



MEMO

Project name **Research based Artificial Intelligence Computer Server Buildings**
Client **Cayuga Operating Company, LLC**

Date September 08, 2025

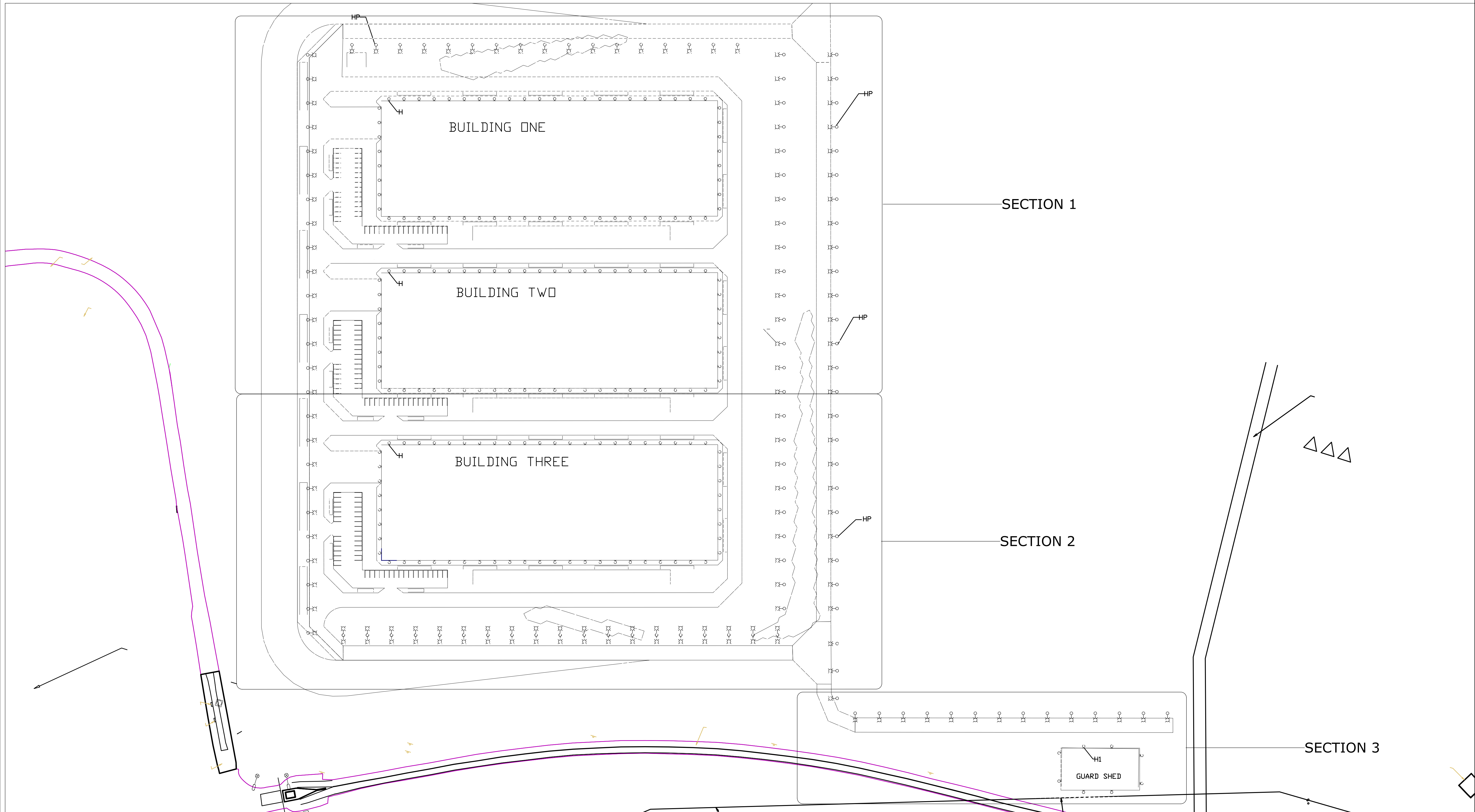
Site Lighting and Electrical Utility Strategy

Site Lighting

Site lighting will consist of roadway pole mounted lights and exterior building wall packs for safety and security. Both the roadway lighting and building wall packs will utilize a full cutoff design technology directing 100% of the light downward in effort to mitigate any upward emission. This design concept prevents light pollution and shields any direct light glare.

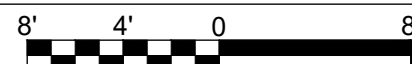
Electrical Utility

Power will be sourced from the existing Milliken station NYSEG 115kV substation located on the site. Two 115kV feeders will be routed overhead to a new substation yard. Medium voltage feeders will be routed underground from the substation yard to desired buildings.



SITE LIGHTING OVERALL PLAN

1/8"=1'-0"
8' 4' 0 8'



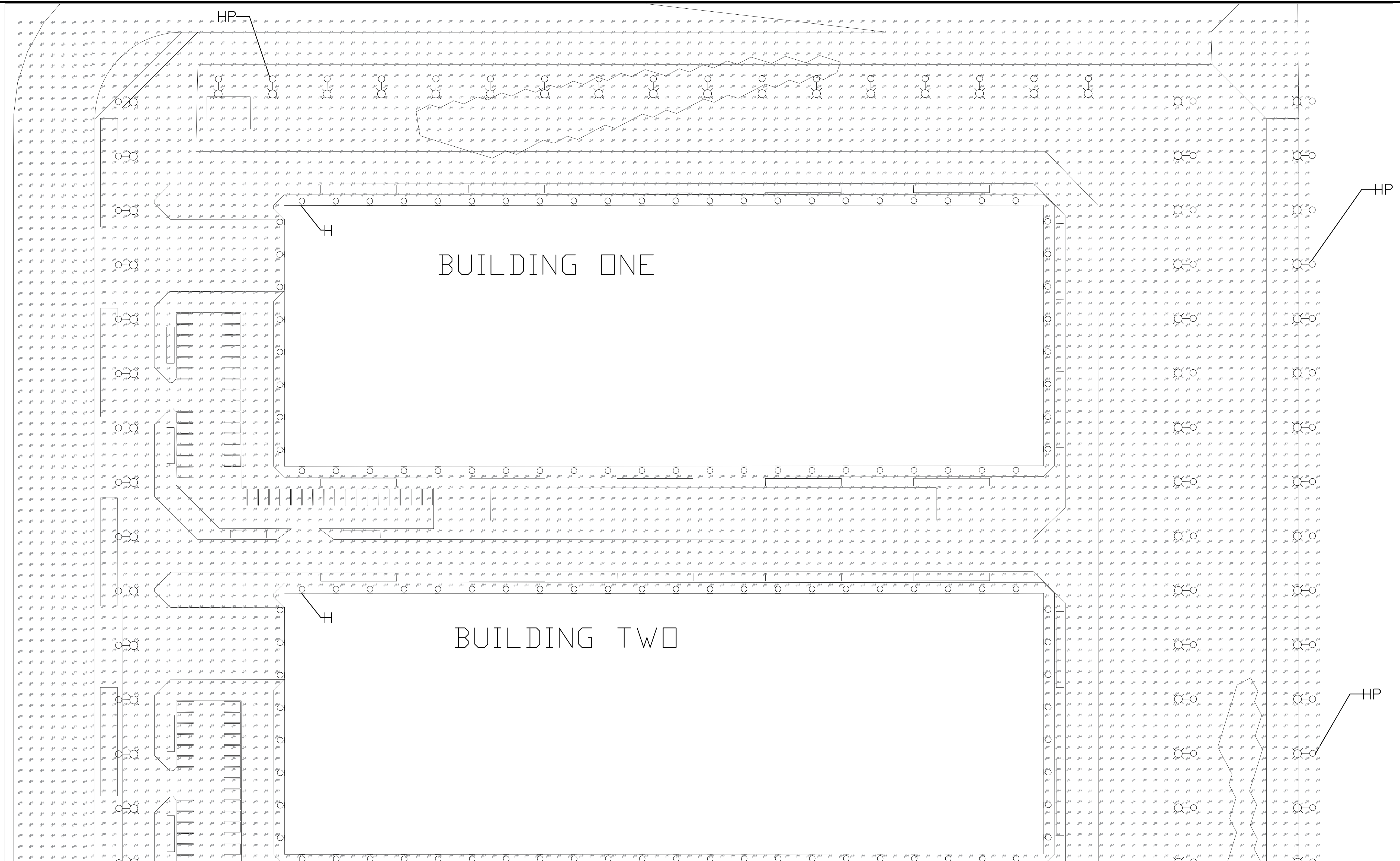
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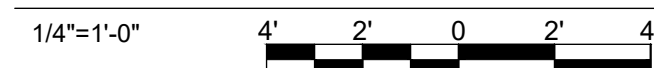
| NO. | REV DATE | REVISION | INT. |
|---|----------|--|------|
| <small>IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT. THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SIZE. DRAWING IS NOT SCALABLE IF NO SCALE BAR IS PRESENT.</small> | | | |
| Project Details TERAWULF INC LAKE HAWKEYE # Location: # Project Number: 190091601 Project Status: PROGRESS SUBMISSION | | Drawing Title SITE PLAN Designer / Professional Engineer Responsible: # Designed by: # Drawn by: # Checked by: # Approved by: # Date: # Scale: Sc X Rev: X X | |
| RAMBOLL <small>RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.</small> | | E-100 | |

LIGHTING PLAN NOTES

1. THE RECOMMENDED AVERAGE LIGHTING LEVEL FOR UNCOVERED PARKING LOTS IS 1 FOOT-CANDLES (FC), AND CAN RANGE FROM 0.5-2 FC PER IESNA.
2. THE RECOMMENDED AVERAGE LIGHTING LEVEL FOR BUILDING EXTERIORS AND PEDESTRIAN WALKWAYS AND PATHWAYS IS 1-5 FOOT-CANDLES PER IESNA.
3. THE RECOMMENDED AVERAGE LIGHTING LEVEL FOR ROADWAYS AND STREETS IS 1-2 FOOT-CANDLES PER IESNA.
4. A DARK SKY COMPLIANT FIXTURE IS DESIGNED TO REDUCE LIGHT POLLUTION BY DIRECTING LIGHT DOWNWARD AND MINIMIZING GLARE. IT MUST BE FULLY SHIELDED, EMIT NO LIGHT ABOVE THE HORIZONTAL PLANE, AND USE A COLOR TEMPERATURE OF 3000K OR LOWER.



SITE LIGHTING PHOTOMETRICS



| Statistics | | |
|-------------------------|--------|--------|
| Description | Symbol | Avg |
| Building One Exterior | + | 4.3 fc |
| Building Three Exterior | + | 4.3 fc |
| Building Two Exterior | + | 4.4 fc |
| Exterior Perimeter Road | + | 3.0 fc |
| Guard Shed Exterior | + | 3.1 fc |
| Parking Building One | + | 1.2 fc |
| Parking Building Three | + | 1.3 fc |
| Parking Building Two | + | 1.2 fc |
| Past Tree Line | □ | 0.4 fc |
| Site Overall | + | 3.6 fc |

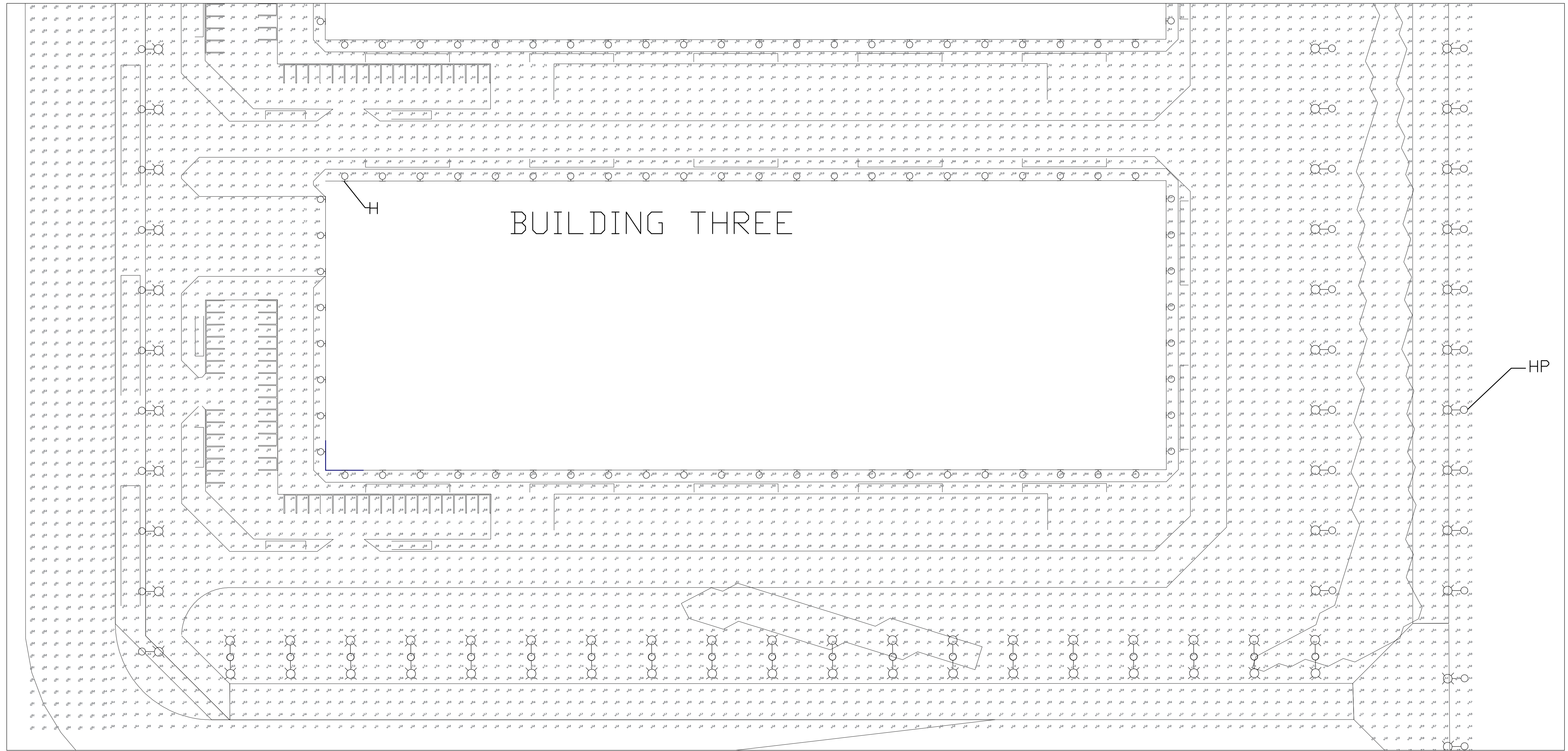
| LIGHTING FIXTURE SCHEDULE | | | | | | | | | | |
|---------------------------|-------------|-----------|--------------|------------------------|--------------|---------|---|----------|---|--|
| ID | FIXTURE QTY | LAMP TYPE | NO. OF LAMPS | MOUNTING | LAMP WATTAGE | VOLTAGE | FIXTURE SIZE AND DESCRIPTION | MFR | CATALOG NO. | REMARKS/ACCESSORIES |
| HP | 147 | LED | NA | POLE MOUNT (25' AFG) | 190.6 | MVOLT | EXTERIOR ARCHITECTURAL AREA LUMINAIRE | LUMINIS | PL240-L1L180-SYR-30K-MVOLT-NLTH-PH7-MS-SP-UO-BKT-MG | PROVIDE WITH STRAIGHT EDGE DIFFUSER (UO) FOR ZERO UPLIGHT |
| H | 180 | LED | NA | SURFACE/WALL (15' AFG) | 76.2 | MVOLT | EXTERIOR WALL-PACK FULL CUT OFF WIDE LIGHT DISTRIBUTION | LITHONIA | WDGE4-LED-P1-30K-70CRI-R3-MVOLT-SRM-PE-PIR-DBLXD | PROVIDE WITH 30K COLOR TEMPERATURE AND SRM MOUNTING FOR DARK SKY COMPLIANCE SEAL OF APPROVAL |
| H1 | 8 | LED | NA | SURFACE/WALL (15' AFG) | 76.2 | MVOLT | EXTERIOR WALL-PACK FULL CUT OFF WIDE LIGHT DISTRIBUTION | LITHONIA | WDGE4-LED-P1-30K-70CRI-R4-MVOLT-SRM-PE-PIR-DBLXD | PROVIDE WITH 30K COLOR TEMPERATURE AND SRM MOUNTING FOR DARK SKY COMPLIANCE SEAL OF APPROVAL |

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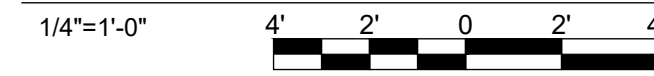
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| RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC. | | E-101 | |

LIGHTING PLAN NOTES

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SITE LIGHTING PHOTOMETRICS



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| Parking Building One | + | 1.2 fc |
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| Parking Building Two | + | 1.2 fc |
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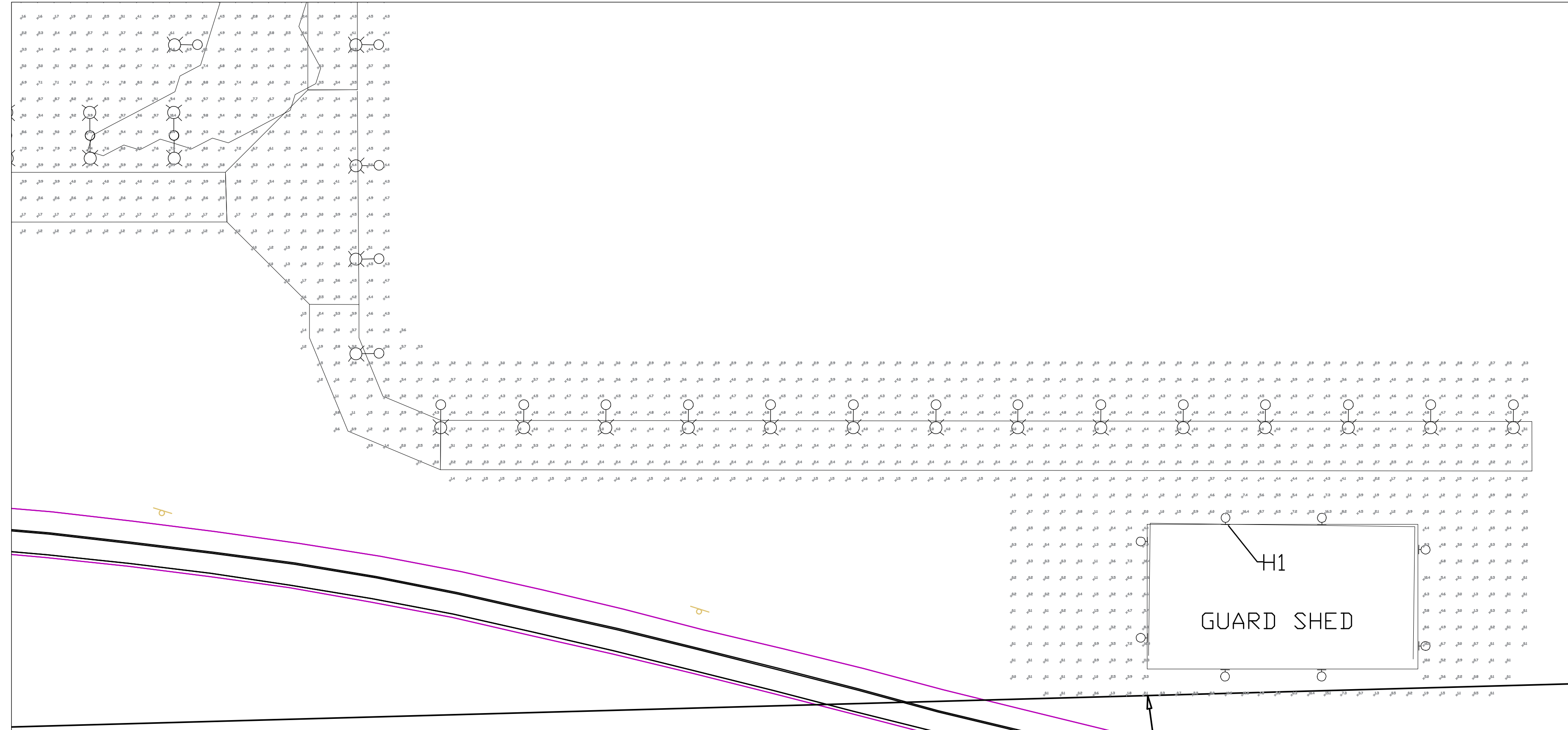
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| RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC. | | Drawing Number E-102 | |

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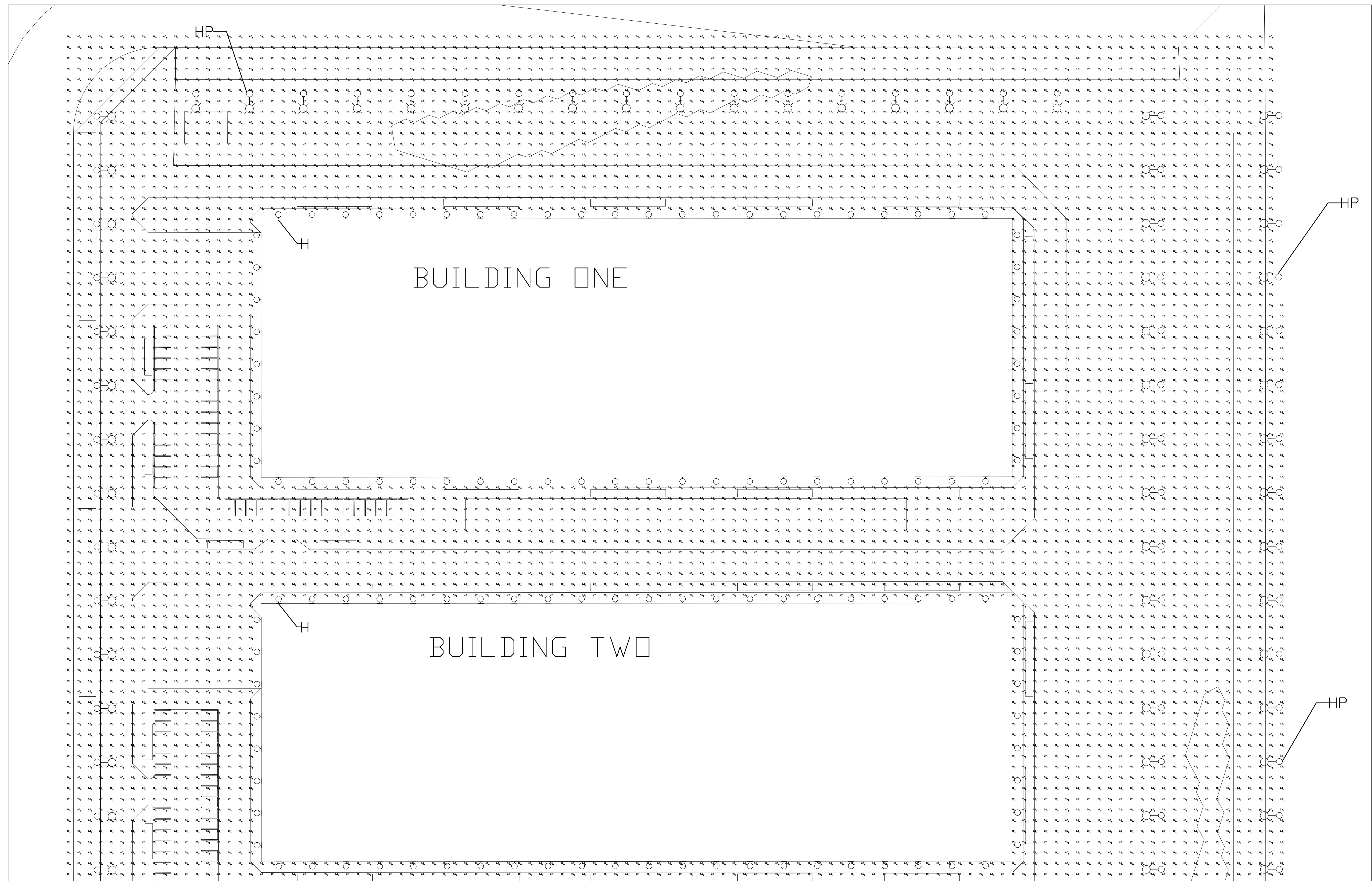
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| TERAWULF INC LAKE HAWKEYE # # Location: # | | RAMBOLL RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC. # # Designer / Professional Engineer Responsible: # | |
| Project Number: 190091601 | Designed by: # | Drawn by: # | Checked by: # |
| Project Status: PROGRESS SUBMISSION | Drawing Number: E-103 | Approved by: # | Date: # |
| | | Scale: | Sc: X |
| | | | Rev: X |



SITE LIGHTING VERTICAL PHOTOMETRICS

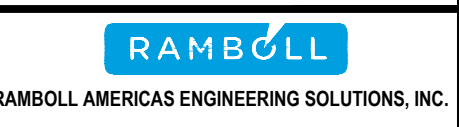


| Statistics | | | | | | |
|--------------------------------|--------|--------|--------|--------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Vertical Measured at top of HP | + | 0.0 fc | 0.0 fc | 0.0 fc | N/A | N/A |

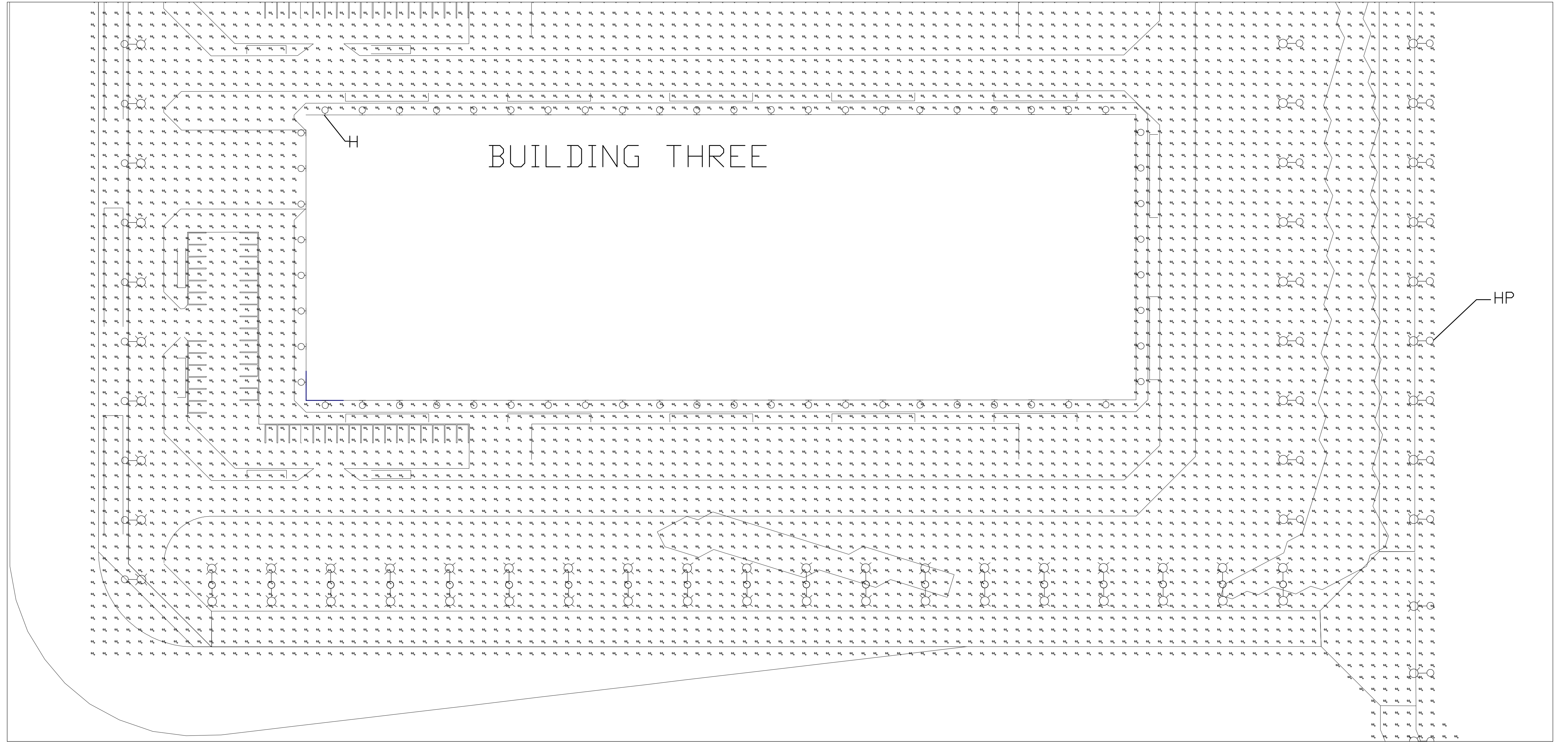
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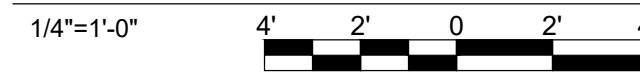
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| <p>Location: #</p> | | <p>Designer / Professional Engineer Responsible: #</p> | |
| <p>Project Number: 190091601</p> | <p>Designed by: #</p> | <p>Drawn by: #</p> | <p>Checked by: #</p> |
| <p>Project Status: PROGRESS SUBMISSION</p> | <p>Drawing Number: E-201</p> | <p>Approved by: #</p> | <p>Date: #</p> |
| | | <p>Scale: X</p> | <p>Rev. X</p> |



RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.



SITE LIGHTING VERTICAL PHOTOMETRICS



| Statistics | | | | | | |
|--------------------------------|--------|--------|--------|--------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
| Vertical Measured at top of HP | + | 0.0 fc | 0.0 fc | 0.0 fc | N/A | N/A |

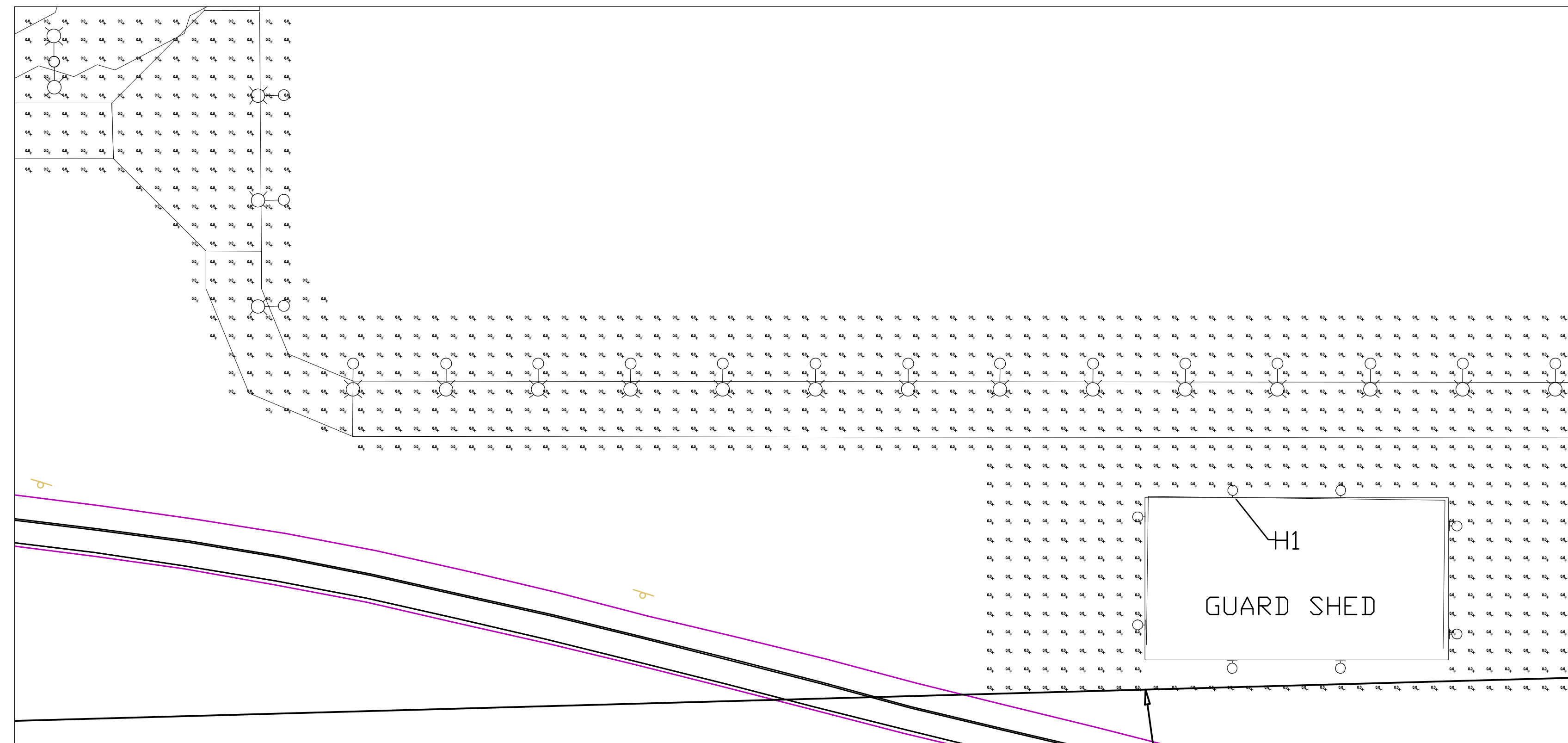
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| Location: # # | | Designer / Professional Engineer Responsible: # # | |
| Project Number 190091601 | Designed by # | Drawn by # | Checked by # |
| Project Status PROGRESS SUBMISSION | Drawing Number E-202 | Approved by # | Date # |
| | Scale | Sc | Rev. |
| | | X | X |



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