:00-19:00)	Residential	58.7	42.4	58.8	0.1	Negligible
	Night (19:00-7:00)	Residential	56.7	37.6	56.8	0.1	Negligible
R1-6 (2) (1F)	Day (7:00-19:00)	Residential	58.7	44.1	58.8	0.1	Negligible
	Night (19:00-7:00)	Residential	56.7	39.7	56.8	0.1	Negligible
R1-7	Day (7:00-19:00)	Residential	58.7	43.8	58.8	0.1	Negligible
	Night (19:00-7:00)	Residential	56.7	39.7	56.8	0.1	Negligible
R1-8	Day (7:00-19:00)	Industrial	63.5	46.3	63.6	0.1	Negligible
	Night (19:00-7:00)	Industrial	59.1	43.1	59.2	0.1	Negligible

Situation 2 - Immediate Sound Pressure for Loudest 1-hour Generator Run

Karis Critical requires a total of 24 backup generators (approx. 3 megawatts each) to be tested regularly. It is assumed that up to two generators will be tested for 30 minutes at a time, with a maximum of 24 generators run throughout the middle of the day. This model identifies the total sound emissions for the loudest 1-hour period of time that four generators are running for 30 minutes each (loudest hour). The most sensitive situation was modeled for the loudest hour based on the position of sensitive residential and light industrial receptors. Assumptions for this model are provided below.

- Generators
  a. Assumed spectrum emission of a 3MW diesel generator used.
  b. It is assumed that the generators will be surrounded with an enclosure capable of providing a sound pressure reading of 77 decibels at 30 feet (total sound energy Lw estimated at 104.2 dBA emanating from enclosure walls.
  c. The dimensions of typical 3MW generators suggest that the exhaust is approximately 9.5 feet above the ground surface. As the exhaust is the loudest part of a typical generator, the source was elevated to 15 feet above grade to account for added heights from enclosures and mufflers.
  d. Frequency of generator operation is assumed to be up to 2 generators running for 30 minute increments (four (4) generators running for a half hour each within one hour) for testing purposes.
  e. A total of 24 generators will run behind the data center. Each generator will only be tested for one 30-minute interval on a monthly basis.
  f. The four (4) generators modeled were along the northeast corner of the east building (nearest the residential property and most sensitive receptor R1-1).

- HVAC
  a. Spectrum profile of HVAC units is assumed based on similar-type HVAC equipment for 300 and 400-ton units.
  b. Maximum total sound power is assumed at 96dBA per unit running at a continuous 60% load for the daytime level and 93dBA per unit running at a continuous 50% load for the nighttime level.
  c. A maximum total of 24 units are placed on the building roof in six (6) clusters of four (4) and elevated to at least 6 feet above the building roof.
  d. HVAC units are modeled to be running for 24-hours through the day and night at 60 % capacity for the day and 50% capacity at night.

- Roads/Drives and Parking Lots
  a. Modeled after KLOA traffic report daytime and nighttime estimates on facility traffic (3 shifts with 45 employees from 7:00-16:30, 10 employees from 16:30-23:30, and 10 employees from 23:30-7:00). Additional visitor volume in central parking lot assumed at ½ capacity of parking area (approximately 50-60 vehicles).

- Walls
  a. A 22-foot visual screen will surround the generator yard. This wall may offer some minor noise attenuation; however, it has been excluded from this model in order to provide a conservative noise model.
  b. An 9-foot 10-inch concrete parapet wall is assumed to be installed surrounding the perimeter of the building roofline (Rw value = 47; reflection loss 1dB).

This condition was modeled to represent the immediate sound emissions of the facility during the loudest estimated daytime hour where four (4) diesel generators are all active for 30 minutes each. This event is the loudest hour during the select days when generator operation is tested and is not expected to be a continuous source of noise emissions. The four (4) generators nearest the closest/most sensitive receptors were modeled. Additionally, generator testing is not scheduled to take place at night, and a nighttime model was not generated (since Situation 1 above models the nighttime noise contributions). The figures and tables below identify the modeled sound emissions for the single hour of generator testing.

Figure 5: Single Hour Generator Run

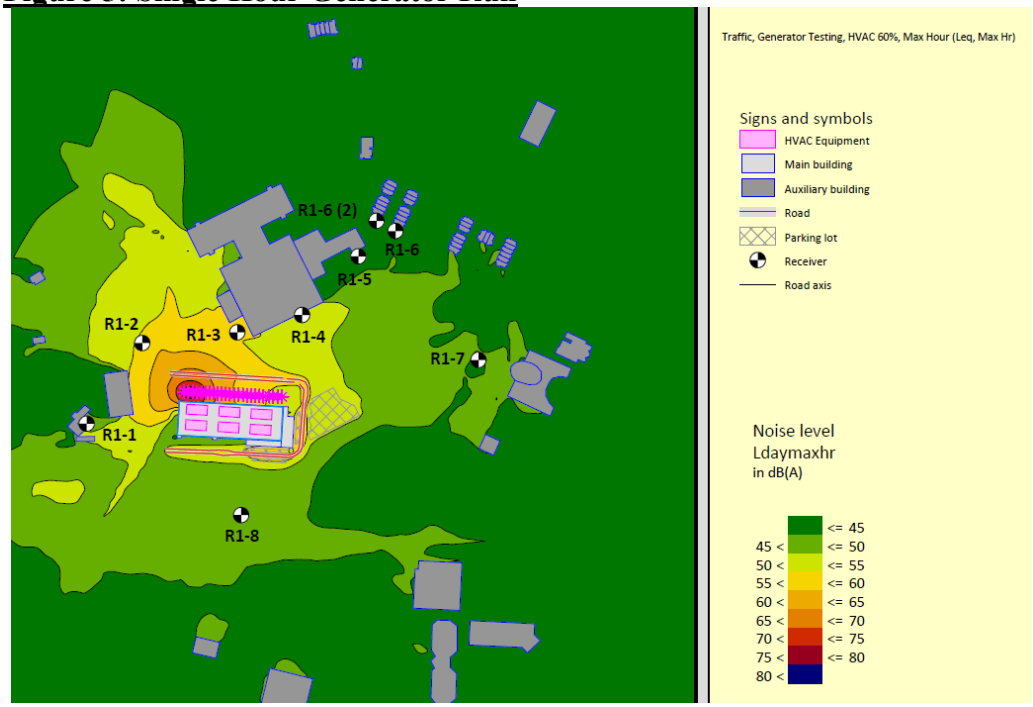


Table 9 – Receiver Table for 1-Hour Generator Run (Daytime)

Receiver	Usage	Fl	Ldaymaxhr dB(A)
R1-1	SCR	GF	48.0
R1-2	COM	GF	56.2
R1-3	COM	GF	56.3
R1-4	COM	GF	52.2
R1-4	COM	1.FL	53.6
R1-4	COM	2.FL	54.1
R1-4	COM	3.FL	54.4
R1-5	COM	GF	40.8
R1-5	COM	1.FL	42.0
R1-6	SCR	GF	43.5
R1-6	SCR	1.FL	44.7
R1-6(2)	SCR	GF	40.9
R1-6(2)	SCR	1.FL	42.7
R1-7	COM	GF	44.2
R1-8	COM	GF	46.4

Table 10 – IPCB Table for HVAC, Traffic, and Generator Model (Leq, maxhr)-Residential

003 Situation 2 Leq-Max Hr - Property Class C								
Octave Pressure Band	Units	IPCB Limits Class C Emitted to Class A	R1-1		R1-6 (2and floor)		R1-6 (2) (2 and floor)	
		Day (Z)	Day (A)	Day (Z)	Day (A)	Day (Z)	Day (A)	Day (Z)
31.5 Hz	dBA/dBZ	75						
63 Hz	dBA/dBZ	74	25.9	52.1	20.5	46.7	19.3	45.5
125 Hz	dBA/dBZ	69	34.4	50.5	29.2	45.3	27.9	44
250 Hz	dBA/dBZ	64	40.4	49	37.8	46.4	36.4	45
500 Hz	dBA/dBZ	58	42.4	45.6	40.2	43.4	38	41.2
1000 Hz	dBA/dBZ	52	43.9	43.9	40.2	40.2	37.7	37.7
2000 Hz	dBA/dBZ	47	38	36.8	32.3	31.1	30.2	29
4000 Hz	dBA/dBZ	43	31.7	30.7	16.8	15.8	15.3	14.3
8000 Hz	dBA/dBZ	40	11.6	12.7	-10.3	-9.2	-11.8	-10.7
		Sum	**48.1**	**56.2**	**44.7**	**52.0**	**42.6**	**50.5**

The total hourly Leq sound emission from testing the generators is reported below Naperville's applicable residential and light industrial noise ordinance (55dBA and 70dBA respectively) for the time within the single estimated loudest hour of operation. Additionally, IPCB limits are met for a Class C emitter to a Class A property. This scenario assumes that a maximum of four (4) generators will be tested within a daytime hour, if they are each running for 30 minutes (and a maximum of two generators running at a time). As a result, the modeled loudest daytime hour of generator usage is compliant with Naperville's noise ordinance.

Similar to Situation 1, the propagated noise levels expected to be emanating from the proposed data center from Situation 2 are reported below the recorded background noise levels surrounding

the Site. The modeled noise levels from the proposed data center operation were added to the recorded background noise levels to determine if a receptor is likely to perceive any significant increase in noise levels. Generally, noise level increases below one decibel are considered negligible and would not be perceived by a receptor. Noise level increases from 1-2 decibels are barely perceptible and increases at or above three (3) decibels are considered perceptible. All expected noise level increases from the proposed data center operations are considered barely perceptible or negligible. The table below summarizes the perceived difference in noise levels for all receptors that may be caused by the proposed operation of the data center within the loudest anticipated hour of the loudest day of the month:

Table 11 – Summary of Decibel Increases and Perceived Noise Levels Emanating from Proposed Data Center Operations – Situation 2

Station	Time Duration	Property Type	Background (dBA)	Modeled Emission (dBA)	Total Sum (dBA)	Increase (dBA)	Loudness Perception
R1-1	Day (7:00-19:00)	Residential	62	48.0	62.2	0.2	Negligible
R1-2	Day (7:00-19:00)	Industrial	59.9	56.2	61.4	1.5	Barely Perceptible
R1-3	Day (7:00-19:00)	Industrial	59.9	56.3	61.5	1.6	Barely Perceptible
R1-4 (GF)	Day (7:00-19:00)	Industrial	59.9	52.2	60.6	0.7	Negligible
R1-4 (1F)	Day (7:00-19:00)	Industrial	59.9	53.6	60.8	0.9	Negligible
R1-4 (2F)	Day (7:00-19:00)	Industrial	59.9	54.1	60.9	1.0	Barely Perceptible
R1-4 (3F)	Day (7:00-19:00)	Industrial	59.9	54.4	61.0	1.1	Barely Perceptible
R1-5 (GF)	Day (7:00-19:00)	Industrial	58.7	40.8	58.8	0.1	Negligible
R1-5 (1F)	Day (7:00-19:00)	Industrial	58.7	42.0	58.8	0.1	Negligible
R1-6 (GF)	Day (7:00-19:00)	Residential	58.7	43.5	58.8	0.1	Negligible
R1-6 (1F)	Day (7:00-19:00)	Residential	58.7	44.7	58.9	0.2	Negligible
R1-6 (2) (GF)	Day (7:00-19:00)	Residential	58.7	40.9	58.8	0.1	Negligible
R1-6 (2) (1F)	Day (7:00-19:00)	Residential	58.7	42.7	58.8	0.1	Negligible
R1-7	Day (7:00-19:00)	Residential	58.7	44.2	58.9	0.2	Negligible
R1-8	Day (7:00-19:00)	Industrial	63.5	46.4	63.6	0.1	Negligible

4.0 CONCLUSIONS

JHA has evaluated the proposed data center development plan, modeled known noise sources, and assumed some effort of sound mitigation to combat nuisance noise (an eight foot tall parapet wall around the building roof and encasement of generators). Two situations are presented that model (i) the operating noise level for the loudest typical day and night of facility operation (Situation 1), and (ii), the single loudest hour of operation within the loudest day, where four backup generators are tested within a single hour near the most sensitive receptors (Situation 2). Both modeled situations identified that the total noise contributions from the proposed data center development remain below both Naperville's noise ordinance in Title 6, Chapter 14 (6-14-4) and IPCB limits for a Class C emitter to a Class A receiver. Additionally, the noise levels produced by the facility for daily (Leq,d), nighttime (Leq,n) and most intense hour (Leq, h), are below the preexisting background noise measured surrounding the Site. As a result, the operation of the proposed data center is not anticipated to cause nuisance noise levels to exceed the standards set forth by the City of Naperville or the IPCB, and receptors near the proposed data center are unlikely to perceive any significant increase in baseline noise levels under standard data center operations.

FIGURES



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www.jacobandhefner.com

SITE LOCATION

PROJECT NAME:	Naperville Data Center		
CLIENT NAME:	Karis Critical		
LOCATION:	1960 W. Lucent Lane		
DATE PREPARED:	4/6/2025		
SHEET:	FIG. 1	JOB NO.:	H477

H:\H477\ENV\Noise Impact Assessment\CAD\FIG 1-2 Location-Layout.dwg



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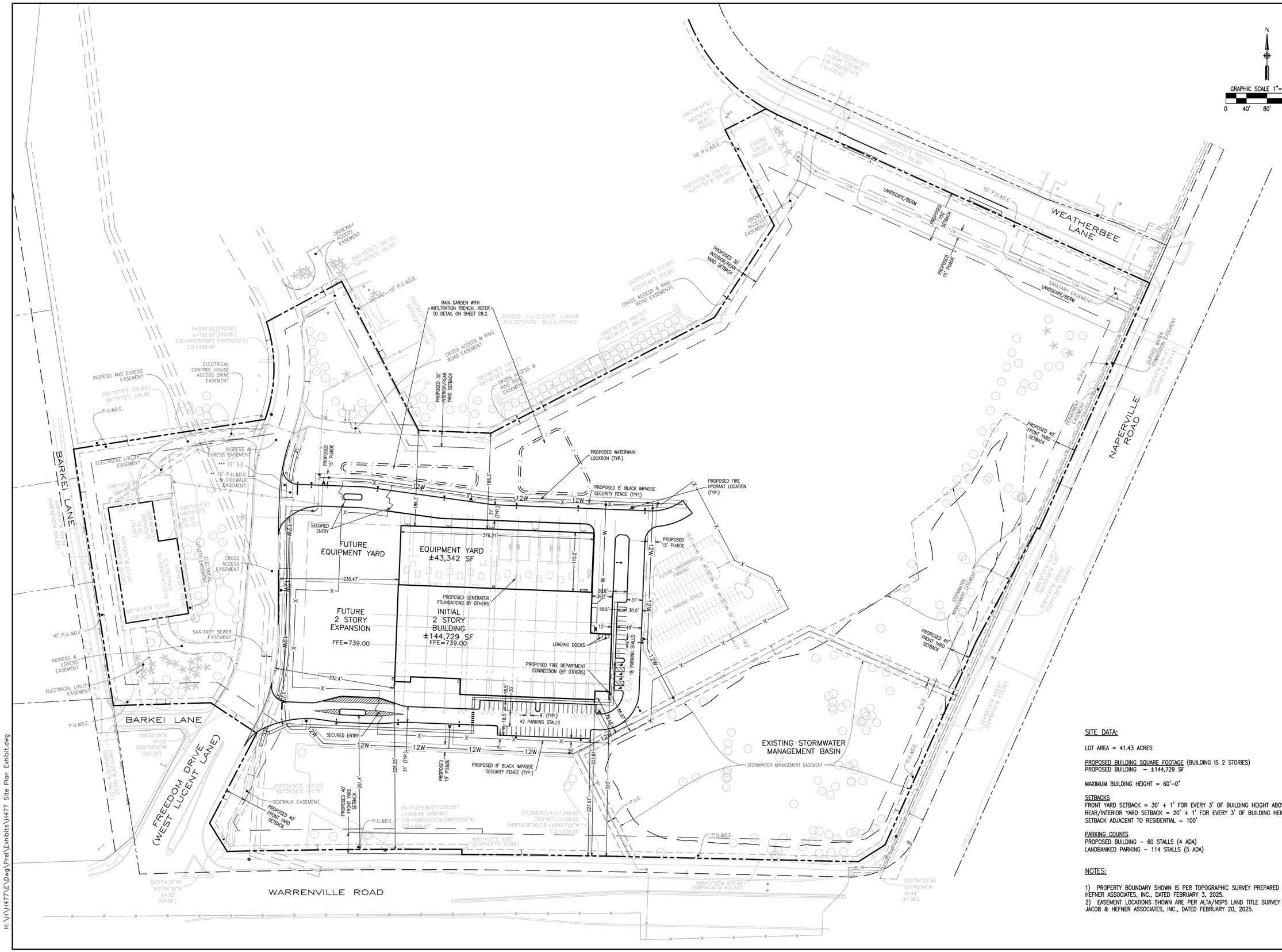
SOUND LEVEL METER MONITORING LOCATIONSz

PROJECT NAME:	Naperville Data Center		
CLIENT NAME:	Karis Critical		
LOCATION:	1960 W. Lucent Lane		
DATE PREPARED:	4/6/2025		
SHEET:	FIG. 2	JOB NO.:	H477

H:\H\H477\ENV\Noise Impact Assessment\CAD\FIG 1-2 Location-Meters.dwg

ATTACHMENET 1

Conceptual Site Plan



No.	Description	Date
5	REVISED PER CITY COMMENTS	09/26/25
4	REVISED PER CITY	7/31/25
3	REVISED	7/24/25
2	REVISED PER CITY	6/12/25
1	ORIGINAL EXHIBIT DATE	4/11/25

SITE PLAN EXHIBIT

1960 W LUCENT LANE
NAPERVILLE, ILLINOIS

KARIS CRITICAL

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www.jacobandhefner.com

SITE DATA:

LOT AREA = 41.43 ACRES

PROPOSED BUILDING SQUARE FOOTAGE (BUILDING IS 2 STORIES)
PROPOSED BUILDING – ±144,729 SF

MAXIMUM BUILDING HEIGHT = 60'–0"

SETBACKS
FRONT YARD SETBACK = 30' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 40'
REAR/INTERIOR YARD SETBACK = 20' + 1' FOR EVERY 3' OF BUILDING HEIGHT ABOVE 30' = 30'
SETBACK ADJACENT TO RESIDENTIAL = 100'

PARKING COUNTS
PROPOSED BUILDING – 60 STALLS (4 ADA)
LANDBANKED PARKING – 114 STALLS (5 ADA)

NOTES:

1) PROPERTY BOUNDARY SHOWN IS PER TOPOGRAPHIC SURVEY PREPARED BY JACOB & HEFNER ASSOCIATES, INC., DATED FEBRUARY 3, 2025.
2) EASEMENT LOCATIONS SHOWN ARE PER ALTA/NSPS LAND TITLE SURVEY PREPARED BY JACOB & HEFNER ASSOCIATES, INC., DATED FEBRUARY 20, 2025.

1" = 80'

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EXHIBIT

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