DESIGN & CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 1 TO PROJECT NO. 47574

CONSTRUCTION, HVAC, AND ELECTRICAL WORK
PROVIDE AUTOMATED RECORD FIRE RANGE
CAMP SMITH TRANING SITE
11 BEAR MOUNTAIN BRIDGE ROAD
CORTLANDT MANOR, NY

July 18, 2025

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

BIDDING REQUIREMENTS – COMMON

1. DOCUMENT 001114 ADVERTISEMENT FOR BIDS: The last date for receipt of bids is changed from Wednesday, July 23, 2025, to Wednesday, July 30, 2025.

BIDDING REQUIREMENTS – CONSTRUCTION WORK

2. DOCUMENT 004113 BID FORM: Discard the Document bound in the Project Manual and substitute with the accompanying Document (pages 004113 – 1 thru 004113 – 4) noted "REVISED 7/18/2025".

BIDDING REQUIREMENTS – HVAC WORK

3. DOCUMENT 004113 BID FORM: Discard the Document bound in the Project Manual and substitute with the accompanying Document (pages 004113 – 1 thru 004113 – 4) noted "REVISED 7/18/2025".

BIDDING REQUIREMENTS – ELECTRICAL WORK

4. DOCUMENT 004113 BID FORM: Discard the Document bound in the Project Manual and substitute with the accompanying Document (pages 004113 – 1 thru 004113 – 4) noted "REVISED 7/18/2025".

GENERAL REQUIREMENTS – COMMON DOCUMENTS

5. DOCUMENT 012100 ALLOWANCES: Discard the Document bound in the Project Manual and substitute with the accompanying Document (page 012100 – 1) noted "REVISED 7/18/2025".

6. DOCUMENT 012300 ALTERNATES: Add the accompanying Document (pages 012300 – 1 thru 012300 – 3) to the Project Manuals.

SPECIFICATIONS – CONSTRUCTION WORK

7. SECTION 087100 DOOR HARDWARE: Add the accompanying Section (pages 087100 – 1 and 087100 – 14) to the Construction Project Manual.

APPENDIX – CONSTRUCTION WORK

8. SCHEDULE OF SUBMITTALS: Discard the Document bound in the Project Manual and substitute the accompanying Document (pages 1 thru 9) noted "Printed 7/16/2025".

DRAWINGS – ALL TRADES

9. Revised Drawings:
    a. The drawing set that accompanies this Addendum will replace the original contract drawings in its entirety.

END OF ADDENDUM

Brady M. Sherlock, P.E.
Director, Division of Design
Design & Construction

DETACH AND USE THIS FORM

BID FORM FOR: 47574-C

CONSTRUCTION WORK
PROVIDE AUTOMATED RECORD FIRE RANGE
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE ROAD
CORTLANDT MANOR, NY

State of New York
Office of General Services
Design and Construction Group
Division of Contract Management
35th Floor, Corning Tower
The Gov. Nelson A. Rockefeller
Empire State Plaza
Albany, NY 12242

THIS IS A 4 PAGE BID FORM. ALL PAGES MUST BE COMPLETED.

THE STATE RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS. EACH BID FORM SHALL BE ACCOMPANIED BY BID SECURITY (AS DESCRIBED IN THE INSTRUCTIONS TO BIDDERS) IN THE AMOUNT STATED IN THE ADVERTISEMENT FOR BIDS.

The Undersigned agrees to complete the Work within the time stated in Section 011000 of the Specifications.

The Undersigned acknowledges his/her understanding of the social policy concerning minority and women business participation in the State building construction program, and pledges to cooperate with the State in the implementation of this policy, and further pledges to exert good faith efforts to achieve participation of minority and female employees.

The Undersigned certifies, as to each of the occupations listed in the Prevailing Rate Schedule applicable to this Project, the ability and willingness to exert good faith efforts to achieve the goal for minority and women workforce participation as set forth in the Supplementary Conditions.

The Undersigned certifies the ability and willingness to exert good faith efforts to achieve the goals for Minority and Women-Owned Business Enterprise and Service-Disabled Veteran-Owned Businesses participation as set forth in the Supplementary Conditions.

The Undersigned declares that the Bidding and Contract Documents have been carefully examined and that all things necessary for the completion of the Work shall be provided.

The Undersigned agrees that the bid security shall be subject to forfeiture if this bid is accepted by the State and he/she does not submit executed copies of the Agreement WITHIN FIVE (5) DAYS OF RECEIPT OF A WRITTEN REQUEST TO PROVIDE SUCH AGREEMENT. A Performance Bond and a Labor and Material Bond, each in an amount equal to the contract sum, shall be supplied with the executed Agreement and shall be the statutory form of public bonds required by Sections 136 and 137 of the State Finance Law.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his/her knowledge and belief:

(1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other bidder or with any competitor;

(2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;

(3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

(4) This contract shall not cause or result in a violation of Section 74(3)(e) of the Public Officers Law which states: "No officer or employee of a state agency, member of the legislature or legislative employee should engage in any transaction as representative or agent of the State with any business entity in which he/she has a direct or indirect financial interest that might reasonably tend to conflict with the proper discharge of his/her official duties."

Federal Employer I.D. No. _____

(5) The Bidder understands and agrees to comply with the requirements of the Procurement Lobbying Law, State Finance Law § 139-j and § 139-k, and with OGS's procedures relating to permissible contacts during a procurement as required by State Finance Law § 139-j(3) and § 139-j(6)(b). Such requirements and procedures are posted at https://ogs.ny.gov/acpl.

(6) The bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law (NYS Iran Divestment Act of 2012). The list can be viewed at the following link:

https://ogs.ny.gov/iran-divestment-act-2012

(7) Will New York State Businesses be used in the performance of this contract (refer to Document 007324)?

Yes ☐ No ☐

(8) The New York State Human Rights Law (Human Rights Law), Article 15 of the Executive Law, prohibits discrimination and harassment based on age, race, creed, color, national origin, sex, pregnancy or pregnancy-related conditions, sexual orientation, gender identity, disability, marital status, familial status, domestic violence victim status, prior arrest or conviction record, military status or predisposing genetic characteristics.

The Human Rights Law may also require reasonable accommodation for persons with disabilities and pregnancy-related conditions. A reasonable accommodation is an adjustment to a job or work environment that enables a person with a disability to perform the essential functions of a job in a reasonable manner. The Human Rights Law may also require reasonable accommodation in employment on the basis of Sabbath observance or religious practices.

Generally, the Human Rights Law applies to:

- all employers of four or more people, employment agencies, labor organizations and apprenticeship training programs in all instances of discrimination or harassment;
- employers with fewer than four employees in all cases involving sexual harassment; and,
- any employer of domestic workers in cases involving sexual harassment or harassment based on gender, race, religion or national origin.

In accordance with Executive Order No. 177, the Bidder hereby certifies that it does not have institutional policies or practices that fail to address the harassment and discrimination of individuals on the basis of their age, race, creed, color, national origin, sex, sexual orientation, gender identity, disability, marital status, military status, or other protected status under the Human Rights Law.

Executive Order No. 177 and this certification do not affect institutional policies or practices that are protected by existing law, including but not limited to the First Amendment of the United States Constitution, Article 1, Section 3 of the New York State Constitution, and Section 296(11) of the New York State Human Rights Law.

(9) In accordance with State Finance Law § 139-l, by submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law.

If the bidder cannot make the foregoing certification, such bidder shall so state and shall furnish with the bid a signed statement that sets forth in detail the reasons that the bidder cannot make the certification.

Federal Employer I.D. No. _____

(10) In accordance with Section 165(5) of the State Finance Law, the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either (answer yes or no to one or both of the following, as applicable):

1. have business operations in Northern Ireland Yes ☐ No ☐ and if yes:

2. shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of compliance with such principles.

Yes ☐ No ☐

(11) Certification Under Executive Order No. 16 - Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia

Executive Order No. 16 provides that "all Affected State Entities are directed to refrain from entering into any new contract or renewing any existing contract with an entity conducting business operations in Russia." The complete text of Executive Order No. 16 can be found here: https://www.governor.ny.gov/executive-order/no-16-prohibiting-state-agencies-and-authorities-contracting-businesses-conducting

The Executive Order remains in effect while sanctions imposed by the federal government are in effect. Accordingly, vendors who may be excluded from award because of current business operations in Russia are nevertheless encouraged to respond to solicitations to preserve their contracting opportunities in case the sanctions are lifted during a solicitation or even after award in the case of some solicitations.

As defined in Executive Order No. 16, an "entity conducting business operations in Russia" means an institution or company, wherever located, conducting any commercial activity in Russia or transacting business with the Russian Government or which the commercial entities headquartered in Russia or with their principal place of business in Russia in the form of contracting, sales, purchasing, investment, or any business partnership.

Is Vendor an entity conducting business operations in Russia, as defined above? Please answer by checking one of the following boxes:

☐ 1. No, Vendor does not conduct business operations in Russia within the meaning of Executive Order No. 16.

☐ 2.a. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but has taken steps to wind down business operations in Russia or is in the process of winding down business operations in Russia. (Please provide a detailed description of the wind down process and a schedule for completion.)

☐ 2.b. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but only to the extent necessary to provide vital health and safety services within Russia or to comply with federal law, regulations, executive orders, or directives. (Please provide a detailed description of the services being provided or the relevant laws, regulations, etc.)

☐ 3. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16.

(12) In accordance with New York State Labor Law Section 220-i, the bidder certifies that it is registered with the New York State Department of Labor (NYSDOL) for public work projects. By submission of this bid and providing the registration number in the space indicated on this bid form, the bidder affirms that its registration is current and valid as of the date of bid submission.

Federal Employer I.D. No. _____

Addenda to the Contract Documents are available at:
https://online.ogs.ny.gov/dnc/contractorConsultant/esb/ESBPlansAvailableIndex.asp
The Undersigned acknowledges receipt and review of all Addenda to the Contract Documents on the above website, listed by number in the space below:

_____

The Undersigned proposes to perform the Work required for this project in accordance with the Contract Documents for the following amount:

BID AMOUNT

1.	All Work except Allowance(s)		$ _____.00
2.	Allowance(s) (As described in Section 012100)		$ 203,900.00
	Total Bid Amount (Sum of 1. & 2.)		$ _____.00

ALTERNATES (As Described in Section 012300)

ALTERNATE NO. 1	ADD	$ _____.00
ALTERNATE NO. 2	ADD	$ _____.00

FEDERAL EMPLOYER I.D. NO. _____

NYSDOL CONTRACTOR REGISTRATION NO. (per NYS LABOR LAW 220-i) _____

Is your firm a NYS-Certified Minority and Women-Owned Business Enterprise (MWBE)? Yes ☐ No ☐

MWBE CERTIFICATION FILE NO. _____

SIGN BID HERE _____
Authorized Signature

PRINT NAME OF SIGNER _____

TITLE OF SIGNER _____

OFFICIAL COMPANY NAME _____

MAILING ADDRESS _____
Street

_____
City State Zip

TELEPHONE NO. _____ FAX NO. _____
Area Code Area Code

E-MAIL ADDRESS _____

*****

Federal Employer I.D. No. _____

DETACH AND USE THIS FORM

BID FORM FOR: 47574-H

HVAC WORK
PROVIDE AUTOMATED RECORD FIRE RANGE
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE ROAD
CORTLANDT MANOR, NY

State of New York
Office of General Services
Design and Construction Group
Division of Contract Management
35th Floor, Corning Tower
The Gov. Nelson A. Rockefeller
Empire State Plaza
Albany, NY 12242

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The Undersigned agrees to complete the Work within the time stated in Section 011000 of the Specifications.

The Undersigned acknowledges his/her understanding of the social policy concerning minority and women business participation in the State building construction program, and pledges to cooperate with the State in the implementation of this policy, and further pledges to exert good faith efforts to achieve participation of minority and female employees.

The Undersigned certifies, as to each of the occupations listed in the Prevailing Rate Schedule applicable to this Project, the ability and willingness to exert good faith efforts to achieve the goal for minority and women workforce participation as set forth in the Supplementary Conditions.

The Undersigned certifies the ability and willingness to exert good faith efforts to achieve the goals for Minority and Women-Owned Business Enterprise and Service-Disabled Veteran-Owned Businesses participation as set forth in the Supplementary Conditions.

The Undersigned declares that the Bidding and Contract Documents have been carefully examined and that all things necessary for the completion of the Work shall be provided.

The Undersigned agrees that the bid security shall be subject to forfeiture if this bid is accepted by the State and he/she does not submit executed copies of the Agreement WITHIN FIVE (5) DAYS OF RECEIPT OF A WRITTEN REQUEST TO PROVIDE SUCH AGREEMENT. A Performance Bond and a Labor and Material Bond, each in an amount equal to the contract sum, shall be supplied with the executed Agreement and shall be the statutory form of public bonds required by Sections 136 and 137 of the State Finance Law.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his/her knowledge and belief:

(1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other bidder or with any competitor;

(2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor;

(3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

(4) This contract shall not cause or result in a violation of Section 74(3)(e) of the Public Officers Law which states: "No officer or employee of a state agency, member of the legislature or legislative employee should engage in any transaction as representative or agent of the State with any business entity in which he/she has a direct or indirect financial interest that might reasonably tend to conflict with the proper discharge of his/her official duties."

Federal Employer I.D. No. _____

(5) The Bidder understands and agrees to comply with the requirements of the Procurement Lobbying Law, State Finance Law § 139-j and § 139-k, and with OGS's procedures relating to permissible contacts during a procurement as required by State Finance Law § 139-j(3) and § 139-j(6)(b). Such requirements and procedures are posted at https://ogs.ny.gov/acpl.

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(7) Will New York State Businesses be used in the performance of this contract (refer to Document 007324)?

Yes ☐ No ☐

(8) The New York State Human Rights Law (Human Rights Law), Article 15 of the Executive Law, prohibits discrimination and harassment based on age, race, creed, color, national origin, sex, pregnancy or pregnancy-related conditions, sexual orientation, gender identity, disability, marital status, familial status, domestic violence victim status, prior arrest or conviction record, military status or predisposing genetic characteristics.

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- all employers of four or more people, employment agencies, labor organizations and apprenticeship training programs in all instances of discrimination or harassment;
- employers with fewer than four employees in all cases involving sexual harassment; and,
- any employer of domestic workers in cases involving sexual harassment or harassment based on gender, race, religion or national origin.

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Executive Order No. 177 and this certification do not affect institutional policies or practices that are protected by existing law, including but not limited to the First Amendment of the United States Constitution, Article 1, Section 3 of the New York State Constitution, and Section 296(11) of the New York State Human Rights Law.

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If the bidder cannot make the foregoing certification, such bidder shall so state and shall furnish with the bid a signed statement that sets forth in detail the reasons that the bidder cannot make the certification.

Federal Employer I.D. No. _____

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1. have business operations in Northern Ireland Yes ☐ No ☐ and if yes:

2. shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of compliance with such principles.

Yes ☐ No ☐

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1.	All Work except Allowance(s)	$ .00
2.	Allowance(s) (As described in Section 012100)	$ 1,200.00
	Total Bid Amount (Sum of 1. & 2.)	$ .00

ALTERNATES (As Described in Section 012300)

ALTERNATE NO. 1	ADD	$ .00
ALTERNATE NO. 2	ADD	$ .00

FEDERAL EMPLOYER I.D. NO. _____

NYSDOL CONTRACTOR REGISTRATION NO. (per NYS LABOR LAW 220-i) _____

Is your firm a NYS-Certified Minority and Women-Owned Business Enterprise (MWBE)? Yes ☐ No ☐

MWBE CERTIFICATION FILE NO. _____

SIGN BID HERE _____
Authorized Signature

PRINT NAME OF SIGNER _____

TITLE OF SIGNER _____

OFFICIAL COMPANY NAME _____

MAILING ADDRESS _____
Street

_____
City State Zip

TELEPHONE NO. _____ FAX NO. _____
Area Code Area Code

E-MAIL ADDRESS _____

*****

Federal Employer I.D. No. _____
Updated 12/16/2024

DETACH AND USE THIS FORM

BID FORM FOR: 47574-E

ELECTRICAL WORK
PROVIDE AUTOMATED RECORD FIRE RANGE
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE ROAD
CORTLANDT MANOR, NY

State of New York
Office of General Services
Design and Construction Group
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(10) In accordance with Section 165(5) of the State Finance Law, the bidder, by submission of this bid, certifies that it or any individual or legal entity in which the bidder holds a 10% or greater ownership interest, or any individual or legal entity that holds a 10% or greater ownership interest in the bidder, either (answer yes or no to one or both of the following, as applicable):

1. have business operations in Northern Ireland Yes ☐ No ☐ and if yes:

2. shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, and shall permit independent monitoring of compliance with such principles.

Yes ☐ No ☐

(11) Certification Under Executive Order No. 16 - Prohibiting State Agencies and Authorities from Contracting with Businesses Conducting Business in Russia

Executive Order No. 16 provides that "all Affected State Entities are directed to refrain from entering into any new contract or renewing any existing contract with an entity conducting business operations in Russia." The complete text of Executive Order No. 16 can be found here: https://www.governor.ny.gov/executive-order/no-16-prohibiting-state-agencies-and-authorities-contracting-businesses-conducting

The Executive Order remains in effect while sanctions imposed by the federal government are in effect. Accordingly, vendors who may be excluded from award because of current business operations in Russia are nevertheless encouraged to respond to solicitations to preserve their contracting opportunities in case the sanctions are lifted during a solicitation or even after award in the case of some solicitations.

As defined in Executive Order No. 16, an "entity conducting business operations in Russia" means an institution or company, wherever located, conducting any commercial activity in Russia or transacting business with the Russian Government or which the commercial entities headquartered in Russia or with their principal place of business in Russia in the form of contracting, sales, purchasing, investment, or any business partnership.

Is Vendor an entity conducting business operations in Russia, as defined above? Please answer by checking one of the following boxes:

☐ 1. No, Vendor does not conduct business operations in Russia within the meaning of Executive Order No. 16.

☐ 2.a. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but has taken steps to wind down business operations in Russia or is in the process of winding down business operations in Russia. (Please provide a detailed description of the wind down process and a schedule for completion.)

☐ 2.b. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16 but only to the extent necessary to provide vital health and safety services within Russia or to comply with federal law, regulations, executive orders, or directives. (Please provide a detailed description of the services being provided or the relevant laws, regulations, etc.)

☐ 3. Yes, Vendor conducts business operations in Russia within the meaning of Executive Order No. 16.

(12) In accordance with New York State Labor Law Section 220-i, the bidder certifies that it is registered with the New York State Department of Labor (NYSDOL) for public work projects. By submission of this bid and providing the registration number in the space indicated on this bid form, the bidder affirms that its registration is current and valid as of the date of bid submission.

Federal Employer I.D. No. _____

Addenda to the Contract Documents are available at:
https://online.ogs.ny.gov/dnc/contractorConsultant/esb/ESBPlansAvailableIndex.asp
The Undersigned acknowledges receipt and review of all Addenda to the Contract Documents on the above website, listed by number in the space below:

_____

The Undersigned proposes to perform the Work required for this project in accordance with the Contract Documents for the following amount:

BID AMOUNT

1.	All Work except Allowance(s)	$ _____.00
2.	Allowance(s) (As described in Section 012100)	$ 75,600.00
	Total Bid Amount (Sum of 1. & 2.)	$ _____.00

ALTERNATES (As Described in Section 012300)

ALTERNATE NO. 1	ADD	$ _____.00
ALTERNATE NO. 2	ADD	$ _____.00

FEDERAL EMPLOYER I.D. NO. _____

NYSDOL CONTRACTOR REGISTRATION NO. (per NYS LABOR LAW 220-i) _____

Is your firm a NYS-Certified Minority and Women-Owned Business Enterprise (MWBE)? Yes ☐ No ☐

MWBE CERTIFICATION FILE NO. _____

SIGN BID HERE _____
Authorized Signature
PRINT NAME OF SIGNER _____

TITLE OF SIGNER _____

OFFICIAL COMPANY NAME _____

MAILING ADDRESS _____
Street

_____
City State Zip

TELEPHONE NO. _____ FAX NO. _____
Area Code Area Code

E-MAIL ADDRESS _____

*****

Federal Employer I.D. No. _____

REVISED 7/18/2025

SECTION 012100

ALLOWANCES

PART 1 GENERAL

1.01 DESCRIPTION

A. Include in the contract sum the allowances stated in this Section.

B. Should the net cost be more than the specified amount of the allowance, the contract sum will be adjusted by Order on Contract in accordance with the General Conditions. No Work in excess of the allowance will be permitted except by Order on Contract. Should the net cost be less than the specified amount of the allowance, the balance will be deducted from the final payment.

1.02 ALLOWANCES FOR CONTINGENCIES

A. Include in the contract sum the amount indicated below to cover the cost of additional labor and materials for contingent activities within the scope of the Contract as directed in writing by Field Order. The Field Order will include a description of the Work and a method for determining the cost of such Work.

1. Construction Work Contract: **$203,900**
2. Electrical Work Contract: **$75,600**
3. HVAC Work Contract: **$1,200.00**

B. The value of the directed Work under this allowance will be determined by one or more of the methods authorized in Section 012200 which will be specified in the Field Order.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 012300

ALTERNATES

PART 1 GENERAL

1.01 DESCRIPTION

A. This Section describes the changes to be made under each alternate.

B. Coordinate pertinent related Work and modify surrounding Work as required to complete the project under each alternate selected by the Director.

C. Include in the Base Bid the cost of all Work required by the Contract Documents except the additional cost (if any) of the alternates described below.

1.02 DESCRIPTION OF ALTERNATES

A. Construction Work Contract:

1. Alternate No. 1: Range Operations Building

   a. Description: Provide additional costs for all materials and labor required for Construction Work associated with providing the Range Operations Building as identified in the Construction Contract Documents.

   b. Drawings Sheets:
   G-004, C-125A,, 135A A-002A, A-OS-101, A-OS-201,A-OS-301, A-501A, A-601A, A-602A, S-002A,S-OS,101, S-501A.

   c. Specifications Sections:
   072600 VAPOR RETARDER UNDER SLABS ON GRADE

2. Alternate No. 2: Classroom Building

   a. Description: Provide additional costs for all materials and labor required for Construction Work associated with providing the Classroom Building as identified in the Construction Contract Documents.

   b. Drawings Sheets:
   G-005, C-125B, C-135B,A-002B, A-RC-101, A-RC-201, A-RC-301, A-501A, A-601A, S-002A,S-RC-101, S-501A.

   c. Specifications Sections
   072600 VAPOR RETARDER UNDER SLABS ON GRADE

B. Electrical Work Contract:

1. Alternate No. 1: Range Operations Building

a. Description: Provide additional costs for all materials and labor required for Electrical Work associated with providing the Range Operations Building as identified in the Electrical Contract Documents.

b. Drawings Sheets:
E-003A, E-101A, E-102A, E-103A, E-601B, E-602A.

2. Alternate No. 2: Classroom Building

a. Description: Provide additional costs for all materials and labor required for Electrical Work associated with providing the Classroom Building as identified in the Electrical Contract Documents.

b. Drawings Sheets:
E-003B, E-101B, E-102B, E-103B, E-601B, E-602B.

C. HVAC Work Contract:

1. Alternate No. 1: Range Operations Building

a. Description: Provide additional costs for all materials and labor required for HVAC Work associated with providing the Range Operations Building as identified in the HVAC Contract Documents.

b. Drawings Sheets:
M-OS-101, M-601A.

2. Alternate No. 2: Classroom Building

a. Description: Provide additional costs for all materials and labor required for HVAC Work associated with providing the Classroom Building as identified in the HVAC Contract Documents.

b. Drawings Sheets:
M-RC-101, M-501, M-601B.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 087100

DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Mechanical door hardware for the following:

    a. Swinging doors.

2. Cylinders for door hardware specified in other Sections.
3. Electrified door hardware.

B. References

1. NFPA 80 Fire Doors and Windows
2. NFPA 101 Life Safety Code.
3. Building Code of New York State.
4. ICC/ANSI A117.1-2003 Accessible and Usable Buildings and Facilities.
5. ANSI/BHMA Standard A156.1 Butts and Hinges.
6. ANSI/BHMA Standard A156.4 Door Controls – Closers.
7. ANSI/BHMA Standard A156.6 Architectural Door Trim.
8. ANSI/BHMA Standard A156.7 Template Hinge Dimensions.
9. ANSI/BHMA Standard A156.8 Door Controls – Overhead Stops and Holders.
10. ANSI/BHMA Standard A156.13 Mortise Locks and Latches Series 1000.
11. ANSI/BHMA Standard A156.16 Auxiliary Hardware.
12. ANSI/BHMA Standard A156.18 Materials and Finishes.
13. ANSI/BHMA Standard A156.22 Door Gasketing Systems.
14. ANSI/BHMA Standard A156.26 Continuous Hinges.
15. DHI - Door and Hardware Institute.
16. NAAM Standard HMMA 800-96- Hollow Metal Manufacturers Association.
17. NAAM Standard HMMA 831-97 Recommended Hardware Locations for Custom Hollow Metal Doors and Frames.
18. 2010 Standards for State and Local Government Facilities: Title II.

1.3 DEFINITIONS

A. Architectural Hardware Consultant (AHC): A Door and Hardware Institute certified expert in complex architectural openings requiring advanced knowledge of model building codes and safety standards, ADA requirements, access control knowledge and installation expertise.

B. Architectural Hardware Distributor: A company that regularly purchases architectural hardware from manufacturers and specializes in the sale, service and support of that hardware to contractors and/or end users.

C. Company Field Advisor(s): Hardware manufacturers' representatives who are certified in writing by manufacturer to be technically qualified in design, installation, and servicing of products.

D. Installation Supervisor: Designated supervisor/installer, who has a minimum three years experience in finish hardware installation, and is qualified and responsible to ensure approved finish hardware is installed, adjusted, and operates properly.

1.4 COORDINATION

A. Floor-Recessed Door Hardware: Coordinate layout and installation with floor construction.

1. Cast anchoring inserts into concrete.

B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

C. Security: Coordinate installation of door hardware, keying, and access control with Director's Representative's security consultant.

D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

E. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

B. Keying Conference: Conduct conference at Project site.

1. Conference participants shall include Installer's Architectural Hardware Consultant, General Contractor, and Owner.
2. Incorporate conference decisions into keying schedule after reviewing door hardware keying system including, but not limited to, the following:

a. Flow of traffic and degree of security required.
b. Preliminary key system schematic diagram.
c. Requirements for key control system.
d. Requirements for access control.
e. Address for delivery of keys.

1.6 SUBMITTALS

A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions

B. Manufacturer’s installation instructions shall be provided along with product data.

C. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).

D. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

E. Shop Drawings: For electrified door hardware.

1. Include diagrams for power, signal, and control wiring.
2. Include details of interface of electrified door hardware and building safety and security systems.

F. Door Hardware Schedule: Prepared by or under the supervision of Installer's Architectural Hardware Consultant. Coordinate door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Submittal Sequence: Submit door hardware schedule with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate the fabrication of other work that is critical in Project construction schedule.
2. Format: Use same scheduling sequence and format as in door hardware schedule in the Contract Documents.
3. Content: Include the following information:

a. Identification number, location, hand, fire rating, size, and material of each door and frame.
b. Locations of each door hardware set, cross-referenced to Drawings on floor plans and to door and frame schedule.
c. Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
d. Description of electrified door hardware sequences of operation and interfaces with other building control systems.
e. Fastenings and other installation information.
f. Explanation of abbreviations, symbols, and designations contained in door hardware schedule.

g. Mounting locations for door hardware.
h. List of related door devices specified in other Sections for each door and frame.

G. Keying Schedule: Prepared by or under the supervision of Installer's Architectural Hardware Consultant, detailing Director's Representative's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations that are coordinated with the Contract Documents.

H. Qualification Data: Retain "Product Certificates" paragraph below to require submittal of product certificates from electrified door hardware manufacturers.

I. Product Certificates: For each type of electrified door hardware.

1. Certify that door hardware for use on each type and size of labeled fire-rated doors complies with listed fire-rated door assemblies.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of door hardware to include in maintenance manuals.

B. Schedules: Final door hardware and keying schedule.

1.8 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1.9 QUALITY ASSURANCE

A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and of an Architectural Hardware Consultant who is available during the course of the Work to consult Contractor and Director's Representative about door hardware and keying.

1. Warehousing Facilities: In Project's vicinity.
2. Scheduling Responsibility: Preparation of door hardware and keying schedule.
3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.

B. Architectural Hardware Consultant Qualifications: A person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and who is currently or has been certified by DHI as an Architectural Hardware Consultant (AHC).

1.10 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.

B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.

C. Deliver keys to manufacturer of key control system for subsequent delivery to Director's Representative.

D. Deliver keys and permanent cores to Owner's Representative by registered mail or overnight package service.

1.11 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Structural failures including excessive deflection, cracking, or breakage.
b. Faulty operation of doors and door hardware.
c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.

1. Warranty Period: Five years from date of Substantial Completion unless otherwise indicated below:

a. Hinges: Lifetime
b. Locksets: Lifetime
c. Closers: Lifetime

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of door hardware from single manufacturer.

1. Provide electrified door hardware from same manufacturer as mechanical door hardware unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Rated Door Assemblies: Where fire-rated doors are indicated, provide door hardware complying with NFPA 80 that is listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

B. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that complies with requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.

1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. at the tested pressure differential of water.

C. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.

E. Accessibility Requirements: For door hardware on doors in an accessible route to comply with all Codes.

1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.
2. Comply with the following maximum opening-force requirements:

a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf applied perpendicular to door.
b. Sliding or Folding Doors: 5 lbf applied parallel to door at latch.
c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.

3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
4. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.
5. Adjust spring hinges so that, from an open position of 70 degrees, the door will take at least 1.5 seconds to move to the closed position.

2.3 HINGES

A. Hinges: BHMA A156.1. Concealed bearing as indicated. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

2.4 CONTINUOUS HINGES

A. Continuous Hinges: BHMA A156.26; minimum 0.120-inch thick, hinge leaves with minimum overall width of 4 inches; fabricated to full height of door and frame and to template screw locations; with components finished after milling and drilling are complete. Provide protective lip design as indicated.

2.5 MECHANICAL LOCKS AND LATCHES

A. Lock Functions: As indicated in door hardware schedule with one-piece stainless steel latchbolt.

B. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors, and as follows:.
   1. Mortise Locks: Minimum 3/4-inch latchbolt throw.
   2. Deadbolts: Minimum 1-inch bolt throw.

C. Lock Backset: 2-3/4 inches unless otherwise indicated.

D. Lock Trim:

   1. Description: Best #14N
   2. Levers: Forged or Cast

   3. Escutcheons (Roses): Forged, protected cylinder design.

E. Strikes: Provide manufacturer's standard strike for each lock bolt or latchbolt complying with requirements indicated for applicable lock or latch and with strike box and curved lip extended to protect frame; finished to match lock or latch.

F. Mortise Locks: BHMA A156.13; Operational Grade 1 Security Grade 1]; stamped steel case with steel or brass parts; Series 1000.

2.6 AUXILIARY LOCKS

A. Mortise Auxiliary Locks: BHMA A156.36; Grade 1; with strike that suits frame.

B. Push-Button Combination Locks: BHMA A156.36; mortise; Grade 1; lock opens by entering a one- to five-digit code by pushing correct buttons in correct sequence; automatically relocks when door is closed; with strike that suits frame.

2.7 MANUAL FLUSH BOLTS

A. Manual Flush Bolts: BHMA A156.16; minimum 3/4-inch throw; designed for mortising into door edge.

2.8 EXIT DEVICES AND AUXILIARY ITEMS

A. Exit Devices and Auxiliary Items: BHMA A156.3.

2.9 LOCK CYLINDERS

A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver. Provide cylinder from the same manufacturer of locking devices.

B. Standard Lock Cylinders: BHMA A156.5; Grade 1 permanent cores; face finished to match lockset.

1. Core Type: Interchangeable.

C. Construction Cores: Provide construction cores that are replaceable by permanent cores. Provide 10 construction master keys.

2.10 KEYING

A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, appendix. Provide one extra key blank for each lock.

1. No Master Key System: Only change keys operate cylinders.

a. Provide three cylinder change keys.

2. Master Key System: Change keys and a master key operate cylinders.

a. Provide three cylinder change keys and five master keys.

3. Existing System:

a. Master key or grand master key locks to existing system.

4. Keyed Alike: Key all cylinders to same change key.

B. Keys: Nickel silver.

1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:

a. Notation: "DO NOT DUPLICATE."

2.11 OPERATING TRIM

A. Operating Trim: BHMA A156.6; stainless steel, finish as indicated in the hardware sets.

2.12 ACCESSORIES FOR PAIRS OF DOORS

A. Coordinators: BHMA A156.3; consisting of active-leaf, hold-open lever and inactive-leaf release trigger; fabricated from steel with nylon-coated strike plates; with built-in, adjustable safety release.

B. Carry-Open Bars: BHMA A156.3; prevent the inactive leaf from opening before the active leaf; provide polished brass or bronze carry-open bars with strike plate for inactive leaves of pairs of doors unless automatic or self-latching bolts are used.

C. Astragals: BHMA A156.22.

2.13 SURFACE CLOSERS

A. Surface Closers: BHMA A156.4; Cast iron with 1-1/2” bore with rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written instructions for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use.

2.14 DOOR GASKETING

A. Door Gasketing: BHMA A156.22; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.

B. Maximum Air Leakage: When tested according to ASTM E283 with tested pressure differential of 0.3-inch wg, as follows:

1. Smoke-Rated Gasketing: 0.3 cfm/sq. ft. of door opening.
2. Gasketing on Single Doors: 0.3 cfm/sq. ft. of door opening.
3. Gasketing on Double Doors: 0.50 cfm per ft. of door opening.

2.15 THRESHOLDS

A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.

2.16 METAL PROTECTIVE TRIM UNITS

A. Metal Protective Trim Units: BHMA A156.6; fabricated from 0.050-inch thick stainless steel; with manufacturer's standard machine or self-tapping screw fasteners.

2.17 PLASTIC PROTECTION PLATES

A. Protection Plates: BHMA A156.6; fabricated with four sides beveled; .050 gauge.

2.18 FABRICATION

A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rating labels and as otherwise approved by Director’s Representative.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and

hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.

C. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware unless otherwise indicated.

1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
2. Fire-Rated Applications:

    a. Wood or Machine Screws: For the following:

        1) Hinges mortised to doors or frames.
        2) Strike plates to frames.
        3) Closers to doors and frames.

    b. Steel Through Bolts: For the following unless door blocking is provided:

        1) Surface hinges to doors.
        2) Closers to doors and frames.
        3) Surface-mounted exit devices.

3. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
4. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.19 FINISHES

A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance of the Work.

B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Steel Doors and Frames: For surface-applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.

B. Wood Doors: Comply with door and hardware manufacturers' written instructions.

3.3 INSTALLATION

A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
2. Custom Steel Doors and Frames: HMMA 831.
3. Wood Doors: DHI's "Recommended Locations for Architectural Hardware for Wood Flush Doors."

B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.

1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

C. Hinges: Install types and in quantities indicated in door hardware schedule, but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.

D. Lock Cylinders: Install construction cores to secure building and areas during construction period.

1. Replace construction cores with permanent cores
2. Furnish permanent cores to Director's Representative for installation.

E. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."

F. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.

G. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

1. Do not notch perimeter gasketing to install other surface-applied hardware.

H. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

I. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

A. Independent Architectural Hardware Consultant: Engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.

1. Independent Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

3.6 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items as necessary to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.7 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Director's Representative's continued adjustment, maintenance, and removal and replacement of door hardware.

B. Maintenance Service: Beginning at Substantial Completion, maintenance service shall include twelve <12> months' full maintenance by skilled employees of door hardware Installer. Include quarterly preventive maintenance, repair, or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door and door hardware operation. Parts and supplies shall be manufacturers' authorized replacement parts and supplies.

3.8 DEMONSTRATION

A. Train Maintenance personnel on how to adjust, operate, and maintain door hardware.

3.9 DOOR HARDWARE SCHEDULE

HW1

Doors: D1, D4, D6

Each Opening to Receive:

1 ea	Continuous Hinge Push Button	662HD	628	BE
1 ea.	Lockset	45HZ-7DV14KP	626	BE
1 ea.	Closer	EHD9016 TDS	689	BE
1 ea.	Kick Plate	ABK0050 8"	630	AB
1 ea.	Threshold	896 S	628	NA
1 set	Gasketing	700E S	628	NA
1 ea.	Sweep	C627A	628	NA

HW2

Doors: D2, D5

Each Opening to Receive:

2 ea.	Continuous Hinge	662HD	628	BE
1 pr.	Flushbolt	1860 SERIES	630	AB
1 ea.	Dust Proof Strike	1870	630	AB
1 ea.	Deadbolt	48H-7M	626	BE
1 ea.	Flush Pull	1911	626	AB
2 ea.	Closer	EHD9016 TDS	689	BE
2 ea.	Kick Plate	ABK0050 8"	630	AB
1 ea.	Threshold	896 S	628	NA
1 set	Gasketing	700E S	628	NA
2 ea.	Sweep	C627A	628	NA
1 ea.	Astragal	158 S	628	NA

HW3
Doors:
D3
Each Opening to Receive:

3 ea.	Hinges	CB1900R 4.5 x 4.5	652	BE
1 ea.	Lockset	45H-7C14N PATD	626	BE
1 ea.	Overhead Stop	4020	630	AB
1 set	Gasketing	2525 C	628	AB
1 ea.	Sweep	120 S	628	AB
1 ea.	Kick Plate	ABK0050 8"	630	AB

END OF SECTION 087100

NEW YORK STATE OF OPPORTUNITY. Office of General Services

Design and Construction
Division of Construction, 34th Floor, Corning Tower
The Governor Nelson A. Rockefeller Empire State Plaza
Albany, New York 12242
Phone: (518) 474-0331 FAX: (518) 474-8201

SCHEDULE OF SUBMITTALS

PROJECT NO.: 47574 - C

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
PROJECT MANAGER: Derek Mitchell, P.E.	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
007213			**GENERAL CONDITIONS**					
007213	**6.1**	**PD**	ARTICLE 6: Designate in writing competent supervision and/or management representatives as required - **include contact number in case of an emergency after work hours, including weekends and holidays (see 011000 Summary of Work)**	F				
007213	**8.1**	**PD**	ARTICLE 8: Permits and licenses	F				
011100			**SAFETY**					
011100	**1.04,A**	**QCS**	Site Specific Safety Plan	RMS				
011100	**1.04,B**	**QCS**	Employee Safety Orientation Training and Certificates	RMS				
011100	**1.04,A**	**QCS**	Emergency Action and Evacuation Plan	RMS				
013300	**1.15,A,1**	**PD**	Schedule of Submittals (This form completed and editted)	F	X			
013300	**1.07,A**	**QCS**	Submittal Coordinator Qualifications	F/O	X			
013000			**ADMINISTRATIVE REQUIREMENTS**					
013000	**1.03, A.1**	**QCS**	Contractor's List of Contractor's - Suppliers	F/O				
013113			**PROJECT SCHEDULE**					
013113	**3.03**	**QCS**	Preliminary Project Schedule	S	X			
013113	**3.04**	**QCS**	Baseline Project Schedule	S	X			
013113	**3.03, C**	**QCS**	CMU-01 Agreement Form	S	X			
013300			**SUBMITTALS**					
013300	**1.15,A**	**PD**	Schedule of Submittals (This form completed and editted)	F	X			
013300	**1.07,A**	**QCS**	Submittal Coordinator Qualifications	F/O	X			
017123			**FIELD ENGINEERING**					
017123	**1.03, A**	**QCS**	Land Survey Qualifications and Contact Information	F	X			
017123	**1.03, B**	**QCS**	Verification of Survey Work Accuracy (if requested)	F				
017123	**1.03, C**	**QCS**	Certificate Signed and Sealed by Land Surveyor, Stating Elevations and Locations of Work are in Conformance With Contract Documents	F				
017716			**CONTRACT CLOSEOUT**					
017716	**1.04**	**CCS**	Project Record Documents	F				
017716	**1.05**	**CCS**	Operation and maintenance, 2 copies	F				
017716	**1.06**	**CCS**	Warranties	F				
017716	**1.07**	**CCS**	Spare Parts and Maintenance Materials	F				
023313			**UNDERGROUND UTILITY LOCATOR SERVICE**					
023313	**1.05, A**	**PD**	Quality Control Submittals	D				
023313	**1.05, B**	**PD**	Investigative Report	D				

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031100			**CONCRETE FORMWORK**					
031100	**1.04, A, 1**	**PD**	Form systems and ties	D				
032100			**STEEL CONCRETE REINFORCEMENT**					
032100	**1.03, A, 1**	**SD**	Placing drawings for bar reinforcement	D				
032100	**1.03, B, 1**	**EPD**	Environmental Product Declaration	F/O				
032100	**1.03, C, 1**	**SAM**	Bar Supports	F,D				
032100	**1.03, C, 2**	**SAM**	Fabric Reinforcement	F,D				
032100	**1.03, C, 3**	**SAM**	Fabric Reinforcement Supports	F,D				
032100	**1.03, D, 1**	**QCS**	Certificates: Affidavit required under Quality Assurance Article	F,F/O, D				
033000			**CAST-IN-PLACE CONCRETE**					
033000	**1.04, C, 1**	**PD**	Mix Design	D				
033000	**1.04, C, 2**	**PD**	Portland Cement	D				
033000	**1.04, C, 3**	**PD**	Fly Ash	D				
033000	**1.04, C, 4**	**PD**	Air-entraining Admixture	D				
033000	**1.04, C, 5**	**PD**	Water-reducing Admixture	D				
033000	**1.04, C, 6**	**PD**	High Range Water-reducing Admixture (Superplasticizer)	D				
033000		**PD**	Corrosion Inhibitor Admixture	D				
033000	**1.04, C, 7**	**PD**	Accelerating Admixture	D				
033000	**1.04, C, 8**	**PD**	Aggregates	D				
033000	**1.04, C, 9**	**PD**	Chemical Hardener (Dustproofing)	D				
033000	**1.04, D, 1**	**PD**	Chemical Curing and Anti-Spalling Compound	D				
033000	**1.04, D, 2**	**PD**	Bonding Agent (Adhesive)	D				
033000	**1.04, D, 3**	**PD**	Expansion Joint Fillers	D				
033000	**1.04, B, 1**	**EPD**	Environmental Product Declaration	F,F/O, D				
033000	**1.04, E, 1**	**QCS**	Batching Plant Records	F,D				
033000	**1.04, E, 2**	**QCS**	Concrete Pumping Equipment Data	F,D				
033000	**1.04, E, 3**	**QCS**	Minutes of the previous pre-installation conference	F,F/O, D				
034816			**PRECAST CONCRETE SPLASH COURSE**					
034816	**2.01.A**	**PD**	Precast Concrete	F,D				
034816	**2.01.B**	**PD**	Bar Reinforcement	F,D				
034816	**1.02, A**	**QCS**	Freeze thaw test conducted by maufacturer	D				
050513			**SHOP-APPLIED COATINGS FOR METAL**					
050513	**1.04, C**	**QCS**	Certification: Furnish Certificates of Compliance with ASTM Specifications, and Standards specified herein	F,F/O				
050513	**1.03, A**	**SAM**	Two 3 inch by 6 inch samples of factory applied coatings and colors	F,F/O, D				
050513	**1.03, C, 1**	**CCS**	Operation and Maintenance Data: Deliver 2 copies	F				
050513	**1.03, C, 2**	**CCS**	Warranty - Provide 20 year warranty against rust	F				
050513	**1.03, C, 2**	**CCS**	Warranty - 5 year warranty against coating failure	F				
051200			**STRUCTURAL STEEL (Allowable Stress Design)**					
051200	**1.06, A, 1**	**SD**	Initial Submission: Drawings of proposed job standards for shop and field connections, including standard and special connections, complying with the requirements	D				

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051200	**1.06, A, 2**	**SD**	Initial Submission: Erection drawings indicating sizes, weights, and locations of all structural members.	D				
051200	**1.06, A, 3**	**SD**	Initial Submission: Anchor bolt and base plate plans	D				
051200	**1.06, A, 5**	**SD**	Subsequent Submission: Index sheets and revised erection drawings to which erection marks have been added	D				
051200	**1.06, A, 5**	**SD**	Subsequent Submission: Detail drawings of all structural members	D				
051200	**1.06, C, 1**	**PD**	Shop paint	D				
051200	**1.06, B, 1**	**EPD**	Environmental Product Declaration	F,F/O, D				
051200	**1.06, D, 1**	**QCS**	Test Reports: Steel manufacturer's mill test reports	F,D				
051200	**1.06, D, 2**	**QCS**	Test Reports: Bolt manufacturer's test reports	F,D				
051200	**1.06, D, 3**	**QCS**	Certificates: Submit evidence, in triplicate, of steel material compliance with this Specification.	F,D				
051200	**1.07, D**	**QCS**	Fabricator's and Erector's Qualifications Data	F,D				
051200	**1.08, B**	**QCS**	Welding Procedure Specifications	F,D				
051200	**1.08, B**	**QCS**	Welder's Certification	F,D				
053100			**FLUTED STEEL DECKS**					
053100	**1.04, A**	**SD**	Show application to project. Prepare separate drawings, coordinated with, but not superimposed on, joist drawings or structural steel erection drawings.	D				
053100	**2.01, A**	**PD**	Fluted Deck and Accessories	D				
053100	**2.01, B**	**PD**	Self drilling Fasteners	D				
053100	**2.01,C**	**PD**	Flexible Closure Strips	D				
053100	**1.04, A**	**QCS**	Certificate Affidavit required under Quality Assurance	F/O, D				
055000			**METAL FABRICATIONS (Broadscope)**					
055000	**1.04, A**	**SD**	Application to Project: Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.	D				
055000	**2.04,**	**PD**	Structural Steel Door Frames	D				
055000	**2.05,**	**PD**	Steel Pipe Railings and Handrails	D				
055000	**1.04, B**	**EPD**	Environmental Product Declaration	D				
055000	**1.04, D**	**QCS**	Assurance	F/O, D				
055100			**METAL STAIRS**					
055100	**1.04, A, 1**	**SD**	Application to Project: Include anchor bolt location plan (if any), erection drawings, and detail drawings of all components	D				
055100	**1.04, A, 2**	**SD**	Application to Project: Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.	D				
055100	**1.04, B, 2**	**PD**	Grating Treads and Platforms	D				
055100	**1.04, C**	**QCS**	Fabricator's Qualifications Data	F,D				
062000			**FINISH CARPENTRY**					
062000	**1.03.A**	**SD**	Fabrication Details and Connections	D				
062000	**1.03.B.1**	**SAM**	Transparent Finish	F,D				

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064000			**ARCHITECTURAL WOODWORK**					
064000	**2.01**	**SD**	Fabrication Details and Connections	D				
064000	**2.01.C;2.012**	**PD**	Plastic Laminates and Hard Ware Items	D				
064000	**1.03.C.1**	**SAM**	Plastic Laminate	F,D				
071900			**WATER REPELLENT COATING**					
071900	**2.02.A**	**PD**	Liquid Water Repellent	D				
071900	**1.02.B**	**QCS**	Test Reports	F/O,D				
072100			**BUILDING INSULATION**					
072100	**2.01.A**	**PD**	Rigid (Board) Insulation: Extruded polystyrene thermal insulation boards; ASTM C 578, Type IV, manufactured with CFC-free blowing agents	F,D				
072100	**1.02.B.1**	**SAM**	Rigid Type	F,D				
072100	**1.02.C**	**QCS**	Certificate Affidavit required under Quality	F/O,D				
072600			**VAPOR RETARDER UNDER SLABS ON GRADE**					
072600	**2.02.A**	**PD**	Vapor Retarder: Extruded single-ply or multi-ply type; Polyethylene or polyolefin - Puncture	D				
072600	**2.02.B**	**PD**	Pressure-Sensitive Tape/Adhesive	D				
072600	**2.02.C**	**PD**	Pipe Boots	D				
072600	**1.03.A.1**	**SAM**	Vapor Retarder Material	F,D				
072600	**1.03.A.2**	**SAM**	Pressure-Sensitive Tape	F,D				
076000			**FLASHING AND TRIM**					
076000	**2.01.A**	**PD**	Prefinished Galvanized Steel Sheet	D				
076000	**2.01.B**	**PD**	Prefinished Aluminum Sheet	D				
076000	**1.04.B.1**	**SAM**	Materials for Flashings	F,D				
079200			**JOINT SEALERS**					
079200	**2.01.A**	**PD**	Type 2 Sealant	D				
079200	**2.02**	**PD**	Cork Joint Filler	D				
079200	**2.03**	**PD**	Gaskets	D				
081102			**STEEL DOORS AND FRAMES**					
081102	**1.04.B.1.a**	**SD**	Quality Assurance Package	D	X			
081102	**1.04.B.1.b**	**SD**	Door and Frame Schedule with Product Data Package	D	X			
081102	**1.04.B.2**	**CCS**	Closeout Submittal Package	F	X			
085113			**ALUMINUM WINDOWS**					
085113	**1.05.A**	**SD**	Fabrication details and connections	D	X			
085113	**2.01**	**PD**	Aluminum window Types/Grade/Performance Class	D	X			
085113	**1.05.C.1**	**SAM**	Corner section of frame, sash, and insect screen	F,D	X			
085113	**1.05.C.2**	**SAM**	Color Samples	F,D	X			
085113	**1.05.D.1**	**QCS**	Installer's Qualifications Data	F,D	X			
088100			**GLASS AND GLAZING**					
088100	**2.01.A**	**PD**	Type A Glass	D				
088100	**2.01.B**	**PD**	Type D Glass	D				
088100	**2.02.A**	**PD**	Type 1 Glazing Material	D				
088100	**2.02.B**	**PD**	Type 13 Glazing Material	D				
088100	**1.03.B**	**EPD**	Environmental Product Declaration	F/O,D				
088100	**1.03.C.1**	**SAM**	Glass: 12 x 12 inch pieces for each type of glass specified	F,D				

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088100	**1.03.C.2**	**SAM**	Color Samples for Glazing Materials	F,D				
088100	**1.03.D.1**	**QCS**	Certificates: Affidavit required under Quality Assurance Article	F/O,D				
087100			**DOOR HARDWARE**					
087100	**1.6,E**	**SD**	Full detailed drawings including diagrams for power, signal, and control wiring; and details of interface of electrified door hardware and building safety and security systems.	D				
087100		**SAM**	For each exposed product in each finish specified, in manufacturer's standard size.	D				
087100		**SAM**	Initial Selection: For each type of exposed finish	D				
087100		**SAM**	Verification: For each type of exposed product, in each finish specified.	D				
087100	**2.3,A**	**PD**	Hinges					
087100		**PD**	Self-Closing Hinges And Pivots	D				
087100		**PD**	Center-Hung And Offset Pivots	D				
087100	**2.4,A**	**PD**	Continuous Hinges	D				
087100		**PD**	Concealed Hinges	D				
087100	**2.5,A**	**PD**	Mechanical Locks And Latches	D				
087100	**2.6,A**	**PD**	Auxiliary Locks	D				
087100	**2.7,A**	**PD**	Manual Flush Bolts	D				
087100	**2.8,A**	**PD**	Exit Devices and Auxialry Items	D				
087100	**2.9,A**	**PD**	Lock Cylinders	D				
087100	**2.10,A**	**PD**	Keying	D				
087100	**2.10,B**	**PD**	Keys	D				
087100	**2.11,A**	**PD**	Opertaing Trim	D				
087100	**2.12, A**	**PD**	Coordinaters	D				
087100	**2.12,B**	**PD**	Carry Open Bars	D				
087100	**2.12,C**	**PD**	Astrgals	D				
087100	**2.13,A**	**PD**	Surface Closers	D				
087100	**2.14,A**	**PD**	Door Gasketing	D				
087100	**2.15,A**	**PD**	Thresholds	D				
087100	**2.16,A**	**PD**	Metal Protective Trim Units	D				
087100	**2.17,A**	**PD**	Protection Plates	D				
087100	**1.6,F**	**QCS**	Door Hardware Schedule	D				
087100	**1.6,G**	**QCS**	Keying Schedule	D				
087100	**1.9,A**	**QCS**	Qualification Data	D				
087100	**1.6,I**	**QCS**	Product Certificates	D				
087100	**3.4,A**	**QCS**	Field quality-control reports.	D				
087100	**3.7,A**	**CCS**	Maintenance Data	F				
087100	**1.6,G**	**CCS**	Schedules	F				
092116			**GYPSUM BOARD SYSTEMS**					
092116	**2.01**	**PD**	Framing	D				
092116	**2.02**	**PD**	Gypsum Board	D				
092116	**2.03**	**PD**	Fasteners	D				
092116	**2.04.A**	**PD**	Interior Trim	D				
092116	**2.05.A**	**PD**	Sound Attenuation Blankets	D				
092116	**2.06.A**	**PD**	Joint Tapes	D				
092116	**2.06.B**	**PD**	Joint Compound	D				

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095300			**SUSPENDED ACOUSTICAL CEILING SYSTEMS**					
095300	**2.01**	**PD**	Metal Suspension System	D				
095300	**2.02**	**PD**	Acoustical Unit	D				
095300	**1.03.B.1**	**SAM**	Suspension System Materials	F,D				
095300	**1.03.B.2**	**SAM**	Acoustical Units	F,D				
095300	**1.03.C.1**	**QCS**	Certification: Manufacturer's written statement	F/O,D				
095300	**1.03.D.1**	**CCS**	Maintenance Instructions - 2 copies	F				
099101			**CONSTRUCTION PAINTING**					
099101	**1.02.A**	**PD**	Painting Schedule - Exterior Substrates	D				
099101	**1.02.A.1**	**PD**	Painting Schedule - Interior Substrates	D				
099101	**1.02.C.1**	**QCS**	Test Reports	F/O,D				
099101	**1.02.C.2**	**QCS**	Certificates of Quality Assurance Article	F/O				
133419			**PRE-ENGINEERED METAL BUILDING**					
133419	**1.05.A.1**	**SD**	Erection Drawings	D	X			
133419	**1.05.A.2**	**SD**	Structural Drawings	D	X			
133419	**1.05.A.3**	**SD**	Architectural Drawings	D	X			
133419	**2.04**	**PD**	Roofing panels	D	X			
133419	**2.05**	**PD**	Exterior wall panels	D	X			
133419	**2.08**	**PD**	Windows	D	X			
133419	**2.09**	**PD**	Doors	D	X			
133419	**2.06.F**	**PD**	Trim, exterior and interior	D	X			
133419	**2.06.E**	**PD**	Flashings	D	X			
133419	**2.04.E**	**PD**	Snow Rails	D	X			
133419	**2.07**	**PD**	Insulation	D	X			
133419	**2.0.D**	**PD**	Sealants and gaskets	D	X			
133419	**1.05.B**	**EPD**	Environmental Product Declaration	F/O	X			
133419	**1.05.D.1.a**	**SAM**	Roofing panels	F,D	X			
133419	**1.05.D.1.b**	**SAM**	Exterior wall panels	F,D	X			
133419	**1.05.D.1.c**	**SAM**	Interior liner panels	F,D	X			
133419	**1.05.D.1.d**	**SAM**	Roof and wall insulation	F,D	X			
133419	**1.05.D.1.e**	**SAM**	Pedestrian door	F,D	X			
133419	**1.05.D.2.a**	**SAM**	Purlin	F,D	X			
133419	**1.05.D.2.b**	**SAM**	Girt	F,D	X			
133419	**1.05.D.2.c**	**SAM**	Corner, rake and eave trim	F,D	X			
133419	**1.05.D.2.d**	**SAM**	Ridge cover	F,D	X			
133419	**1.05.D.2.e**	**SAM**	Pedestrian door frame	F,D	X			
133419	**1.05.D.2.f**	**SAM**	Thermal break, each type	F,D	X			
133419	**1.05.D.3**	**SAM**	Color Samples	F,D	X			
133419	**1.05.E.1**	**QCS**	Design Calculations	F/O,D	X			
133419	**1.05.E.2**	**QCS**	Manufacturer's written certification structure has been designed in conformance	F/O,D	X			
133419	**1.05.F.1.a**	**CCS**	Roofing Panel Warranty	F	X			
133419	**1.05.F.1.b**	**CCS**	Exterior Wall Panel Warranty	F	X			
310000			**EARTHWORK**					
310000	**1.03, A**	**PD**	Filter Fabric: Manufacturer's catalog sheets, specifications, and installation instructions	D				
310000	**2.01, A**	**PD**	Select Granular Fill Material	D				

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310000	**2.01, C**	**PD**	Selected Fill	D				
310000	**2.01, D**	**PD**	Suitable Material (Fill and Backfill for Landscaped Areas)	D				
310000		**PD**	Cushion Material	D				
310000	**2.01, E**	**PD**	Item B-12	D				
310000	**2.01, F**	**PD**	Rip Rap	D				
310000	**2.02, A**	**PD**	Filter Fabric (GeoTextile)	D				
310000	**2.01, B**	**PD**	Subbase Course, Type 2	D				
310000	**1.03, B, 1**	**SAM**	Select Granular Fill Material (50 - 60lbs)	F				
310000	**1.03, B, 2**	**SAM**	Subbase Course, Type 2	F				
310000	**1.03, B, 3**	**SAM**	Select Fill (40 - 50 lbs)	F				
310000	**1.03, B, 4**	**SAM**	Item B-12 (30 lbs, each gradation)	F				
310000	**1.03, B, 5**	**SAM**	Crushed Stone (30 lbs)	F				
310000	**1.03, C, 1**	**QCS**	Subbase Materials - Name & Location of NYSDOT Source	F,D				
310000	**1.03, C, 2**	**QCS**	Other Aggregates - Name & Location of Source and Lab Test Results	F,D				
310000	**1.03, C, 3**	**QCS**	Excavation Procedure	F				
312316			**ROCK REMOVAL**					
312316	**1.04, A**	**QCS**	Rock Removal Procedure	F, D	X			
312316	**1.04, B, 1**	**QCS**	Certificates: Competency affidavit required under Quality Assurance Article.	F, D	X			
312316	**1.04, B, 2**	**QCS**	Blaster's Qualifications Data	F, D	X			
312316	**1.04, C**	**QCS**	Measurements of Quantities of Rock Removal	F				
312513			**EROSION AND SEDIMENT CONTROL**					
312513	**1.03, E**	**QCS**	NYSDEC Erosion and Sediment Control Training Certification	F	X			
313119			**VEGETATION CONTROL**					
313119	**1.03, A, 1**	**PD**	Submit proposed method of application and proposed rate of application	D				
313119	**2.01, A**	**PD**	Vegetation Killer	D				
313119	**1.03, B**	**QCS**	Credentials of Certifed Commercial Pesticide Applicator	F, D				
313700			**RIPRAP**					
313700	**1.02, A, 1**	**QCS**	Name, source, and test results of materials (if not from NYSDOT)	F, D				
323129			**WOOD FENCES**					
323129	**1.02, A**	**SD**	Show application to project. Machine duplicated copies of Contract Drawings will not be accepted	D				
323129	**1.02, B**	**QCS**	Environmental Product Declaration	F/O				
323129	**1.02, C**	**QCS**	Pressure Treatment Certificates: Certification by treating plant stating chemicals and process used, net amount of salts retained, and conformance with applicable standards.	F				
327101			**WETLAND MITIGATION**					
327101	**1.04, A**	**PD**	List of Plants	D				
327101	**1.04, B, 1**	**PD**	Invoice indicating sizes and variety of plant material	D				
327101	**1.04, B, 2**	**PD**	Certificates of inspection required by State and Federal agencies	D				

SCHEDULE OF SUBMITTALS

PROJECT NO.: 47574 - C

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
PROJECT MANAGER: Derek Mitchell, P.E.	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
327101	**1.04, B, 3**	**PD**	Labels for each plant or bundles of plants indicating name and size	D				
327101	**2.01, A**	**PD**	Shrubs and Trees	D				
327101	**2.01, B**	**PD**	Trees	D				
327101	**2.01, C**	**PD**	Noxious Species	D				
327101	**2.02, A**	**PD**	Seed	D				
327101	**2.02, B**	**PD**	Wetland Seed Mixture	D				
327101	**2.03, A**	**PD**	Wetland Plug Mix	D				
327101	**2.06, A**	**PD**	Peat Moss	D				
327101	**2.06, B**	**PD**	Wood Chips	D				
327101	**2.06, C**	**PD**	Shredded Wood	D				
327101	**2.07, A**	**PD**	Stakes, Deadmen and Guy Stakes	D				
327101	**2.07, B**	**PD**	Guy Wire or Cable	D				
327101	**2.07, C**	**PD**	Tree Wrapping	D				
327101	**2.07, D**	**PD**	Protective Hose	D				
327101	**2.07, E**	**PD**	Tree Wound Paint	D				
327101	**2.07, F**	**PD**	Anti-desiccants	D				
327101	**2.07 8**	**PD**	Landscape Fabric	D				
327101	**1.04, D**	**SAM**	One pound of seed in Vendor's unopened package with label and seed analysis.	F				
327101	**1.04, C, 1**	**QCS**	Worker's Qualifications Data	F				
327101	**1.04, E, 1**	**QCS**	Certified copies of the material certificates shall include the following: Plant Material	F				
327101	**1.04, E, 2**	**QCS**	Certified copies of the material certificates shall include the following: Topsoil	F				
327101	**1.04, E, 3**	**QCS**	Certified copies of the material certificates shall include the following: pH Adjuster	F				
327101	**1.04, E, 4**	**QCS**	Certified copies of the material certificates shall include the following: Fertilizer	F				
327101	**1.04, E, 5**	**QCS**	Certified copies of the material certificates shall include the following: Soil Conditioner	F				
327101	**1.04, E. 6**	**QCS**	Certified copies of the material certificates shall include the following: Organic Mulch	F				
327101	**1.04, F, 1**	**CCS**	As-Built Drawing: As-built topographic drawings with 0.05 contour intervals.	F				
327101	**1.04, F, 2**	**CCS**	As-Built Drawing: Complete list of species planted in the mitigation area	F				
327101	**1.04, F, 3**	**CCS**	As-Built Drawing: Source of the vegetative materials.	F				
329120			**TOPSOIL**					
329120	**1.01, A**	**SAM**	Topsoil for Testing: In the presence of the Director's Representative, take a 5 lb sample from each 1000 cu yds of topsoil to be used on the project. Complete a Topsoil Sample Information Form for each sample. Ship samples and forms (original and 2 copies) to the address indicated in Section 013300.	F				
329120	**2.02, A**	**PD**	Fertilizer	D				
329219			**SEEDING**					
329219	**1.01, A**	**PD**	Hydro Mulch: Manufacturer's specifications and application rate	D				
329219	**1.01, B**	**PD**	Erosion Control Blanket: Manufacturer's specifications	D				

SCHEDULE OF SUBMITTALS

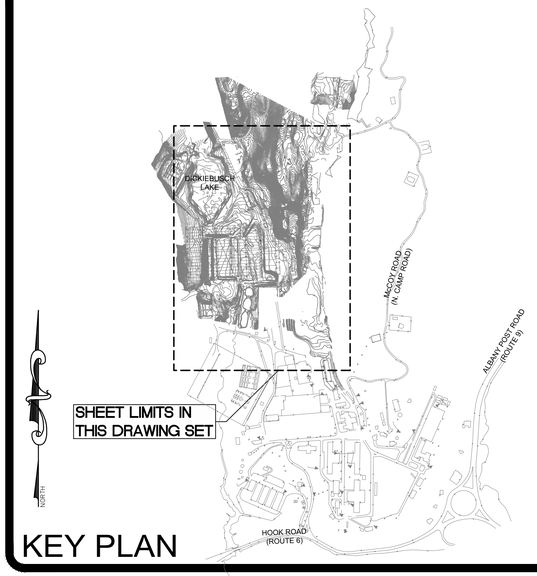
PROJECT NO.: 47574 - C

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
PROJECT MANAGER: Derek Mitchell, P.E.	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
329219	**1,.02, A**	**SAM**	One pound of seed in vendor's unopened package with label and seed analysis.	F				
333913			**DRAINAGE STRUCTURES WITH FRAMES AND COVERS**					
333913	**1.03, A**	**SD**	Show fabrication details and connections to adjacent Work	D	X			
333913	**2.01, A**	**PD**	Precast Reinforced Square and Rectangular Concrete Structures	D				
333913	**2.01, B**	**PD**	Frames, Covers and Grates for Manholes and Catch Basins	D				
333913	**2.01, C**	**PD**	Pipe-to-Manhole/Drainage Structure Connections	D				
333913	**2.01, D**	**PD**	Mortar	D				
333913	**1.03, B**	**EPD**	Environmental Product Declaration	F/O				
334104			**CORRUGATED POLYETHYLENE STORM DRAIN PIPE**					
334104	**2.02, A**	**PD**	Corrugated Polyethylene Pipe (Smooth Interior)	D				
334104	**2.02, C**	**PD**	Fittings	D				
334104	**2.02, D**	**PD**	End Sections	D				
334104	**2.02, E**	**PD**	Perforated Pipe	D				
334101			**REINFORCED CONCRETE PIPE (STORM DRAINAGE)**					
334200	**1.02, A**	**PD**	Concrete Pipe And Fittings	D				
334101	**1.02, B**	**EPD**	Environmental Product Declaration	F/O				
344113			**RANGE SUPPORT SIGNS**					
344113	**1.01, A**	**SD**	Shop Drawings		X			

CAMP SMITH AUTOMATED RECORD FIRE FIRING RANGE

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE ROAD
CORTLANDT MANOR, NY
O.G.S. PROJECT NO. 47574

ADDENDUM NO. 1 PLAN SET



KEY PLAN

NEW YORK STATE | Military and Naval Affairs

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

DRAWING LIST	
GENERAL INFO	
G-001	COVER SHEET
G-002	NOTES AND LEGEND
G-003	SITE ACCESS AND CONSTRUCTION SEQUENCING
G-004	OPERATIONS AND STORAGE BUILDING - LIFE SAFETY PLAN AND SUMMARY ALTERNATE 1
G-005	RANGE CLASSROOM BUILDING - LIFE SAFETY PLAN AND SUMMARY ALTERNATE 2
G-006	RANGE CONTROL TOWER - LIFE SAFETY PLAN AND SUMMARY
G-007	BLEACHER ENCLOSURE - LIFE SAFETY PLAN AND SUMMARY
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C-101	SOIL BORING LOCATIONS
C-102	SOIL BORING LOCATIONS
C-110	REMOVALS PLAN
C-111	REMOVAL PLAN PHOTOS
C-112	UN-EXPLODED ORDNANCE RISK MAP
C-120	OVERALL SITE PLAN
C-121	SITE PLAN
C-122	SITE PLAN
C-123	SITE PLAN
C-124	SITE PLAN
C-125	SITE PLAN BASE BID
C-125A	SITE PLAN ALTERNATE 1
C-125B	SITE PLAN ALTERNATES 1 AND 2
C-130	OVERALL GRADING AND DRAINAGE PLAN
C-131	GRADING AND DRAINAGE PLAN
C-132	GRADING AND DRAINAGE PLAN
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C-134	GRADING AND DRAINAGE PLAN
C-135	GRADING AND DRAINAGE PLAN BASE BID
C-135A	GRADING AND DRAINAGE PLAN ALTERNATE 1
C-135B	GRADING AND DRIANAGE PLAN ALTERNATES 1 AND 2
C-140	EROSION AND SEDIMENT CONTROL PLAN
C-150	WETLAND MITIGATION PLAN CSM-1 AND 2
C-151	WETLAND MITIGATION PLAN CSM-3, 4, AND 5
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C-160	PROFILE: REROUTED VALLEY ROAD
C-161	PROFILE: 60" STORM PIPE
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C-501	SITE DETAILS
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C-504	SITE DETAILS
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A-OS-201	OPERATIONS AND STORAGE - ARCHITECTURAL ELEVATIONS ALTERNATE 1
A-OS-301	OPERATIONS AND STORAGE - ARCHITECTURAL SECTIONS AND WALL SECTIONS ALTERNATE 1
A-RC-101	RANGE CLASSROOM BUILDING - ARCHITECTURAL PLANS ALTERNATE 2
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A-CT-102	RANGE CONTROL TOWER - ARCHITECTURAL PLANS
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A-CT-401	RANGE CONTROL TOWER - ARCHITECTURAL ENLARGED STAIR AND DETAILS
A-BE-101	BLEACHER ENCLOSURE - ARCHITECTURAL PLANS
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A-602	ARCHITECTURAL WINDOW DETAILS BASE BID
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S-RM-101	RELOCATED MESS AND FLAG POLE - FOUNDATION PLAN AND SECTIONS AND DETAILS
S-501	STRUCTURAL TYPICAL DETAILS BASE BID
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E-306	DETAILS
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E-601	ONE-LINE DIAGRAMS BASE BID
E-601A	ONE LINE DIAGRAMS ALTERNATE 1
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E-602A	LIGHTING AND PANELBOARD SCHEDULES ALTERNATE 1
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M-CT-101	RANGE CONTROL TOWER MECHANICAL PLANS
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M-601	SCHEDULES
M-601A	SCHEDULES- ALTERNATE 1
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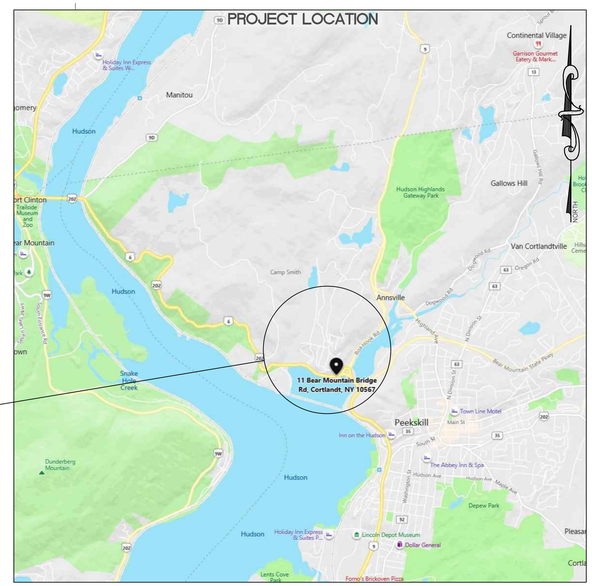
PROJECT LOCATION

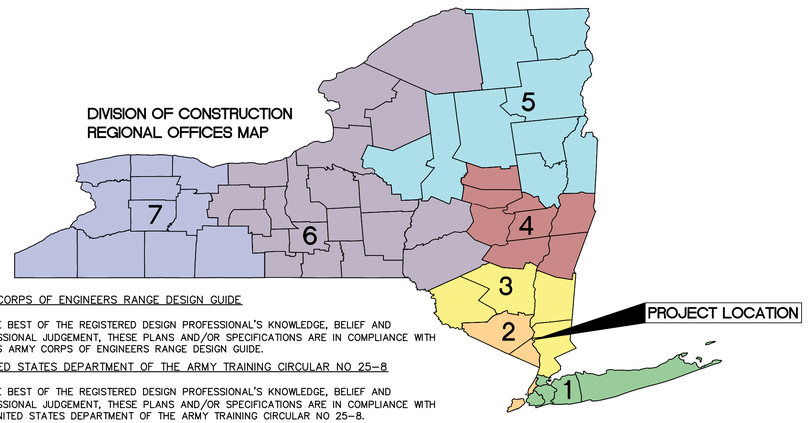


SITE LOCATION

STATE OF NEW YORK
ADAM PAUL OSTERHOUT
LICENSED PROFESSIONAL ENGINEER
079236

THIS PLAN SET HAS ALTERNATES NO.1 AND NO.2

DIVISION OF CONSTRUCTION REGIONAL OFFICES MAP



US ARMY CORPS OF ENGINEERS RANGE DESIGN GUIDE

1. TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE US ARMY CORPS OF ENGINEERS RANGE DESIGN GUIDE.

2004 UNITED STATES DEPARTMENT OF THE ARMY TRAINING CIRCULAR NO 25-8

1. TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE UNITED STATES DEPARTMENT OF THE ARMY TRAINING CIRCULAR NO 25-8.

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

1. TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

1. TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE.

DRAWING NUMBER: G-001

SHEET OF

36x24 PLOT SHEET

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GENERAL NOTES:

1. BASEMAPPING PROVIDED BY PATRIOT DESIGN & CONSULTING FROM JUNE, 2022, JUNE, 2023, AND JULY 2023. CONTRACTOR SHALL CONFIRM ELEVATIONS AND BENCHMARKS PRIOR TO COMMENCEMENT OF CONSTRUCTION. BUILDING OUTLINES, POLES, AND OVERHEAD ELECTRICAL LINES FOR BUILDINGS 86, 89, 90, 92, AND 95 ARE BASED ON AERIAL IMAGERY.

2. EXTEND THE CONTRACT LIMIT LINE (CLL) AS REQUIRED AND DIRECTED TO PROVIDE FOR ALL WORK REQUIRED BY THE CONTRACT.

3. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.

4. PROVIDE ALL REMOVALS INCIDENTAL TO AND NECESSARY TO PROVIDE THE WORK OF THIS CONTRACT. REMOVE EXISTING FEATURES IN THEIR ENTIRETY UNLESS OTHERWISE NOTED.

5. CLEAR AND GRUB EXISTING VEGETATION, REGARDLESS OF SIZE, NECESSARY TO INSTALL THE WORK OF THIS CONTRACT. REMOVE ALL ABOVE GROUND PORTIONS OF PLANTS. GRUB ALL BELOW GROUND PORTIONS OF PLANTS TO A MINIMUM DEPTH OF 6" BELOW FINISH GRADE IN LAWN AREAS. COMPLETELY REMOVE ALL BELOW GROUND PORTIONS OF PLANTS IN AREAS TO BE COVERED WITH BUILDINGS AND OTHER STRUCTURES, GRAVEL ACCESS ROADS AND WALKWAYS. ALL INDIVIDUAL TREES INDICATED FOR REMOVAL ARE TO BE REMOVED IN THEIR ENTIRETY, INCLUDING ALL ABOVE AND BELOW GROUND PORTIONS. PRESERVE AND PROTECT ALL EXISTING VEGETATION NOT INDICATED TO BE REMOVED, AND OTHER VEGETATION OUTSIDE THE CLL NOT REQUIRED TO BE DISTURBED BY THE WORK OF THIS, AND RELATED CONTRACTS. PROVIDE FENCES, BARRICADES AND OTHER SUITABLE DEVICES TO PREVENT DAMAGE BY VEHICLES. DO NOT DRIVE OR PARK VEHICLES ON LAWNS. CLEARED AND GRUBBED VEGETATION MAY BE CHIPPED AND UTILIZED FOR STABILIZATION OR PERIMETER CONTROL ONSITE, IF APPROVED BY OWNER'S REPRESENTATIVE. EXCESS WOOD CHIPS MAY BE DISPOSED OF ONSITE IN A LOCATION APPROVED BY DIRECTOR'S REPRESENTATIVE.

6. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE.

7. RESTORE TO THEIR ORIGINAL CONDITION ALL EXISTING PHYSICAL FEATURES DAMAGED BY THE UNAUTHORIZED ACT OR OMISSION OF THE CONTRACTOR. ORIGINAL CONDITION TO MEAN THE CONDITION IN WHICH THE FEATURE WAS FOUND AT THE START OF THE WORK.

8. COORDINATE THE LAYOUT WORK WITH THE DIRECTOR'S REPRESENTATIVE. ELIMINATE ALL CONFLICTS IN UTILITY LOCATIONS PRIOR TO ANY EXCAVATIONS. EXCEPT FOR APPROVED CHANGES MADE TO AVOID CONFLICT, DO NOT DEVIATE FROM THE LOCATIONS SHOWN ON THE PLANS WITHOUT PRIOR WRITTEN APPROVAL OF THE DIRECTOR'S REPRESENTATIVE.

9. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.

10. MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.

11. STRIP ALL EXISTING ORGANIC SOIL FROM ALL AREAS WITHIN THE CLL WHERE EXCAVATION OR FILL IS REQUIRED. ORGANIC SOILS FROM LAWN AND LANDSCAPED AREAS WILL BE ACCEPTABLE FOR RE-USE AS TOPSOIL. STOCKPILE ALL STRIPPED ORGANIC SOIL AS DIRECTED BY DIRECTOR'S REPRESENTATIVE.

12. FINE GRADE, TOPSOIL, SEED AND MULCH ALL AREAS DISTURBED BY THE WORK OF THIS CONTRACT AND NOT SPECIFIED TO BE COVERED BY BUILDINGS, GRAVEL ROADWAYS AND WALKWAYS, OR OTHER FINISHED SURFACES. RESTORE ALL EXISTING CONSTRUCTION TO ORIGINAL CONDITION, UNLESS SHOWN OR OTHERWISE DIRECTED.

13. PERMANENT GRAVEL ROADS ARE NOT DESIGNED OR INTENDED FOR CONSTRUCTION EQUIPMENT USE UNLESS PERMITTED BY THE DIRECTOR'S REPRESENTATIVE.

14. REPAIR/REPLACE ANY AND ALL DAMAGE BY CONTRACTOR'S ACTIVITIES TO EXISTING UTILITIES THAT LIE OUTSIDE THE SCOPE OF WORK INDICATED ON THESE DRAWINGS. REPAIR/REPLACE ANY AND ALL DAMAGE TO EXISTING UTILITIES TO THE SATISFACTION OF BOTH THE UTILITY PROVIDER AND THE DIRECTOR'S REPRESENTATIVE.

15. RETURN ALL DISTURBED AREAS TO THEIR EXISTING COVER TYPES UPON CONSTRUCTION COMPLETION UNLESS OTHERWISE SPECIFIED.

16. INDIANA BAT CLEARING RESTRICTIONS APPLY. TREE CLEARING SHALL BE RESTRICTED TO NOVEMBER 1ST THROUGH MARCH 31ST.

DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES:

1. DRAINAGE STRUCTURE INLET PROTECTION: PRIOR TO COMMENCEMENT OF CONSTRUCTION, STONE BAGS TO BE CONSTRUCTED AT EXISTING STORM DRAINS, AS REQUIRED. MAINTAIN IN GOOD CONDITION UNTIL FINAL VEGETATIVE COVER IS WELL ESTABLISHED ON ALL DISTURBED AREAS UPSTREAM OF THE INLET.

LITTER AND CONSTRUCTION DEBRIS CONTROL MEASURES:

1. COMPLY WITH THE FOLLOWING LITTER AND CONSTRUCTION DEBRIS CONTROL MEASURES.

   A. DISPOSE OF ALL CONSTRUCTION DEBRIS AT AN OFF-SITE FACILITY APPROVED FOR THE TYPE OF MATERIAL GENERATED AT THE SITE.

   B. NO BURNING OR BURY PITS WILL BE PERMITTED ON SITE.

   C. PRIOR TO LEAVING THE SITE EACH DAY, INSPECT THE PROJECT SITE AND PLACE ALL LITTER AND CONSTRUCTION DEBRIS IN APPROPRIATE SECURE STORAGE CONTAINERS.

TRAFFIC MAINTENANCE AND PROTECTION:

1. MAINTAIN PEDESTRIAN AND VEHICULAR TRAFFIC ROUTES AT ALL TIMES. REFER TO SPECIFICATION SECTION 011100.

2. FACILITY ACCESS AND APPROPRIATE ROUTING TO BE COORDINATED WITH THE DIRECTOR'S REPRESENTATIVE TO MEET FACILITY REQUIREMENTS THROUGHOUT CONSTRUCTION.

3. COORDINATE AND PLAN WORK TO PROVIDE OPEN TWO-WAY VEHICULAR TRAFFIC AT THE END OF EACH WORK DAY.

4. PROVIDE TRAFFIC CONES/BARRELS/TAPE/SIGNAGE WITHIN 5 FEET OF PEDESTRIAN AND VEHICULAR WORK AREAS TO MAINTAIN SAFETY NEAR WORK ZONES.

5. MAINTAIN EMERGENCY ACCESS AT ALL TIMES IN ACCORDANCE WITH THE FACILITY EMERGENCY PLAN.

CONSTRUCTION SAFEGUARDING:

1. COMPLY WITH ALL OSHA STANDARDS DURING CONSTRUCTION. SEE SPECIFICATION 014100.

2. CORRECT DUSTY CONDITIONS RESULTING FROM THE WORK BY THE USE OF CALCIUM CHLORIDE AND/OR WATER. DISTRIBUTE WATER UNIFORMLY BY THE USE OF SUITABLE SPRAY HEADS OR SPRAY BAR. THE DIRECTOR'S REPRESENTATIVE WILL BE THE SOLE JUDGE OF THE NEED FOR THE APPLICATION OF WATER FOR DUST CONTROL. PROVIDE WATER AT THE INTERVALS AND LOCATIONS AS DIRECTED BY THE DIRECTOR'S REPRESENTATIVE.

3. STORE AND PLACE CONSTRUCTION EQUIPMENT AND MATERIALS IN A MANNER THAT DOES NOT ENDANGER THE PUBLIC OR THE WORKERS FOR THE DURATION OF THE PROJECT.

4. STORE AND PLACE CONSTRUCTION MATERIALS AND EQUIPMENT IN A MANNER THAT DOES NOT OBSTRUCT ACCESS TO FIRE HYDRANTS, STANDPIPES, FIRE OR POLICE ALARM BOXES, UTILITY POLES, CATCH BASINS OR MANHOLES.

CONSTRUCTION SAFEGUARDING:

5. COORDINATE ACCESS TO FACILITY AND SUBSEQUENT CONSTRUCTION SITE WITH DIRECTOR'S REPRESENTATIVE. SEE SHEET G-003 FOR DETAILS OF CIRCULATION AND LOCATIONS OF RANGE OPERATIONS BUILDING, OGS TRAILER, POST HQ, AND POTABLE WATER ACCESS.

EROSION AND SEDIMENT CONTROL PRACTICES:

PRACTICE	INITIAL PLACEMENT	DURATION OF USE
SILT FENCE	PRIOR TO CONSTRUCTION ACTIVITES	UNTIL SITE STABILIZATION
STORM INLET PROTECTION	PRIOR TO CONSTRUCTION ACTIVITES	UNTIL SITE STABILIZATION
TEMPORARY SEEDING	BARE EARTH & SOIL STOCK PILES TO BE INACTIVE FOR 7 DAYS OR LONGER	UNTIL FINAL GRADING & SEEDING OR USE OF STOCKPILE
DUST CONTROL	COMMENCEMENT OF CONSTRUCTION ACTIVITIES	UNTIL SITE STABILIZATION
TEMPORARY SEDIMENT TRAP	PRIOR TO COMMENCEMENT OF MASS GRADING	UNTIL UPGRADIENT STABILIZATION
TEMPORARY CHECK DAM	FOLLOWING GRADING OF PROPOSED SWALES	UNTIL SITE STABILIZATION
CONCRETE WASHOUT FACILITY	PRIOR TO PLACEMENT OF CAST-IN-PLACE CONCRETE ON SITE.	UNTIL FINAL CURING AND ACCEPTANCE OF CONCRETE FOUNDATIONS AND/OR SLABS

ALL ABOVE MEASURES ARE TEMPORARY.

EROSION AND SEDIMENT CONTROL AND STORM WATER CONTROL DEVICE MAINTENANCE:

A. CONSTRUCTION DURATION

1. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSPECTED WEEKLY.

   A. REPLACE SILT FENCE WHEN IT BECOMES DEFORMED, TORN, OR NO LONGER MEETS THE INSTALLATION DETAILS.

   B. REMOVE BUILT-UP SEDIMENT FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.

   C. CHECK DRAINAGE STRUCTURES AND PIPING IMPACTED BY WORK RELATED TO THIS PROJECT FOR CLOGGING AND SEDIMENT ACCUMULATION AND CLEANED IF REQUIRED.

   D. INSPECT SEDIMENT TRAPS FOR DEPTH OF SEDIMENT. BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 50 PERCENT OF THE DESIGN CAPACITY.

   E. CONTRACTOR TO INSPECT DISTURBED AREAS AND MATERIALS STORAGE AREAS FOR EVIDENCE OF OR POTENTIAL FOR POLLUTANTS ENTERING STORMWATER SYSTEM.

   F. MONITOR AND INSPECT VEHICULAR ACCESS POINTS AT THE SAME FREQUENCY AS EROSION CONTROL FEATURES TO ENSURE THAT DEPOSITS OF SAND, SILT, OR OTHER MATERIAL IS NOT BEING DEPOSITED ON ADJACENT ROADWAYS OUTSIDE THE CLL. IN THE EVENT ANY SIGNIFICANT DEPOSITS OCCUR, THEY ARE TO BE CLEANED IMMEDIATELY.

   G. MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES TO BE USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DRIPPED, WASHED, OR TRACKED ONTO PUBLIC-RIGHTS-OF-WAY, OR, ADJACENT FACILITY ROADS, TO BE REMOVED IMMEDIATELY.

   H. INSPECT CHECK DAMS FOR DEPTH OF SEDIMENT. BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 50 PERCENT OF THE DESIGN CAPACITY.

   I. CLEAN CONCRETE WASHOUT FACILITY, OR, NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

B. PROJECT COMPLETION

1. AT PROJECT COMPLETION AND PRIOR TO PROJECT CLOSE OUT, INSPECT ALL PERMANENT EROSION, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT PRACTICES.

   A. ACCEPTABLE VEGETATION ESTABLISHMENT IN ACCORDANCE WITH SPECIFICATION SECTION 329219.

2. DRAINAGE STRUCTURES AND PIPING IMPACTED BY THIS PROJECT TO BE CHECKED FOR SEDIMENT ACCUMULATION AND CLEANED AS NECESSARY. PRIOR TO FINAL ACCEPTANCE OF PROJECT DRAINAGE STRUCTURES AND PIPING TO BE CLEANED AFTER SITE STABILIZATION.

EROSION AND SEDIMENT CONTROL NOTES:

1. ALL WORK TO BE IN COMPLIANCE OF THE GENERAL PERMIT GP0-25-001.

2. THE SEDIMENT CONTROL MEASURES DETAILED TO BE IN PLACE PRIOR TO CONSTRUCTION START-UP FOR EACH CONSTRUCTION PHASE. THESE MEASURES CONSIST OF SEDIMENT BARRIERS, DRAINAGE DITCH SEDIMENT FILTERS, STORM DRAIN INLET PROTECTION. ONCE CONSTRUCTED, ALL MEASURES TO BE PROPERLY MAINTAINED AND/OR REPLACED, AND THEN REMOVED FROM THE SITE ONCE VEGETATION, STRUCTURES, AND FINAL GRAVEL ROADS AND WALKWAYS ARE IN PLACE.

3. THE EROSION CONTROL MEASURES DEPICTED ON THESE PLANS ARE REQUIRED AS A MINIMUM. ADDITIONAL IMPLEMENTATION OF GENERAL AND PARTICULAR MEASURES AS DEEMED NECESSARY BY THE DIRECTOR'S REPRESENTATIVE MAY BE REQUIRED. ANY DISTURBED SOILS ARE TO BE TEMPORARILY STABILIZED IF LEFT INACTIVE FOR 14 OR MORE DAYS.

4. THE LIMITS OF DISTURBANCE FOR ANY SITE CLEARING OR GRADING TO BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK.

5. INSTALL SEDIMENT BARRIERS, TRAPS, AND INLET/OUTLET PROTECTION. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED DURING GRADING OPERATIONS.

6. INSTALL RUNOFF CONTROL MEASURES (DIVERSIONS, OUTLET PROTECTION, ETC.) AND ADDITIONAL RUNOFF CONTROL MEASURES AS NEEDED DURING CONSTRUCTION.

7. CLEAR AND GRADE THE DEPICTED AREA OF DISTURBANCE.

8. INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

9. WHEN ALL DISTURBED AREAS ARE STABLE AND HAVE REACHED 95% VEGETATIVE COVER, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.

10. TEMPORARY EROSION CONTROL PROTECTION BY MULCHING MUST BE CARRIED OUT AS THE FILL IS PROGRESSED TO AVOID ALL POSSIBLE CONTAMINATION OF PONDS, STREAMS, OR OTHER WATERCOURSES. PLACEMENT OF EROSION CONTROL BLANKET OVER THE MULCH IS RECOMMENDED TO PROVIDE POSITIVE "TACKING" OF THE MULCH AND INCREASED PROTECTION AGAINST EROSION.

11. ANY ACCIDENTAL DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION TO BE CORRECTED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.

12. PLAN SITE PREPARATION ACTIVITIES TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISRUPTION.

13. PERMANENT TRAFFIC CORRIDORS TO BE ESTABLISHED AND "ROUTES OF CONVENIENCE" ARE TO BE AVOIDED.

SWPPP NOTES:

1. INSPECT THE PROJECT SITE AND ALL EROSION AND SEDIMENT CONTROL PRACTICES AFTER EACH RAIN EVENT AND ON A WEEKLY BASIS IN ACCORDANCE WITH THE PROJECT SPECIFIC SWPPP. IF A FIVE ACRE WAIVER IS GRANTED, INSPECTIONS WILL BE REQUIRED TWICE A WEEK.

2. REPAIR AND REMEDY ANY EROSION AND SEDIMENT CONTROL PRACTICES OBSERVED TO BE DEFICIENT OR IN NEED OF REPAIR OR AT THE DIRECTION OF THE DIRECTOR'S REPRESENTATIVE.

3. IMPLEMENT AND COMPLY WITH ALL THE PROJECT-SPECIFIC SWPPP REQUIREMENTS.

4. STABILIZE DISTURBED AREAS IMMEDIATELY BUT NOT MORE THAN 14 DAYS AFTER SOIL DISTURBANCE HAS CEASED. IN THE EVENT CONTRACTOR ANTICIPATES DISTURBANCES EXCEEDING FIVE ACRES A 5 ACRE WAIVER PERMIT WILL BE REQUIRED PRIOR TO DISTURBING MORE THAN 5 ACRES, DISTURBED AREAS MUST BE STABILIZED WITHIN 7 DAYS AFTER SOIL DISTURBANCE HAS CEASED.

5. STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS TO REMAIN WITHIN THE LIMITS OF THE PROPERTY FOR DEVELOPMENT ONLY. EXTEND CLL TO INCORPORATE THESE AREAS WITH THE APPROVAL OF THE DIRECTORS REPRESENTATIVE.

6. PROVIDE ALL FIELD LAYOUT.

7. AS-BUILT PLANS SHALL BE REVIEWED BY THE DIRECTOR'S REPRESENTATIVE. PROVIDE ANY CORRECTION OR OMISSION TO THE SATISFACTION OF THE DIRECTOR'S REPRESENTATIVE BEFORE ACCEPTANCE.

8. NO EXCAVATED MATERIALS OR NATIVE SOILS MAY BE TRANSPORTED OUT OF THE WORK AREA DUE TO THE POTENTIAL PRESENCE OF LEAD CONTAINING MATERIALS. ANY EXCESS EXCAVATED MATERIALS OR NATIVE SOILS MUST BE STOCKPILED ON SITE AS DIRECTED BY THE DIRECTOR'S REPRESENTATIVE.

TRAVEL SURFACE NOTES

1. PITCH/SLOPE FINISH GRADE PAVEMENT SURFACES TO TRANSITION EVENLY BETWEEN SPOT GRADES. SURFACES SHOULD BE FREE FROM IRREGULARITIES TO PREVENT PONDING. PROVIDE POSITIVE DRAINAGE TO EXISTING DRAINAGE STRUCTURES AND AWAY FROM BUILDING(S).

EXISTING CONDITIONS NOTES

1. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE COORDINATES, NAD83 EASTERN ZONE FROM GPS OBSERVATIONS MADE BY PATRIOT DESIGN & CONSULTING.

2. VERTICAL CONTROL IS REFERENCED TO STATE PLANE COORDINATES, NAD83 EASTERN ZONE FROM GPS OBSERVATIONS MADE BY PATRIOT DESIGN & CONSULTING.

3. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON ABOVE GROUND EVIDENCE VISIBLE AT THE TIME OF THE SURVEY FROM UNDERGROUND UTILITY INVESTIGATION PERFORMED BY GREENSTAR ENVIRONMENTAL SOLUTIONS, LLC IN JUNE, 2022, AND FROM RECORD/AS-BUILT PLANS PROVIDED BY NYS OGS.

4. AN ABSTRACT OF TITLE WAS NOT PROVIDED FOR THE COMPLETION OF THIS SURVEY, WHICH IS THEREFORE SUBJECT TO ANY FACTS OF TITLE THAT MAY BE SHOWN BY SOURCES OTHER THAN THOSE REFERENCED HEREON.

BASIS OF DESIGN NOTES

1. CONTROL TOWER PERSONNEL MAY NEED TO UTILIZE HEARING PROTECTION WHILE RANGE IS IN USE TO PREVENT HEARING DAMAGE.

2. SURFACE DANGER ZONE HAS BEEN DESIGNED IN ACCORDANCE WITH DAM PAM 386-63; COMPOSITE LIMITS ARE SHOWN ON SITE PLANS.

3. BLAST ROCK MAY BE USED AS FILL WITHIN RANGE FOOTPRINT AS INDICATED IN SPECIFICATION SECTIONS 310000, EARTHWORK.

4. THE FIRING LINE IS ASSUMED TO HAVE A DECIBEL RATING OF APPROXIMATELY 140 DBA AT THE CENTER OF THE PLATFORM. DURING OPERATIONS, THIS WILL RESULT IN A DECIBEL RATING OF APPROXIMATELY 95 DBA NEAR THE OUTSIDE OF THE RANGE SUPPORT CLASSROOM BUILDING AND OPERATIONS AND MAINTENANCE BUILDING.

ABBREVIATIONS:

±	PLUS/MINUS
A.L.O.	APPROXIMATE LOCATION OF
BLDG	BUILDING
CB	CATCH BASIN
CBR	CATCH BASIN- ROUND
CF	CUBIC FEET
CLL	CONTRACT LIMIT LINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CP	CONTROL POINT
ELEV/EL	ELEVATION
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
HDPE/ADS	BLACK PLASTIC PIPE
INV	INVERT
MEC	MUNITIONS AND EXPLOSIVES OF CONCERN
MH	MANHOLE
MIN.	MINIMUM
NYS	NEW YORK STATE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
R=	RADIUS EQUALS
SF	SQUARE FEET
TF	TOP OF FRAME
(TYP.)	TYPICAL
UGE	UNDERGROUND ELECTRIC
UP	UTILITY POLE
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
UXO	UNEXPLODED ORDINANCE
W/	WITH
YR	YEAR

EXISTING:

- ----280---- CONTOUR LINE MAJOR
- ----281---- CONTOUR LINE MINOR
- ——X—— FENCE
- ——OH—— OVERHEAD UTILITY LINE
- ——ST—— STORM SEWER LINE
- ——UGE—— UNDERGROUND ELECTRIC WIRE
- ——W—— WATER LINE
- E UTILITY ELECTRICAL METER
- USACE WETLAND AREA
- USACE WETLAND BORDER
- INV=266.3 INVERT ELEVATION
- SIGN
- UTILITY POLE
- CP 12 DOCK SPIKE SET N 853,136.62 E 751,423.644 ELEV 505.02' HORIZONTAL CONTROL POINTS
- MONITORING WELL
- FENCE POST
- DECIDUOUS TREE
- LIGHTING
- SOIL BORING OR INFILTRATION TEST LOCATION

NEW:

- DETAIL NUMBER / C-501 / DRAWING NUMBER — DETAIL REFERENCE
- TF= 99.0 — TOP OF FRAME (RIM) ELEVATION
- CLL — CONTRACT LIMIT LINE
- TEMPORARY CONSTRUCTION FENCE
- SILT FENCE
- LIMITS OF GRAVEL ACCESS ROAD
- N:226,564.02 E:1,003,042.21 DESCRIPTION — HORIZONTAL CONTROL POINT N: NORTHING E: EASTING
- AREA OF EXISTING BRUSH AND TREES TO BE REMOVED
- AREA OF ASPHALT TO BE REMOVED
- AREA OF GRAVEL OR STONE TO BE REMOVED
- AREA OF WETLAND DISTURBANCE
- AREA OF GRAVEL
- SYMBOL FOR SITE FEATURE TO BE REMOVED
- LINEAR FEATURE TO BE REMOVED
- AREA OF TOPSOIL AND SEEDING
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- INLET PROTECTION
- 5.0' / 5.0' / R=9.5' — DIMENSION
- (15) — NUMBER OF PARKING SPACES
- 121 — MINOR CONTOUR LINE
- 123 — MAJOR CONTOUR LINE
- (EX 258.24)× EXISTING SPOT GRADE REFERENCE
- ×257.62 DESIGNED SPOT GRADE
- SWALE
- ST — STORM PIPE
- ST — END SECTION
- UNDER DRAIN
- CHECK DAM
- EROSION CONTROL BLANKET
- LIGHT STONE RIP-RAP
- CATCH BASIN OR NYLOPLAST DRAIN
- TRAFFIC, PARKING OR STORMWATER MANAGEMENT SIGNAGE
- 9 / 8 — ROAD STATIONING
- EDGE OF GRAVEL
- STATIONARY INFANTRY TARGET

REVISED DRAWING 07/02/2025

NEW YORK STATE Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

EDP ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · ADAM PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER
EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
NOTES AND LEGEND

DRAWING NUMBER:
G-002

SHEET OF

36x24 PLOT SHEET

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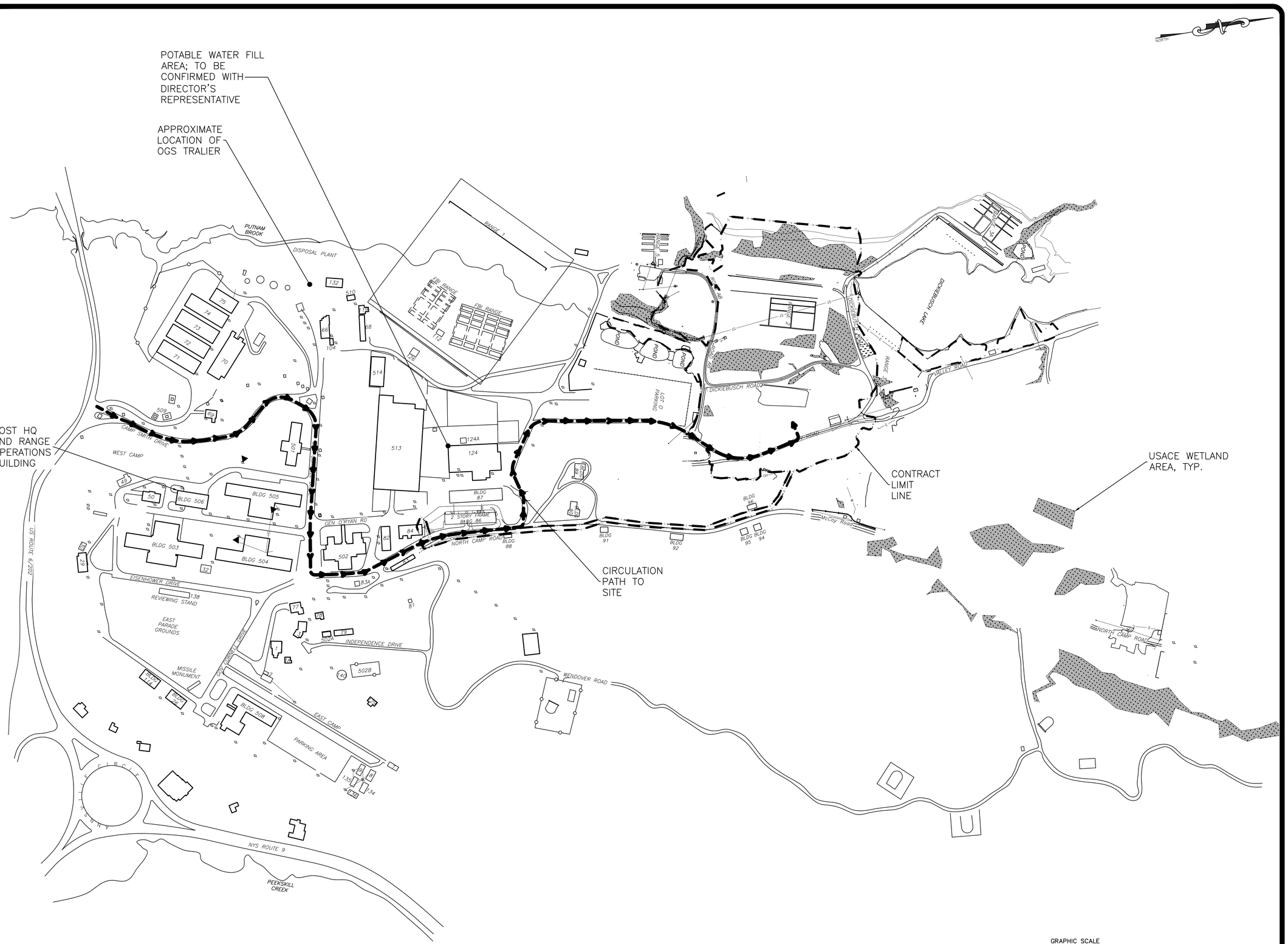

GRAPHIC SCALE

200 160 120 80 40 0 100 200 400 800

(IN FEET)
1" = 200'

NOTE: FEATURES ON THIS PAGE OUTSIDE OF THE LIMITS OF SURVEY WERE TAKEN FROM AERIAL IMAGERY AND ARE SCHEMATIC IN NATURE.

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · BRAPAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
SITE ACCESS AND CONSTRUCTION SEQUENCING

DRAWING NUMBER:
G–003

SHEET OF

GENERAL NOTES:

1. MINIMUM HEADROOM OF 6'-8"(80") SHALL BE PROVIDED
2. ALL PROTRUDING OBJECTS SHALL NOT EXCEED 4" IN PATH OF REQUIRED MEANS OF EGRESS
3. STORAGE RACKS, COMBUSTIBLE/ FLAMMABLE MATERIAL CANNOT BE STORED IN A REQUIRED MEANS OF EGRESS.
4. FACILITIES, OR PORTIONS OF FACILITIES, ON A MILITARY INSTALLATION THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.
5. RESERVE AND NATIONAL GUARD FACILITIES, OR PORTIONS OF SUCH FACILITIES, OWNED BY OR UNDER THE CONTROL OF THE DEPARTMENT OF DEFENSE, THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.

LEGEND- FUNCTION & OCCUPANTS:

CONCENTRATED BUSINESS USE AREA =225 GROSS SQ.FT

STORAGE=575 GROSS SQ.FT

LIFE SAFETY LEGEND:

EXIT TRAVEL STARTING LOCATION

EXIT ACCESS TRAVEL

ILLUMINATED EXIT SIGN
(WALL MOUNTED/ CEILING MOUNTED)

FIRE EXTINGUISHER

DOOR CAPACITY

DOOR WIDTH PROVIDED

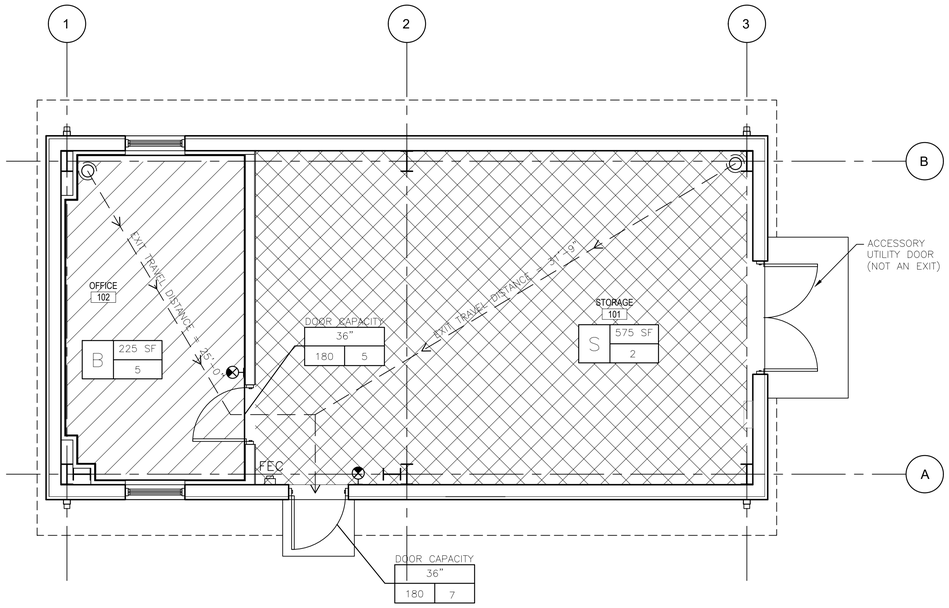
OCCUPANCY LOAD

MAX EXIT CAPACITY (0.2" PER OCCUPANT)

GROSS SF

OCCUPANT LOAD

OCCUPANCY CLASSIFICATION



1 G-004 **LIFE SAFETY PLAN**
1/4" = 1'-0"

NORTH

PROJECT INFORMATION

PROJECT NAME: OPERATIONS AND STORAGE
DESCRIPTION : ONE STORY PRE-ENGINEERED METAL BUILDING

OCCUPANCY CLASSIFICATION

☒SINGLE ☐MIXED OCCUPANCY ☐ SEPARATED
☐NON-SEPARATED ☐COMBINATION

SEPARATION FIRE BARRIER RATING: N/A (TABLE 706.4)

OCCUPANCY CLASSIFICATION (S) : BUSINESS

USES : OFFICE – CONCENTRATED BUSINESS USE AREA
STORAGE – ACCESSORY STORAGE

AUTOMATIC SPRINKLER SYSTEM PROVIDED

☐ YES ☒ NO (NOT REQUIRED)

MAXIMUM ALLOWABLE BUILDING AREA (TABLE 506.2)
NON- SPRINKLERED, B OCCUPANCY IS 19,000 SQ.FT (800SF ACTUAL)

CONSTRUCTION TYPE: IIB (TABLE 504.3/ 504.4/ 601)

FIRE-RESISTANCE OF BUILDING ELEMENTS(HOURS)

BUILDING ELEMENTS	REQUIRED	PROVIDED
MAXIMUM STORIES ABOVE GRAGE	3	1
MAXIUM HEIGHT ALLOWED	55	13'-4"
STRUCTURAL FRAME	0	0
BEARING WALLS (EXTERIOR)	0	0
BEARING WALLS (INTERIOR)	0	0
NON-BEARING WALLS (INTERIOR)	0	0
FLOOR CONSTRUCTION	0	0
ROOF CONSTRUCTION	0	0

MEANS OF EGRESS (TABLE 1004.5)

BUILDING AREA	SF	OCCUPANT LOAD
OFFICE(50 SF/OCC)	225 GROSS SF	5
STORAGE (300 SF/OCC)	575 GROSS SF	2
TOTAL	800 SF	7

MEANS OF EGRESS ELEMENT	REQUIRED	PROVIDED	SECTION
NUMBER OF EXITS	1*	1	TABLE 1006.3.2
EXIT ACCESS TRAVEL DISTANCE	200'	31'-9"	TABLE 1017.2
COMMON PATH OF TRAVEL	100'	31'-9"	TABLE 1006.2.1

* OCCUPANT LOAD IS LESS THAN 49 AND COMMON PATH OF EGRESS TRAVEL DISTANCE IS LESS THAN 75 FT.

DOORS	REQUIRED	PROVIDED	SECTION
OFFICE	0.2 x 5 OCCUPANTS= 1"	36"	1005.3.2

FIRE AND SMOKE PROTECTION (CHAPTER 7)

ELEMENTS	REQUIRED	PROVIDED	SECTION
EXTERIOR WALLS	0	0	602/705
FIRE WALLS	0	0	706
FIRE BARRIERS	0	0	707
FIRE PARTITIONS	0	0	708
SMOKE BARRIERS	0	0	709
SMOKE PARTITIONS	0	0	710
HORIZONTAL ASSEMBLIES	0	0	711
VERTICAL OPENINGS	0	0	712
SHAFT ENCLOSURES	0	0	713

INTERIOR FINISHES (CHAPTER 803 & 804)

FINISH TYPE	OCCUPANCY	MINIMUM REQUIRED FINISH CLASSIFICATION		
		INTERIOR EXIT PASSAGEWAYS	CORRIDORS	ROOM AND ENCLOSED SPACES
WALLS & CEILINGS	B	CLASS A	CLASS B	CLASS C
FLOORING	B	CLASS II	CLASS II	CLASS II

FIRE PROTECTION SYSTEMS (CHAPTER 9)

ELEMENTS	REQUIRED	PROVIDED	SECTION
AUTOMATIC SPRINKLER	N	N	903
ALTERNATIVE AUTO FIRE EXT	N	N	904
STANDPIPE	N	N	905
PORTABLE FIRE EXTINGUISHER	Y	1	906
FIRE ALARM & DERECTION	N	N	907
EMERGENCY ALARM	N	N	908
SMOKE CONTROL SYSTEM	N	N	909
SMOKE & HEAT VENTS	N	N	910
FIRE COMMAND CENTER	N	N	911
CARBON MONOXIDE DETACTION	Y	Y	915

PORTABLE FIRE EXTINGUISHERS: PROVIDE MINIMUM 2-A EXTINGUISHER
MIN. 1 UNIT OF A PER 3,000 SF
MIN. 1 UNIT OF EXTINGUISHER PER 11,250 SF
MAX. 75' TRAVEL DISTANCE TO EXTINGUISHER
(906.3 FCNYS)

REVISED DRAWING 07/02/2025

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CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331
POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK
EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE: OPERATIONS AND STORAGE BUILDING-LIFE SAFETY PLAN AND SUMMARY ALT 1

DRAWING NUMBER: G-004

SHEET OF

36x24 PLOT SHEET
Jul 01,2025 - 12:40pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081-G004.dwg

GENERAL NOTES:

1. MINIMUM HEADROOM OF 6'–8"(80") SHALL BE PROVIDED
2. ALL PROTRUDING OBJECTS SHALL NOT EXCEED 4" IN PATH OF REQUIRED MEANS OF EGRESS
3. STORAGE RACKS, COMBUSTIBLE/ FLAMMABLE MATERIAL CANNOT BE STORED IN A REQUIRED MEANS OF EGRESS.
4. FACILITIES, OR PORTIONS OF FACILITIES, ON A MILITARY INSTALLATION THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE–BODIED MILITARY PERSONNEL.
5. RESERVE AND NATIONAL GUARD FACILITIES, OR PORTIONS OF SUCH FACILITIES, OWNED BY OR UNDER THE CONTROL OF THE DEPARTMENT OF DEFENSE, THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE–BODIED MILITARY PERSONNEL.

LEGEND– FUNCTION & OCCUPANTS:

UNCONCENTRATED ASSEMBLY–TABLES & CHAIRS AREA= 689 NET SQ.FT

LIFE SAFETY LEGEND:

EXIT TRAVEL STARTING LOCATION

EXIT ACCESS TRAVEL

ILLUMINATED EXIT SIGN (WALL MOUNTED/ CEILING MOUNTED)

FIRE EXTINGUISHER

DOOR CAPACITY

DOOR WIDTH PROVIDED

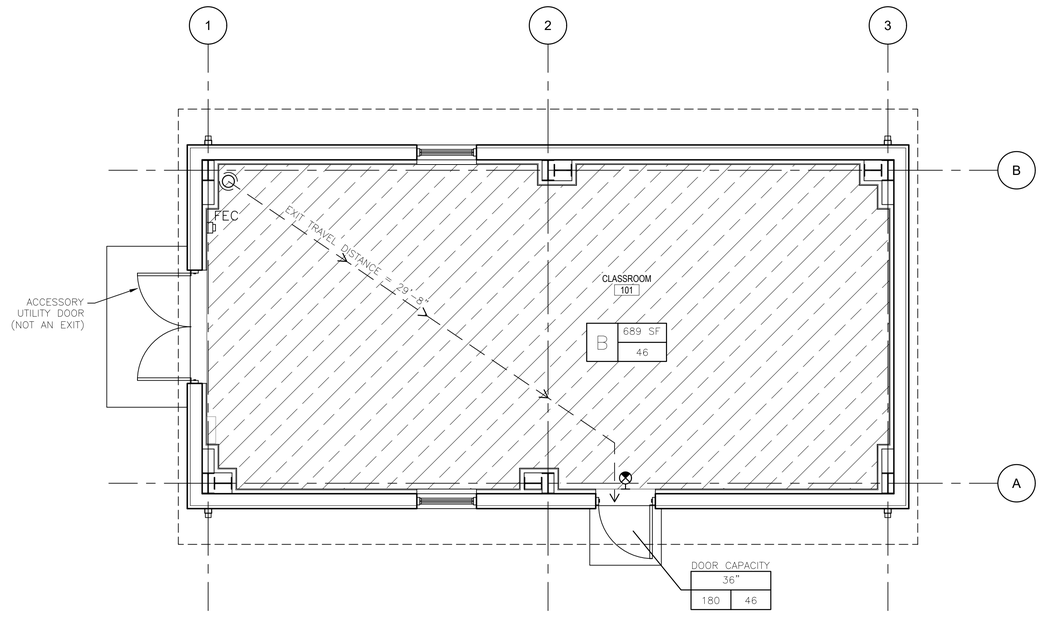
OCCUPANCY LOAD

MAX EXIT CAPACITY (0.2" PER OCCUPANT)

GROSS SF

OCCUPANT LOAD

OCCUPANCY CLASSIFICATION



1 G-005 **LIFE SAFETY PLAN**
1/4" = 1'–0"

NORTH

PROJECT INFORMATION

PROJECT NAME: RANGE CLASSROOM
DESCRIPTION : ONE STORY PRE–ENGINEERED METAL BUILDING

OCCUPANCY CLASSIFICATION

☒SINGLE ☐MIXED OCCUPANCY ☐ SEPARATED
☐NON–SEPARATED ☐COMBINATION
SEPARATION FIRE BARRIER RATING: N/A (TABLE 706.4)
OCCUPANCY CLASSIFICATION (S) : BUSINESS
USES : CLASSROOM – UNCONCENTRATED ASSEMBLY, TABLES & CHAIRS

AUTOMATIC SPRINKLER SYSTEM PROVIDED

☐ YES ☒ NO (NOT REQUIRED)

MAXIMUM ALLOWABLE BUILDING AREA (TABLE 506.2)
NON– SPRINKLERED, B OCCUPANCY IS 19,000 SQ.FT (800 SF ACTUAL)

CONSTRUCTION TYPE: IIB (TABLE 504.3/ 504.4/ 601)

FIRE–RESISTANCE OF BUILDING ELEMENTS(HOURS)

BUILDING ELEMENTS	REQUIRED	PROVIDED
MAXIMUM STORIES ABOVE GRAGE	3	1
MAXIUM HEIGHT ALLOWED	55	13'–4"
STRUCTURAL FRAME	0	0
BEARING WALLS (EXTERIOR)	0	0
BEARING WALLS (INTERIOR)	0	0
NON–BEARING WALLS (INTERIOR)	0	0
FLOOR CONSTRUCTION	0	0
ROOF CONSTRUCTION	0	0

MEANS OF EGRESS (TABLE 1004.5)

BUILDING AREA	SF	OCCUPANT LOAD
CLASSROOM (15 SF/OCC)	689 NET SF	46
TOTAL	689 SF	46

MEANS OF EGRESS ELEMENT	REQUIRED	PROVIDED	SECTION
NUMBER OF EXITS	1*	1	TABLE 1006.3.2
EXIT ACCESS TRAVEL DISTANCE	200'	29'–8"	TABLE 1017.2
COMMON PATH OF TRAVEL	100'	29'–8"	TABLE 1006.2.1

* OCCUPANT LOAD IS LESS THAN 49 AND COMMON PATH OF EGRESS TRAVEL DISTANCE IS LESS THAN 75 FT.

DOORS	REQUIRED	PROVIDED	SECTION
CLASSROOM	0.2 x 46 OCCUPANTS= 9.2"	36"	1005.3.2

FIRE AND SMOKE PROTECTION (CHAPTER 7)

ELEMENTS	REQUIRED	PROVIDED	SECTION
EXTERIOR WALLS	0	0	602/705
FIRE WALLS	0	0	706
FIRE BARRIERS	0	0	707
FIRE PARTITIONS	0	0	708
SMOKE BARRIERS	0	0	709
SMOKE PARTITIONS	0	0	710
HORIZONTAL ASSEMBLIES	0	0	711
VERTICAL OPENINGS	0	0	712
SHAFT ENCLOSURES	0	0	713

INTERIOR FINISHES (CHAPTER 803 & 804)

FINISH TYPE	OCCUPANCY	MINIMUM REQUIRED FINISH CLASSIFICATION		
		INTERIOR EXIT PASSAGEWAYS	CORRIDORS	ROOM AND ENCLOSED SPACES
WALLS & CEILINGS	B	CLASS A	CLASS B	CLASS C
FLOORING	B	CLASS II	CLASS II	CLASS II

FIRE PROTECTION SYSTEMS (CHAPTER 9)

ELEMENTS	REQUIRED	PROVIDED	SECTION
AUTOMATIC SPRINKLER	N	N	903
ALTERNATIVE AUTO FIRE EXT	N	N	904
STANDPIPE	N	N	905
PORTABLE FIRE EXTINGUISHER	Y	1	906
FIRE ALARM & DERECTION	N	N	907
EMERGENCY ALARM	N	N	908
SMOKE CONTROL SYSTEM	N	N	909
SMOKE & HEAT VENTS	N	N	910
FIRE COMMAND CENTER	N	N	911
CARBON MONOXIDE DETACTION	Y	Y	915

PORTABLE FIRE EXTINGUISHERS: PROVIDE MINIMUM 2–A EXTINGUISHER
MIN. 1 UNIT OF A PER 3,000 SF
MIN. 1 UNIT OF EXTINGUISHER PER 11,250 SF
MAX. 75' TRAVEL DISTANCE TO EXTINGUISHER (906.3 FCNYS)

REVISED DRAWING 07/02/2025

NEW YORK STATE Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331
POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK
EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

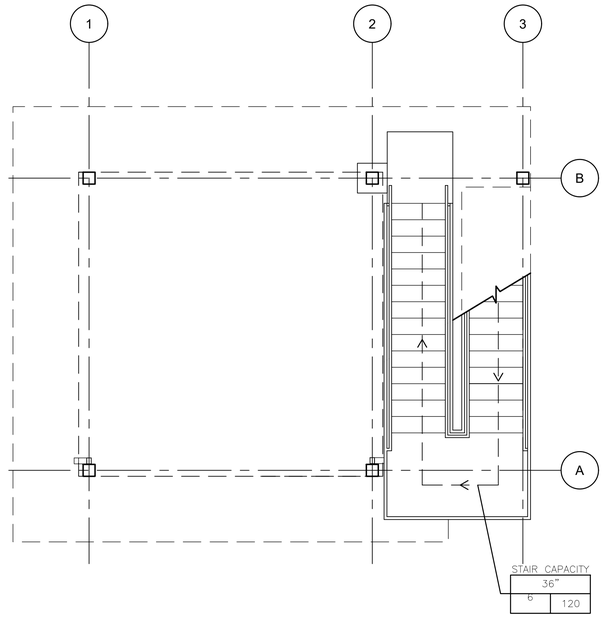
PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:
RANGE CLASSROOM BUILDING–LIFE SAFETY PLAN AND SUMMARY ALT 2

DRAWING NUMBER:
G–005

SHEET OF

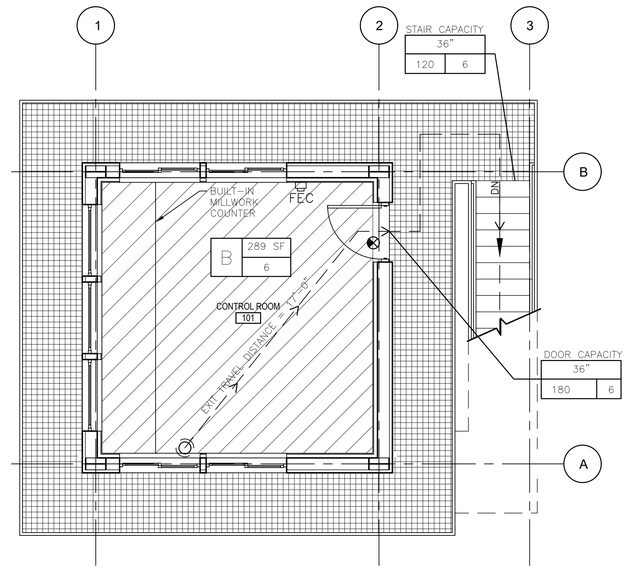
Jul 01,2025 – 12:11pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081–G005.dwg
36x24 PLOT SHEET



1 G-006 LIFE SAFETY PLAN- MID LEVEL

1/4" = 1'-0"

NORTH



1 G-006 LIFE SAFETY PLAN- CONTROL ROOM FLOOR

1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. MINIMUM HEADROOM OF 6'-8"(80") SHALL BE PROVIDED
2. ALL PROTRUDING OBJECTS SHALL NOT EXCEED 4" IN PATH OF REQUIRED MEANS OF EGRESS
3. STORAGE RACKS, COMBUSTIBLE/ FLAMMABLE MATERIAL CANNOT BE STORED IN A REQUIRED MEANS OF EGRESS.
4. FACILITIES, OR PORTIONS OF FACILITIES, ON A MILITARY INSTALLATION THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.
5. RESERVE AND NATIONAL GUARD FACILITIES, OR PORTIONS OF SUCH FACILITIES, OWNED BY OR UNDER THE CONTROL OF THE DEPARTMENT OF DEFENSE, THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.

LEGEND- FUNCTION & OCCUPANTS:

CONCENTRATED BUSINESS USE
AREA= 289 GROSS SQ.FT

LIFE SAFETY LEGEND:

EXIT TRAVEL STARTING LOCATION

EXIT ACCESS TRAVEL

ILLUMINATED EXIT SIGN
(WALL MOUNTED/ CEILING MOUNTED)

FIRE EXTINGUISHER

STAIR CAPACITY
STAIR WIDTH PROVIDED
OCCUPANCY LOAD
MAX EXIT CAPACITY (0.3" PER OCCUPANT)

DOOR CAPACITY
DOOR WIDTH PROVIDED
OCCUPANCY LOAD
MAX EXIT CAPACITY (0.2" PER OCCUPANT)

GROSS SF
OCCUPANT LOAD
OCCUPANCY CLASSIFICATION

PROJECT INFORMATION

PROJECT NAME: CONTROL TOWER
DESCRIPTION : TWO STORY PRE-ENGINEERED METAL BUILDING

OCCUPANCY CLASSIFICATION

☒SINGLE ☐MIXED OCCUPANCY ☐ SEPARATED
☐NON-SEPARATED ☐COMBINATION
SEPARATION FIRE BARRIER RATING: N/A (TABLE 706.4)
OCCUPANCY CLASSIFICATION (S) : BUSINESS
USES : BUSINESS/ OFFICE

AUTOMATIC SPRINKLER SYSTEM PROVIDED

☐ YES ☒ NO (NOT REQUIRED)

MAXIMUM ALLOWABLE BUILDING AREA (TABLE 506.2)
NON- SPRINKLERED, B OCCUPANCY IS 19,000 SQ.FT (800SF ACTUAL)

CONSTRUCTION TYPE: IIB (TABLE 504.3/ 504.4/ 601)

FIRE-RESISTANCE OF BUILDING ELEMENTS(HOURS)

BUILDING ELEMENTS	REQUIRED	PROVIDED
MAXIMUM STORIES ABOVE GRAGE	3	1
MAXIUM HEIGHT ALLOWED	55	31'-2 1/2"
STRUCTURAL FRAME	0	0
BEARING WALLS (EXTERIOR)	0	0
BEARING WALLS (INTERIOR)	0	0
NON-BEARING WALLS (INTERIOR)	0	0
FLOOR CONSTRUCTION	0	0
ROOF CONSTRUCTION	0	0

MEANS OF EGRESS (TABLE 1004.5)

BUILDING AREA	SF	OCCUPANT LOAD
CONTROL ROOM (50 SF/OCC)	289 GROSS SF	6
TOTAL	289 SF	6

MEANS OF EGRESS ELEMENT	REQUIRED	PROVIDED	SECTION
NUMBER OF EXITS	1*	1	TABLE 1006.3.2
EXIT ACCESS TRAVEL DISTANCE	200'	17'-0"	TABLE 1017.2
COMMON PATH OF TRAVEL	100'	17'-0"	TABLE 1006.2.1

* OCCUPANT LOAD IS LESS THAN 49 AND COMMON PATH OF EGRESS TRAVEL DISTANCE IS LESS THAN 75 FT.

STAIRS	REQUIRED	PROVIDED	SECTION
CONTROL RM	0.3 x 6 OCCUPANTS= 1.8"	36"	1005.3.1

DOORS	REQUIRED	PROVIDED	SECTION
CONTROL RM	0.2 x 6 OCCUPANTS= 1.2"	36"	1005.3.2

FIRE AND SMOKE PROTECTION (CHAPTER 7)

ELEMENTS	REQUIRED	PROVIDED	SECTION
EXTERIOR WALLS	0	0	602/705
FIRE WALLS	0	0	706
FIRE BARRIERS	0	0	707
FIRE PARTITIONS	0	0	708
SMOKE BARRIERS	0	0	709
SMOKE PARTITIONS	0	0	710
HORIZONTAL ASSEMBLIES	0	0	711
VERTICAL OPENINGS	0	0	712
SHAFT ENCLOSURES	0	0	713

INTERIOR FINISHES (CHAPTER 803 & 804)

FINISH TYPE	OCCUPANCY	MINIMUM REQUIRED FINISH CLASSIFICATION		
		INTERIOR EXIT PASSAGEWAYS	CORRIDORS	ROOM AND ENCLOSED SPACES
WALLS & CEILINGS	B	CLASS A	CLASS B	CLASS C
FLOORING	B	CLASS II	CLASS II	CLASS II

FIRE PROTECTION SYSTEMS (CHAPTER 9)

ELEMENTS	REQUIRED	PROVIDED	SECTION
AUTOMATIC SPRINKLER	N	N	903
ALTERNATIVE AUTO FIRE EXT	N	N	904
STANDPIPE	N	N	905
PORTABLE FIRE EXTINGUISHER	Y	1	906
FIRE ALARM & DERECTION	N	N	907
EMERGENCY ALARM	N	N	908
SMOKE CONTROL SYSTEM	N	N	909
SMOKE & HEAT VENTS	N	N	910
FIRE COMMAND CENTER	N	N	911
CARBON MONOXIDE DETACTION	Y	Y	915

PORTABLE FIRE EXTINGUISHERS: PROVIDE MINIMUM 2-A EXTINGUISHER
MIN. 1 UNIT OF A PER 3,000 SF
MIN. 1 UNIT OF EXTINGUISHER PER 11,250 SF
MAX. 75' TRAVEL DISTANCE TO EXTINGUISHER
(906.3 FCNYS)

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 12:12pm
B:\2099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081-G006.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331
POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK
EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	-
APPROVED:	-

SHEET TITLE:
RANGE CONTROL TOWER -LIFE SAFETY PLAN AND SUMMARY BASE BID

DRAWING NUMBER:
G-006

SHEET 6 OF 89

GENERAL NOTES:

1. MINIMUM HEADROOM OF 6'-8" (80") SHALL BE PROVIDED.
2. ALL PROTRUDING OBJECTS SHALL NOT EXCEED 4" IN PATH OF REQUIRED MEANS OF EGRESS.
3. STORAGE RACKS, COMBUSTIBLE/FLAMMABLE MATERIAL CAN NOT BE STORED IN A REQUIRED MEANS OF EGRESS.
4. FACILITIES, OR PORTIONS OF FACILITIES, ON A MILITARY INSTALLATION THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.
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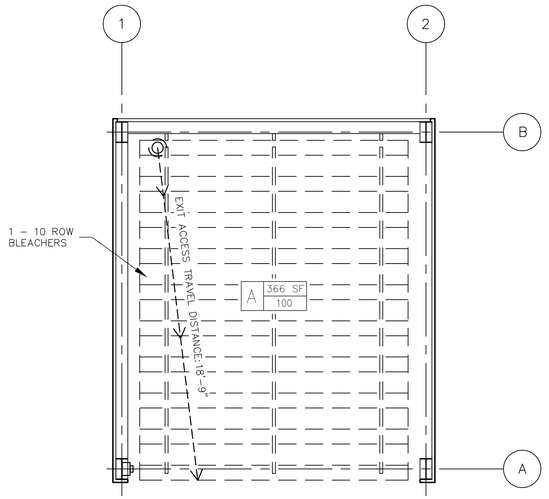
LIFE SAFETY LEGEND:

EXIT TRAVEL STARTING LOCATION

EXIT ACCESS TRAVEL

FIRE EXTINGUISHER

GROSS SF
OCCUPANCY LOAD
OCCUPANCY CLASSIFICATION



1 G-007 **LIFE SAFETY PLAN**
SCALE: 1/4" = 1' 0"

PROJECT INFORMATION:

PROJECT NAME: BLEACHER ENCLOSURE
DESCRIPTION: ONE STORY PRE-ENGINEERED METAL BUILDING

OCCUPANCY CLASSIFICATION:

☒ SINGLE ☐ MIXED OCCUPANCY ☐ SEPARATED
☐ NON-SEPARATED ☐ COMBINATION

OCCUPANCY CLASSIFICATION: ASSEMBLY GROUP A-5
USES: BLEACHERS

AUTOMATIC SPRINKLER SYSTEM PROVIDED:

☐ YES ☒ NO (NOT REQUIRED)

MAXIMUM ALLOWABLE BUILDING AREA (TABLE 506.2) = UNLIMITED
NON-SPRINKLERED, A-5 OCCUPANCY IS UNLIMITED SQ. FT. (366 SF ACTUAL)

CONSTRUCTION TYPE: IIB (TABLE 504.3/504.4/601)

FIRE–RESISTANCE OF BUILDING ELEMENTS (HOURS)

BUILDING ELEMENTS	REQUIRED	PROVIDED
MAXIMUM STORIES ABOVE GRADE	UNLIMITED	1
MAXIMUM HEIGHT ALLOWED	55	17'-11"
STRUCTURAL FRAME	0	0
BEARING WALLS (EXTERIOR)	0	0
BEARING WALL (INTERIOR)	0	0
NON-BEARING WALL (INTERIOR)	0	0
FLOOR CONSTRUCTION	0	0
ROOF CONSTRUCTION	0	0

MEANS OF EGRESS (TABLE 1004.5)

BUILDING AREA	PER 1004.6	OCCUPANT LOAD
A-5 BLEACHERS	18" PER OCCUPANT	100

MEANS OF EGRESS ELEMENT	REQUIRED	PROVIDED	SECTION
EXIT ACCESS TRAVEL DISTANCE	75'	18'-9"	TABLE 1006.2.1

FIRE AND SMOKE PROTECTION (CHAPTER 7)

ELEMENTS	REQUIRED	PROVIDED	SECTION
EXTERIOR WALLS	0	0	602/705
FIRE WALLS	0	0	706
FIRE BARRIERS	0	0	707
FIRE PARTITIONS	0	0	708
SMOKE BARRIERS	0	0	709
SMOKE PARTITIONS	0	0	710
HORIZONTAL ASSEMBLIES	0	0	711
VERTICAL OPENINGS	0	0	712
SHAFT ENCLOSURES	0	0	713

INTERIOR FINISHES (CHAPTER 8, SECTIONS 803 & 804)

FINISH TYPE	OCCUPANCY	MINIMUM REQUIRED FINISH CLASSIFICATION		
		INTRERIOR EXIT PASSAGEWAYS	CORRIDORS	ROOM AND ENCLOSED SPACES
WALLS & CEILINGS	A-5	CLASS A	CLASS A	CLASS C
FLOORING	A-5	CLASS A	CLASS A	CLASS C

FIRE PROTECTION SYSTEMS (CHAPTER 9)

ELEMENTS	REQUIRED	PROVIDED	SECTION
AUTOMATIC SPRINKLER	N	N	903
ALTERNATIVE AUTO FIRE EXT	N	N	904
STANDPIPE	N	N	905
PORTABLE FIRE EXTINGUISHER	Y	1	906
FIRE ALARM & DERECTION	N	N	907
EMERGENCY ALARM	N	N	908
SMOKE CONTROL SYSTEM	N	N	909
SMOKE & HEAT VENTS	N	N	910
FIRE COMMAND CENTER	N	N	911
CARBON MONOXIDE DETACTION	N	N	915

PORTABLE FIRE EXTINGUISHERS: PROVIDE MINIMUM 2-A EXTINGUISHER
MIN. 1 UNIT OF A PER 3,000 SF,
MIN.1 UNIT OF EXTINGUISHER PER 11,250 SF,
MAX. 75' TRAVEL DISTANCE TO EXTINGUISHER
(906.3 FCNYS)

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 020682
PATRIOT DESIGN & CONSULTING
STILL SERVING

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NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

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REGISTERED ARCHITECT FRANCINE WALLACE 037384 STATE OF NEW YORK
REGISTRATION EXPIRES: 2/28/2026

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	FSW
DRAWN BY:	AWM
FIELD CHECK:	CRB
APPROVED:	FSW

SHEET TITLE:
BLEACHER ENCLOSURE
– LIFE SAFETY PLAN
AND SUMMARY

DRAWING NUMBER:
G–007

SHEET OF

36x24 PLOT SHEET
Jun 30,2025 – 1:49pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ARCH CAD 2022 G-007.dwg

CONSTRUCTION CONTRACT
DRAWINGS LEGEND:

- 280 — CONTOUR LINE MAJOR
- 281 — CONTOUR LINE MINOR
- X — FENCE
- OH — OVERHEAD UTILITY LINE
- ST — STORM SEWER LINE
- W — WATER LINE
- UGE — UNDERGROUND ELECTRIC WIF
- E — UTILITY ELECTRICAL METER
- USACE WETLAND AREA
- USACE WETLAND BORDER
- INV=266.3 — INVERT ELEVATION
- SIGN
- UTILITY POLE
- CP 12 DOCK SPIKE SET N 853,136.62 E 751,423.644 ELEV 505.02' — HORIZONTAL CONTROL POINTS
- MONITORING WELL
- FENCE POST
- DECIDUOUS TREE
- LIGHTING
- SOIL BORING OR INFILTRATION TEST LOCATION

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

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STATE OF NEW YORK · BRIAN PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
EXISTING CONDITIONS

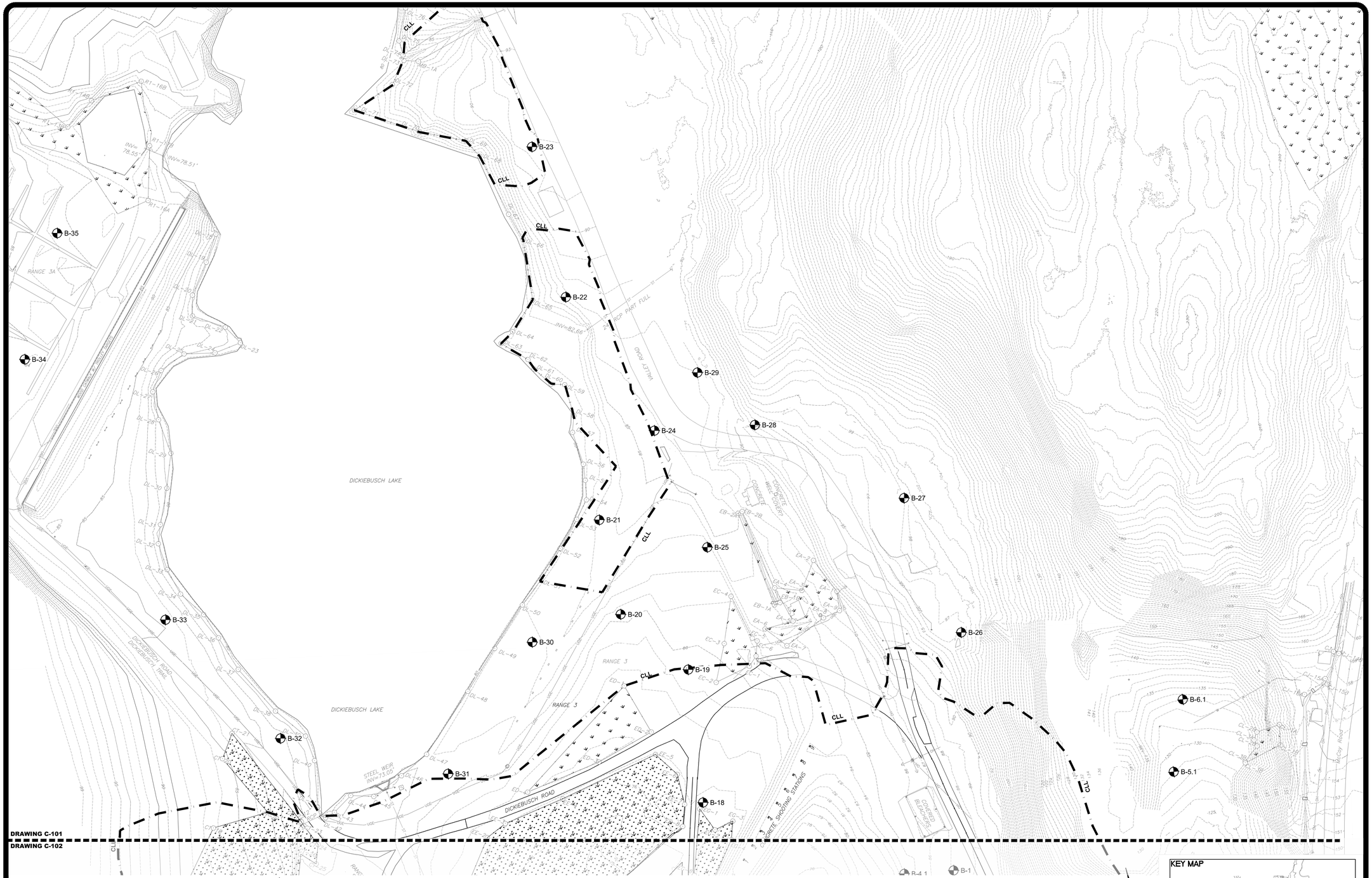
DRAWING NUMBER:
C–100

SHEET 8 OF 89

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 02,2025 – 12:41pm
C:\workfiles\environmental design partnership\sharepoint site - documents\0 A-Z\westchester\cortlandt manor\camp smith road\cgs-firing range-se-081\05-dwg\detailed plans\SHEETS\C-100.dwg



SOIL BORING, INFILTRATION TEST, ROCK INVESTIGATION INFORMATION:

THE FOLLOWING ROCK INVESTIGATION WAS PERFORMED ON JUNE 2, 2022 AND WERE OBSERVED BY THE ENVIRONMENTAL DESIGN PARTNERSHIP, LLP. THE FOLLOWING SOIL BORINGS AND INFILTRATION TESTS WERE PERFORMED ON JUNE 14, 2022 AND WERE OBSERVED BY ATLANTIC TESTING LABORATORIES.

B–18		B–24		B–31	
>78"	NO BEDROCK/REFUSAL ENCOUNTERED CLAY	>96"	NO BEDROCK ENCOUNTERED	59"	NO BEDROCK/REFUSAL ENCOUNTERED MANY COBBLES
B–19		B–25		B–32	
>78"	NO BEDROCK/REFUSAL, CLAY, COBBLES	>90	NO BEDROCK ENCOUNTERED, CLAY	>90"	NO BEDROCK/REFUSAL ENCOUNTERED
B–20		B–26		B–33	
42"	ENCOUNTERED REFUSAL	>90"	NO BEDROCK ENCOUNTERED, SANDY CLAY	>90"	NO BEDROCK/REFUSAL ENCOUNTERED, SOME COBBLES
B–21		B–27		B–34	
>48"	NO BEDROCK/REFUSAL ENCOUNTERED	>90"	NO BEDROCK ENCOUNTERED, CLAY	>90"	NO BEDROCK/REFUSAL ENCOUNTERED
B–22		B–28		B–35	
>78"	NO BEDROCK/REFUSAL, CLAY	36"	BEDROCK/REFUSAL	>90"	NO BEDROCK/REFUSAL ENCOUNTERED
B–23		B–29			
>67.2	NO BEDROCK ENCOUNTERED, COBBLES	12"	BEDROCK/REFUSAL		
		B–30			
		42"	NO BEDROCK, COBBLES		

B–5.1	
0"–2"	TOPSOIL & ORGANIC MATERIAL
3"–24"	BROWN SILT, SOME FINE SAND, TRACE CLAY & ORGANIC MATERIAL
24"–48"	BROWN CLAY, SOME MF GRAVEL, TRACE FINE SAND AND SILT
48"–72"	BROWN CMF GRAVEL, LITTLE CMF SAND, TRACE SILT
72"–96"	BROWN CMF SAND, SOME MF GRAVEL, TRACE SILT
96"–120"	BROWN CMF GRAVEL, LITTLE CMF SAND, TRACE SILT

GROUNDWATER AT 59" BGS

B–6.1	
0"–24"	BROWN CLAY, SOME MF GRAVEL, TRACE FINE SAND, TRACE SILT, TRACE ORGANIC MATERIAL
24"–48"	BROWN CMF SAND, SOME MF GRAVEL, TRACE SILT
48"–72"	BROWN MF GRAVEL, LITTLE CMF SAND, TRACE SILT
72"–96"	BROWN CMF GRAVEL, LITTLE CMF SAND, TRACE SILT
96"–120"	GREY CMF GRAVEL, LITTLE CMF SAND, TRACE SILT

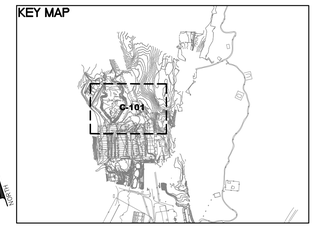
GROUNDWATER AT 36" BGS

GRAPHIC SCALE

50 40 30 20 10 0 25 50 100 200

(IN FEET)
1" = 50'

KEY MAP



REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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C:\workfiles\environmental design partnership\sharepoint site - documents\0 A-Z\westchester\cortlandt manor\camp smith road\vgs-firing range-se-081\05-dwg\detailed plans\SHEETS\C-101.dwg

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · JOSEPH PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

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PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
SOIL BORING LOCATIONS

DRAWING NUMBER:
C–101

SHEET OF

DRAWING C-101
DRAWING C-102

SOIL BORING, INFILTRATION TEST, ROCK INVESTIGATION INFORMATION:

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B-1	59"	BEDROCK/REFUSAL	B-9	>48"	BEDROCK/REFUSAL
B-2	45"	BEDROCK/REFUSAL	B-10	>36"	BEDROCK/REFUSAL
B-3	71"	BEDROCK/REFUSAL; MAY BE COBBLES	B-11	>89"	NO BEDROCK/REFUSAL ENCOUNTERED
B-4	>72"	BEDROCK/REFUSAL; EXPOSED BOULDERS NEARBY	B-12	30"	BEDROCK/REFUSAL
B-5	>24"	REFUSAL AT 24"; APPEARS TO BE SOME SORT OF BASE, NOT BEDROCK.	B-13	>76"	NO BEDROCK/REFUSAL ENCOUNTERED
B-6	>78"	NO BEDROCK/REFUSAL ENCOUNTERED	B-14	>76"	NO BEDROCK/REFUSAL ENCOUNTERED
B-7	>68"	BEDROCK/REFUSAL	B-15	>76"	NO BEDROCK/REFUSAL ENCOUNTERED
B-8	>96"	NO BEDROCK/REFUSAL ENCOUNTERED	B-16	>78"	NO BEDROCK/REFUSAL ENCOUNTERED
B-17	>78"	NO BEDROCK/REFUSAL ENCOUNTERED HEAVY GRAVEL IN THIS AREA			
B-37	>84"	NO BEDROCK/REFUSAL ENCOUNTERED			
B-38	>84"	NO BEDROCK/REFUSAL ENCOUNTERED			
B-39	>84"	NO BEDROCK/REFUSAL ENCOUNTERED, MUD/MUCK, GROUNDWATER AT SURFACE.			
B-40	0"	BEDROCK FACE			
B-41	0"	BEDROCK FACE			

B-1.1
0"–2" TOPSOIL & ORGANIC MATERIAL
2"–48" BROWNISH GRAY CMF GRAVEL LITTLE CMF SAND
48"–72" BROWN SILT, AND MF GRAVEL, LITTLE CMF SAND
72"–120" BROWN CLAY; SOME SILT, LITTLE FINE GRAVEL
GROUNDWATER AT 50.4" BGS

B-2.1
0"–3" TOPSOIL & ORGANIC MATERIAL
3"–24" BROWN CMF SAND, SOME MF GRAVEL
24"–48" BROWN CLAY, LITTLE SILT, TRACE FINE SAND
48"–120" BROWN SILT, LITTLE CLAY, TRACE FINE SAND
GROUNDWATER AT 104.4" BGS

B-3.1
0"–5" TOPSOIL & ORGANIC MATERIAL
5"–24" GRAY CMF SAND, LITTLE SILT & MF GRAVEL; TRACE CLAY; TRACE ORGANIC MATERIALS
24"–48" BROWN CLAY; LITTLE SILT, TRACE F SAND (MOIST, PLASTIC)
48"–72" BROWN SILT, TRACE F. SAND, TRACE CLAY (WET, VERY SLIGHTLY PLASTIC)
72"–96" BROWN CLAY, LITTLE SILT, TRACE F. SAND
96"–120" BROWN SILT, LITTLE CLAY, TRACE F. SAND (WET, SLIGHTLY PLASTIC)

B-4.1
0"–5" TOPSOIL & ORGANIC MATERIAL
5"–24" BROWN MF SAND, LITTLE CMF SAND, TRACE SILT AND ORGANIC MATERIALS
24"–48" WHITE COARSE GRAVEL
48"–72" GRAY CMF GRAVEL, LITTLE CMF SAND
72"–96" GRAY MF GRAVEL, LITTLE CMF SAND, LITTLE SILT, TRACE CLAY
GROUNDWATER AT 46.8" BGS

KEY MAP

GRAPHIC SCALE
50 40 30 20 10 0 25 50 100 200
(IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

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SHEET TITLE:
SOIL BORING LOCATIONS

DRAWING NUMBER:
C–102

SHEET OF

36x24 PLOT SHEET
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C:\workfiles\environmental design partnership\sharepoint site – documents\0 A–Z\westchester\cortlandt manor\camp smith road\ogs–firing range–se–081\05–dwg\detailed plans\SHEETS\C–102.dwg

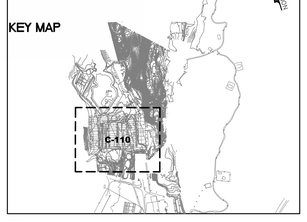
REMOVALS PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROVIDE ALL REMOVALS INCIDENTAL TO AND NECESSARY TO PROVIDE THE WORK OF THIS CONTRACT. REMOVE EXISTING FEATURES IN THEIR ENTIRETY UNLESS OTHERWISE NOTED.
4. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
5. RESTORE TO THEIR ORIGINAL CONDITION ALL EXISTING PHYSICAL FEATURES DAMAGED BY THE UNAUTHORIZED ACT OR OMISSION OF THE CONTRACTOR. ORIGINAL CONDITION SHALL MEAN THE CONDITION IN WHICH THE FEATURE WAS FOUND AT THE START OF THE WORK.
6. SEE DRAWING C–112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN–EXPLODED ORDINANCE IS ENCOUNTERED.
7. EXISTING BARRICADES TO BE REUSED ON SITE ALONG FIRING PLATFORMS. BARRICADES TO BE SET BY THE FACILITY AND COORDINATED WITH THE DIRECTOR'S REPRESENTATIVE, IF NEEDED, DURING CONSTRUCTION.

REMOVALS PLAN KEY:

1. POSTS AND SIGN TO BE REMOVED AND DISPOSED OF OFFSITE IN AN APPROVED MANNER.
2. CLEAR TREES AND GRUB STUMPS AND ROOTS PER SPECIFICATIONS.
3. SAW CUT SMOOTHLY AND EVENLY ALONG EXISTING PAVEMENT. IN THE EVENT OF ANY DAMAGE TO THE EXISTING PAVEMENT REPAIR IT AND RESTORE IT TO ITS ORIGINAL CONDITION.
4. AREA OF EXISTING ASPHALT PAVEMENT AND SUBBASE TO BE FULLY REMOVED. ASSUME 4" OF PAVEMENT AND 12" OF SUBBASE. TOTAL AREA ALL DRAWINGS = 17,036± SF
5. AREA OF WETLAND DISTURBANCE. REFER TO WETLAND MITIGATION PLANS FOR DETAILS.
6. REMOVE STORM PIPE AND DISPOSE OF OFFSITE.
7. EXISTING SWING GATE TO REMAIN. PROTECT DURING CONSTRUCTION. IN THE EVENT OF ANY DAMAGE TO THE GATE, REPAIR AND RESTORE TO ORIGINAL CONDITION OR REPLACE IF NEEDED; TO BE DETERMINED BY OWNER'S REPRESENTATIVE.
8. EXISTING FLAG POLE TO BE RELOCATED. COORDINATE WITH DIRECTOR'S REPRESENTATIVE FOR SPECIFIC LOCATION.
9. REMOVE EXISTING GRAVEL. COORDINATE WITH DIRECTOR'S REPRESENTATIVE TO DETERMINE IF SUITABLE FOR REUSE AS FILL ON SITE. SEE SPECIFICATIONS.
10. REMOVE EXISTING CONCRETE. COORDINATE WITH DIRECTOR'S REPRESENTATIVE TO DETERMINE IF CRUSHED/BROKEN CONCRETE IS SUITABLE FOR REUSE AS FILL ON SITE OR OUTLET PROTECTION. SEE SPECIFICATIONS.
11. EXISTING 60" CONCRETE STORM PIPE TO BE PROTECTED THROUGHOUT CONSTRUCTION.
12. REMOVE RETAINING WALL AND WOOD CATWALK W/ TROLLEY TARGETS. SALVAGE WOOD CATWALK W/ TROLLEY TARGETS FOR REUSE ON–SITE AT THE DIRECTION OF THE DIRECTOR'S REPRESENTATIVE. SEE PHOTO REFERENCE 1 ON DRAWING C–111.
13. REMOVE CONCRETE RETAINING WALL. SEE PHOTO REFERENCE 2 ON DRAWING C–111.
14. EXISTING LANE MARKERS TO BE REMOVED AND SALVAGED FOR POTENTIAL REUSE ON SITE. CONTRACTOR TO COORDINATE WITH DIRECTOR'S REPRESENTATIVE PRIOR TO APPROVAL.
15. EXISTING SHOOTING STANDS TO BE REMOVED.
16. EXISTING COVERED MESS SHELTER TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH DIRECTOR'S REPRESENTATIVE FOR DETAILS ON RELOCATION.
17. 9 LANE MARKERS TO BE REMOVED AND SALVAGED.
18. EXISTING ROCK WALL TO BE REMOVED. SEE PHOTO REFERENCE 3 ON DRAWING C–111.

KEY MAP



GRAPHIC SCALE

50 40 30 20 10 0 25 50 100 200
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PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
REMOVALS PLAN

DRAWING NUMBER:
C–110

SHEET OF

36x24 PLOT SHEET

Jul 02,2025 – 12:42pm
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1 C-111 **RETAINING WALL, WOOD TARGETS, TROLLY, ETC.**
NOT TO SCALE

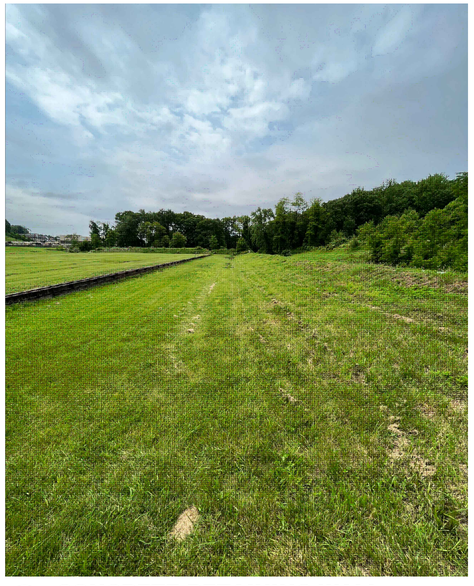
3 C-111 **ROCK WALL**
NOT TO SCALE

4 C-111 **EXAMPLE OF UNEXPLODED ORDNANCE**
NOT TO SCALE

NOTES:

PHOTO REFERENCES 1, 2, AND 3 ARE UNTITLED IMAGES TAKEN BY C.R. WILKINSON ON JUNE, 1, 2022 FOR THE ENVIRONMENTAL DESIGN PARTNERSHIP. PHOTOS WERE UTILIZED ON OCTOBER 19TH, 2023.

PHOTO REFERENCES 4 AND 5 ARE UNTITLED IMAGES TAKEN BY AN UNKNOWN ENTITY ON AN UNKNOWN DATE FROM A PUBLICATION ENTITLED, "UNEXPLODED ORDNANCE (UXO) SAFETY), PREPARED BY OR FOR THE UNITED STATES DEPARTMENT OF THE ARMY, POSTED ONLINE IN JULY, 2009.



2 C-111 **CONCRETE RETAINING WALL**
NOT TO SCALE

5 C-111 **EXAMPLE OF UNEXPLODED ORDNANCE**
NOT TO SCALE

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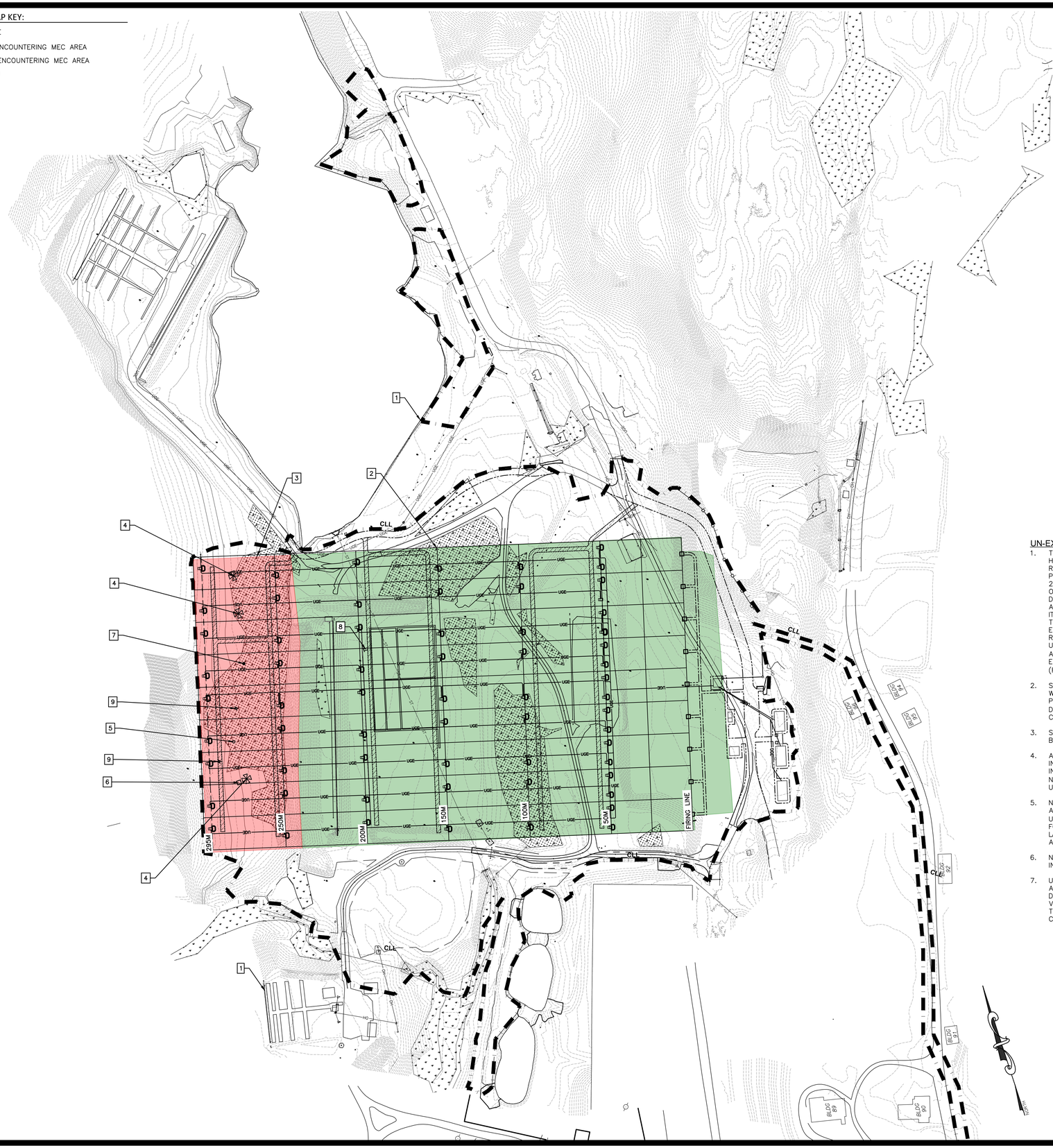
SHEET TITLE:
REMOVAL PLAN PHOTOS

DRAWING NUMBER:
C-111

SHEET OF

UN-EXPLODED ORDNANCE RISK MAP KEY:

1. LIMITS OF SURFACE DANGER ZONE
2. LIMITS OF LOW PROBABILITY OF ENCOUNTERING MEC AREA
3. LIMITS OF HIGH PROBABILITY OF ENCOUNTERING MEC AREA
4. 3" STOKES MORTAR (3) REMOVED
5. 40 MM GR TP DEBRIS
6. 40 MM GR TP
7. 2.36 ROCKET MOTOR
8. SMALL ARMS CASING
9. MOVER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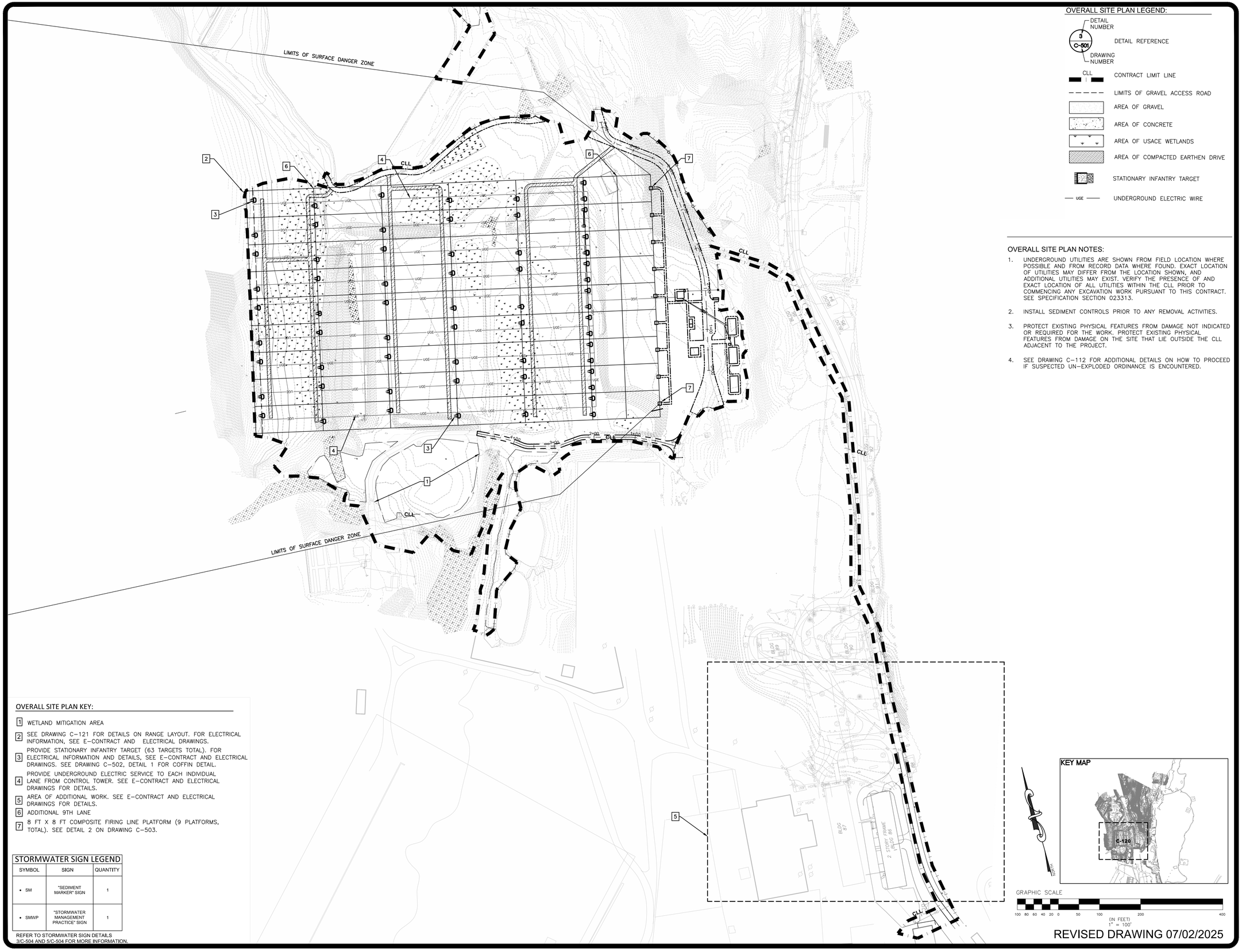

OVERALL SITE PLAN LEGEND:

- DETAIL NUMBER / 3 / C-501 / DRAWING NUMBER — DETAIL REFERENCE
- CLL — CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

OVERALL SITE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. SEE DRAWING C-112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN-EXPLODED ORDINANCE IS ENCOUNTERED.

OVERALL SITE PLAN KEY:

1. WETLAND MITIGATION AREA
2. SEE DRAWING C-121 FOR DETAILS ON RANGE LAYOUT. FOR ELECTRICAL INFORMATION, SEE E-CONTRACT AND ELECTRICAL DRAWINGS.
3. PROVIDE STATIONARY INFANTRY TARGET (63 TARGETS TOTAL). FOR ELECTRICAL INFORMATION AND DETAILS, SEE E-CONTRACT AND ELECTRICAL DRAWINGS. SEE DRAWING C-502, DETAIL 1 FOR COFFIN DETAIL.
4. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
5. AREA OF ADDITIONAL WORK. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
6. ADDITIONAL 9TH LANE
7. 8 FT X 8 FT COMPOSITE FIRING LINE PLATFORM (9 PLATFORMS, TOTAL). SEE DETAIL 2 ON DRAWING C-503.

STORMWATER SIGN LEGEND

SYMBOL	SIGN	QUANTITY
• SM	"SEDIMENT MARKER" SIGN	1
• SMWP	"STORMWATER MANAGEMENT PRACTICE" SIGN	1

REFER TO STORMWATER SIGN DETAILS 3/C-504 AND 5/C-504 FOR MORE INFORMATION.

KEY MAP

GRAPHIC SCALE

100 80 60 40 20 0 50 100 200 400
(IN FEET)
1" = 100'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
OVERALL SITE PLAN

DRAWING NUMBER:
C-120

SHEET OF

36x24 PLOT SHEET

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CONSTRUCTION CONTRACT DRAWINGS LEGEND:

- 3 / C-501 — DETAIL REFERENCE (3 = DETAIL NUMBER; C-501 = DRAWING NUMBER)
- CLL — CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
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- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

SITE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. NEVER PICK UP OR DISTURB SHELL CASINGS OR PROJECTILE FRAGMENTS ON A RANGE SITE. MOVEMENT, HEAT, OR IMPACT CAN STILL TRIGGER UNEXPLODED ORDNANCE (INTACT OR FRAGMENTED) THAT HAS LAIN DORMANT FOR YEARS. DO NOT COLLECT SPENT AMMUNITION – IT IS AGAINST FEDERAL LAW TO REMOVE ORDNANCE FROM AN INSTALLATION WITHOUT PROPER AUTHORITY.

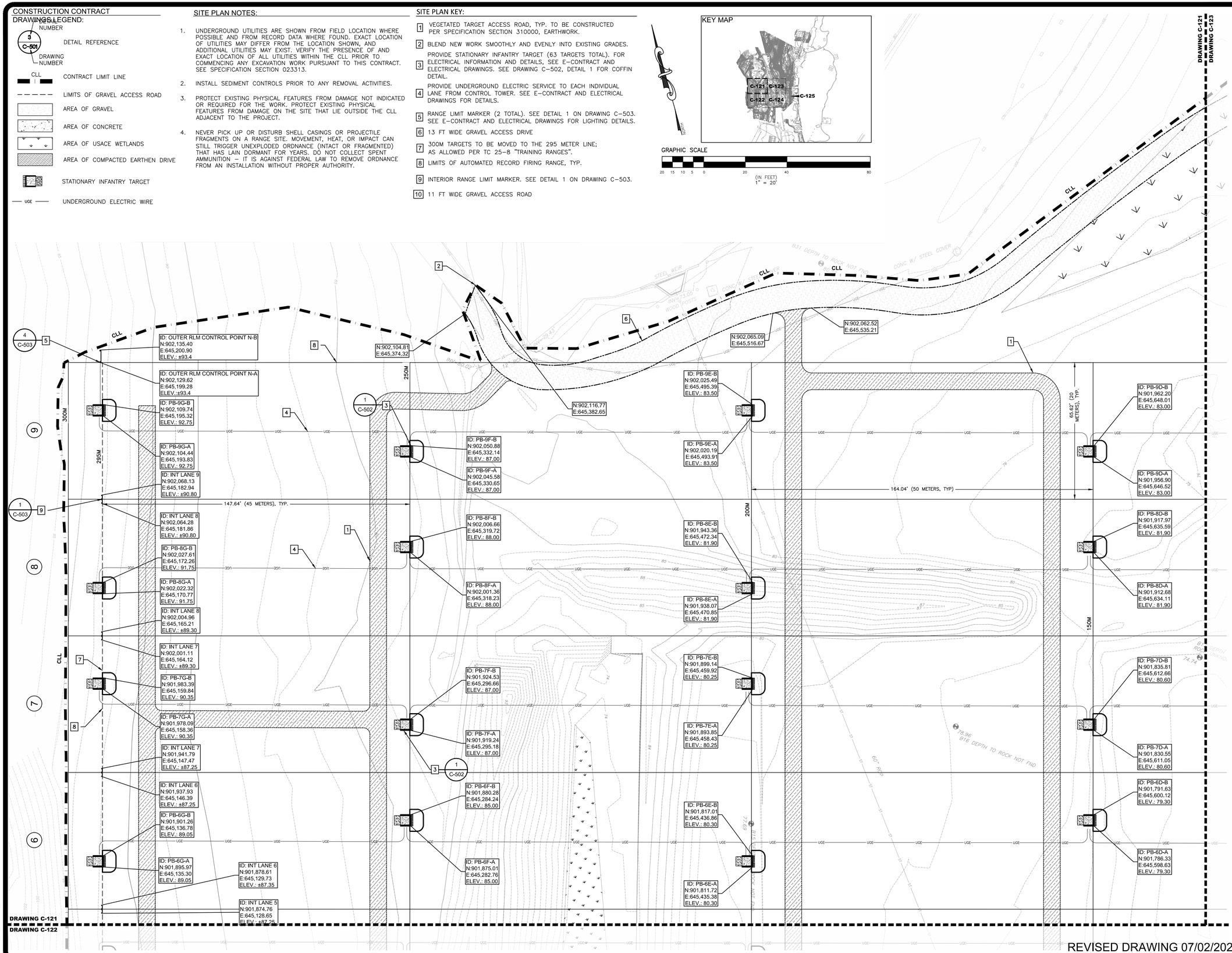
SITE PLAN KEY:

1. VEGETATED TARGET ACCESS ROAD, TYP. TO BE CONSTRUCTED PER SPECIFICATION SECTION 310000, EARTHWORK.
2. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING GRADES.
3. PROVIDE STATIONARY INFANTRY TARGET (63 TARGETS TOTAL). FOR ELECTRICAL INFORMATION AND DETAILS, SEE E-CONTRACT AND ELECTRICAL DRAWINGS. SEE DRAWING C-502, DETAIL 1 FOR COFFIN DETAIL.
4. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
5. RANGE LIMIT MARKER (2 TOTAL). SEE DETAIL 1 ON DRAWING C-503. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR LIGHTING DETAILS.
6. 13 FT WIDE GRAVEL ACCESS DRIVE
7. 300M TARGETS TO BE MOVED TO THE 295 METER LINE; AS ALLOWED PER TC 25-8 "TRAINING RANGES".
8. LIMITS OF AUTOMATED RECORD FIRING RANGE, TYP.
9. INTERIOR RANGE LIMIT MARKER. SEE DETAIL 1 ON DRAWING C-503.
10. 11 FT WIDE GRAVEL ACCESS ROAD

KEY MAP

GRAPHIC SCALE

20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'



36x24 PLOT SHEET

REVISED DRAWING 07/02/2025

Jul 02,2025 - 12:43pm
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NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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⚠ BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

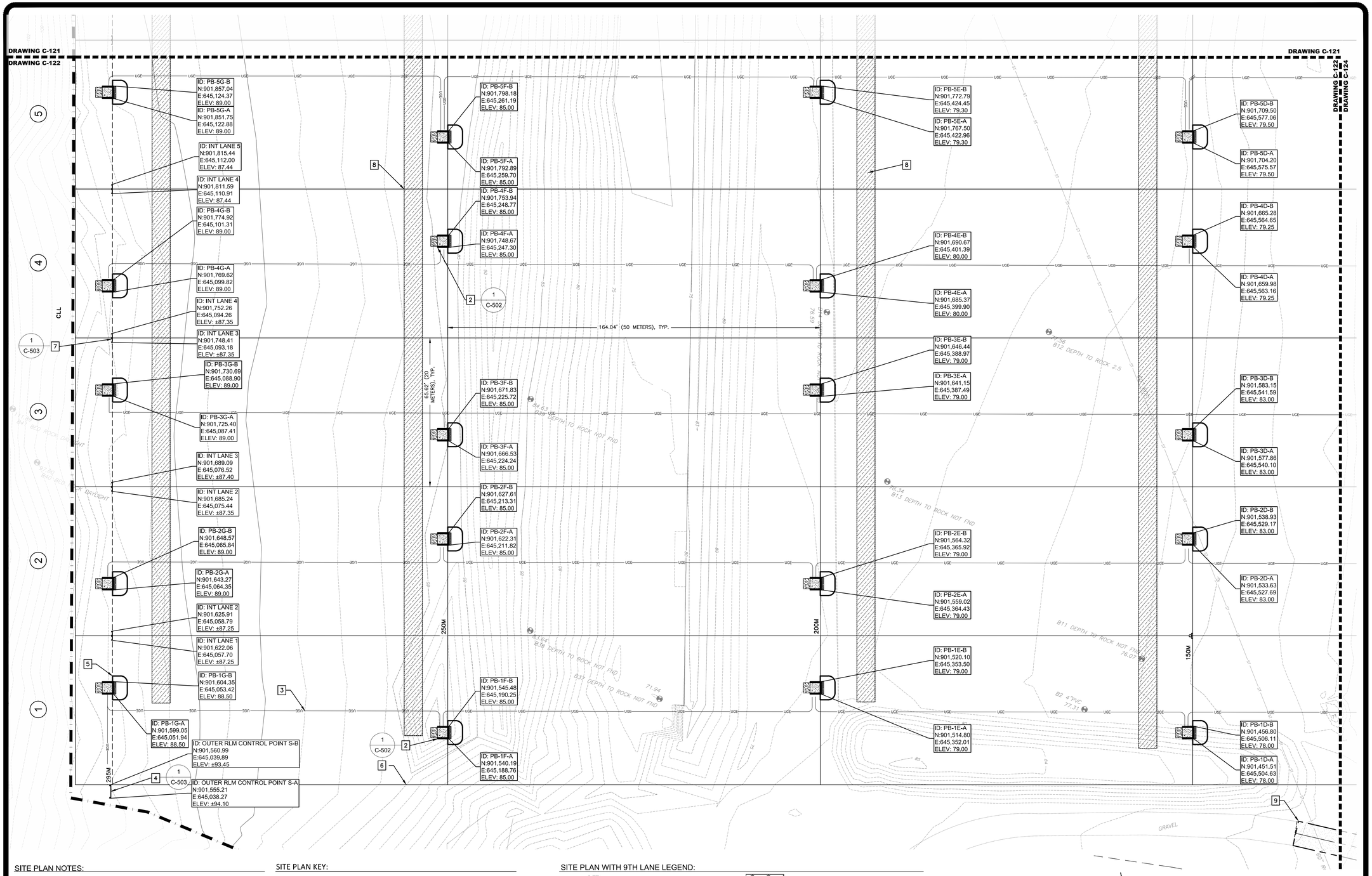
SHEET TITLE:

SITE PLAN

DRAWING NUMBER:

C-121

SHEET OF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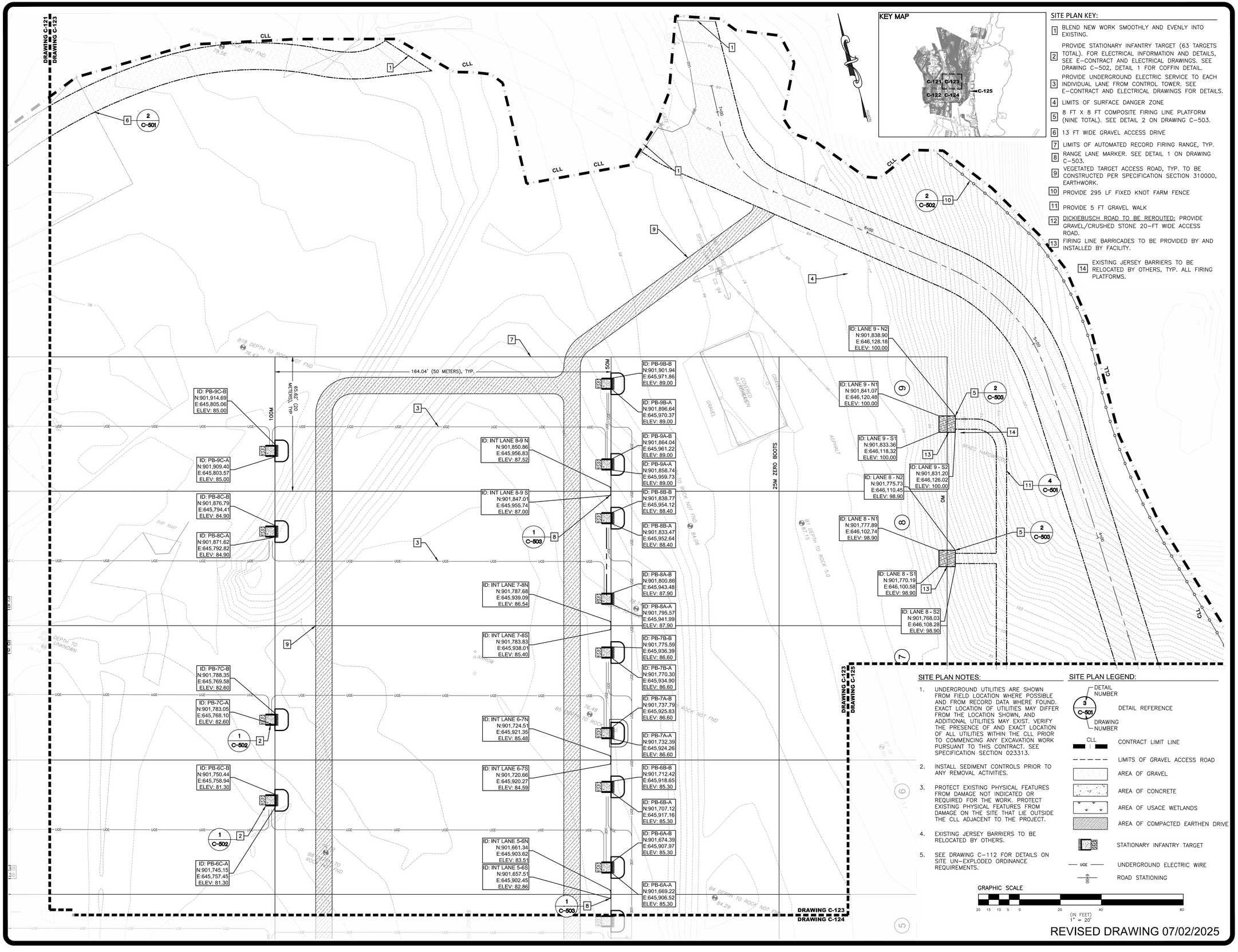
164.04' (50 METERS), TYP.
65.62' (20 METERS), TYP.
250M
200M
150M
295M
CLL
UGE
B13 DEPTH TO ROCK NOT FND
B12 DEPTH TO ROCK 2.5
B11 DEPTH TO ROCK NOT FND
B10 DEPTH TO ROCK NOT FND
B9 DEPTH TO ROCK NOT FND
B8 DEPTH TO ROCK NOT FND
B7 DEPTH TO ROCK NOT FND
B6 DEPTH TO ROCK NOT FND
B5 DEPTH TO ROCK NOT FND
B4 DEPTH TO ROCK NOT FND
B3 DEPTH TO ROCK NOT FND
B2 4"PVC
GRAVEL
ROCK OUTCROP
TREELINE
TREE LINE
TREE LINE TO BE REMOVED
TREE LINE TO BE REMOVED
TREE LINE TO BE REMOVED



SITE PLAN KEY:

1. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
2. PROVIDE STATIONARY INFANTRY TARGET (63 TARGETS TOTAL). FOR ELECTRICAL INFORMATION AND DETAILS, SEE E–CONTRACT AND ELECTRICAL DRAWINGS. SEE DRAWING C–502, DETAIL 1 FOR COFFIN DETAIL.
3. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E–CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
4. LIMITS OF SURFACE DANGER ZONE
5. 8 FT X 8 FT COMPOSITE FIRING LINE PLATFORM (NINE TOTAL). SEE DETAIL 2 ON DRAWING C–503.
6. 13 FT WIDE GRAVEL ACCESS DRIVE
7. LIMITS OF AUTOMATED RECORD FIRING RANGE, TYP.
8. RANGE LANE MARKER. SEE DETAIL 1 ON DRAWING C–503.
9. VEGETATED TARGET ACCESS ROAD, TYP. TO BE CONSTRUCTED PER SPECIFICATION SECTION 310000, EARTHWORK.
10. PROVIDE 295 LF FIXED KNOT FARM FENCE
11. PROVIDE 5 FT GRAVEL WALK
12. DICKIEBUSCH ROAD TO BE REROUTED: PROVIDE GRAVEL/CRUSHED STONE 20–FT WIDE ACCESS ROAD.
13. FIRING LINE BARRICADES TO BE PROVIDED BY AND INSTALLED BY FACILITY.
14. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS, TYP. ALL FIRING PLATFORMS.

SITE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
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5. SEE DRAWING C–112 FOR DETAILS ON SITE UN–EXPLODED ORDINANCE REQUIREMENTS.

SITE PLAN LEGEND:

- DETAIL NUMBER / DRAWING NUMBER (e.g. 3 / C–501): DETAIL REFERENCE
- CLL: CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE: UNDERGROUND ELECTRIC WIRE
- 0+00: ROAD STATIONING

GRAPHIC SCALE
20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

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STATE OF NEW YORK · DON PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236
EXPIRES:09/30/2027

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CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
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CLIENT:
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SHEET TITLE:
SITE PLAN

DRAWING NUMBER:
C–123

SHEET OF

Jul 02,2025 - 12:49pm
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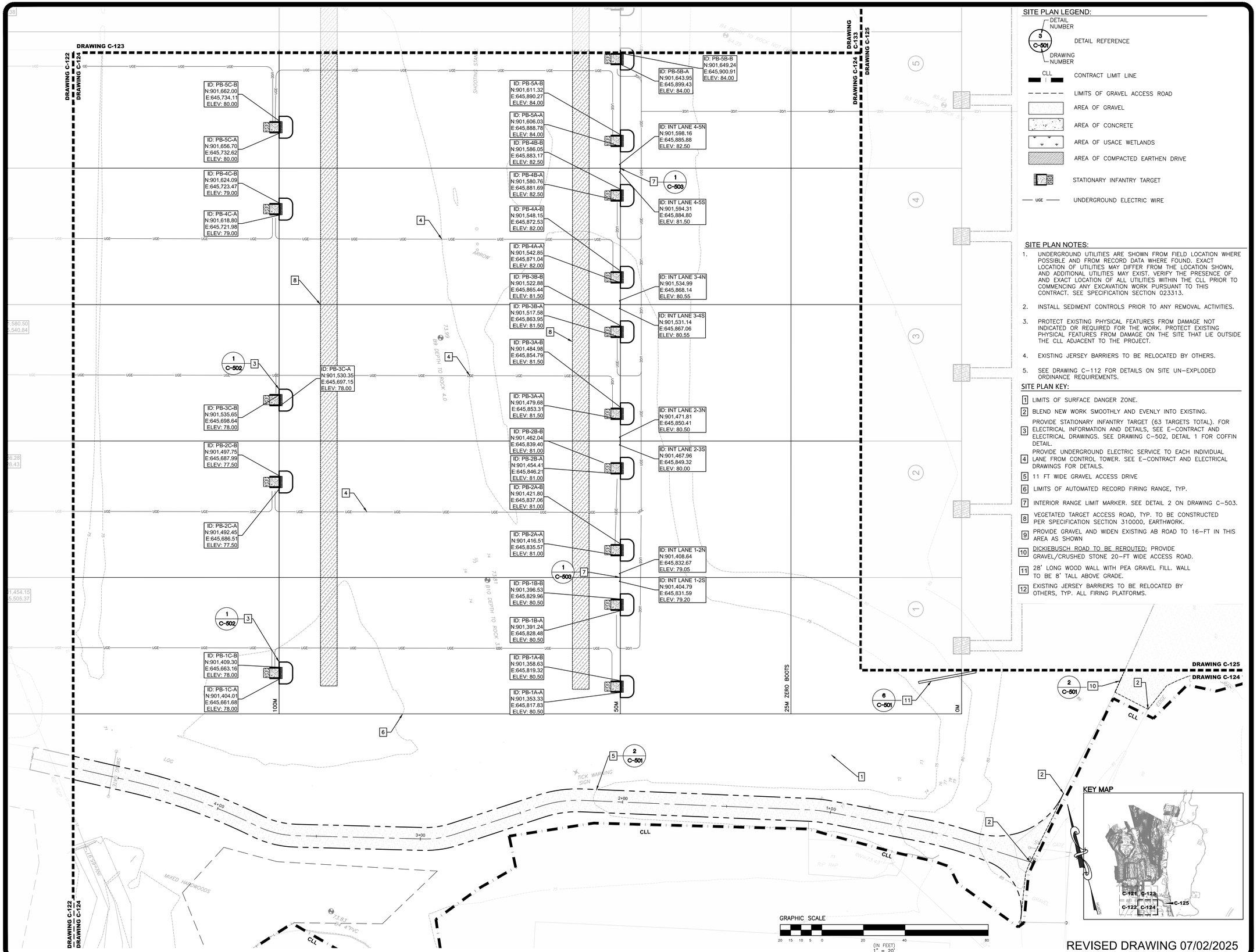
36x24 PLOT SHEET



SITE PLAN LEGEND:

- DETAIL NUMBER / DETAIL REFERENCE / DRAWING NUMBER (e.g. 3 / C-501)
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- LIMITS OF GRAVEL ACCESS ROAD
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SITE PLAN NOTES:

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4. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS.
5. SEE DRAWING C-112 FOR DETAILS ON SITE UN-EXPLODED ORDINANCE REQUIREMENTS.

SITE PLAN KEY:

1. LIMITS OF SURFACE DANGER ZONE.
2. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
3. PROVIDE STATIONARY INFANTRY TARGET (63 TARGETS TOTAL). FOR ELECTRICAL INFORMATION AND DETAILS, SEE E-CONTRACT AND ELECTRICAL DRAWINGS. SEE DRAWING C-502, DETAIL 1 FOR COFFIN DETAIL.
4. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
5. 11 FT WIDE GRAVEL ACCESS DRIVE
6. LIMITS OF AUTOMATED RECORD FIRING RANGE, TYP.
7. INTERIOR RANGE LIMIT MARKER. SEE DETAIL 2 ON DRAWING C-503.
8. VEGETATED TARGET ACCESS ROAD, TYP. TO BE CONSTRUCTED PER SPECIFICATION SECTION 310000, EARTHWORK.
9. PROVIDE GRAVEL AND WIDEN EXISTING AB ROAD TO 16-FT IN THIS AREA AS SHOWN
10. DICKIEBUSCH ROAD TO BE REROUTED: PROVIDE GRAVEL/CRUSHED STONE 20-FT WIDE ACCESS ROAD.
11. 28' LONG WOOD WALL WITH PEA GRAVEL FILL. WALL TO BE 8' TALL ABOVE GRADE.
12. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS, TYP. ALL FIRING PLATFORMS.

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

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STATE OF NEW YORK — JOHN PAUL OSTERHOUT — 079236 — LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE, 11 BEAR MOUNTAIN BRIDGE RD, CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE: SITE PLAN

DRAWING NUMBER: C-124

SHEET OF

36x24 PLOT SHEET

Jul 02,2025 - 12:45pm
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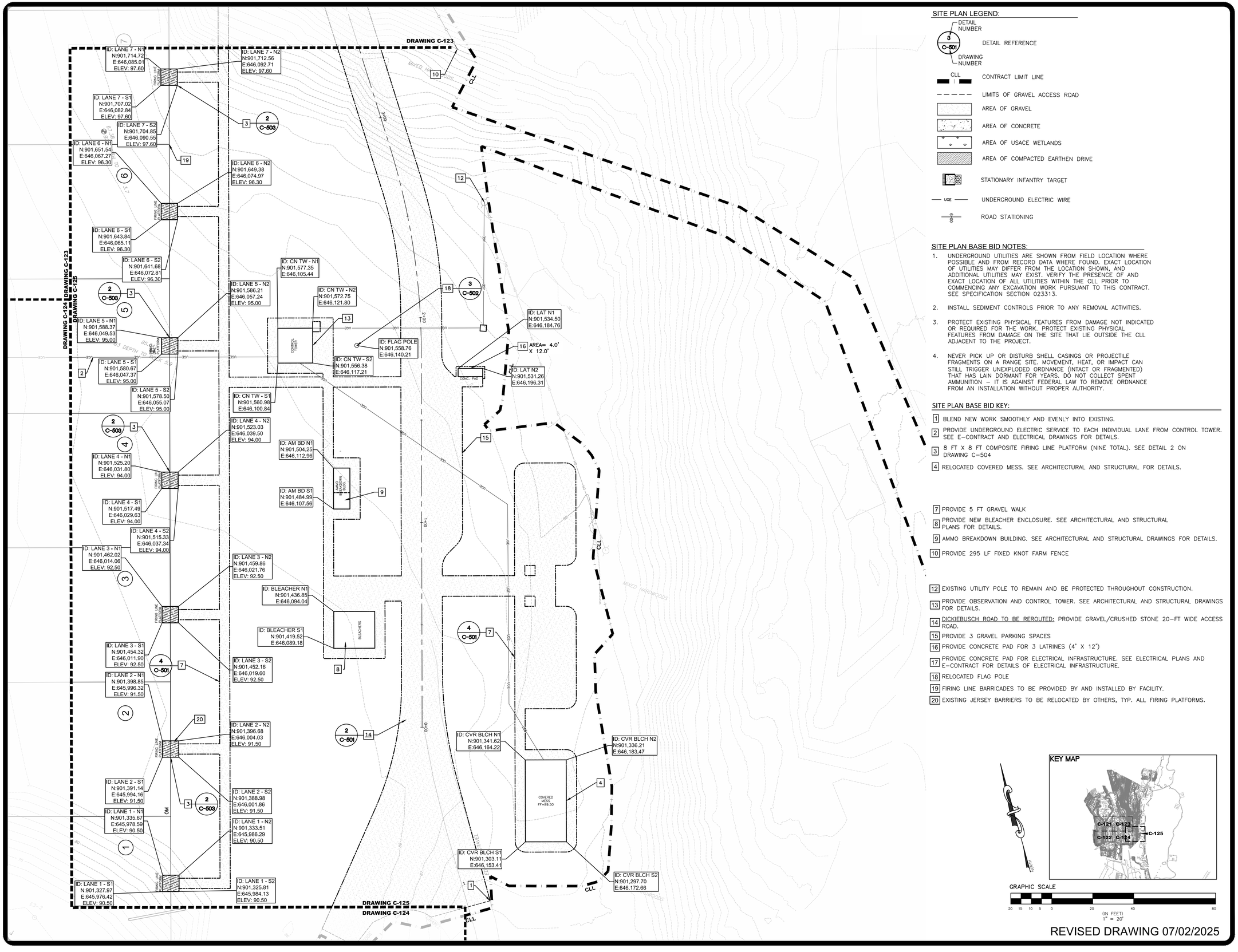

SITE PLAN LEGEND:

- DETAIL NUMBER / DRAWING NUMBER (e.g. 3 / C-501): DETAIL REFERENCE
- CLL: CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE: UNDERGROUND ELECTRIC WIRE
- 0+00: ROAD STATIONING

SITE PLAN BASE BID NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. NEVER PICK UP OR DISTURB SHELL CASINGS OR PROJECTILE FRAGMENTS ON A RANGE SITE. MOVEMENT, HEAT, OR IMPACT CAN STILL TRIGGER UNEXPLODED ORDNANCE (INTACT OR FRAGMENTED) THAT HAS LAIN DORMANT FOR YEARS. DO NOT COLLECT SPENT AMMUNITION – IT IS AGAINST FEDERAL LAW TO REMOVE ORDNANCE FROM AN INSTALLATION WITHOUT PROPER AUTHORITY.

SITE PLAN BASE BID KEY:

1. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
2. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E–CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
3. 8 FT X 8 FT COMPOSITE FIRING LINE PLATFORM (NINE TOTAL). SEE DETAIL 2 ON DRAWING C–504
4. RELOCATED COVERED MESS. SEE ARCHITECTURAL AND STRUCTURAL FOR DETAILS.
7. PROVIDE 5 FT GRAVEL WALK
8. PROVIDE NEW BLEACHER ENCLOSURE. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.
9. AMMO BREAKDOWN BUILDING. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
10. PROVIDE 295 LF FIXED KNOT FARM FENCE
12. EXISTING UTILITY POLE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
13. PROVIDE OBSERVATION AND CONTROL TOWER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
14. DICKIEBUSCH ROAD TO BE REROUTED: PROVIDE GRAVEL/CRUSHED STONE 20–FT WIDE ACCESS ROAD.
15. PROVIDE 3 GRAVEL PARKING SPACES
16. PROVIDE CONCRETE PAD FOR 3 LATRINES (4' X 12')
17. PROVIDE CONCRETE PAD FOR ELECTRICAL INFRASTRUCTURE. SEE ELECTRICAL PLANS AND E–CONTRACT FOR DETAILS OF ELECTRICAL INFRASTRUCTURE.
18. RELOCATED FLAG POLE
19. FIRING LINE BARRICADES TO BE PROVIDED BY AND INSTALLED BY FACILITY.
20. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS, TYP. ALL FIRING PLATFORMS.

GRAPHIC SCALE

20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236
EXPIRES:09/30/2027

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

⚠ BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE: SITE PLAN BASE BID

DRAWING NUMBER: C–125

SHEET OF

36X24 PLOT SHEET

Jul 03,2025 - 11:54am
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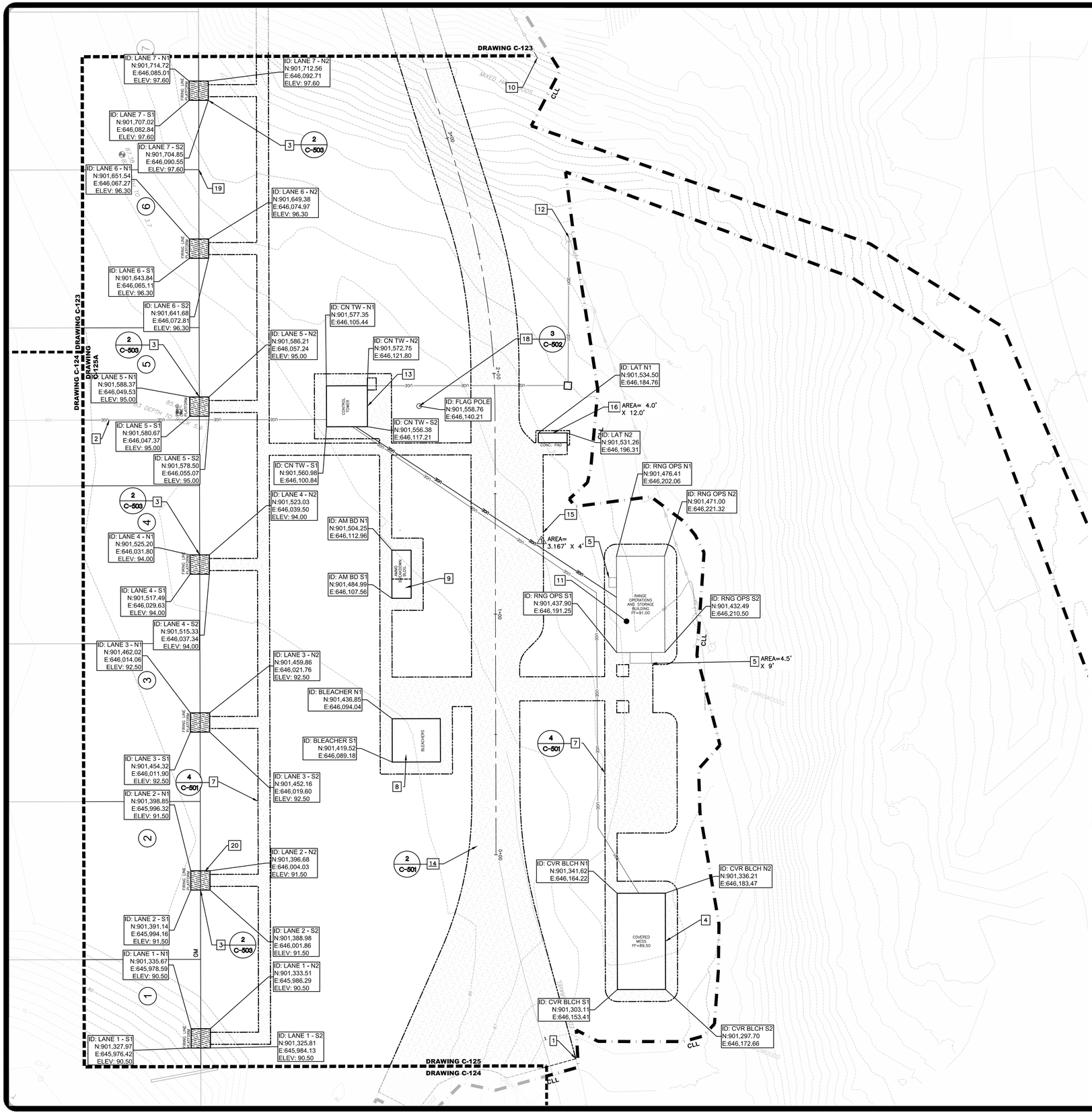

SITE PLAN LEGEND:

- DETAIL NUMBER / DETAIL REFERENCE / DRAWING NUMBER (e.g. 3 / C-501)
- CLL — CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE
- ROAD STATIONING

SITE PLAN ALTERNATE 1 NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
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4. NEVER PICK UP OR DISTURB SHELL CASINGS OR PROJECTILE FRAGMENTS ON A RANGE SITE. MOVEMENT, HEAT, OR IMPACT CAN STILL TRIGGER UNEXPLODED ORDNANCE (INTACT OR FRAGMENTED) THAT HAS LAIN DORMANT FOR YEARS. DO NOT COLLECT SPENT AMMUNITION – IT IS AGAINST FEDERAL LAW TO REMOVE ORDNANCE FROM AN INSTALLATION WITHOUT PROPER AUTHORITY.

SITE PLAN ALTERNATE 1 KEY:

1. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
2. PROVIDE UNDERGROUND ELECTRIC SERVICE TO EACH INDIVIDUAL LANE FROM CONTROL TOWER. SEE E-CONTRACT AND ELECTRICAL DRAWINGS FOR DETAILS.
3. 8 FT X 8 FT COMPOSITE FIRING LINE PLATFORM (NINE TOTAL). SEE DETAIL 2 ON DRAWING C-504
4. RELOCATED COVERED MESS. SEE ARCHITECTURAL AND STRUCTURAL FOR DETAILS.
5. PROVIDE CONCRETE PAD, DIMENSIONS AS SHOWN ON PLANS. SEE STRUCTURAL PLANS FOR PAD DETAILS. ALTERNATES No. 1
7. PROVIDE 5 FT GRAVEL WALK
8. PROVIDE NEW BLEACHER ENCLOSURE. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.
9. AMMO BREAKDOWN BUILDING. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
10. PROVIDE 295 LF FIXED KNOT FARM FENCE
11. PROVIDE 40-FT X 20-FT RANGE OPERATIONS AND STORAGE BUILDING SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS. ALTERNATE NO. 1
12. EXISTING UTILITY POLE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
13. PROVIDE OBSERVATION AND CONTROL TOWER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
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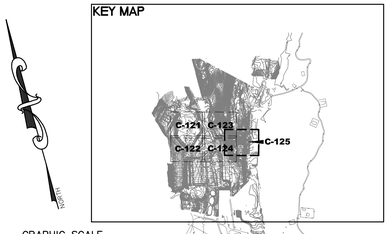
19. FIRING LINE BARRICADES TO BE PROVIDED BY AND INSTALLED BY FACILITY.
20. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS, TYP. ALL FIRING PLATFORMS.

KEY MAP



GRAPHIC SCALE

20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

BPO	7/02/2025	ADDENDUM NO. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
SITE PLAN ALTERNATE 1

DRAWING NUMBER:
C-125A

SHEET OF

Jul 03,2025 - 11:50am
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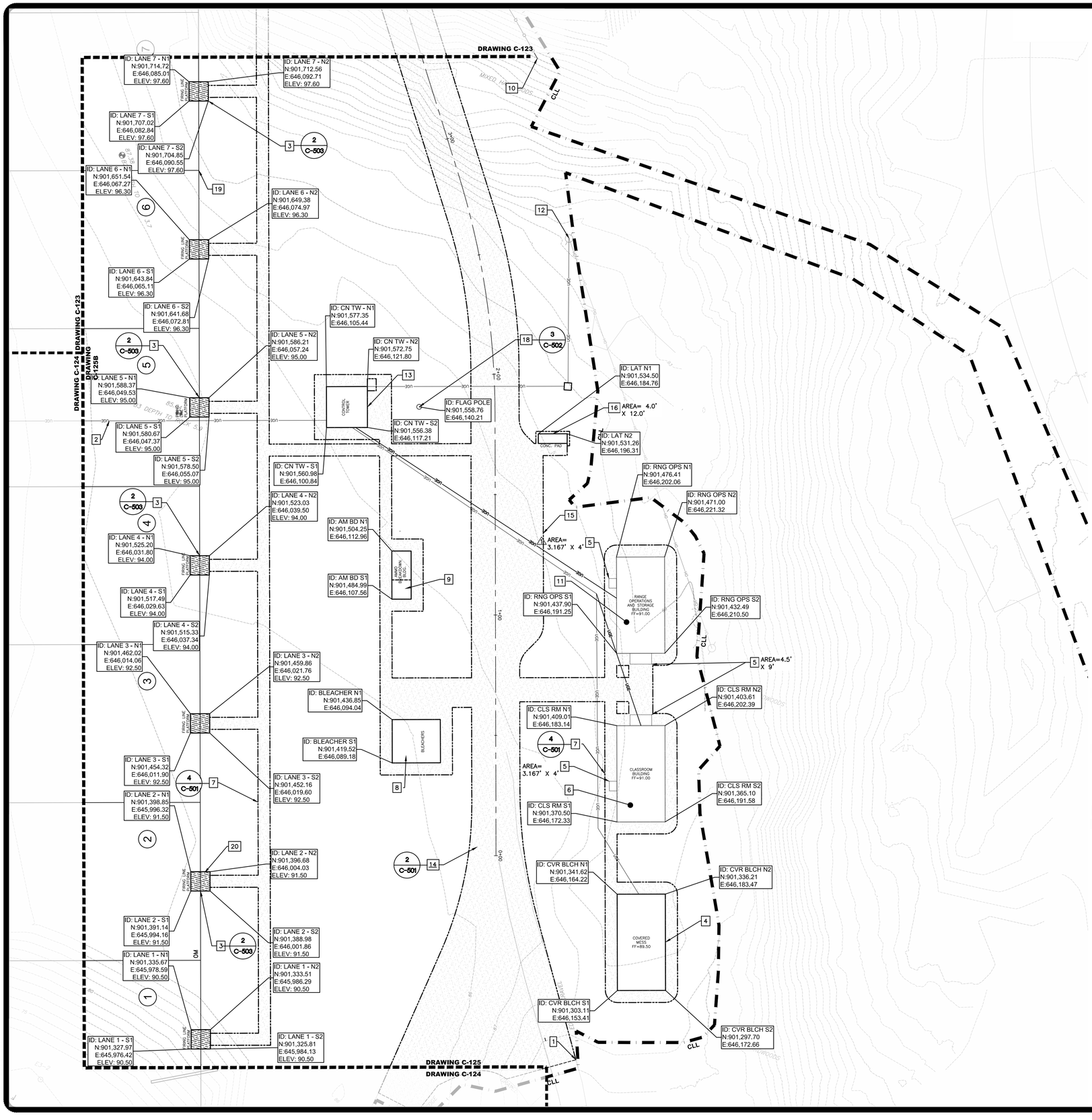
36X24 PLOT SHEET



SITE PLAN LEGEND:

- DETAIL NUMBER / DRAWING NUMBER (e.g. 3 / C-501): DETAIL REFERENCE
- CLL: CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- STATIONARY INFANTRY TARGET
- UGE: UNDERGROUND ELECTRIC WIRE
- ROAD STATIONING

SITE PLAN ALTERNATES 1 & 2 NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
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SITE PLAN ALTERNATES 1 & 2 KEY:

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3. 8 FT X 8 FT COMPOSITE FIRING LINE PLATFORM (NINE TOTAL). SEE DETAIL 2 ON DRAWING C–504
4. RELOCATED COVERED MESS. SEE ARCHITECTURAL AND STRUCTURAL FOR DETAILS.
5. PROVIDE CONCRETE PAD, DIMENSIONS AS SHOWN ON PLANS. SEE STRUCTURAL PLANS FOR PAD DETAILS. ALTERNATES No. 1 & No. 2
6. PROVIDE 40–FT X 20–FT RANGE CLASSROOM BUILDING. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS. ALTERNATE No. 2
7. PROVIDE 5 FT GRAVEL WALK
8. PROVIDE NEW BLEACHER ENCLOSURE. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS.
9. AMMO BREAKDOWN BUILDING. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
10. PROVIDE 295 LF FIXED KNOT FARM FENCE
11. PROVIDE 40–FT X 20–FT RANGE OPERATIONS AND STORAGE BUILDING SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS. ALTERNATE NO. 1
12. EXISTING UTILITY POLE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
13. PROVIDE OBSERVATION AND CONTROL TOWER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DETAILS.
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19. FIRING LINE BARRICADES TO BE PROVIDED BY AND INSTALLED BY FACILITY.
20. EXISTING JERSEY BARRIERS TO BE RELOCATED BY OTHERS, TYP. ALL FIRING PLATFORMS.

KEY MAP

GRAPHIC SCALE

20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

BPO	7/02/2025	ADDENDUM NO. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
SITE PLAN ALTERNATES 1 & 2

DRAWING NUMBER:
C–125B

SHEET OF

Jul 03,2025 – 11:50am
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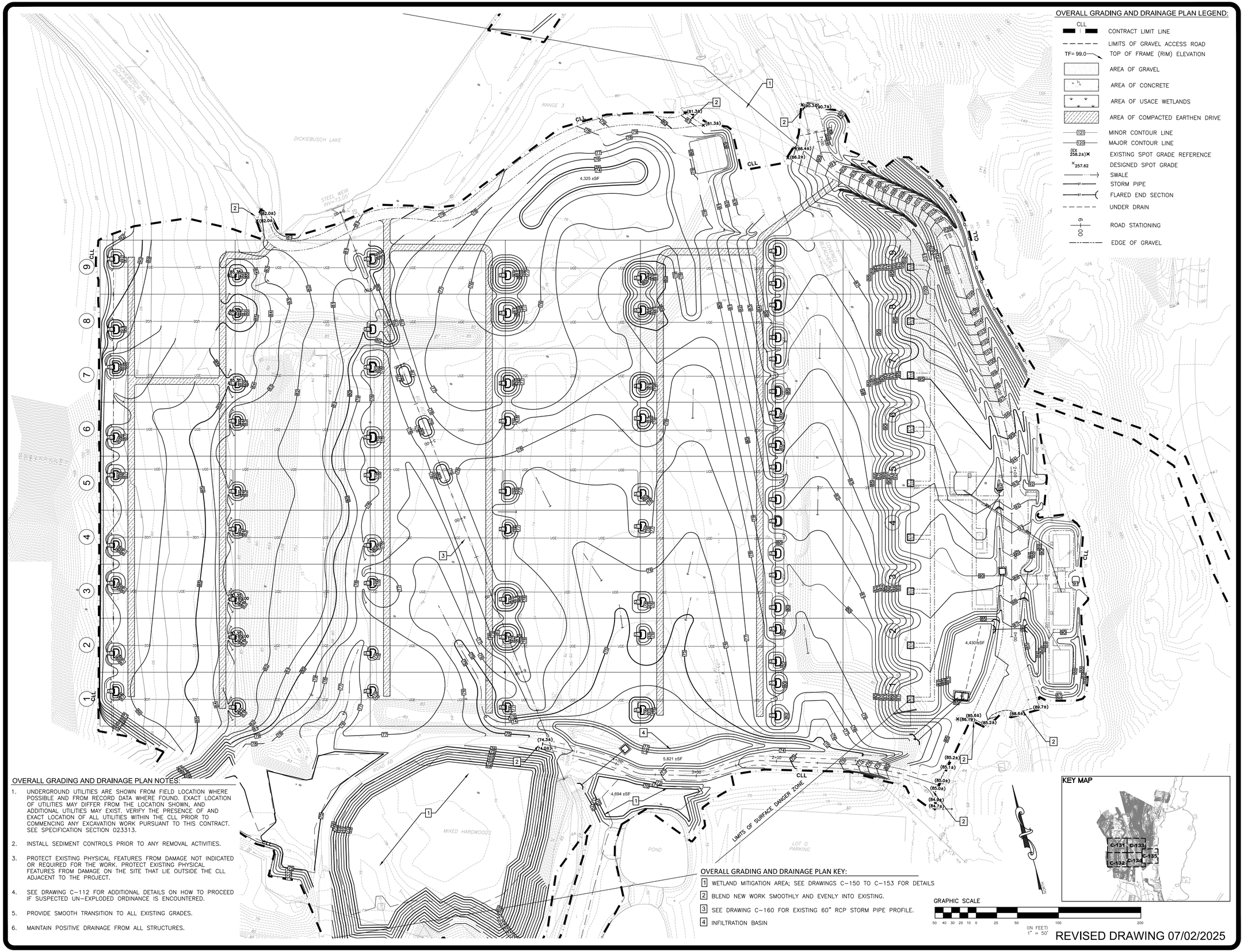
36X24 PLOT SHEET



OVERALL GRADING AND DRAINAGE PLAN LEGEND:

- CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- TF= 99.0 — TOP OF FRAME (RIM) ELEVATION
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- 121 — MINOR CONTOUR LINE
- 123 — MAJOR CONTOUR LINE
- (Ex 258.2±)× — EXISTING SPOT GRADE REFERENCE
- ×257.62 — DESIGNED SPOT GRADE
- SWALE
- ST — STORM PIPE
- ST — FLARED END SECTION
- UNDER DRAIN
- 0+00 — ROAD STATIONING
- EDGE OF GRAVEL

OVERALL GRADING AND DRAINAGE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
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3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. SEE DRAWING C-112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN-EXPLODED ORDINANCE IS ENCOUNTERED.
5. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
6. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

OVERALL GRADING AND DRAINAGE PLAN KEY:

1. WETLAND MITIGATION AREA; SEE DRAWINGS C-150 TO C-153 FOR DETAILS
2. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
3. SEE DRAWING C-160 FOR EXISTING 60" RCP STORM PIPE PROFILE.
4. INFILTRATION BASIN

GRAPHIC SCALE
50 40 30 20 10 0 25 50 100 200
(IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

KEY MAP

NEW YORK STATE Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

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STATE OF NEW YORK · JOSEPH PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

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NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

⚠1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
OVERALL GRADING AND DRAINAGE PLAN

DRAWING NUMBER:
C-130

SHEET OF

36x24 PLOT SHEET

Jul 02,2025 - 12:47pm
C:\workfiles\environmental design partnership\sharepoint site - documents\0 A-Z\westchester\cortlandt manor\camp smith road\ugs-firing range-se-081\05-dwg\detailed plans\SHEETS\C-130.dwg

KEY MAP

GRAPHIC SCALE

20 15 10 5 0 20 40 80

(IN FEET)
1" = 20'

GRADING AND DRAINAGE PLAN KEY:

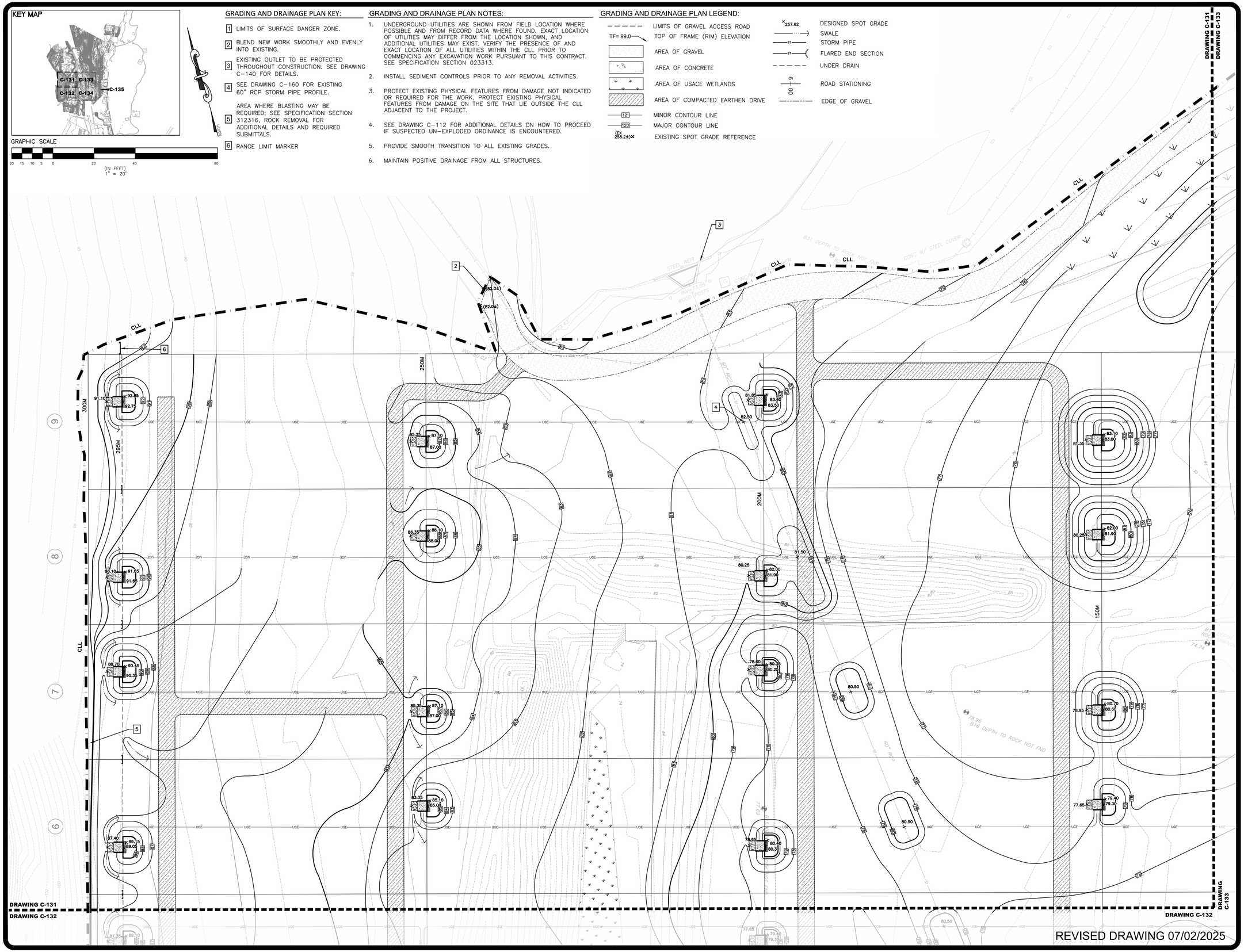
1. LIMITS OF SURFACE DANGER ZONE.
2. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
3. EXISTING OUTLET TO BE PROTECTED THROUGHOUT CONSTRUCTION. SEE DRAWING C–140 FOR DETAILS.
4. SEE DRAWING C–160 FOR EXISTING 60" RCP STORM PIPE PROFILE.
5. AREA WHERE BLASTING MAY BE REQUIRED; SEE SPECIFICATION SECTION 312316, ROCK REMOVAL FOR ADDITIONAL DETAILS AND REQUIRED SUBMITTALS.
6. RANGE LIMIT MARKER

GRADING AND DRAINAGE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. SEE DRAWING C–112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN–EXPLODED ORDINANCE IS ENCOUNTERED.
5. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
6. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

GRADING AND DRAINAGE PLAN LEGEND:

- LIMITS OF GRAVEL ACCESS ROAD
- TF= 99.0 — TOP OF FRAME (RIM) ELEVATION
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- 121 — MINOR CONTOUR LINE
- 120 — MAJOR CONTOUR LINE
- (EX 258.2±)× — EXISTING SPOT GRADE REFERENCE
- ×257.62 — DESIGNED SPOT GRADE
- SWALE
- ST — STORM PIPE
- ST — FLARED END SECTION
- UNDER DRAIN
- 9 + 00 — ROAD STATIONING
- EDGE OF GRAVEL



REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

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STATE OF NEW YORK · JOSEPH PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:

GRADING AND DRAINAGE PLAN

DRAWING NUMBER:

C–131

SHEET OF

36x24 PLOT SHEET

Jul 02,2025 – 12:48pm
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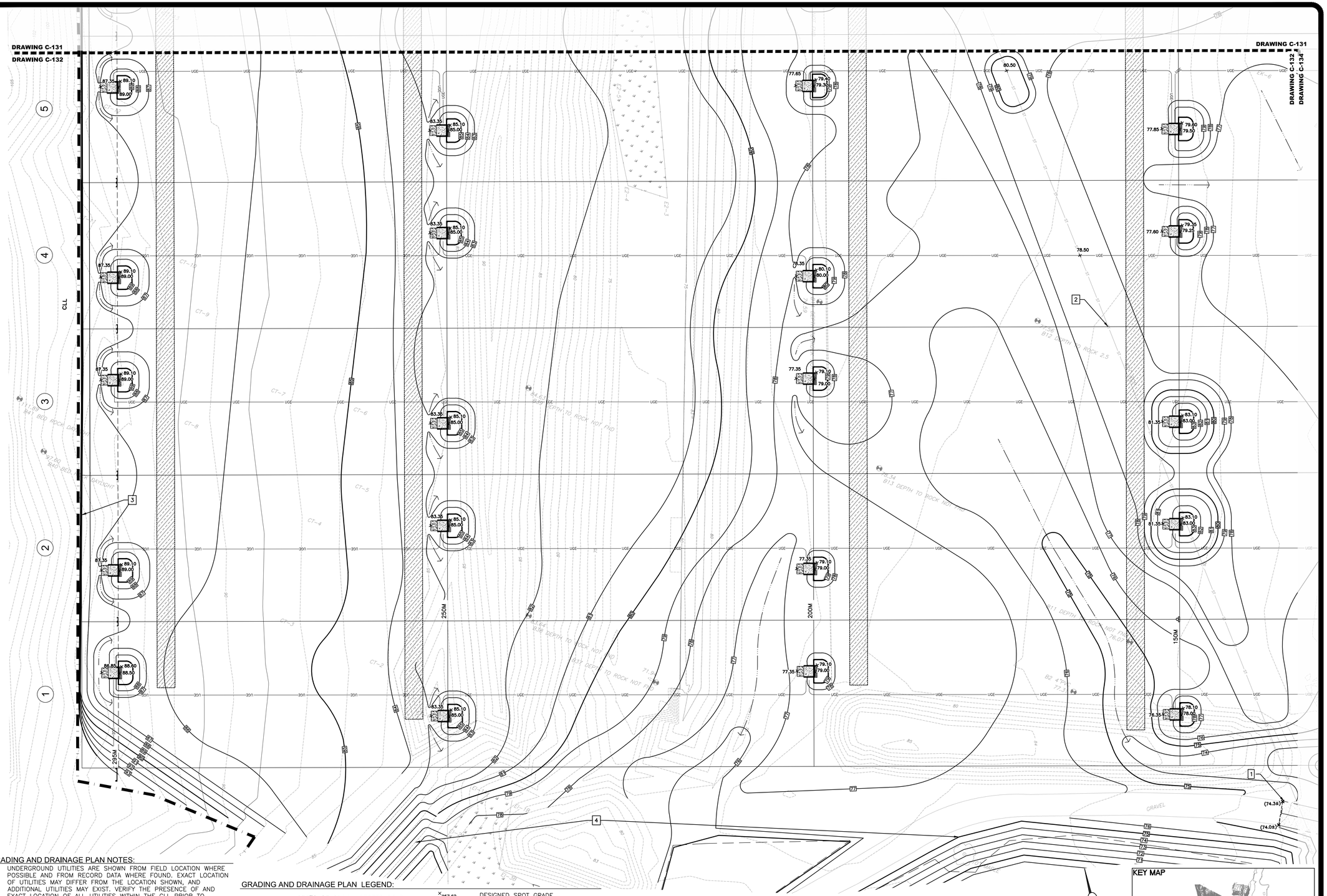
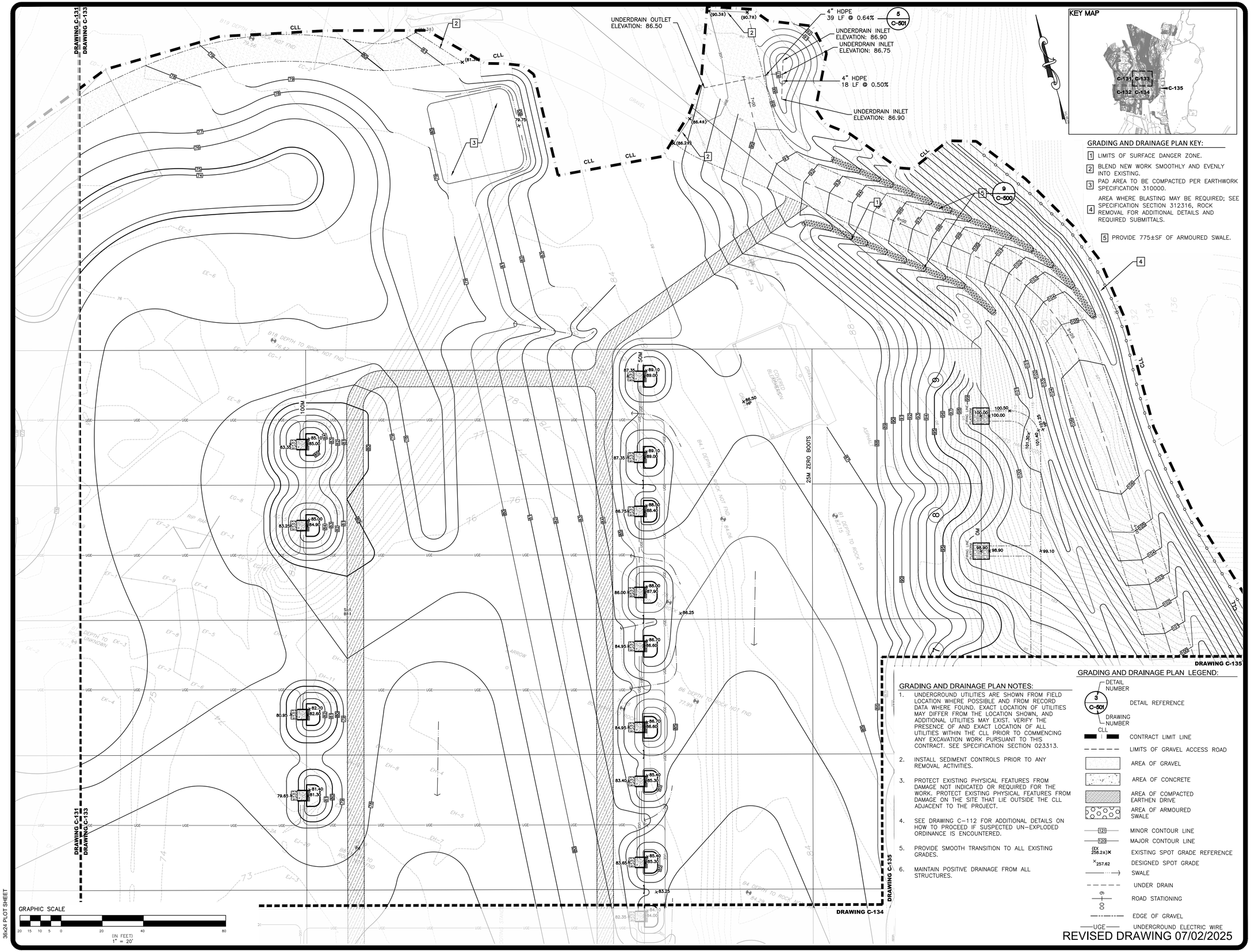
DRAWING C-131
DRAWING C-132

DRAWING C-131
DRAWING C-132
DRAWING C-134





36x24 PLOT SHEET

Jul 02,2025 - 12:49pm
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STATE OF NEW YORK · BRIAN PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:

GRADING AND
DRAINAGE PLAN

DRAWING NUMBER:

C-133

SHEET OF

DRAWING C-131

DRAWING C-133

DRAWING C-134

DRAWING C-132

DRAWING C-133

DRAWING C-134

DRAWING C-135

DRAWING C-135

DRAWING C-132
DRAWING C-134

DRAWING C-135

GRADING AND DRAINAGE PLAN LEGEND:

- DETAIL NUMBER / DRAWING NUMBER — DETAIL REFERENCE (e.g. 3 / C-501)
- CLL — CONTRACT LIMIT LINE
- LIMITS OF GRAVEL ACCESS ROAD
- TF= 99.0 — TOP OF FRAME (RIM) ELEVATION
- AREA OF GRAVEL
- AREA OF CONCRETE
- AREA OF USACE WETLANDS
- AREA OF COMPACTED EARTHEN DRIVE
- 121 — MINOR CONTOUR LINE
- 120 — MAJOR CONTOUR LINE
- (Ex 258.2±)× — EXISTING SPOT GRADE REFERENCE
- ×257.62 — DESIGNED SPOT GRADE
- SWALE
- ST — STORM PIPE
- ST — FLARED END SECTION
- CB — CATCH BASIN
- 0+00 — ROAD STATIONING
- EDGE OF GRAVEL
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

GRADING AND DRAINAGE PLAN NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
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4. SEE DRAWING C-112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN-EXPLODED ORDINANCE IS ENCOUNTERED.
5. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
6. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

GRADING AND DRAINAGE PLAN KEY:

1. LIMITS OF SURFACE DANGER ZONE.
2. BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.
3. INFILTRATION BASIN.
4. WETLAND MITIGATION AREA; SEE DRAWING C-150 THROUGH C-153 FOR DETAILS

9 C-501 — CB-3 TF=71.50 24" INV OUT=66.15

24" HDPE @0.50% 69 LF

FES#5 24" INV OUT=66.15 — 7 C-501

1 C-504 — 3

7 C-501 — FES#3 & FES#4 18" INV OUT=80.50

18" HDPE @ 0.61% 76 LF

18" HDPE @ 0.61% 76 LF

25M ZERO BOOTS

100M

50M

CLL

GRAPHIC SCALE

20 15 10 5 0 20 40 80 (IN FEET) 1" = 20'

REVISED DRAWING 07/02/2025

KEY MAP

C-131, C-133
C-132, C-134
C-135

36x24 PLOT SHEET

Jul 02,2025 - 12:50pm
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NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

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CERTIFICATE OF AUTHORIZATION #: 037711

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CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · ADAM PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
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CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

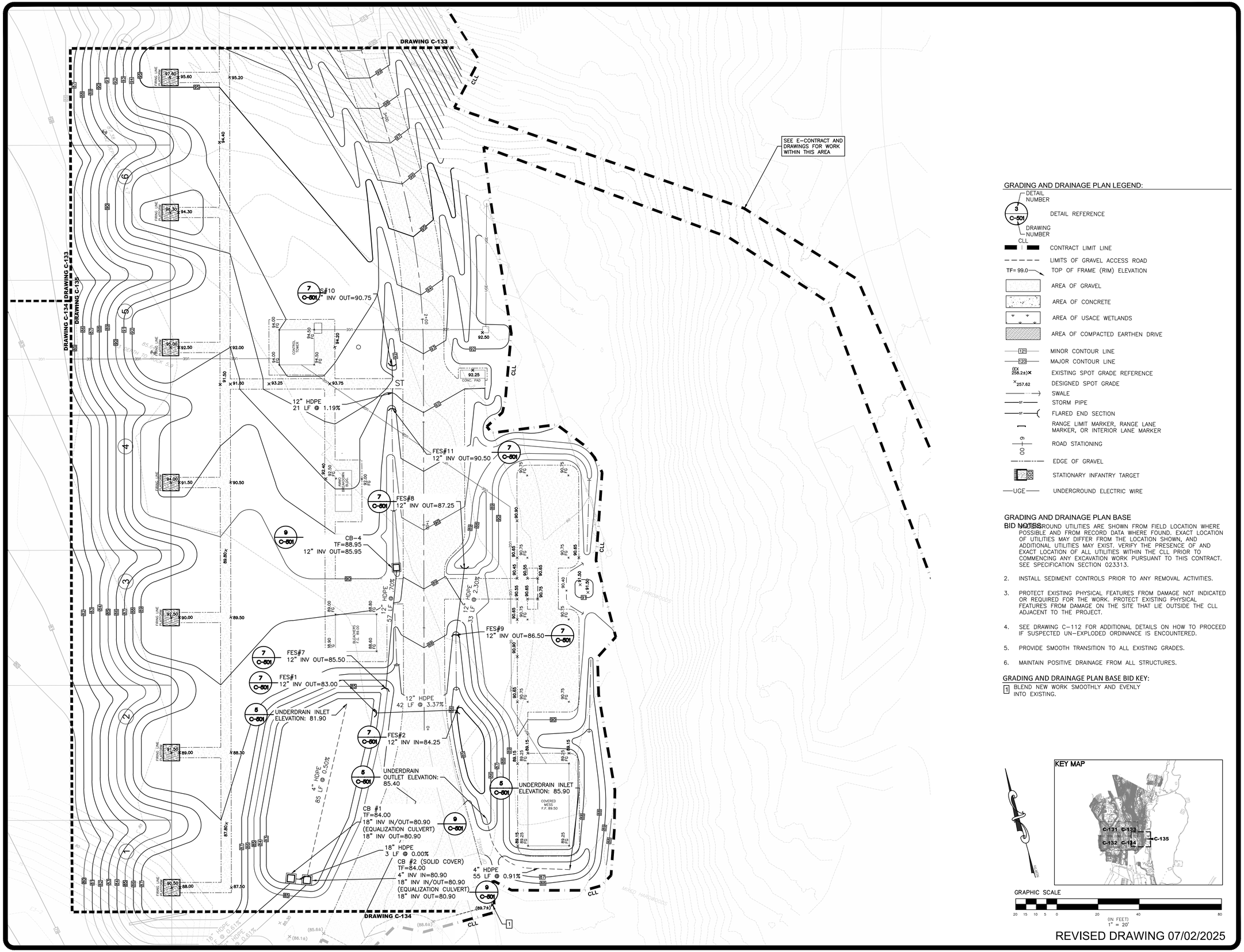
SHEET TITLE:

GRADING AND DRAINAGE PLAN

DRAWING NUMBER:

C-134

SHEET OF



GRADING AND DRAINAGE PLAN LEGEND:

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- 257.62 — DESIGNED SPOT GRADE
- SWALE
- ST — STORM PIPE
- ST — FLARED END SECTION
- RANGE LIMIT MARKER, RANGE LANE MARKER, OR INTERIOR LANE MARKER
- 6 / 00 — ROAD STATIONING
- EDGE OF GRAVEL
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

GRADING AND DRAINAGE PLAN BASE BID NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
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5. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
6. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

GRADING AND DRAINAGE PLAN BASE BID KEY:

1 BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.

GRAPHIC SCALE

20 15 10 5 0 20 40 80

(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · RAPAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

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LOCATION:

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CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:

GRADING AND DRAINAGE PLAN BASE BID

DRAWING NUMBER:

C-135

SHEET OF

36x24 PLOT SHEET

Jul 03,2025 - 11:56am
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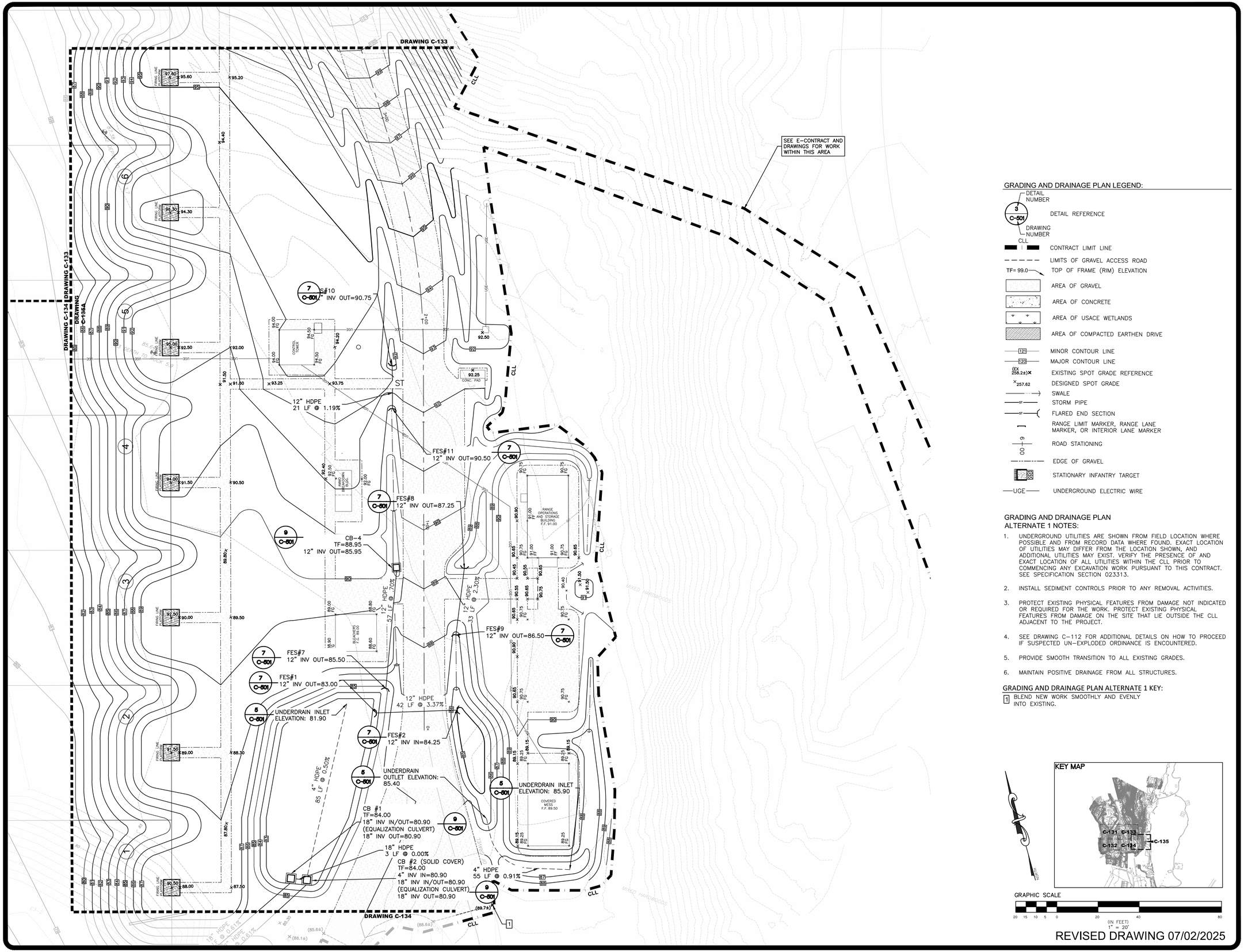

GRADING AND DRAINAGE PLAN LEGEND:

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- RANGE LIMIT MARKER, RANGE LANE MARKER, OR INTERIOR LANE MARKER
- 6+00 — ROAD STATIONING
- EDGE OF GRAVEL
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

GRADING AND DRAINAGE PLAN ALTERNATE 1 NOTES:

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GRADING AND DRAINAGE PLAN ALTERNATE 1 KEY:

[1] BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.

KEY MAP

GRAPHIC SCALE

20 15 10 5 0 20 40 80
(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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APPROVED:	BPO

SHEET TITLE:

GRADING AND DRAINAGE PLAN ALTERNATE 1

DRAWING NUMBER:

C-135A

SHEET OF

36x24 PLOT SHEET

Jul 03,2025 - 11:57am
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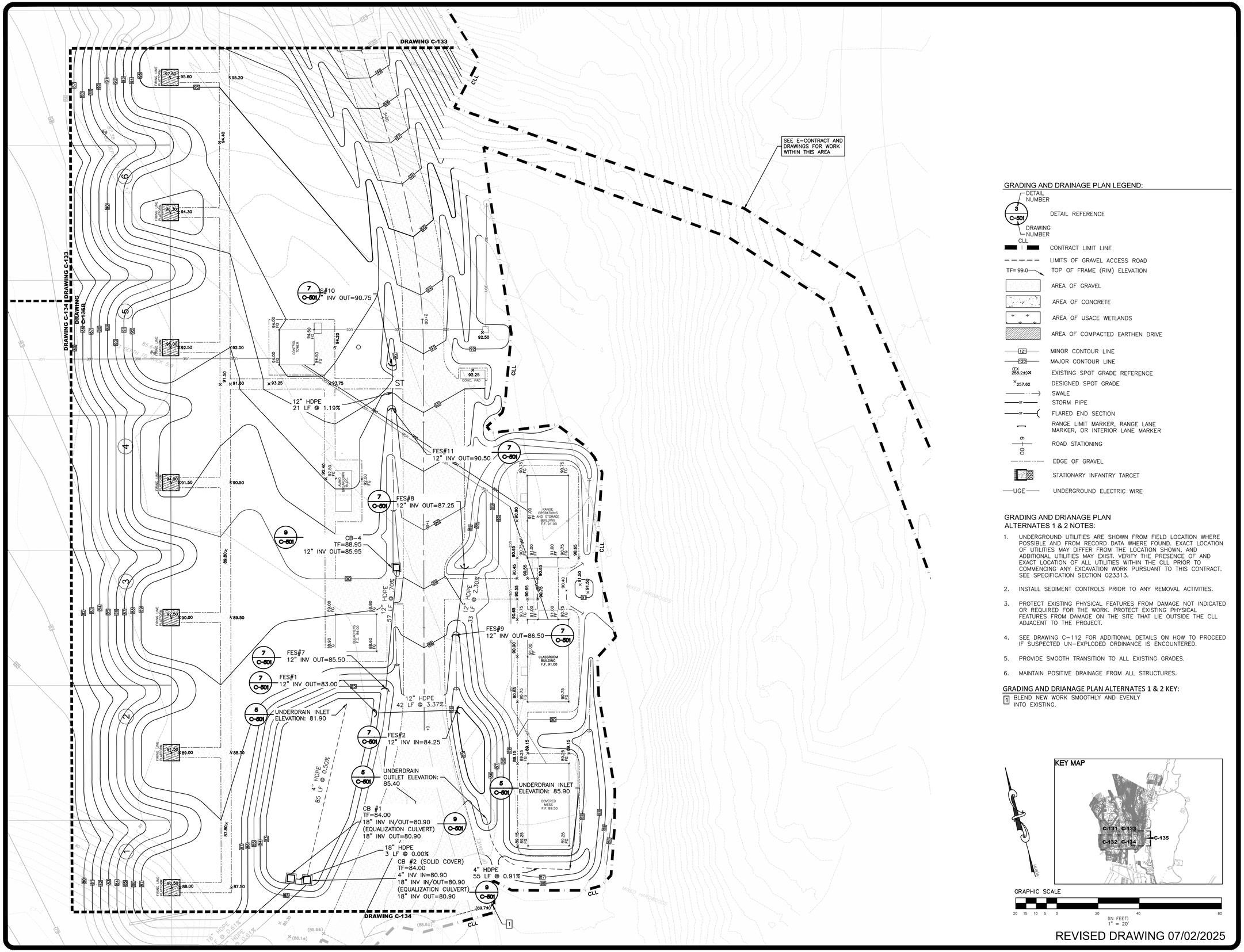

GRADING AND DRAINAGE PLAN LEGEND:

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- 6 / 00 — ROAD STATIONING
- EDGE OF GRAVEL
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE

GRADING AND DRIANAGE PLAN ALTERNATES 1 & 2 NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION WHERE POSSIBLE AND FROM RECORD DATA WHERE FOUND. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES WITHIN THE CLL PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT. SEE SPECIFICATION SECTION 023313.
2. INSTALL SEDIMENT CONTROLS PRIOR TO ANY REMOVAL ACTIVITIES.
3. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE NOT INDICATED OR REQUIRED FOR THE WORK. PROTECT EXISTING PHYSICAL FEATURES FROM DAMAGE ON THE SITE THAT LIE OUTSIDE THE CLL ADJACENT TO THE PROJECT.
4. SEE DRAWING C-112 FOR ADDITIONAL DETAILS ON HOW TO PROCEED IF SUSPECTED UN-EXPLODED ORDINANCE IS ENCOUNTERED.
5. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
6. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

GRADING AND DRIANAGE PLAN ALTERNATES 1 & 2 KEY:

1 BLEND NEW WORK SMOOTHLY AND EVENLY INTO EXISTING.

KEY MAP

GRAPHIC SCALE

20 15 10 5 0 20 40 80

(IN FEET)
1" = 20'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · RAPAUL OSTERHOUDT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
GRADING AND DRIANAGE PLAN ALTERNATES 1 & 2

DRAWING NUMBER:
C-135B

SHEET OF

36x24 PLOT SHEET

Jul 03,2025 - 11:58am
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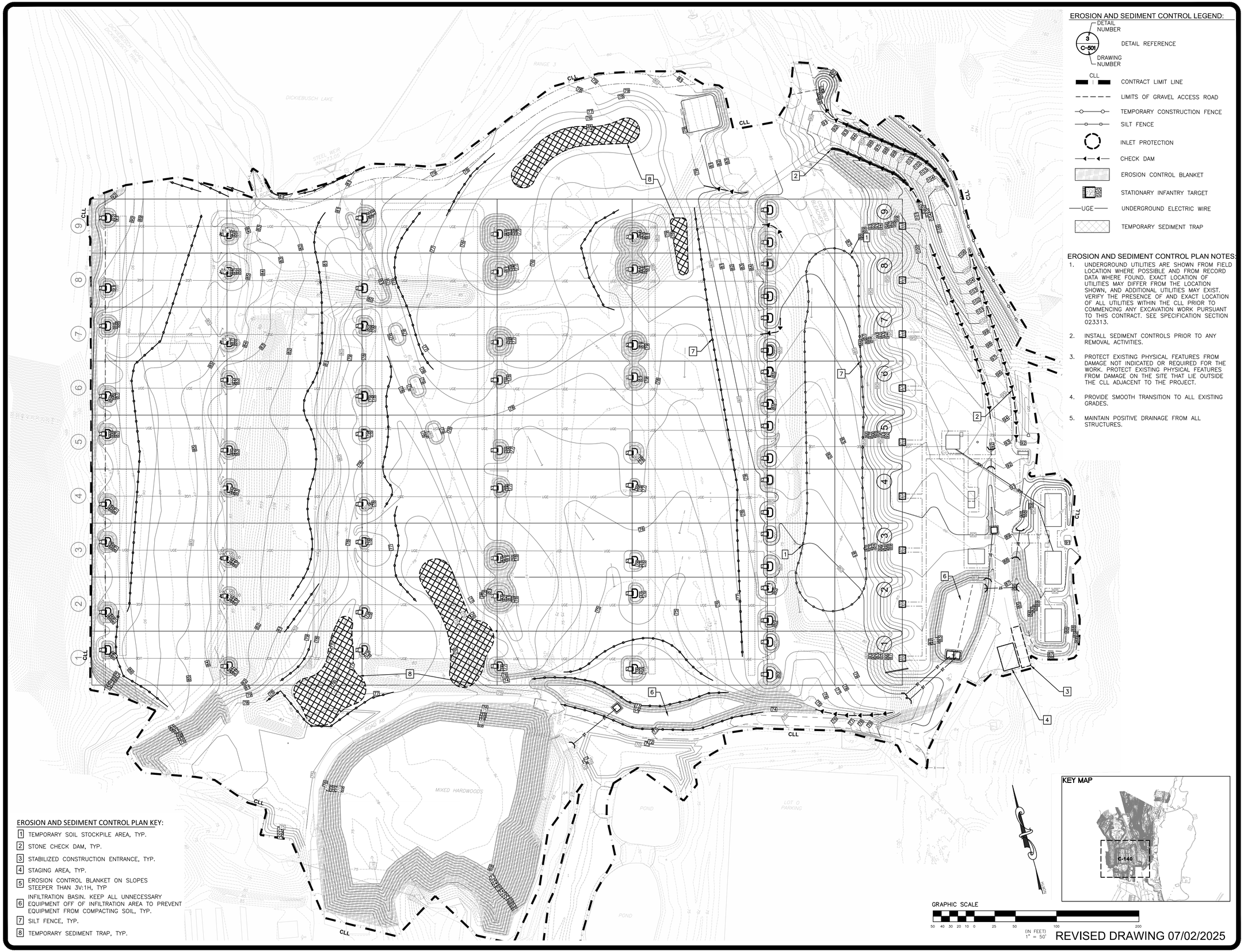

EROSION AND SEDIMENT CONTROL PLAN KEY:

1. TEMPORARY SOIL STOCKPILE AREA, TYP.
2. STONE CHECK DAM, TYP.
3. STABILIZED CONSTRUCTION ENTRANCE, TYP.
4. STAGING AREA, TYP.
5. EROSION CONTROL BLANKET ON SLOPES STEEPER THAN 3V:1H, TYP
6. INFILTRATION BASIN. KEEP ALL UNNECESSARY EQUIPMENT OFF OF INFILTRATION AREA TO PREVENT EQUIPMENT FROM COMPACTING SOIL, TYP.
7. SILT FENCE, TYP.
8. TEMPORARY SEDIMENT TRAP, TYP.

EROSION AND SEDIMENT CONTROL LEGEND:

- DETAIL REFERENCE (DETAIL NUMBER 3, DRAWING NUMBER C-501)
- CONTRACT LIMIT LINE (CLL)
- LIMITS OF GRAVEL ACCESS ROAD
- TEMPORARY CONSTRUCTION FENCE
- SILT FENCE
- INLET PROTECTION
- CHECK DAM
- EROSION CONTROL BLANKET
- STATIONARY INFANTRY TARGET
- UGE — UNDERGROUND ELECTRIC WIRE
- TEMPORARY SEDIMENT TRAP

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4. PROVIDE SMOOTH TRANSITION TO ALL EXISTING GRADES.
5. MAINTAIN POSITIVE DRAINAGE FROM ALL STRUCTURES.

KEY MAP

GRAPHIC SCALE

50 40 30 20 10 0 25 50 100 200
(IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · JOSEPH PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER

EXPIRES:09/30/2027

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NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:

EROSION AND SEDIMENT CONTROL PLAN

DRAWING NUMBER:

C-140

SHEET OF

36x24 PLOT SHEET

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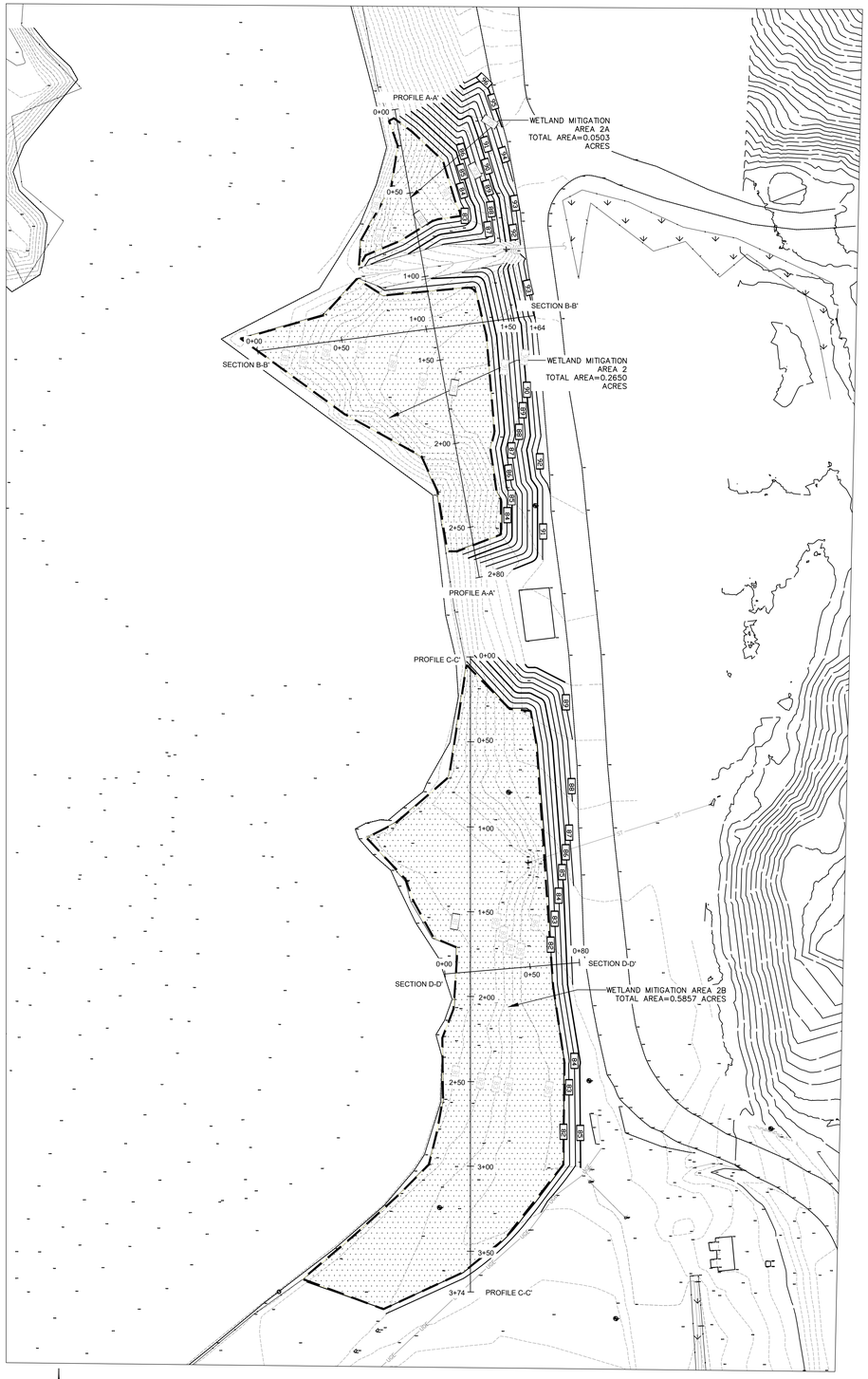
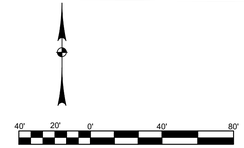




LEGEND:

FORESTED ESTABLISHMENT AREA

EMERGENT ESTABLISHMENT AREA

CONSERVATION EASEMENT AREA

COMPENSATORY WETLAND ESTABLISHMENT NOTES:

A. QUALITY ASSURANCE

1. THE FRESHWATER WETLAND BOUNDARIES AS REPRESENTED ON THE COMPENSATORY WETLAND ESTABLISHMENT AREA LANDSCAPE AND GRADING PLANS DEPICT FEDERAL JURISDICTIONAL WETLANDS. NO ADDITIONAL CONSTRUCTION, GRADING, FILLING, STRIPPING, STAGING, STORING, STOCKPILING OR OTHER RELATED ACTIVITY SHALL BE ALLOWED WITHIN THE DESIGNATED BOUNDARIES, UNLESS STATED OTHERWISE IN THE CONTRACT DOCUMENTS.

B. EROSION AND SEDIMENT CONTROL

1. CONTRACTOR SHALL INSTALL THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", NOVEMBER 2016.

2. THE CONTRACTOR IS PERMITTED ONE ACCESS DRIVE INTO THE SITE. THE ACCESS SHALL BE NO MORE THAN 20' WIDE AND SHALL BE RE-GRADED AND SEEDED UPON COMPLETION OF CONSTRUCTION. THE ACCESS DRIVE SHOULD BE LOCATED TO AVOID THE REMOVAL OF LARGE LIVE OR DEAD TREES.

3. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES IN THE COMPENSATORY WETLAND ESTABLISHMENT SITE, THE CONTRACTOR SHALL LAYOUT AND INSTALL THE TREE/VEGETATION PROTECTION BARRIER ALONG THE EXISTING WETLANDS BOUNDARY. NO CONSTRUCTION EQUIPMENT, OPERATIONS OR PLANT REMOVAL SHALL BE ALLOWED WITHIN THE BOUNDARIES OF THE EXISTING WETLANDS AND AS DELINEATED WITH THE TREE/VEGETATION PROTECTION BARRIER.

4. INSTALL SILT FENCE AT ALL DOWNGRADIENT LOCATIONS AT THE PERIMETER OF THE COMPENSATORY WETLAND ESTABLISHMENT AREA, PRIOR TO THE START OF ANY CONSTRUCTION.

5. AFTER THE PLANTING OPERATIONS HAVE BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE ALL TREE/VEGETATION PROTECTIVE FENCING. NOT UNTIL THE COMPENSATORY WETLAND ESTABLISHMENT AREA HAS ESTABLISHED A VEGETATIVE COVER, SHALL THE CONTRACTOR REMOVER THE SILT FENCE.

C. EXCAVATION

1. PLACE 2 HARDWOOD TREE STUMPS (MAPLES AND/OR OAKS) IN THE WETLAND ESTABLISHMENT AREA (MINIMUM DIAMETER-24 INCHES, IF AVAILABLE) IN RANDOM LOCATIONS. THE GRUBBED STUMPS SHALL COME FROM THE ESTABLISHMENT AREA DURING CLEARING AND GRUBBING

2. THE BASE OR FLOOR ELEVATIONS OF THE COMPENSATORY WETLAND ESTABLISHMENT AREA GRADING PLAN ARE SHOWN AS FINISHED GRADES. THE CONTRACTOR SHALL EXCAVATE THE WETLAND ESTABLISHMENT AREA DOWN TO A MINIMUM DEPTH OF 12 INCHES BELOW THE FINISHED GRADE ELEVATIONS AS SHOWN ON THE PLANS. FINISHED GRADE ELEVATIONS WILL BE ACCOMPLISHED BY PLACING TOPSOIL FROM AN APPROVED SOURCE TO A MINIMUM DEPTH OF 12 INCHES. THE CONTRACTOR SHALL CONSTRUCT MOUNDS OF SOIL (HUMMOCKS) AND SHALLOW DEPRESSIONS TO A HEIGHT OR DEPTH OF 1.5 FEET OR LESS, ON/IN THE FLOOR ELEVATION OF THE WETLAND ESTABLISHMENT AREA (SEE NOTE 6).

3. VERIFY IF THE SEASONAL HIGH GROUNDWATER ELEVATION IS AT SUFFICIENT DEPTH TO SUPPORT WETLAND VEGETATION WITHIN THE COMPENSATORY WETLAND ESTABLISHMENT AREA. IF THE SEASONAL HIGH GROUNDWATER ELEVATION IS NOT SUFFICIENT, THE CONTRACTOR SHALL NOTIFY THE DIRECTOR'S REPRESENTATIVE OF THE CONDITIONS.

4. PRIOR TO THE FINAL GRADING OF THE COMPENSATORY WETLAND ESTABLISHMENT AREA, THE CONTRACTOR SHALL NOTIFY THE DIRECTOR'S REPRESENTATIVE TO VERIFY THAT SUFFICIENT WATER DEPTH WILL BE OBTAINED FOR THE FINAL GRADE ELEVATIONS SPECIFIED. FURTHER EXCAVATION AND/OR FILLING MAY BE NECESSARY. THE CONTRACTOR SHALL INSTALL TWO MONITORING WELLS WITHIN EACH MITIGATION AREA (SEE DETAIL THIS SHEET).

5. IN ORDER TO PROMOTE THE EARLY DEVELOPMENT OF THE NEW WETLAND PLANTINGS WITHIN THE WETLAND ESTABLISHMENT AREA, THE CONTRACTOR SHALL EXCAVATE AND CONSTRUCT THE WETLAND ESTABLISHMENT AREA DURING THE SPRING/SUMMER. ONCE STARTED, WETLAND GRADING SHALL BE PROGRESSED TO COMPLETION WITHOUT DELAY. THE DIRECTOR'S REPRESENTATIVE WILL MONITOR THE WETLANDS WATER LEVELS AND WELLS DURING EXCAVATION. IF GRADING CHANGES ARE NEEDED THEY WILL BE CONDUCTED DURING THE EXCAVATION ACTIVITIES. FINAL GRADING WILL COMMENCE WITHIN TWO WEEKS OF THE START OF EXCAVATION. ALL GRADING, PLANTING AND SEEDING MUST BE COMPLETED BY OCTOBER. PROVIDE AS BUILT PLAN WITHIN 30 DAYS OF GRADING, PRIOR TO PLANTING. PLANTING AND SEEDING OF THE AREA WILL IMMEDIATELY FOLLOW APPROVAL OF THE AS BUILT. FINAL AS BUILTS OF THE ESTABLISHMENT AREA SHOULD BE COMPLETED IN THE FALL.

6. CONSTRUCT WETLAND AREA AT ELEVATIONS PER THE PLANS. HUMMOCKS (MOUNDS) 2'-6' IN DIAMETER AND 1'-1.5' IN HEIGHT SHALL BE PLACED RANDOMLY THROUGHOUT THE WETLANDS (MINIMUM 10 HUMMOCKS PER 1,000 SF). ALL PLANTINGS IN THE FORESTED WETLAND SHALL BE PLACED ON THE HUMMOCKS.

D. WETLAND TOPSOIL

1. STRIP, STOCKPILE AND PLACE A UNIFORM LAYER OF TOPSOIL (12 INCHES MINIMUM DEPTH) OVER THE PROPOSED COMPENSATORY WETLAND ESTABLISHMENT AREA. THE TOPSOIL SHALL BE FERTILE, FRIABLE AND FREE OF SUBSOIL, BRUSH, STONES, INVASIVE PLANTS OR OTHER DELETERIOUS MATERIALS LARGER THAN 2 INCHES. TOPSOIL SHALL BE FINE GRADED TO MAINTAIN A FINISH GRADE ELEVATION AS SHOWN ON THE WETLAND ESTABLISHMENT PLANS. ADDITIONAL WETLAND TOPSOIL IS ANTICIPATED TO BE REQUIRED AND SHOULD COME FROM A SOURCE APPROVED BY THE DIRECTOR'S REPRESENTATIVE.

2. TOPSOIL CONTAINING FOREIGN MATERIAL, SUCH AS INVASIVE PLANT ROOTS AND/OR SEEDS (SUCH AS COMMON REED OR PURPLE LOOSESTRIFE) SHALL BE REJECTED BY THE DIRECTOR'S REPRESENTATIVE.

3. STRIPPED TOPSOIL SHALL BE STOCKPILED AND PROTECTED WITH WOOD FIBER MULCH, ONLY. ALL STOCKPILES SHALL HAVE AN APPROVED SILT BARRIER TOTALLY SURROUNDING THE PILE. THE PILE SHALL BE IN AN APPROVED UPLAND AREA A MINIMUM OF 25 FEET FROM ANY DESIGNATED WETLAND AREAS, STREAMS OR OTHER WATER BODIES.

E. COMPENSATORY WETLAND ESTABLISHMENT PLANTING

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CERTIFICATES OF INSPECTION FOR ALL COMPENSATORY WETLAND ESTABLISHMENT PLANTINGS AND WETLAND SEEDING. SEE THE SEED MIX TABLES AND TREE/SHRUB THIS SHEET.

2. THE APPLICATION OF TOPSOIL SHALL IMMEDIATELY FOLLOW FINAL GRADING. SEEDING AND LANDSCAPING SHALL BE DONE DURING THE FALL PLANTING SEASON, ONLY.

3. WITHIN THE BOUNDARY LIMITS OF THE WETLAND ESTABLISHMENT AREA, WETLAND SEED MIX C SHALL BE USED ON ALL DISTURBED AREAS AT A RATE OF 20 LBS PER ACRE.

4. THE CONTRACTOR SHALL LAY OUT ALL FORESTED WETLAND PLANTINGS. THE GROUPING OF PLANTS SHALL BE PLANTED IN A RANDOM MANNER AS WOULD OCCUR IN THE NATURAL ENVIRONMENT AT A RATE OF 180 TREES/SHRUBS PER ACRE-SEE DETAIL ON SHEET C-153.

F. COMPLETION

1. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SILT FROM BEHIND THE SILT BARRIERS. THE SILT SHALL BE DISPOSED OF IN AN APPROVED AREA.

G. MONITORING

1. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTINGS IN CONJUNCTION WITH THE WETLAND ESTABLISHMENT EFFORT SHALL HAVE AN EIGHTY-FIVE (85) PERCENT SURVIVAL AND/OR COVERAGE RATE THAT MUST BE MET OR EXCEEDED AT THE END OF THE SECOND GROWING SEASON FOLLOWING THE INITIAL PLANTING. IF THE EIGHTY-FIVE PERCENT SURVIVAL RATE IS NOT MET AT THE END OF THE SECOND GROWING SEASON, THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE THE LEVEL OF SURVIVAL BY THE END OF THE NEXT GROWING SEASON, INCLUDING RE-PLANTING AND RE-GRADING, AS NECESSARY.

WETLAND SEED MIX "C":

Common Name	Botanical Name	Indicator	%
Bottlebrush Grass	Elymus canadensis	OBL	5
American Manna Grass	Glyceria grandis	OBL	5
Rice Cut Grass	Leersia oryzoides	OBL	6.25
Prairie Cordgrass	Spartina pectinata	OBL	6.25
Hop Sedge	Carex lupulina	OBL	10
Hollow Bulrush	Scirpus pendulus	OBL	3.75
Common Sedge	Carex comosa	OBL	6.25
Green Bulrush	Scirpus atrovirens	OBL	1.25
Many Leaved Bulrush	Scirpus polyphyllus	OBL	3.75
Soft Rush	Juncus effusus	OBL	3.75
Creeping Spike Rush	Eleocharis palustris	OBL	5
Giant Bur Reed	Sparganium eurycarpum	OBL	12.5
Button Bush	Cephalanthus occidentalis	OBL	6.75
Maryland Meadow Beauty	Rhexia mariana	OBL	5
Rosemallow	Hibiscus moscheutos	OBL	6.75
Seed Box	Ludwigia alternifolia	OBL	3.75
Monkey Flower	Mimulus ringens	OBL	4.6875
Ditch Stonecrop	Penthorum sedoides	OBL	0.3125

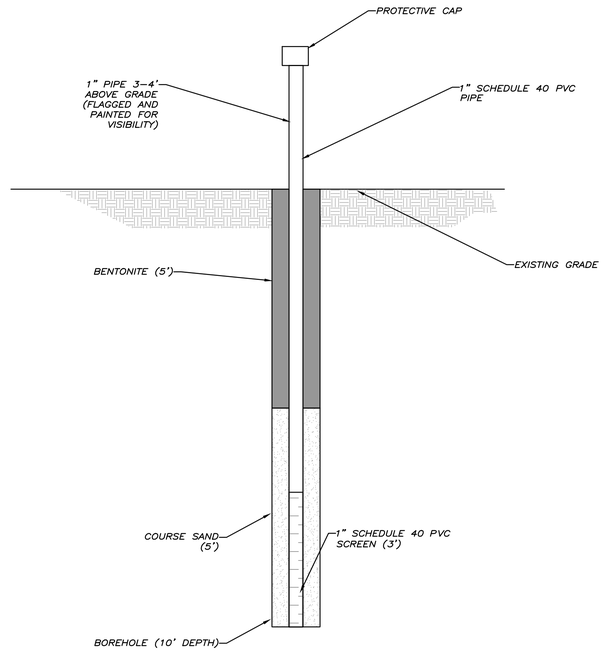
UPLAND SEED MIX:

American Meadows Native Northeast Wildflower Seed Mix:
* SEED AT 1 LB per 2,000 SF *

Aquilegia canadensis	Eastern Red Columbine	Perennial	FACU
Asclepias incarnata	Swamp Milkweed	Perennial	OBL
Asclepias tuberosa	Butterfly Weed	Perennial	FACU
Aster novae-angliae	New England Aster	Perennial	FACW
Chamaecrista fasciculata	Partridge Pea	Annual	FACU
Coreopsis lanceolata	Lanceol-Leaf Coreopsis	Perennial	FACU
Eupatorium maculatum	Spotted Joe Pye Weed	Perennial	FACW
Gaillardia pulchella	Indian Blanket	Annual	UPL
Helianthus helianthoides	Ox-Eye Sunflower	Perennial	FACU
Liatris spicata	Blazing Star or Gayfeather	Perennial	UPL
Lupinus perennis	Wild Lupine	Perennial	UPL
Monarda fistulosa	Wild Bergamot	Perennial	FACU
Oenothera biennis	Evening Primrose	Biennial	FACU
Penstemon digitalis	Beard Tongue	Perennial	FAC
Rudbeckia hirta	Black-eyed Susan	Perennial	FACU
Rudbeckia subtomentosa	Sweet Black Eyed Susan	Perennial	FACU
Rudbeckia triloba	Brown-eyed Susan	Annual	FACU
Silphium rigida	Rigid Goldenrod	Perennial	FACU

COMMON NAME	SCIENTIFIC NAME	SIZE	INDICATOR STATUS	QUANTITY
*RED MAPLE (FAC) (RM)	ACER RUBRUM	8'	FAC	20
*GREEN ASH (FACW) (GA)	FRAXINUS PENNSYLVANICA	8'	FACW	20
SPECKLED ALDER (FACW) (SA)	ALNUS RUGOSA	2-3'	FACW	5
SILKY DOGWOOD (FACW) (SD)	CORNUS AMOMUM	2-3'	FACW	5
GRAY DOGWOOD (FAC) (GD)	CORNUS RACEMOSA	2-3'	FAC	5
BLACK WILLOW (FACW) (BW)	SALIX NIGRA	2-3'	FACW	5

* (ALL TREES MIN. 1" CALIPER)



1 MITIGATION AREA MONITORING WELL
SCALE N.T.S.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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OSPA ENGINEERING SERVICES, PC

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STATE OF NEW YORK | MICHAEL C. OSTERHOUT | 078718 | LICENSED PROFESSIONAL ENGINEER

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1 MCO	7/2/2025	ADDENDUM NO. 1
MCO	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JKS
DRAWN BY:	JKS
FIELD CHECK:	MCO
APPROVED:	MCO

SHEET TITLE:
WETLAND MITIGATION PLAN CSM-1 AND 2

DRAWING NUMBER:
C-150

SHEET OF

PROFILE E-E'
SECTION F-F'
EMERGENT WETLAND MITIGATION AREA 5
TOTAL AREA=0.3946 ACRES
SECTION H-H'
WETLAND MITIGATION AREA 4
TOTAL AREA=0.3162 ACRES
PROFILE G-G'
PROFILE I-I'
SECTION J-J'
FORESTED WETLAND MITIGATION AREA 5
TOTAL AREA=0.3379 ACRES
WETLAND MITIGATION AREA 6
TOTAL AREA=0.0831 ACRES

30' 15' 0' 30' 60'

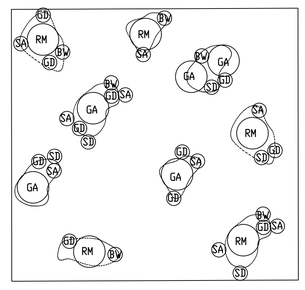
LEGEND:

FORESTED ESTABLISHMENT AREA

EMERGENT ESTABLISHMENT AREA

CONSERVATION EASEMENT AREA

NOTES:
1. SEE SHEET C-150 FOR NOTES.



FORESTED ESTABLISHMENT AREA PLANTING DETAIL 100' X 100' AREA

REVISED DRAWING 07/02/2025

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CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

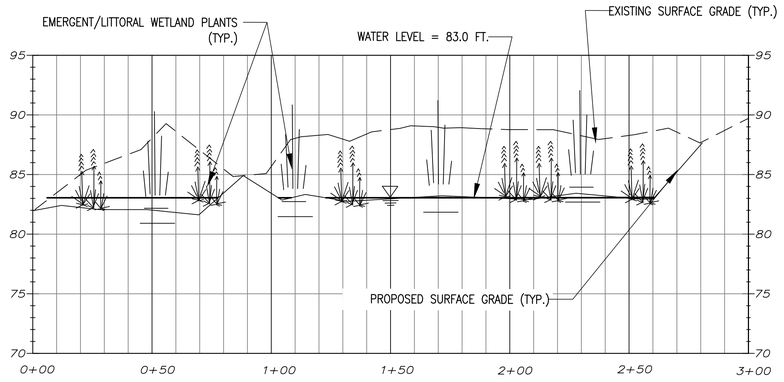
MARK	DATE	DESCRIPTION
1 MCO	7/2/2025	ADDENDUM NO. 1
MCO	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JKS
DRAWN BY:	JKS
FIELD CHECK:	MCO
APPROVED:	MCO

SHEET TITLE:
WETLAND MITIGATION PLAN
CSM-3, 4 AND 5

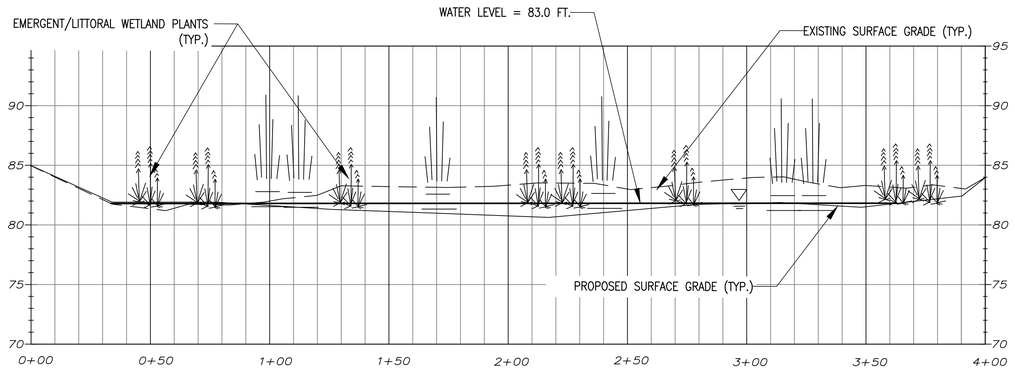
DRAWING NUMBER:
C-151

SHEET OF

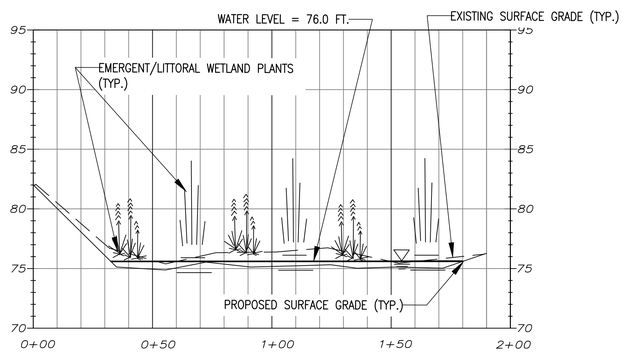


1 C-152 SITE CSM 2-2A ESTABLISHMENT AREA PLAN - PROFILE VIEW - SECTION A-A'

SCALE: 1"=30' HOR: VERT 1: 5

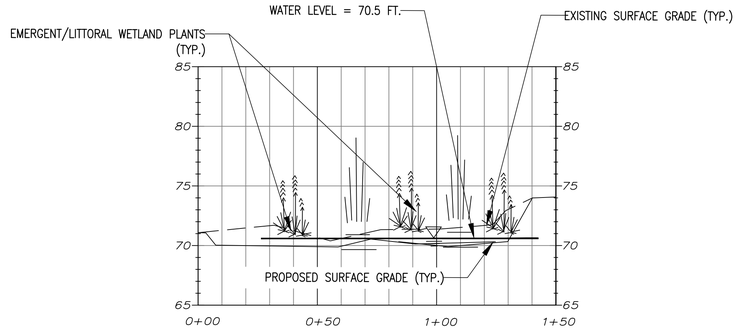


2 C-152 SITE CSM 2B ESTABLISHMENT AREA PLAN - PROFILE VIEW - SECTION C-C'



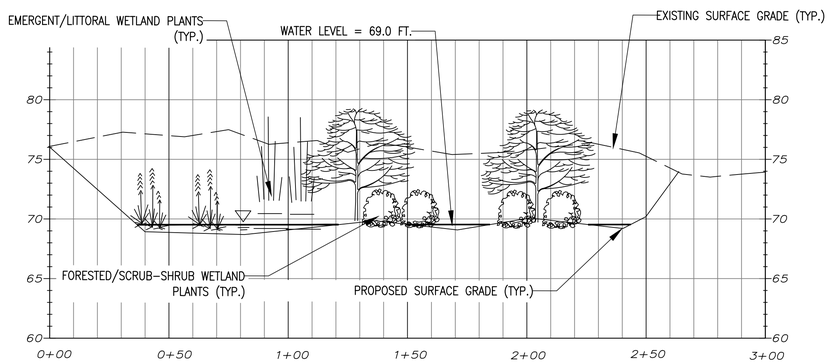
3 C-152 SITE CSM 4 ESTABLISHMENT AREA PLAN - PROFILE VIEW - SECTION E-E'

SCALE: 1"=30' HOR: VERT 1: 5



4 C-152 SITE CSM 6 ESTABLISHMENT AREA PLAN - PROFILE VIEW - SECTION I-I'

SCALE: 1"=30' HOR: VERT 1: 5



5 C-152 SITE CSM 5 ESTABLISHMENT AREA PLAN - PROFILE VIEW - SECTION G-G'

SCALE: 1"=30' HOR: VERT 1: 5

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 0021871

OSPA ENGINEERING SERVICES, PC

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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STATE OF NEW YORK · MICHAEL C. OSTERHOUT · 078718 · LICENSED PROFESSIONAL ENGINEER

EXPIRES: 06/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠1 MCO	7/2/2025	ADDENDUM NO. 1
MCO	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JKS
DRAWN BY:	JKS
FIELD CHECK:	MCO
APPROVED:	MCO

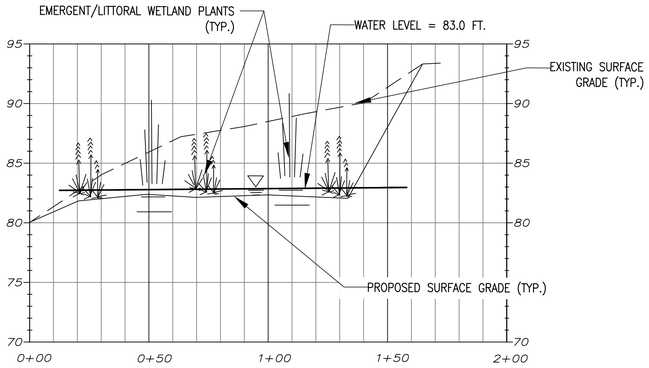
SHEET TITLE:

MITIGATION AREA PROFILES

DRAWING NUMBER:

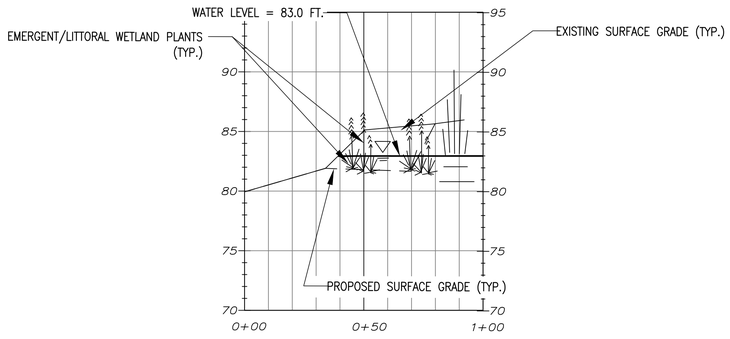
C-152

SHEET OF



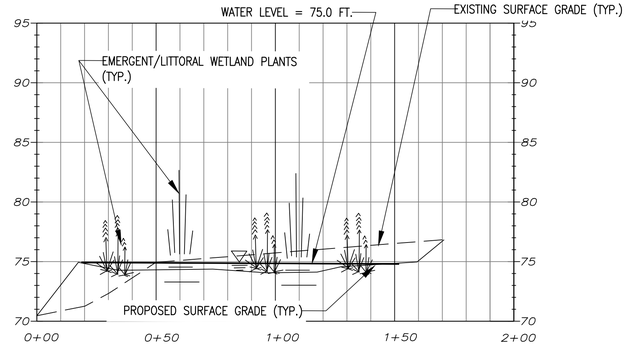
1 C-153 **SITE CSM 2-2A ESTABLISHMENT AREA PLAN - SECTION B-B'**

SCALE: 1"=30' HOR: VERT 1: 5



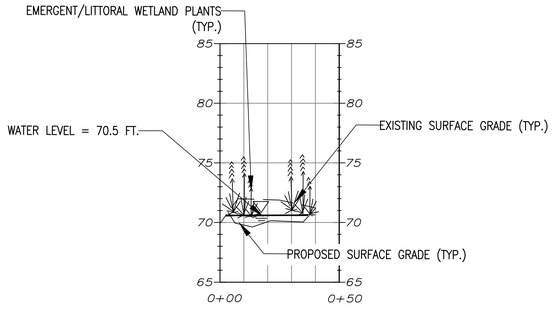
2 C-153 **SITE CSM 2B ESTABLISHMENT AREA PLAN - SECTION D-D'**

SCALE: 1"=30' HOR: VERT 1: 5



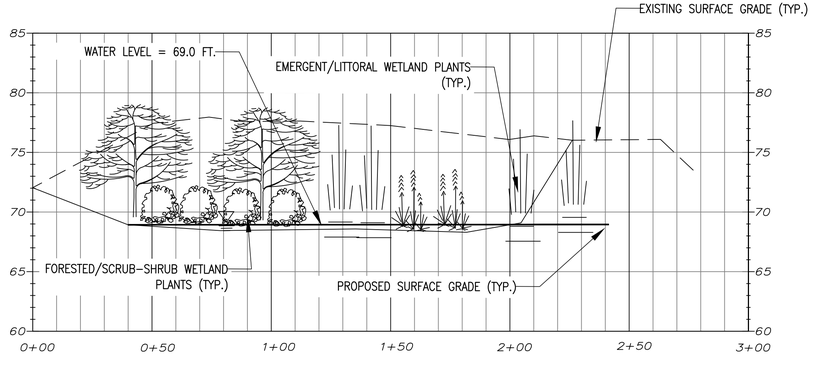
3 C-153 **SITE CSM 4 ESTABLISHMENT AREA PLAN - SECTION F-F'**

SCALE: 1"=30' HOR: VERT 1: 5



4 C-153 **SITE CSM 6 ESTABLISHMENT AREA PLAN - SECTION J-J'**

SCALE: 1"=30' HOR: VERT 1: 5



5 C-153 **SITE CSM 5 ESTABLISHMENT AREA PLAN- SECTION H-H'**

SCALE: 1"=30' HOR: VERT 1: 5

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 0021871

OSPA ENGINEERING SERVICES, PC

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STATE OF NEW YORK · MICHAEL C. OSTRANDER · 078779 · LICENSED PROFESSIONAL ENGINEER

EXPIRES: 06/30/2027

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

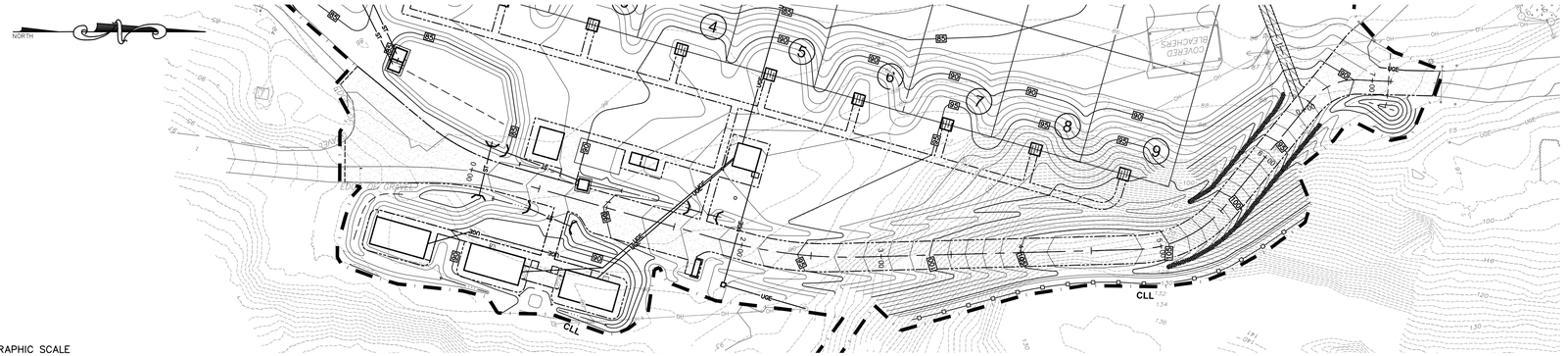
MARK	DATE	DESCRIPTION
⚠1 MCO	7/2/2025	ADDENDUM NO. 1
MCO	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JKS
DRAWN BY:	JKS
FIELD CHECK:	MCO
APPROVED:	MCO

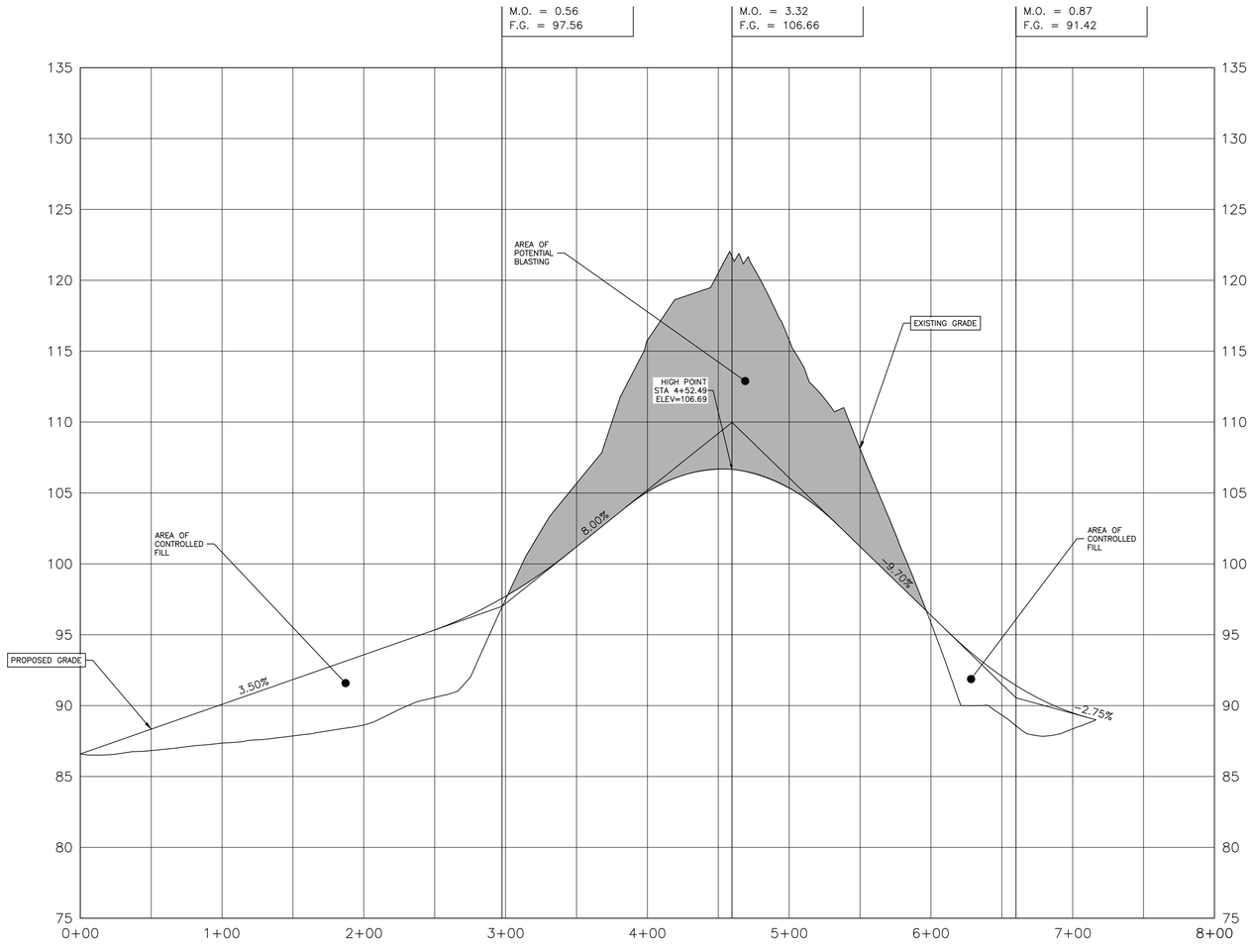
SHEET TITLE: MITIGATION AREA CROSS SECTIONS

DRAWING NUMBER: C-153

SHEET OF



1 C-160 VALLEY ROAD REROUTE – PLAN VIEW
SCALE: HORIZONTAL: 1" = 50'



2 C-160 VALLEY ROAD REROUTE – PROFILE
SCALE: HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK
BRIAN PAUL OSTERHOUT
079236
LICENSED PROFESSIONAL ENGINEER
EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

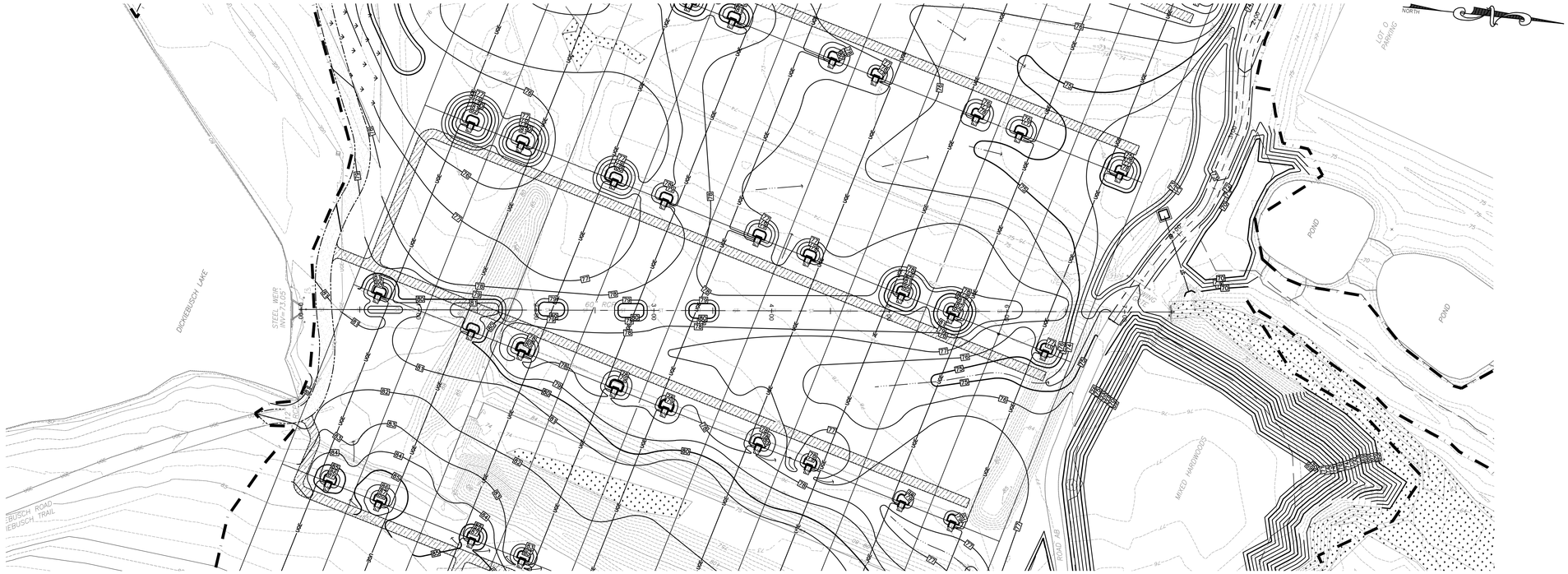
PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
PROFILE: REROUTED VALLEY ROAD

DRAWING NUMBER:
C-160

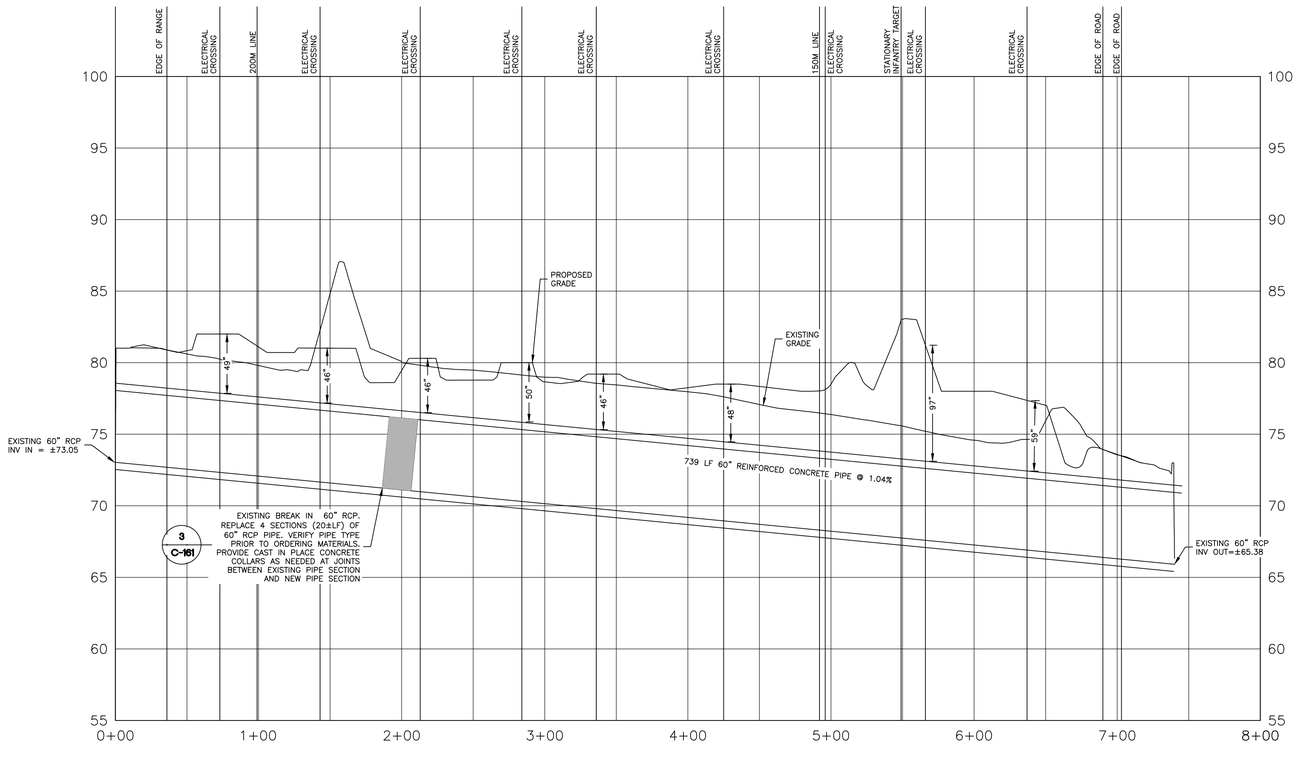
SHEET OF

Jul 02,2025 - 12:55pm
C:\workfiles\environmental design partnership\sharepoint site - documents\0 A-Z\westchester\cortlandt manor\camp smith road\vgs-firing range-se-081\05-dwg\detailed plans\SHEETS\C-160.dwg
36x24 PLOT SHEET

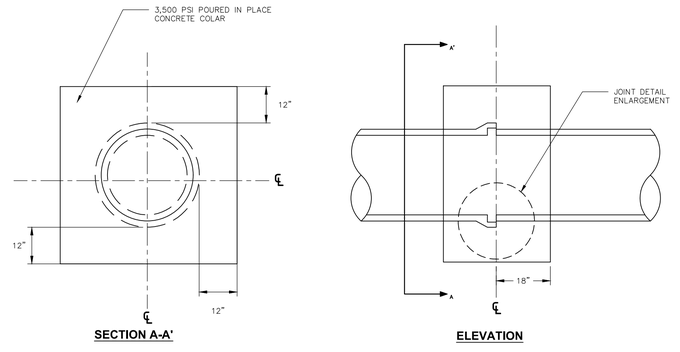


1 C-161 — 60" STORM PIPE – PLAN VIEW
SCALE: HORIZONTAL: 1" = 50'

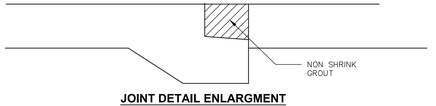
GRAPHIC SCALE
50 40 30 20 10 0 25 50 100 200
(IN FEET)
1" = 50'



2 C-161 — 60" STORM PIPE – PROFILE VIEW
SCALE: HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



NOTES:
1. THIS DETAIL IS FOR THE CONNECTION OF NEW PIPE SECTIONS TO EXISTING PIPE SECTIONS. FOLLOW MANUFACTURES INSTRUCTIONS FOR JOINTS BETWEEN NEW SECTIONS OF PIPE



JOINT DETAIL ENLARGMENT

3 C-161 — **60 INCH RCP PIPE**
NOT TO SCALE

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · JOHN PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER
EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
PROFILE: 60" STORM PIPE

DRAWING NUMBER:
C–161

SHEET OF

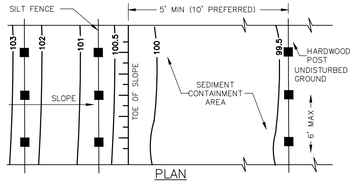
36x24 PLOT SHEET
Jul 02,2025 – 12:55pm
C:\workfiles\environmental design partnership\shorepoint site – documents\0 A-Z\westchester\cortlandt manor\camp smith road\ops-firing range-se-081\05-dwg\detailed plans\SHEETS\C-161.dwg

SILT FENCE GENERAL NOTES:

1. SILT FENCE SHALL BE PLACED A MINIMUM OF 5 FT. FROM TOE OF SLOPE, 10 FT. PREFERRED, TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND FACILITATE MAINTENANCE OF SEDIMENT CONTAINMENT AREA.
2. POSTS MAY BE 1.25"x1.25" (MINIMUM) HARDWOOD, TYPICALLY, FOR WIRE MESH BACK USE 2"x2" NOM. HARDWOOD, OR STEEL "T" OR "U" POSTS (1lb per lf). SILT FENCE SHALL BE WOVEN GEOTEXTILE FABRIC(GEOTEX 2130 OR EQUAL).
3. SILT FENCE ASSEMBLIES MAY HAVE 4 FT. OR 6 FT. POST SPACING, AND MAY OR MAY NOT HAVE MESH REINFORCEMENT. SENSITIVE AREAS TO BE PROTECTED MAY NEED TO BE REINFORCED BY USING HEAVY WIRE FENCING FOR ADDED SUPPORT TO PREVENT COLLAPSE.
4. THE BOTTOM EDGE OF SILT FENCE SHALL BE BURIED A MINIMUM OF 6" BELOW GROUND. THE FENCE SHALL BE INSTALLED WITH THE POSTS ON THE DOWNSTREAM SIDE OF THE FABRIC.
5. MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUNOFF TO A SILT FENCE PLACED ON A SLOPE ARE:

SLOPE STEEPNESS	MAXIMUM LENGTH (ft.)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100

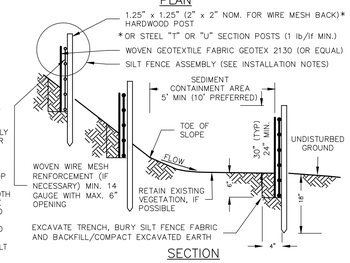
6. MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED ¼ ACRE PER 100 FEET OF FENCE, WITH MAXIMUM PONDING DEPTH OF 1.5 FEET BEHIND THE FENCE; AND EROSION WOULD OCCUR IN THE FORM OF SHEET EROSION; AND THERE IS NO CONCENTRATION OF WATER FLOWING TO THE BARRIER.
7. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS, AFTER EACH RAINFALL OF .5" OR MORE WITHIN A 12 HOUR PERIOD, OR DAILY DURING PROLONGED RAINFALL. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
8. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.



PLAN

SILT FENCE INSTALLATION NOTES:

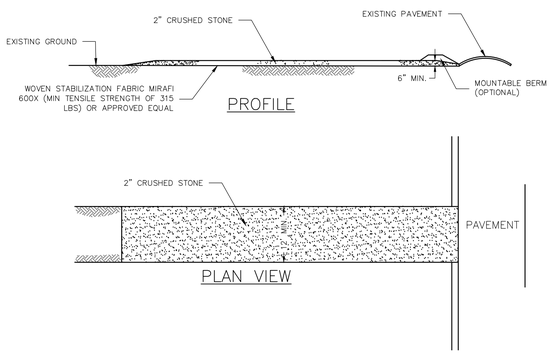
1. GEOTEXTILE FABRIC AND WOVEN WIREMESH TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACES EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



SECTION

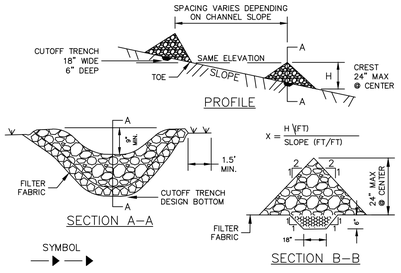
1 C-500 SILT FENCE

NOT TO SCALE



2 C-500 CONSTRUCTION ENTRANCE

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

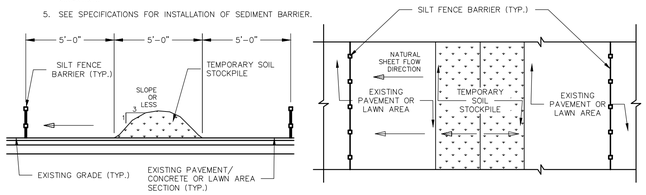
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOW OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LONER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
6. MAXIMUM DRAINAGE AREA 2 ACRES.

3 C-500 CHECK DAM

NOT TO SCALE

INSTALLATION NOTES:

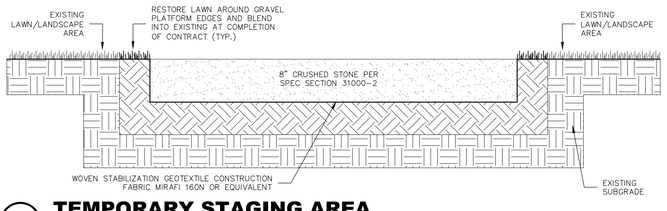
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALE BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING EACH PILE SHALL BE SURROUNDED WITH EITHER SEDIMENT BARRIER OR SAN AND/OR GRAVEL BAG, THEN STABILIZED WITH VEGETATION OR COVERED,
4. SILT FENCE TO BE INSTALLED AT THE DOWN STREAM END OF THE NATURAL SHEET FLOW DIRECTION.
5. SEE SPECIFICATIONS FOR INSTALLATION OF SEDIMENT BARRIER.



4 C-500 TYPICAL SOIL STOCKPILE AREA

NOT TO SCALE

REMOVE GRAVEL, RESTORE TOPSOIL AND LAWN AT COMPLETION OF CONTRACT

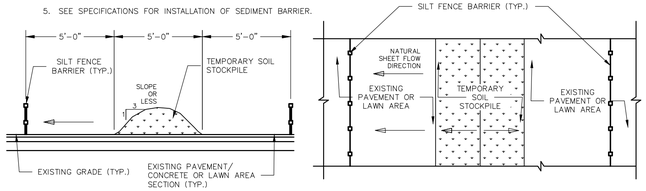


5 C-500 TEMPORARY STAGING AREA

NOT TO SCALE

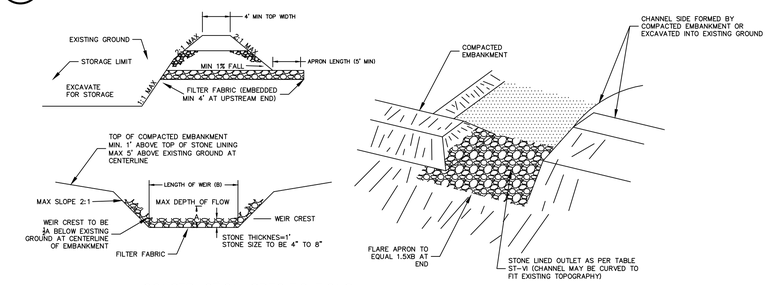
INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALE BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING EACH PILE SHALL BE SURROUNDED WITH EITHER SEDIMENT BARRIER OR SAN AND/OR GRAVEL BAG, THEN STABILIZED WITH VEGETATION OR COVERED,
4. SILT FENCE TO BE INSTALLED AT THE DOWN STREAM END OF THE NATURAL SHEET FLOW DIRECTION.
5. SEE SPECIFICATIONS FOR INSTALLATION OF SEDIMENT BARRIER.



6 C-500 TYPICAL SOIL STOCKPILE AREA

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE 5 FEET, MEASURED AT CENTERLINE OF EMBANKMENT.
3. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER, CUT SLOPES 1:1 OR FLATTER.
4. EXCAVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF THE EMBANKMENT.
5. STORAGE AREA PROVIDED SHALL BE INSURED BY COMPUTING THE VOLUME AVAILABLE BEHIND THE OUTLET CHANNEL UP TO AN ELEVATION OF ONE (1) FOOT BELOW THE LEVEL WEIR CREST.
6. FILTER FABRIC SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO TO PLACEMENT IN STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST 1 FOOT WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNELS.
7. STONE USED UN THE OUTLET CHANNEL SHALL BE 4 TO 8 INCH RIP-RAP. TO PROVIDE A FILTERING EFFECT, A LAYER OF FILTER FABRIC SHALL BE EMBEDDED 1'-FOOT WITH SECTION NEAREST ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OUTLET CHANNEL.
8. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ½ THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH AN MANNER IT WILL NOT ERODE.
9. THE STRUCTURE SHALL BE REPAIRED AFTER EACH RAIN AND AS NEEDED.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER EROSION AND WATER POLLUTION ARE MINIMIZED.
11. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
12. DRAINAGE FOR THIS AREA IS LIMITED TO 15 ACRES OR LESS.

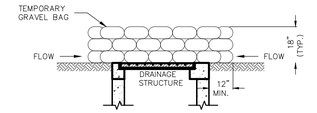
DESIGN CALCULATIONS (SMA 1/SMA2)

CONTRIBUTING AREA = 8.7/5.5 ACRES
MIN SIZE = 3,600 CF/ACRE
MIN SIZE = 31,320 CF/19,800 CF

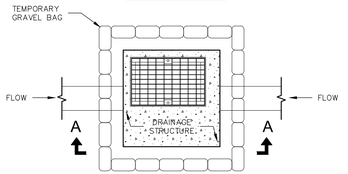
CONTRIBUTING AREA (ACRES)	DEPTH OF CHANNEL (A) (FT)	LENGTH OF WEIR (B) (FT)
1	1.5	4.0
2	1.5	5.0
3	1.5	6.0
4	1.5	10.0
5	1.5	12.0
6	1.5	14.0
7	1.5	16.0
8	2.0	10.0
9	2.0	10.0
10	2.0	12.0

7 C-500 STONE OUTLET SEDIMENT TRAP

NOT TO SCALE



SECTION A-A



PLAN

TEMPORARY GRAVEL BAG

APPLICATION NOTES:

A. THE PRIMARY PURPOSE OF DRAINAGE STRUCTURE INLET PROTECTION IS TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM BY PONDING WATER, WHICH ALLOWS SEDIMENT TO FALL OUT OF SUSPENSION.

B. GRAVEL BAGS ARE FILLED WITH CLEAN STONE RATHER THAN SAND TO PREVENT SEDIMENT FROM ENTERING A DRAINAGE SYSTEM IF BAGS ARE ONLY TO BE USED.

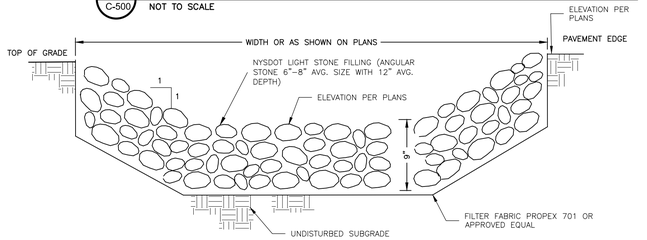
C. THE TOP OF THE INLET PROTECTION SHALL BE SET AT THE MAXIMUM DESIRED WATER LEVEL BASED ON FIELD LOCATION AND CONDITIONS.

GENERAL NOTES:

1. GRAVEL BAGS SHALL BE INDIVIDUALLY TIED, DOUBLE BAGGED AND INVERSELY INSERTED. GRAVEL BAGS SHALL LAP THE JOINTS BETWEEN THE BAGS IN THE LAYER BELOW.
2. MEASURES SHALL BE INSPECTED ONCE EVERY SEVEN (7) CALENDAR DAYS. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ½ OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
4. MAXIMUM DRAINAGE AREA FOR DRAINAGE STRUCTURE INLET PROTECTION IS 1-ACRE.

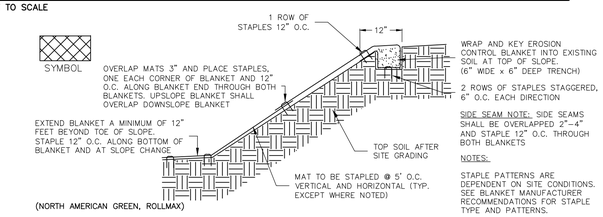
8 C-500 DRAINAGE STRUCTURE INLET PROTECTION

NOT TO SCALE



9 C-500 ARMOURED SWALE

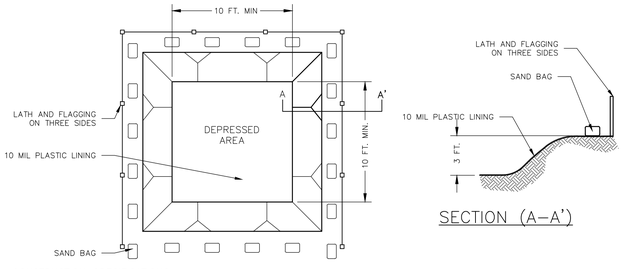
NOT TO SCALE



(NORTH AMERICAN GREEN, ROLLMAX)

10 C-500 EROSION CONTROL BLANKET

NOT TO SCALE



SECTION (A-A')

CONSTRUCTION SPECIFICATIONS

1. CONCRETE WASHOUT FACILITY SHALL BE LOCATED PER THE EROSION CONTROL PLAN SHEET C-140.
2. THE BASIN DIMENSIONS DEPICTED ABOVE ARE REQUIRED MINIMUMS. CONCRETE WASHOUT FACILITY SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. (APPROXIMATELY 60 GALLONS OF WASTE AND WATER PER TRUCK).
3. PLASTIC LINING MATERIAL SHALL BE A MINIMUM 10 MIN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
4. WASHOUT FACILITY MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

MAINTENANCE AND CLEANING

1. DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND
2. DO NOT USE SANITARY SEWER.
3. PLACE A SECURE NON COLLAPSING, NON-WATER COLLECTING COVER OVER THE FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW.
4. REMOVE AND DISPOSE OF HARDEN CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL STATE.
5. INSPECT THE WASHOUT FACILITY FOR SIGNS OF WEAKENING OR DAMAGE AND REPAIR AS NECESSARY(RELINE THE STRUCTURE WITH NEW POLY SHEETING AFTER EACH CLEANING).

11 C-500 CONCRETE WASHOUT FACILITY

NOT TO SCALE

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

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STATE OF NEW YORK · RAPAUL OSTERHOUDT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠1 BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:

SITE DETAILS

DRAWING NUMBER:

C-500

SHEET OF

36x24 PLOT SHEET

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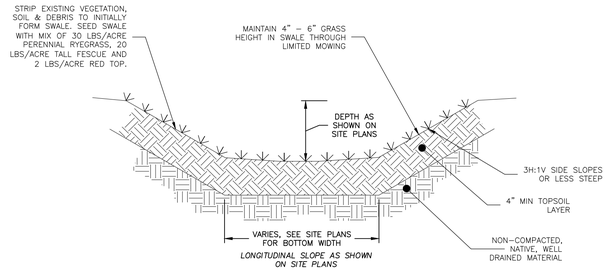
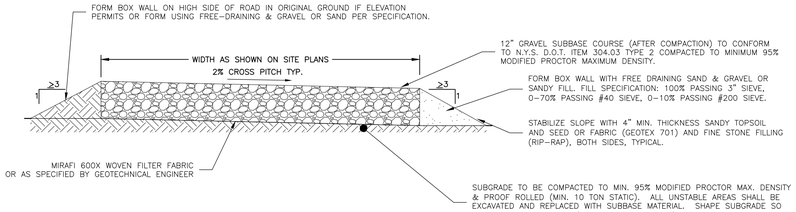


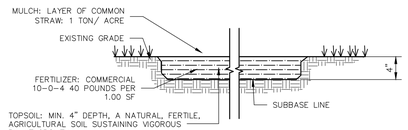
1 C-501 **VEGETATED SWALE**

NOT TO SCALE



2 C-501 **GRAVEL ACCESS ROAD**

NOT TO SCALE

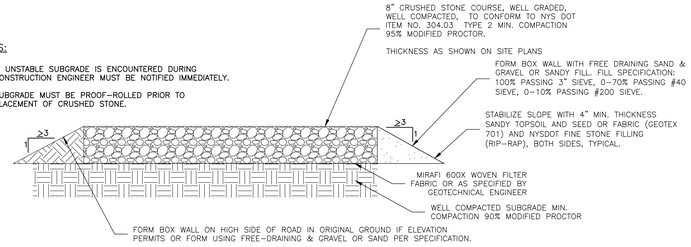


3 C-501 **TOPSOIL SEED FERTILIZER AND MULCH**

NOT TO SCALE

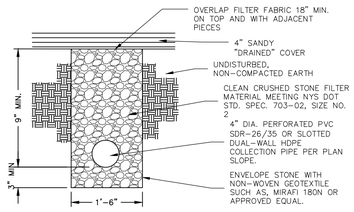
NOTES:

1. IF UNSTABLE SUBGRADE IS ENCOUNTERED DURING CONSTRUCTION ENGINEER MUST BE NOTIFIED IMMEDIATELY.
2. SUBGRADE MUST BE PROOF–ROLLED PRIOR TO PLACEMENT OF CRUSHED STONE.



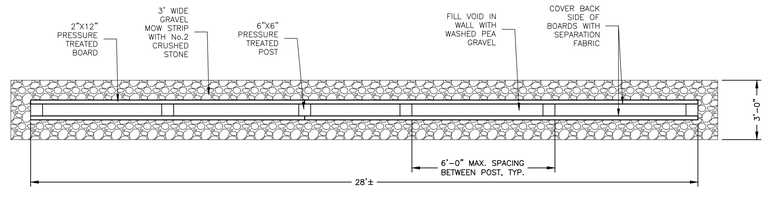
4 C-501 **GRAVEL WALKWAY**

NOT TO SCALE

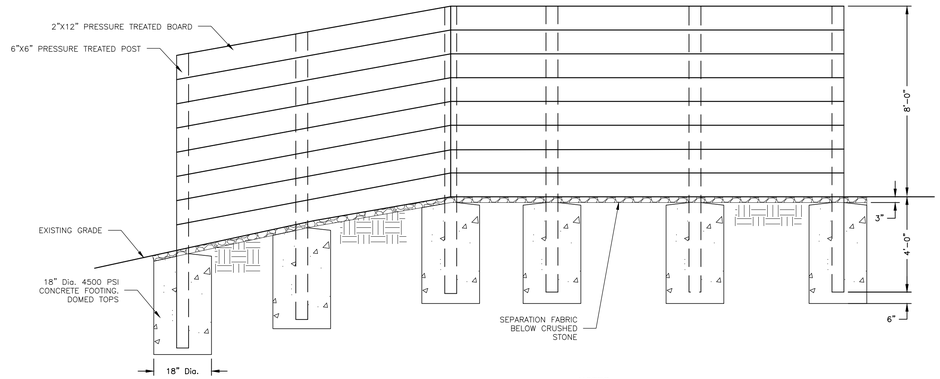


5 C-501 **UNDERDRAIN**

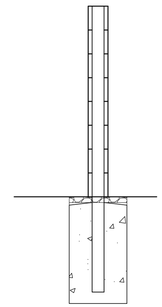
NOT TO SCALE



PLAN



PROFILE



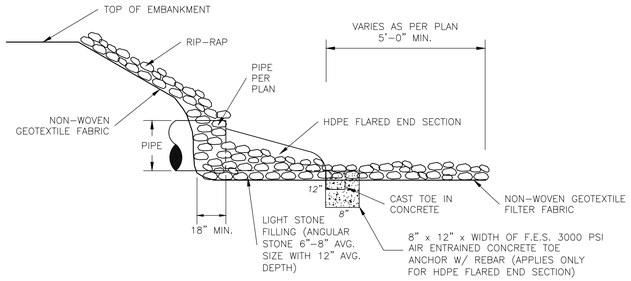
SECTION

NOTES:

1. FASTEN PRESSURE TREATED WOOD BOARDS TO POSTS WITH THREE (3) 2.5" LENGTH EXTERIOR GRADE SCREWS.

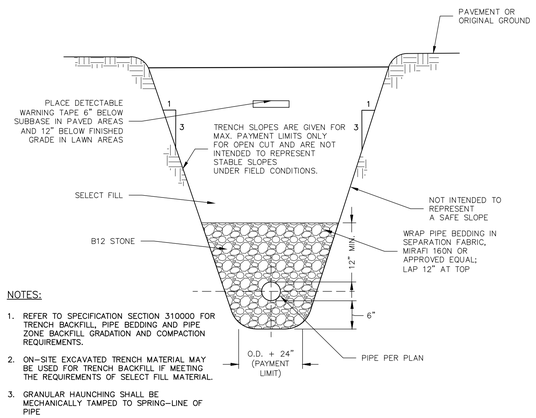
6 C-501 **WOOD WALL WITH PEA GRAVEL FILL**

NOT TO SCALE



7 C-501 **FLARED END SECTION**

NOT TO SCALE

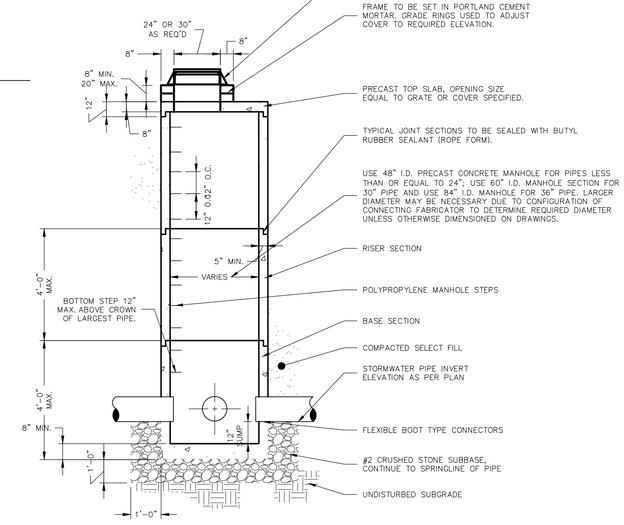


NOTES:

1. REFER TO SPECIFICATION SECTION 310000 FOR TRENCH BACKFILL, PIPE BEDDING AND PIPE ZONE BACKFILL GRADATION AND COMPACTION REQUIREMENTS.
2. ON–SITE EXCAVATED TRENCH MATERIAL MAY BE USED FOR TRENCH BACKFILL IF MEETING THE REQUIREMENTS OF SELECT FILL MATERIAL.
3. GRANULAR HAUNCHING SHALL BE MECHANICALLY TAMPED TO SPRING–LINE OF PIPE

8 C-501 **STORM PIPE TRENCH**

NOT TO SCALE



9 C-501 **CATCH BASIN**

NOT TO SCALE

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DESIGN & CONSTRUCTION

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CERTIFICATE OF AUTHORIZATION #: 037711

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SHEET OF

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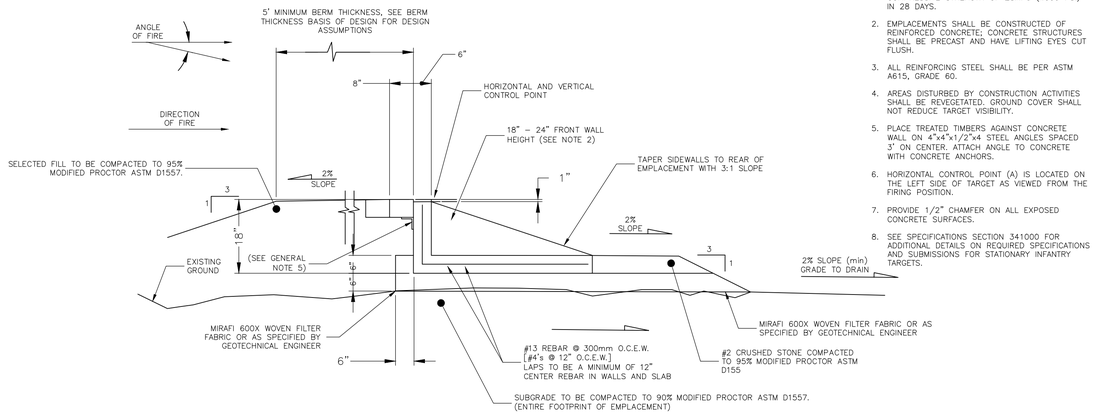

B
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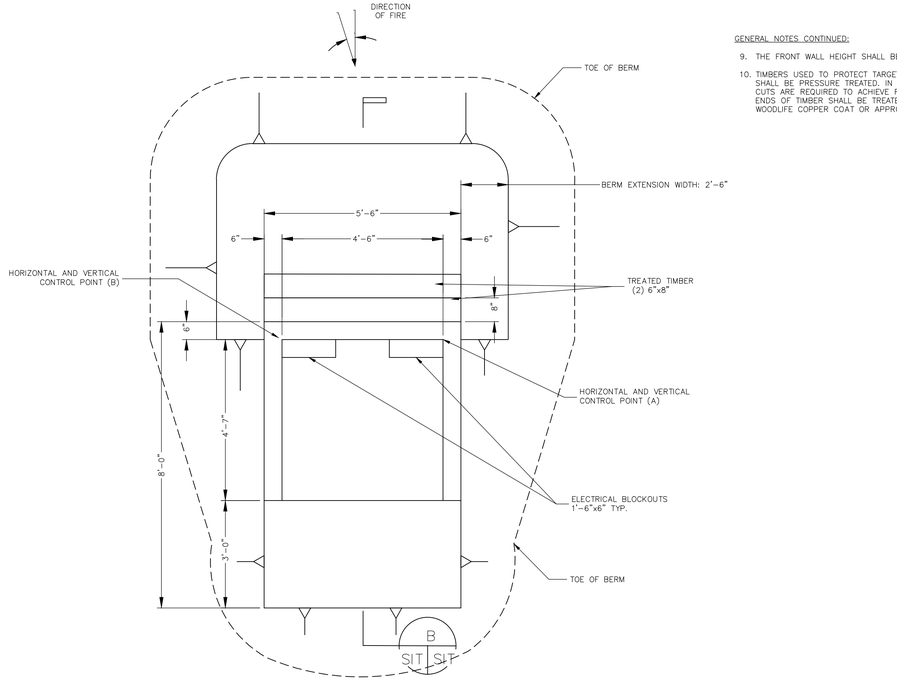
SECTION

GENERAL NOTES:

1. CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 28MPa (4000 PSI) IN 28 DAYS.
2. EMPLACEMENTS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE; CONCRETE STRUCTURES SHALL BE PRECAST AND HAVE LIFTING EYES CUT FLUSH.
3. ALL REINFORCING STEEL SHALL BE PER ASTM A615, GRADE 60.
4. AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REVEGETATED. GROUND COVER SHALL NOT REDUCE TARGET VISIBILITY.
5. PLACE TREATED TIMBERS AGAINST CONCRETE WALL ON 4"x4"x1/2"x4 STEEL ANGLES SPACED 3' ON CENTER. ATTACH ANGLE TO CONCRETE WITH CONCRETE ANCHORS.
6. HORIZONTAL CONTROL POINT (A) IS LOCATED ON THE LEFT SIDE OF TARGET AS VIEWED FROM THE FIRING POSITION.
7. PROVIDE 1/2" CHAMFER ON ALL EXPOSED CONCRETE SURFACES.
8. SEE SPECIFICATIONS SECTION 341000 FOR ADDITIONAL DETAILS ON REQUIRED SPECIFICATIONS AND SUBMISSIONS FOR STATIONARY INFANTRY TARGETS.

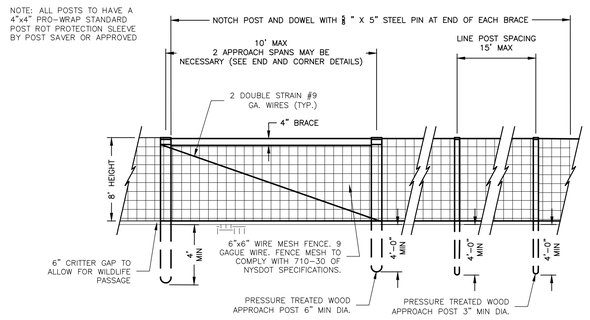


PLAN
SURFACE/FILL EMPLACEMENT

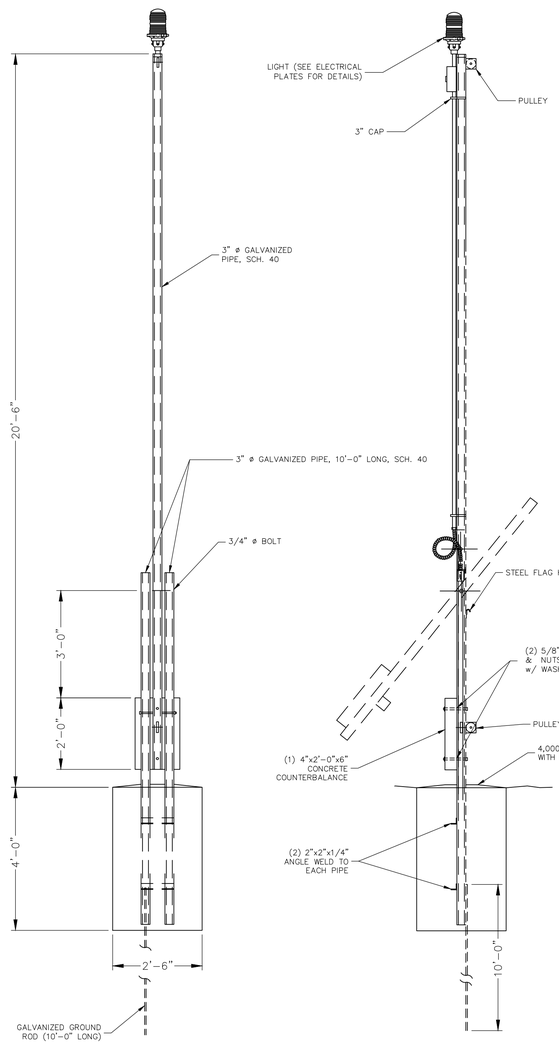
GENERAL NOTES CONTINUED:

9. THE FRONT WALL HEIGHT SHALL BE 18".
10. TIMBERS USED TO PROTECT TARGET COFFIN SHALL BE PRESSURE TREATED. IN THE EVENT CUTS ARE REQUIRED TO ACHIEVE FINAL WIDTH, ENDS OF TIMBER SHALL BE TREATED WITH WOODLIFE COPPER COAT OR APPROVED EQUAL.

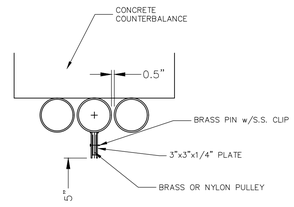
1 C-502 **STATIONARY INFANTRY TARGET**
NOT TO SCALE



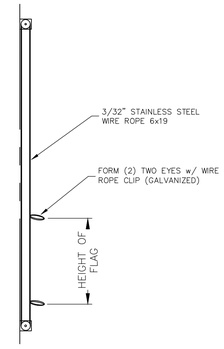
2 C-502 **FIXED KNOT FARM FENCE**
NOT TO SCALE



3 C-502 **FLAGPOLE ELEVATIONS AND DETAILS**
NOT TO SCALE



PULLEY
SCALE: N.T.S.



HALYARD
SCALE: N.T.S.

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STATE OF NEW YORK · PAUL OSTERHOUT · 079236 · LICENSED PROFESSIONAL ENGINEER
EXPIRES:09/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

BPO	7/02/2025	ADDENDUM No. 1
BPO	5/30/2025	BID DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER:	47574 - C
DESIGNED BY:	JWL
DRAWN BY:	JWL
FIELD CHECK:	BPO
APPROVED:	BPO

SHEET TITLE:
SITE DETAILS

DRAWING NUMBER:
C-502

SHEET OF

36x24 PLOT SHEET
Jul 02,2025 - 12:56pm
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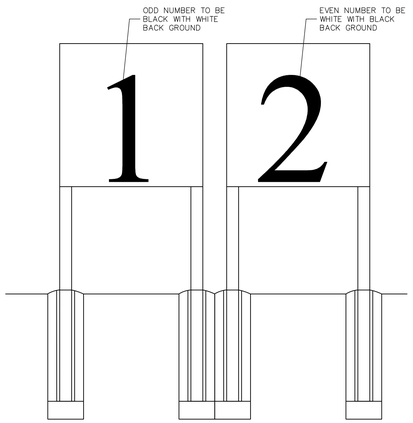
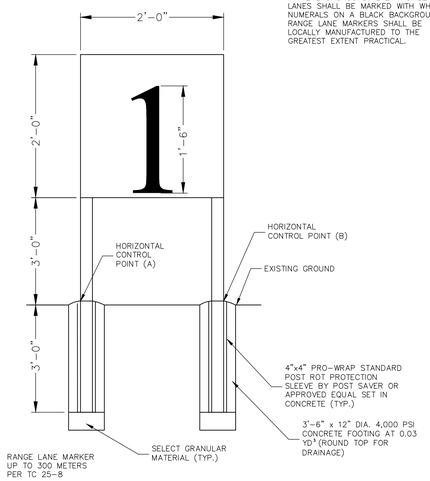
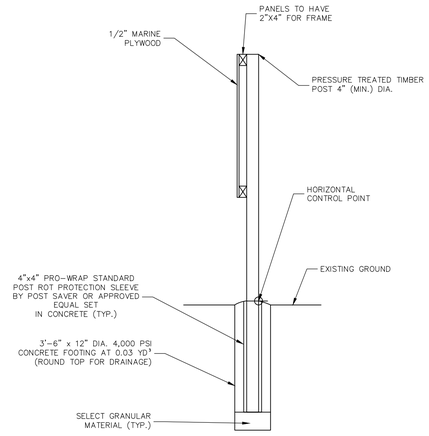


DOUBLE LANE MARKERS



FRONT VIEW



SIDE VIEW

NOTES:

1. ODD NUMBERED LANES SHALL BE MARKED WITH BLACK NUMERALS ON A WHITE BACKGROUND. EVEN NUMBERED LANES SHALL BE MARKED WITH WHITE NUMERALS ON A BLACK BACKGROUND. RANGE LANE MARKERS SHALL BE LOCALLY MANUFACTURED TO THE GREATEST EXTENT PRACTICAL.

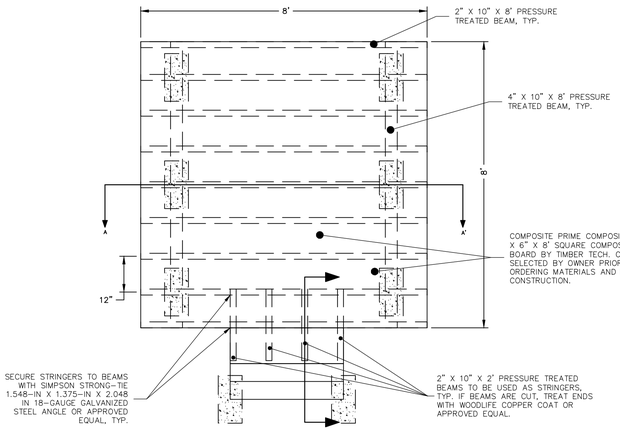
1 C-503 RANGE LANE MARKER

NOT TO SCALE

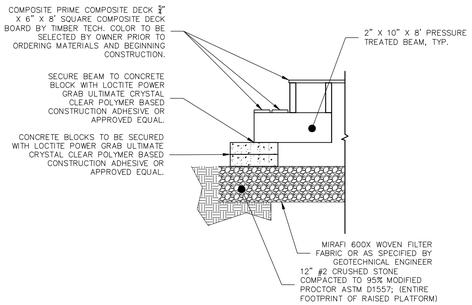
FIRING LINE PLATFORM ELEVATION ABOVE GRADE TABLE			
LANE NUMBER	TOP OF PLATFORM ELEVATION	FINISHED GRADE AT BASE OF PLATFORM	HEIGHT OF PLATFORM ABOVE FINISHED GRADE
LANE 1	90.50	88.00	2.5'
LANE 2	91.50	89.00	2.5'
LANE 3	92.50	90.00	2.5'
LANE 4	94.00	91.50	2.5'
LANE 5	95.00	92.50	2.5'
LANE 6	96.30	94.30	2.0'
LANE 7	97.60	95.60	2.0'
LANE 8*	98.90	98.9000	0.00
LANE 9*	100.00	100.0000	0.00
*FOR LANES 8 & 9, USE 2" X 4" X 8' AND 4" X 4" X 8' PRESSURE TREATED BEAMS WITH A SINGLE ROW OF CONCRETE BLOCKS. STAIRS AND STRINGERS NOT REQUIRED FOR LANES 8 & 9 UNLESS SPECIFICALLY REQUESTED BY DIRECTOR'S REPRESENTATIVE.			

NOTES:

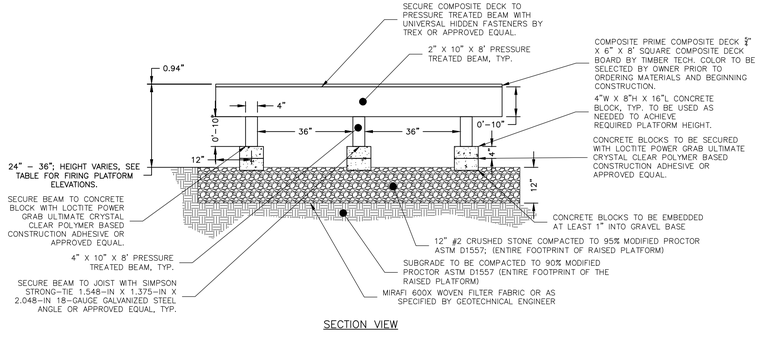
1. FOR ALL FIRING PLATFORM WORK, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER CONSULTANT FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION OF BOARDWALK.



PLAN VIEW



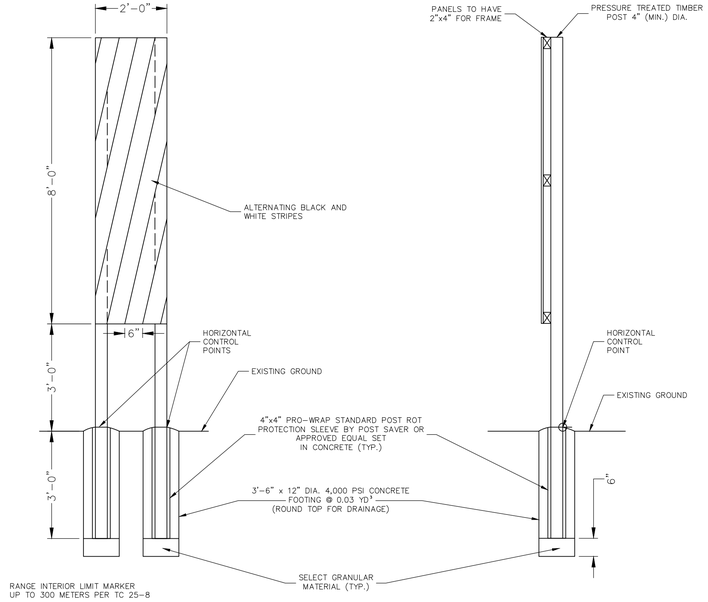
SECTION VIEW OF STAIRS



SECTION VIEW

2 C-503 FIRING PLATFORM

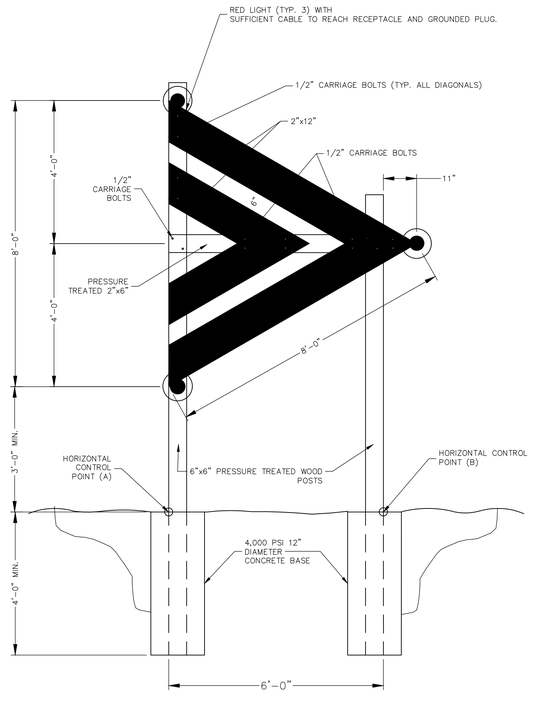
NOT TO SCALE



SIDE VIEW

3 C-503 RANGE INTERIOR LIMIT MARKERS

NOT TO SCALE



4 C-503 RANGE LIMIT MARKER DETAILS

NOT TO SCALE

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: XXXXXXX

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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STATE OF NEW YORK · PAUL OSTERHOUT · LICENSED PROFESSIONAL ENGINEER · 079236

EXPIRES:09/30/2027

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BPO	5/30/2025	BID DOCUMENTS

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SHEET TITLE:

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SHEET OF

36x24 PLOT SHEET

Jul 02,2025 - 12:57pm
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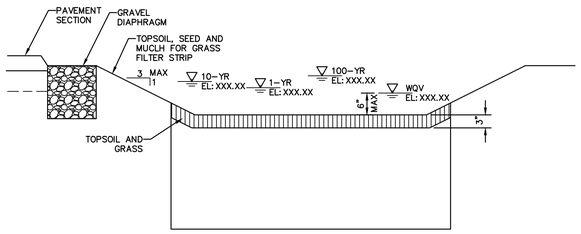
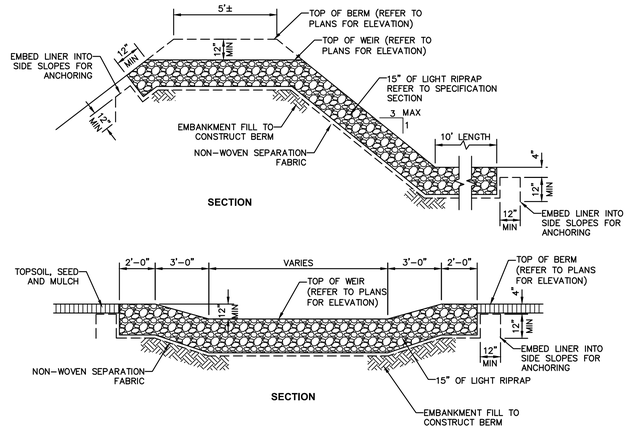
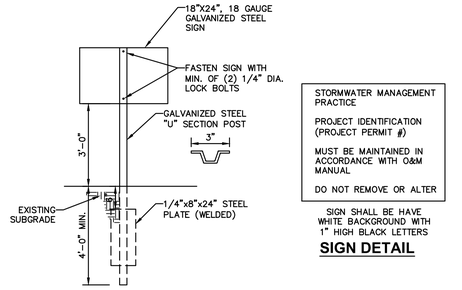


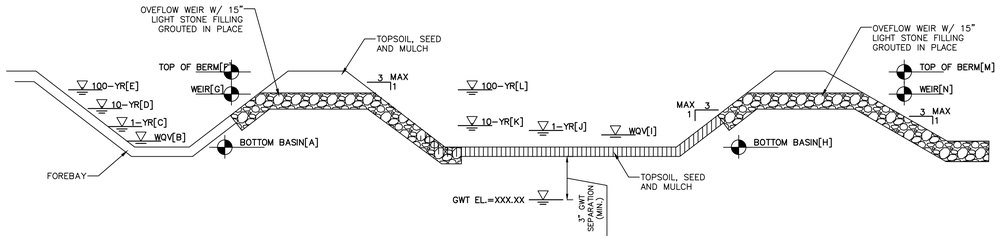
1 INFILTRATION BASIN SECTION
SCALE: N.T.S.



2 OVERFLOW WEIR
SCALE: N.T.S.

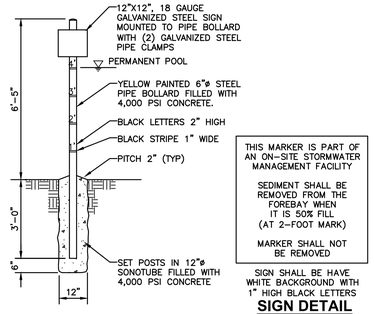


3 STORMWATER MANAGEMENT SIGN
SCALE: N.T.S.



	FOREBAY INFORMATION								INFILTRATION BASIN INFORMATION								
BASIN ID	BOTTOM OF BASIN EL. (A)	WQV (B) EL	1-YR STORM (C) EL	10-YR STORM (D) EL	100-YR STORM (E) EL	TOP OF BERM (F) EL	OVERFLOW WEIR (G) EL	OVERFLOW WEIR LENGTH (FT)	BASIN ID	BOTTOM OF BASIN EL. (H)	WQV (I) EL	1-YR STORM (J) EL	10-YR STORM (K) EL	100-YR STORM (L) EL	TOP OF BERM (M) EL	OVERFLOW WEIR (N) EL	OVERFLOW WEIR LENGTH (FT)
IB-1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	IB-1	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
IB-2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	IB-2	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

4 INFILTRATION BASIN - SECTION
SCALE: NTS



5 SEDIMENT MARKER
SCALE: N.T.S.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
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SHEET OF

36x24 PLOT SHEET

Jul 02,2025 - 12:57pm
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ABBREVIATIONS

A:	AREA
AB:	ANCHOR BOLT
ABV:	ABOVE
ACC:	ACCESS
ACOUST:	ACOUSTICAL
ACR:	ACRYLIC
ACST:	ACOUSTIC
ACT:	ACOUSTICAL TILE
AD:	ACCESS DOOR
ADH:	ADHESIVE
ADJ:	ADJUST, ADJUSTABLE, ADJACENT
AFF:	ABOVE FINISHED FLOOR
AGGR:	AGGREGATE
ALT:	ALTERNATE
ALUM:	ALUMINUM
ANOD:	ANODIZED
AP:	ACCESS PANEL
APPROX:	APPROXIMATE
ACOE:	ARMY CORP OF ENGINEERS
ATC:	ACOUSTICAL TILE CEILING
BDRM:	BEDROOM
BETW:	BETWEEN
BF:	BOARD FOOT
BIT:	BITUMINOUS
BLDG:	BUILDING
BLKG:	BLOCKING
BOT:	BOTTOM
BPL:	BEARING PLATE
BRG:	BEARING
BRK:	BRICK
BRZ:	BRONZE
BS:	BOTH SIDES
BSMT:	BASEMENT
BUR:	BUILT-UP ROOF
C/C:	CENTER TO CENTER
CAB:	CABINET
CAR:	CARPET
CAV:	CAVITY
CCW:	COUNTER CLOCKWISE
CCTV:	CLOSED CIRCUIT TV
CEM:	CEMENT
CER:	CERAMIC
CF:	CUBIC FEET
CHAM:	CHAMFER
CJ:	CONTROL JOINT
CK:	CAULKING
CL:	CENTERLINE
CLG:	CEILING
CLKG:	CAULKING
CLR:	CLEAR
CLR OPG:	CLEAR OPENING
CMT:	CERAMIC MOSAIC TILE
CMU:	CONCRETE MASONRY UNIT
COL:	COLUMN
CONC:	CONCRETE
CONSTR:	CONSTRUCTION
CONT:	CONTINUOUS
CONTR:	CONTRACTOR
COP:	COPPER
CPR:	COPPER
CPT:	CARPET
CT:	CERAMIC TILE
CW:	CLOCKWISE
DBL:	DOUBLE
DEG:	DEGREE
DEMO:	DEMOLITION
DF:	DRINKING FOUNTAIN
DIAG:	DIAGONAL
DIA:	DIAMETER
DIAM:	DIAMETER
DIFF:	DIFFUSER
DN:	DOWN
DR:	DOOR
DWG:	DRAWING
DWGS:	DRAWINGS
DWR:	DRAWER
EA:	EACH
EB:	EXPANSION BOLT
EE:	EACH END
EF:	EACH FACE
EIFS:	EXTERIOR INSULATION AND FINISH SYSTEM
EJ:	EXPANSION JOINT
EL:	ELEVATION, ELEVATOR
ELEC:	ELECTRICAL
ELEV:	ELEVATOR, ELEVATION
ENCL:	ENCLOSURE
EPDM:	ETHYLENE PROPYLENE DIENE MONOMER
EQ:	EQUAL
EQUIP:	EQUIPMENT
EW:	EACH WAY
EXG:	EXISTING
EXH:	EXHAUST
EXIST:	EXISTING
EXP:	EXPOSED
FB:	FACE BRICK
FD:	FLOOR DRAIN
FDC:	FIRE DEPARTMENT CONNECTION
FDN:	FOUNDATION
FDTN:	FOUNDATION
FE:	FIRE EXTINGUISHER
FEC:	FIRE EXTINGUISHER CABINET
FFE:	FINISHED FLOOR ELEVATION
FF&E:	FIXTURES, FURNISHINGS & EQUIPMENT
FFL:	FINISHED FLOOR LINE
FGL:	FIBERGLASS
FHC:	FIRE HOSE CABINET
FIN:	FINISHED
FIXT:	FIXTURE
FL:	FLOOR
FLR:	FLOOR
FO:	FINISHED OPENING
FOF:	FACE OF FINISH
FOS:	FACE OF STUDS
FP:	FIREPROOF
FRT:	FIRE RETARDANT
FT:	FOOT, FEET,
FTG:	FOOTING, FITTING
FURN:	FURNISH, FURNITURE
FURR:	FURRING
GA:	GAUGE, GAGE
GALV:	GALVANIZED
GC:	GENERAL CONTRACTOR
GL:	GLASS
GL BLK:	GLASS BLOCK
GRND:	GROUND
GRTG:	GRATING
GVL:	GRAVEL
GYP:	GYPSUM
GYP BD:	GYPSUM BOARD
HDCP:	HANDICAPPED (BETTER CALLED "ACCESSIBLE")
HDW:	HARDWARE
HDWD:	HARDWOOD
HGT:	HEIGHT
HM:	HOLLOW METAL
HORIZ:	HORIZONTAL
HR:	HOUR
HWD:	HARDWOOD
ID:	INSIDE DIAMETER
IN:	INCH
INCL:	INCLUDE
INFO:	INFORMATION
INSTL:	INSTALL
INSUL:	INSULATION
INT:	INTERIOR
INTERM:	INTERMEDIATE
JAN:	JANITOR
JC:	JANITOR'S CLOSET
JT:	JOINT
LAB:	LABORATORY, LABOR
LAV:	LAVATORY
LB:	POUND (WEIGHT)
LBL:	LABEL
LINO:	LINOLEUM
LNTL:	LINTEL
MAINT:	MAINTENANCE
MAN:	MANUAL
MAR:	MARBLE
MARB:	MARBLE
MAS:	MASONRY
MAT:	MATERIAL
MATL:	MATERIAL
MAX:	MAXIMUM
MECH:	MECHANICAL
MEMB:	MEMBRANE
MFD:	MANUFACTURED
MFG:	MANUFACTURER, MANUFACTURING
MFR:	MANUFACTURE, MANUFACTURER
MI:	MALLEABLE IRON, MILES
MIKE:	MICROPHONE
MIN:	MINIMUM
MIR:	MIRROR
MISC:	MISCELLANEOUS
MK:	MARK
ML&P:	METAL LATH & PLASTER
MLD:	MOLDING
MLDG:	MOLDING
MM:	MILLIMETER
MMB:	MEMBRANE
MO:	MASONRY OPENING
MOD:	MODULE
MONO:	MONOLITHIC
MOV:	MOVABLE
MP:	METAL ACOUSTICAL PANEL
MPS:	MEDIUM PRESSURE STEAM
MR:	MOP RECEPTOR
MRD:	METAL ROOF DECK
MT:	MOUNT, MOUNTED
MTD:	MOUNTED
MTL:	MATERIAL, METAL
MTR:	MOTOR
MUL:	MULLION
MULL:	MULLION
MV:	MERCURY VAPOR
MWP:	MAXIMUM WORKING PRESSURE
MWK:	MILLWORK
N:	NORTH, NITROGEN
NAP:	NAPKIN
NAT:	NATURAL
NATL:	NATURAL
NB:	"NOTA BENE" LATIN PHRASE FOR "TAKE SPECIAL NOTE"
NC:	NORMALLY CLOSED, NOISE CRITERIA
NEC:	NATIONAL ELECTRICAL CODE
NEUT:	NEUTRAL
NF:	NEAR FACE
NFWH:	NON-FREEZE WALL HYDRANT
NI:	NICKEL
NIC:	NOT IN CONTRACT
NK:	NECK
NMT:	NON-METALLIC
NO:	NUMBER, NORMALLY OPEN
NOM:	NOMINAL
NR:	NOISE REDUCTION
NRC:	NOISE REDUCTION COEFFICIENT
NTS:	NOT TO SCALE
OB:	OBSCURE
OBS:	OBSCURE
OC:	ON CENTER
OD:	OUTSIDE DIAMETER
OF:	OUTSIDE FACE
OFF:	OFFICE
OH:	OVERHEAD
OHD:	OVERHEAD DOOR
OPNG:	OPENING
OPP:	OPPOSITE
OPP H:	OPPOSITE HAND
P. LAM:	PLASTIC LAMINATE
PAR:	PARALLEL
PBD:	PARTICLE BOARD
PERIM:	PERIMETER
PERP:	PERPENDICULAR
PL:	PLATE
PLBG:	PLUMBING
PLYWD:	PLYWOOD
PLUMB:	PLUMBING
PR:	PAIR
PREFAB:	PREFABRICATED
PRES:	PRESSURE
PRESS:	PRESSURE
PRMLD:	PREMOLDED
PRTN:	PARTITION
PSF:	POUNDS PER SQUARE FOOT
PSI:	POUNDS PER SQUARE INCH
PT:	PAINT
PTD:	PAINTED, PAPER TOWEL DISPENSER
PTD/R:	COMBINATION PAPER TOWEL DISPENSER/RECEPTACLE
PTN:	PARTITION
QUAL:	QUALITY
QT:	QUARRY TILE, QUART
QTY:	QUANTITY
RB:	RUBBER BASE
RCP:	REFLECTED CEILING PLAN
RD:	ROOF DRAIN, ROUND, RECEPTACLE DISTRIBUTION PANEL
REBAR:	REINFORCING BAR
REF:	REFER, REFERENCE, REFRIGERATOR
REFL:	REFLECTED,
REFR:	REFRIGERATE, REFRIGERATOR
REINF:	REINFORCEMENT, OR REINFORCE
REQD:	REQUIRED
RESIL:	RESILIENT
RF:	ROOF
RGH:	ROUGH
RGH OPNG:	ROUGH OPENING
RO:	ROUGH OPENING
RT:	RUBBER TILE
SALV:	SALVAGE
SCHED:	SCHEDULE
SF:	SQUARE FOOT
SHR:	SHOWER
SHT:	SHEET
SPEC:	SPECIFICATION, SPECIFICATIONS
SPECS:	SPECIFICATIONS
SQ:	SQUARE
SS:	STAINLESS STEEL
STC:	SOUND TRANSMISSION CLASS
STD:	STANDARD
STL:	STEEL
STOR:	STORAGE
STRT:	STRAIGHT
STRUC:	STRUCTURAL
STRUCT:	STRUCTURAL
SUR:	SURFACE
SUSP:	SUSPENDED, SUSPEND
T&B:	TOP AND BOTTOM
T&G:	TONGUE & GROOVE
TB:	TOWEL BAR
TD:	TRENCH DRAIN
TERR:	TERRAZZO
THK:	THICK, THICKNESS
THRU:	THROUGH
TLT:	TOILET
TPD:	TOILET PAPER DISPENSER
TPH:	TOILET PAPER HOLDER
TPTN:	TOILET PARTITION
TYP:	TYPICAL
TZ:	TERRAZZO
UNFIN:	UNFINISHED
UNO:	UNLESS NOTED OTHERWISE
UON:	UNLESS OTHERWISE NOTED
UP:	UNPAINTED
UR:	URINAL
USACE:	UNITED STATE ARMY CORP OF ENGINEERS
VAT:	VINYL ASBESTOS TILE
VBC:	VINYL BASE (COVED)
VCT:	VINYL COMPOSITION TILE
VERT:	VERTICAL
VEST:	VESTIBULE
VIF:	VERIFY IN THE FIELD
VT:	VINYL TILE
VTR:	VENT THROUGH ROOF
VWC:	VINYL WALL COVERING
W/:	WITH
W/O:	WITHOUT
WAINS:	WAINSCOT
WC:	WATERCLOSET
WD:	WOOD

GENERAL NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE LATEST ADOPTED BUILDING CODE EDITION, AND TO CONDITIONS AND SPECIFICATIONS OF ALL GOVERNING AUTHORITIES.
2. VERIFY AND CONFIRM ALL CONDITIONS, DIMENSIONS, AND LAYOUT INFORMATION PRIOR TO START OF CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK. ANY CORRECTION WORK REQUIRED AS A RESULT OF NOT REPORTING SUCH DISCREPANCIES SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR AND SUBCONTRACTORS SHALL CAREFULLY EXAMINE THE SITE AND THE CONSTRUCTION DOCUMENTS OF THE ENTIRE WORK. INCONSISTENCIES IN THE PLANS OR SPECIFICATIONS SHALL BE CALLED TO THE ATTENTION OF OWNER.
4. CONTRACTORS ARE RESPONSIBLE FOR ALL MATERIALS, CONSTRUCTION METHODS AND CRAFTSMANSHIP.
5. REFER TO ELEVATIONS AND DETAILS WHERE INDICATED FOR ADDITIONAL INFORMATION. DETAILS TAKE PRECEDENCE OVER PLANS. IN THE CASE OF A CONFLICT, THE HIGHEST COST OPTION SHOULD BE PRICED.
6. DETAIL REFERENCES SHALL BE APPLIED TO ALL INSTANCES WHERE THE SAME CONDITIONS OCCUR, UNLESS OTHERWISE NOTED.
7. DIMENSIONS ARE TO STRUCTURAL GRID, CENTERLINE OF COLUMNS, AND FACE OF WALL FINISH UNLESS NOTED OTHERWISE.
8. THE TERMS "ABOVE FINISH FLOOR" (AFF) AND "FINISH FLOOR ELEVATION" (FEE) REFER TO FINAL FINISHED FLOOR ELEVATION, WHETHER BUILT-UP SLAB, COMPOSITE DECK, OR RAISED ACCESS FLOOR.
9. DO NOT SCALE DRAWINGS.
10. CUTTING AND DRILLING OF STRUCTURAL MEMBERS NOT DETAILED REQUIRES THE WRITTEN PERMISSION OF THE ARCHITECT OF RECORD.
11. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE RESULTING FROM THEIR WORK. THE CONTRACTOR WILL COORDINATE CLEANUP OF ALL AREAS AFFECTED BY DUST OR ANY MATERIALS, BOTH DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT, INCLUDING THE INSIDE OF ALL WINDOWS AS NECESSARY SO THAT THE SPACE IS READY FOR OCCUPANCY BY TENANT.
12. CONTRACTORS ARE TO PROVIDE ADEQUATE SUPPORT OF FOUNDATION WALLS, LOAD BEARING WALLS AND PARTITIONS DURING CONSTRUCTION.
13. THOROUGHLY COORDINATE WORK WITH OTHER TRADES AND DETERMINE THE EXACT ROUTE AND LOCATION OF UTILITIES, MATERIALS AND EQUIPMENT BEFORE FABRICATION AND INSTALLATION.
14. CONTRACTORS PROVIDE ALL BLOCKING, FURRING AND SHIMMING FOR INSTALLATION AND COMPLETION OF WORK.
15. ALL NEW WORK SHALL BE PLUMB, LEVEL AND SQUARE.

ADA NOTES:

1. FACILITIES, OR PORTIONS OF FACILITIES, ON A MILITARY INSTALLATION THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.
2. RESERVE AND NATIONAL GUARD FACILITIES, OR PORTIONS OF SUCH FACILITIES, OWNED BY OR UNDER THE CONTROL OF THE DEPARTMENT OF DEFENSE, THAT ARE DESIGNED AND CONSTRUCTED FOR USE EXCLUSIVELY BY ABLE-BODIED MILITARY PERSONNEL.

MATERIAL SYMBOLS

- CONCRETE
- CEMENT, SAND, GROUT, PLASTER, OR GYPSUM WALL BOARD
- RIGID INSULATION
- STEEL
- PLYWOOD
- STONE, GRAVEL, OR POROUS FILL
- EARTH
- BATT. OR LOOSE INSULATION
- WOOD (FINISHED)
- WOOD (ROUGH)
- WOOD (BLOCK)

DRAFTING SYMBOLS

- SOLID LINE FOR NEW/ EXISTING/ BACKGROUND (LINE WEIGHT VARIES)
- CENTER LINE OR COLUMN GRID
- HIDDEN/ REMOVAL/ DEMO LINE (LINE WEIGHT VARIES)
- OVERHEAD LINE
- BREAK LINE
- COLUMN LINE REFERENCES (1, 2, A, B)
- DOOR TAGS (D1)
- ROOM TAG (ROOM NAME / XXX / ROOM NUMBER)
- WINDOW TAG/LOUVER TAG (W1)
- WALL TYPE (P-1)
- CEILING HEIGHT (+ X'-X" A.F.F.)
- NORTH ARROW (TRUE NORTH / NORTH)
- SECTIONS (DETAIL NO 0 / SHEET NO X-XXX)
- EXTERIOR ELEVATIONS (DETAIL NO 0 / SHEET NO X-XXX)
- DETAIL CALL OUTS (1 / A101, SIM)
- REVISION SYMBOL AND CLOUD (#)

REVISED DRAWING 07/02/2025

Jul 01,2025 - 12:12pm
B:\20099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-001.dwg

36x24 PLOT SHEET

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:

ARCHITECTURAL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES

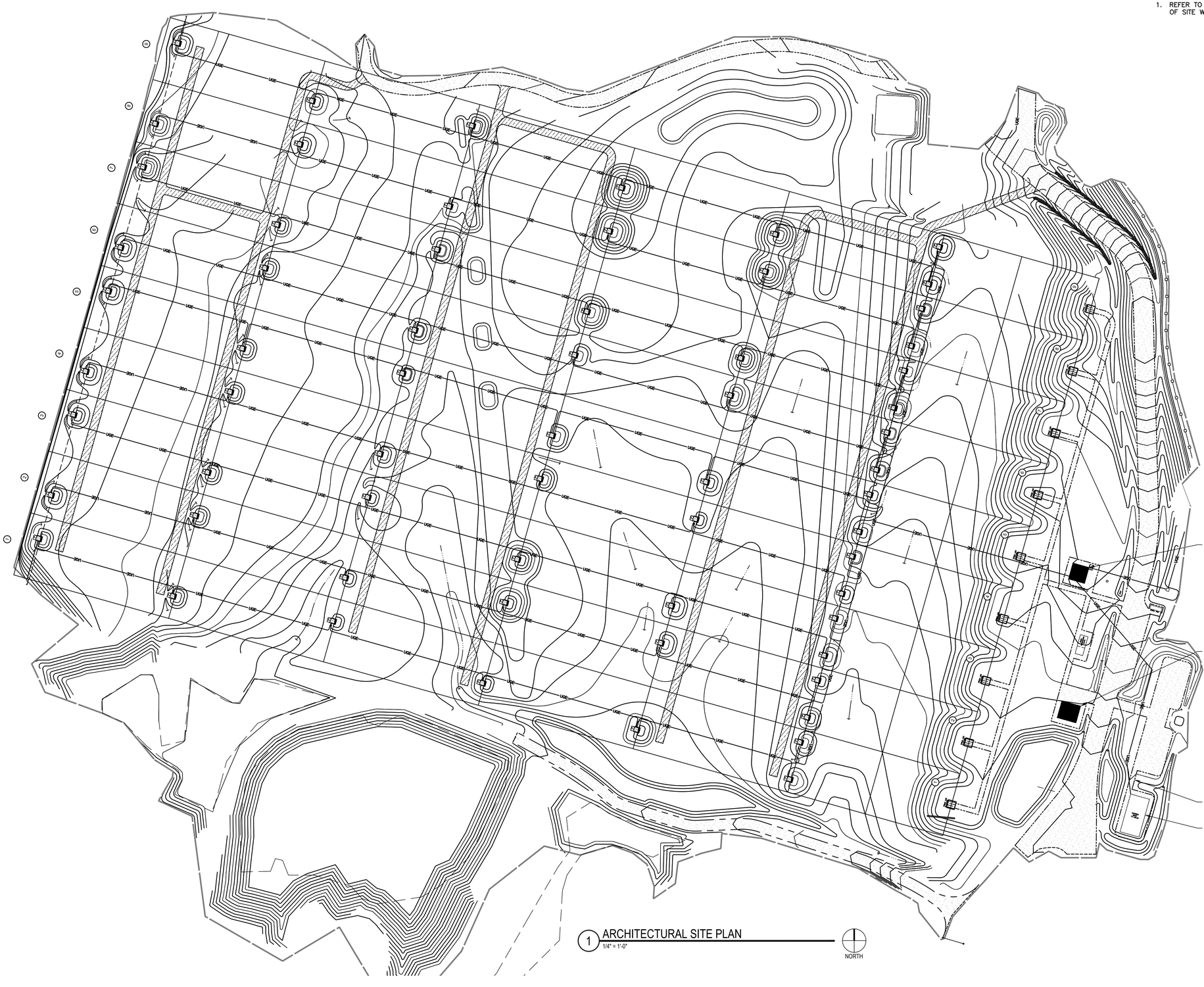
DRAWING NUMBER:

A–001

SHEET OF

GENERAL NOTES:

1. REFER TO CIVIL DRAWINGS FOR EXTENT OF SITE WORK AND ADDITIONAL DETAILS.



1 ARCHITECTURAL SITE PLAN
1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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EXPIRATION: 2/28/2027

CONTRACT:
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TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
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11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:
ARCHITECTURAL SITE PLAN BASE BID

DRAWING NUMBER:
A–002

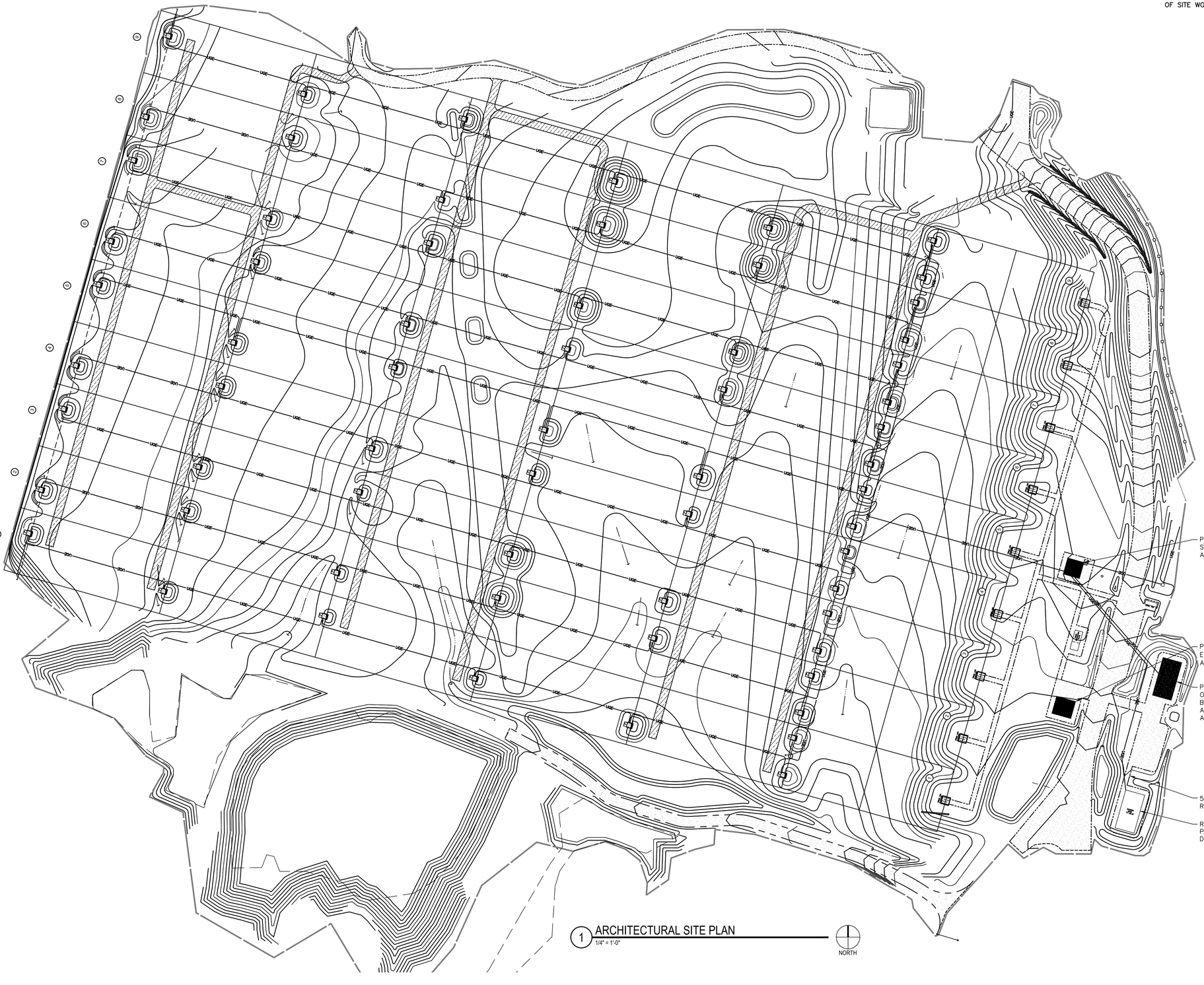
SHEET OF

Jul 01,2025 – 12:12pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM-CAD\SE081A–002.dwg

36x24 PLOT SHEET

GENERAL NOTES:

1. REFER TO CIVIL DRAWINGS FOR EXTENT OF SITE WORK AND ADDITIONAL DETAILS.



1 ARCHITECTURAL SITE PLAN
1/4" = 1'-0"

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:
ARCHITECTURAL SITE PLAN ALT 1

DRAWING NUMBER:
A–002A

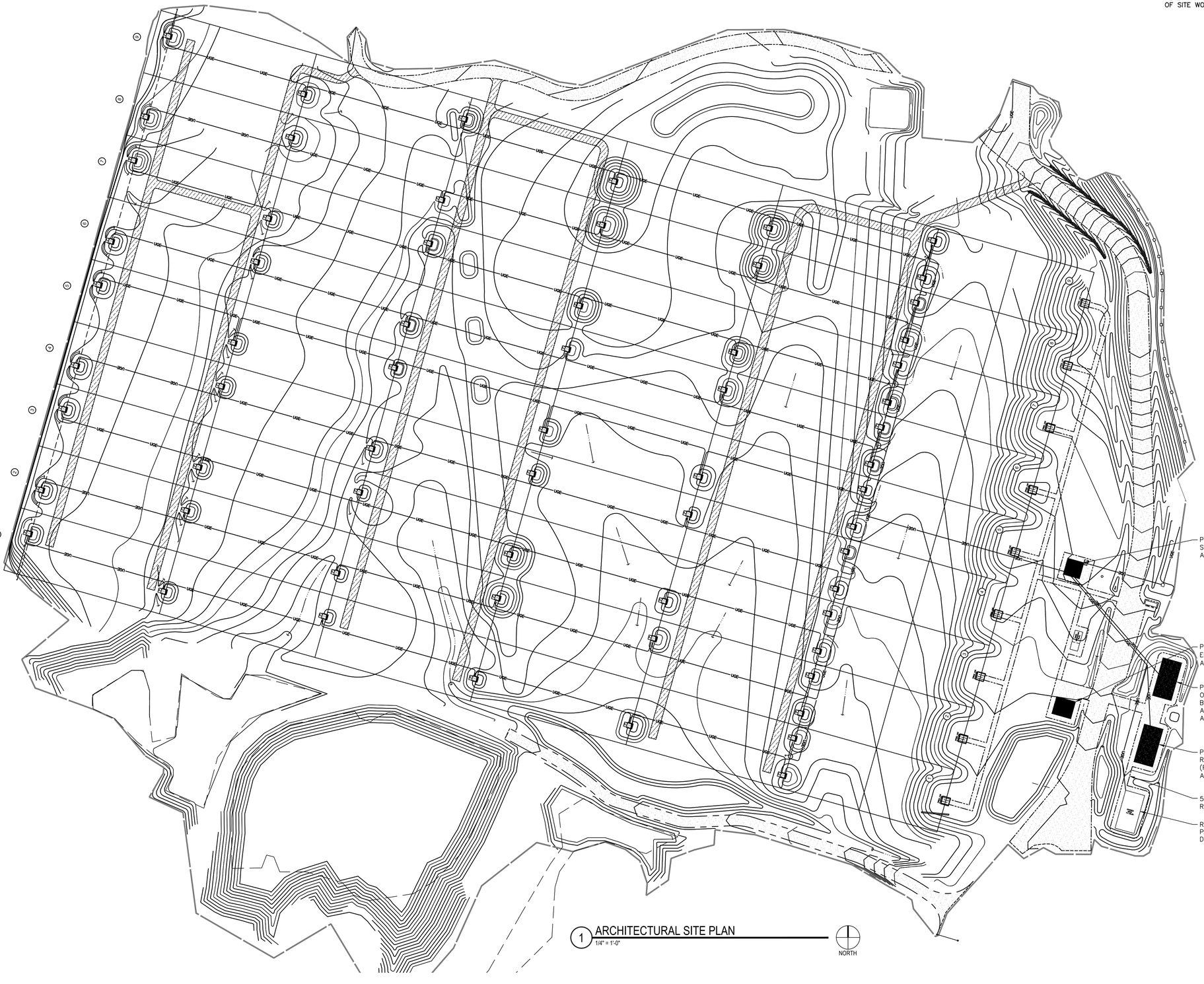
SHEET OF

Jul 01,2025 – 12:13pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM-CAD\SE081A–002A.dwg

36x24 PLOT SHEET

GENERAL NOTES:

1. REFER TO CIVIL DRAWINGS FOR EXTENT OF SITE WORK AND ADDITIONAL DETAILS.



1 ARCHITECTURAL SITE PLAN
1/4" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 1:50pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-002B.dwg

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CERTIFICATE OF AUTHORIZATION #: 021331

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK
EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

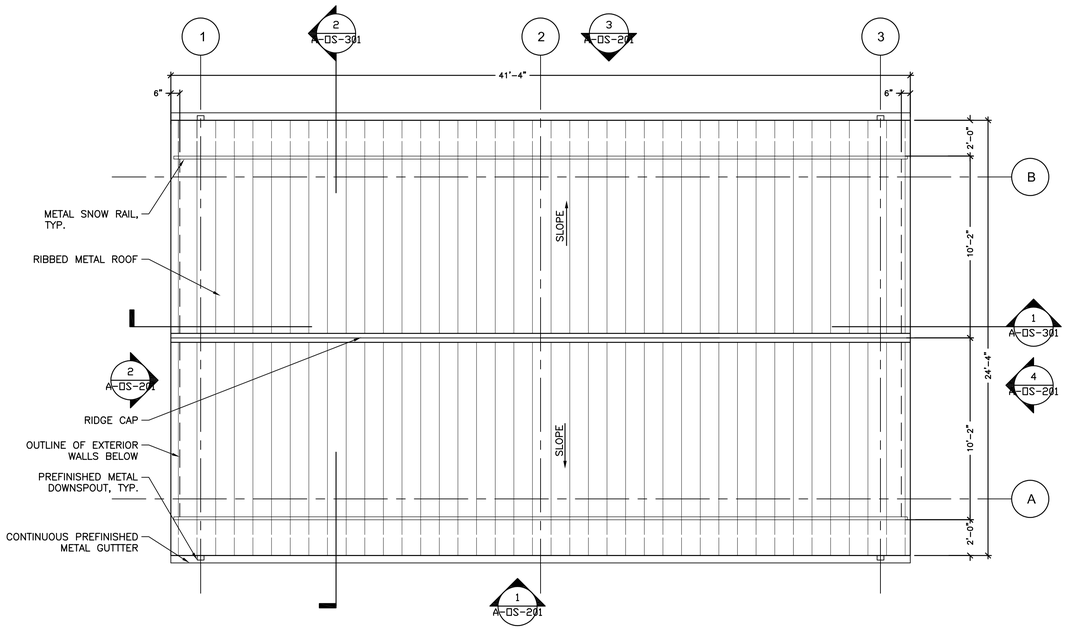
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:
ARCHITECTURAL SITE PLAN ALT 2

DRAWING NUMBER:
A-002B

SHEET OF



ROOF PLAN

3 A-OS-101 1/4" = 1'-0"

NORTH

RCP LEGEND

- 2x2 A.C.T. CEILING
- NO CEILING–OPEN TO ABOVE
- GYB SOFFIT
- 1'x4' SUSPENDED LIGHT FIXTURE
- 2'x2' LAY–IN LIGHT FIXTURE
- + 9'–0" A.F.F. — CEILING HEIGHT
- OCC — CEILING MOUNTED OCCUPANCY SENSOR, REFER TO ELEC DWGS
- EXIT LIGHT, REFER TO ELEC DWGS
- TWO HEAD EMERGENCY LIGHT, REFER TO ELEC DWGS

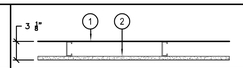
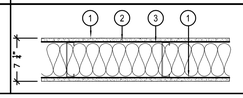
GENERAL NOTES:

1. ALL EXTERIOR AND INTERIOR DIMENSIONS ARE TO STRUCTURAL GRID, CENTERLINE OF COLUMNS. AND FACE OF WALL FINISH UNLESS OHTERWISE NOTED.
2. REFER TO AND COORDINATE WITH CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AS REQUIRED.
3. LAY OUT CEILING GRIDS SYMMETRICALLY ABOUT THE ROOM AS INDICATED. U.O.N.
4. REFER TO SPECIFICATION SECTION 133419 FOR PRE–ENGINEERED METAL BUILDING DESIGN REQUIREMENTS.
5. PROVIDE ± 5'–0" GRAVEL PERIMETER AT GRADE, REFER TO CIVIL DRAWINGS.

FLOOR PLAN LEGEND

- NAME 101 — ROOM NAME AND NUMBER
- D1 — DOOR NUMBER
- P1 — WALL PARTITION TYPE, SEE LEGEND
- W1 — WINDOW TYPE
- FIRE EXTINGUISHER
- PTHP–1 — HVAC UNIT

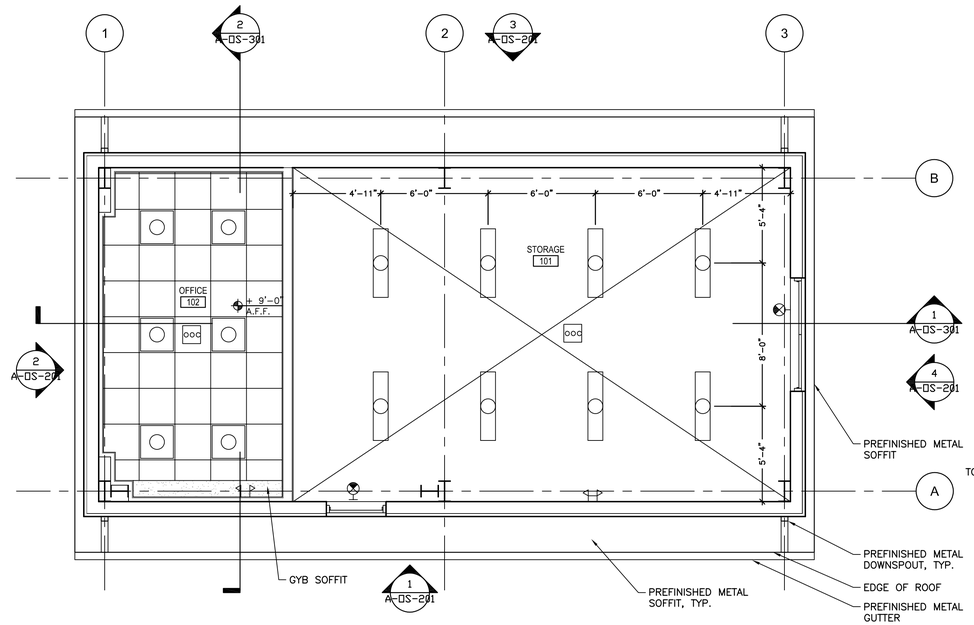
PARTITION TYPE LEGEND

P-1		1 2 ½" METAL FURRING STUD @ 16" O.C. 2 ⅝" GYPSUM WALL BOARD
P-2		1 ⅝" GYPSUM WALL BOARD 2 6" METAL STUD @ 16" O.C. 3 FIBERGLASS SOUND ATTENUATION BATT INSULATION

ROOM FINISH SCHEDULE

BUILDING NAME	ROOM NO.	ROOM NAME	FLOOR	BASE	NORTH	SOUTH	EAST	WEST	CEILING		COMMENTS
									MATERIAL	HEIGHT	
OPERATION & STORAGE	101	OFFICE	SC–1	BS–1	PT–1	PT–1	PT–1	PT–1	ACT	9'–0"	
OPERATION & STORAGE	102	STORAGE	SC–1	BS–1	PT–1	–	–	–	EXPOSED	–	BS–1 AT NORTH GWB WALL ONLY

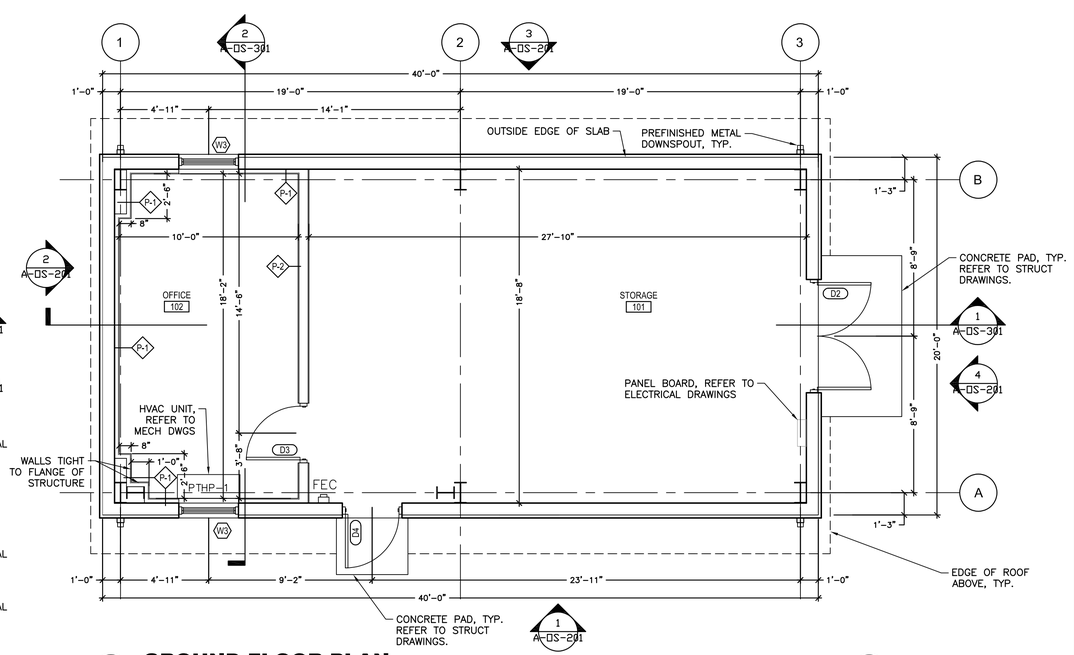
NOTE:
1. ALL INTERIOR/ EXTERIOR STRUCTURAL STEEL TO BE PAINTED.
2. REFER TO SPECIFICATION FOR PAINT TYPES.



REFLECTED CEILING PLAN

2 A-OS-101 1/4" = 1'–0"

NORTH



GROUND FLOOR PLAN

1 A-OS-101 1/4" = 1'–0"

NORTH

REVISED DRAWING 07/02/2025

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE: OPERATIONS AND STORAGE– ARCHITECTURAL PLANS ALT 1

DRAWING NUMBER: A–OS–101

SHEET OF

36x24 PLOT SHEET

Jul 01,2025 – 2:22pm
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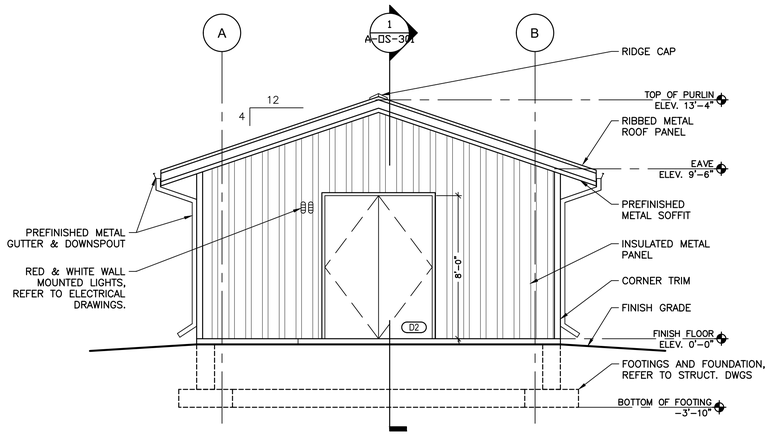
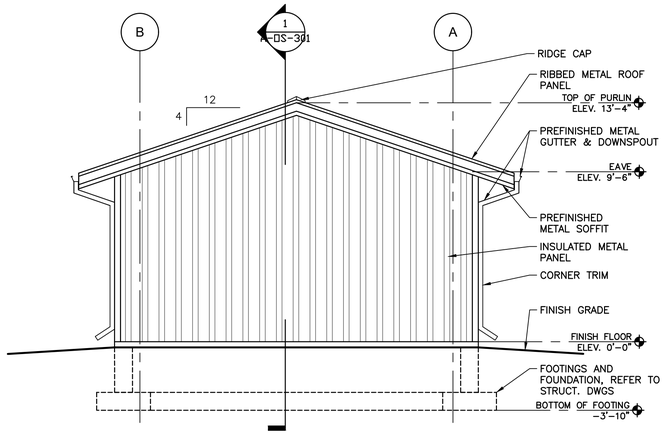


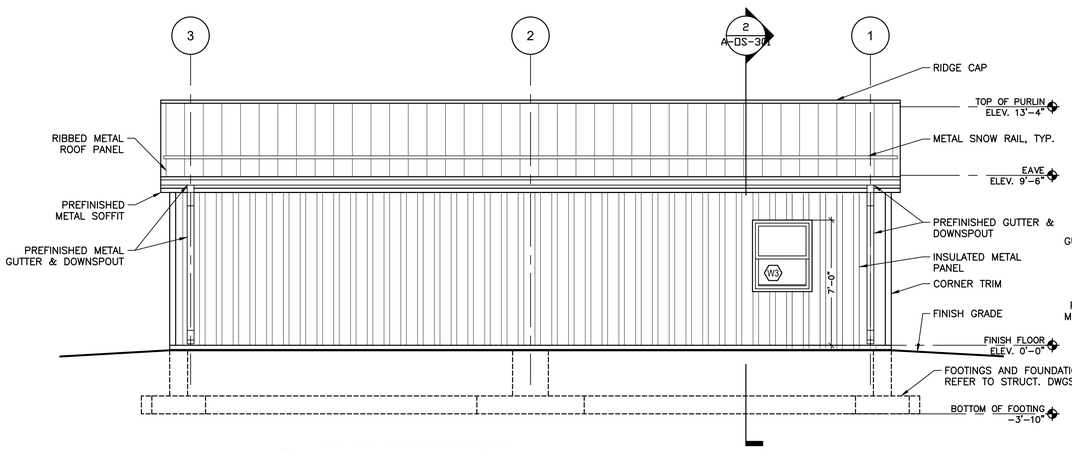
4 A-OS-201 **SOUTH ELEVATION**

1/4" = 1'-0"



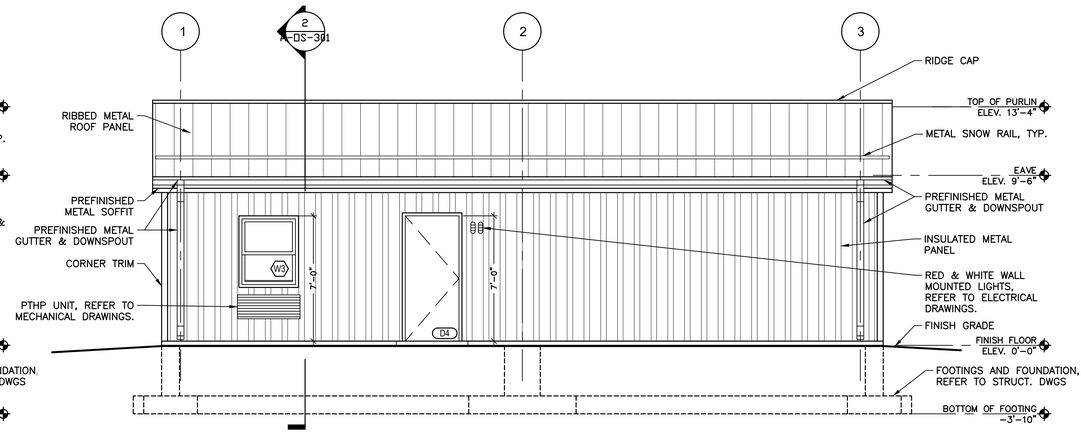
2 A-OS-201 **NORTH ELEVATION**

1/4" = 1'-0"



3 A-OS-201 **EAST ELEVATION**

1/4" = 1'-0"



1 A-OS-201 **WEST ELEVATION**

1/4" = 1'-0"

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36x24 PLOT SHEET

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

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REGISTERED ARCHITECT
OLGA KISLYUK
041855-01
STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

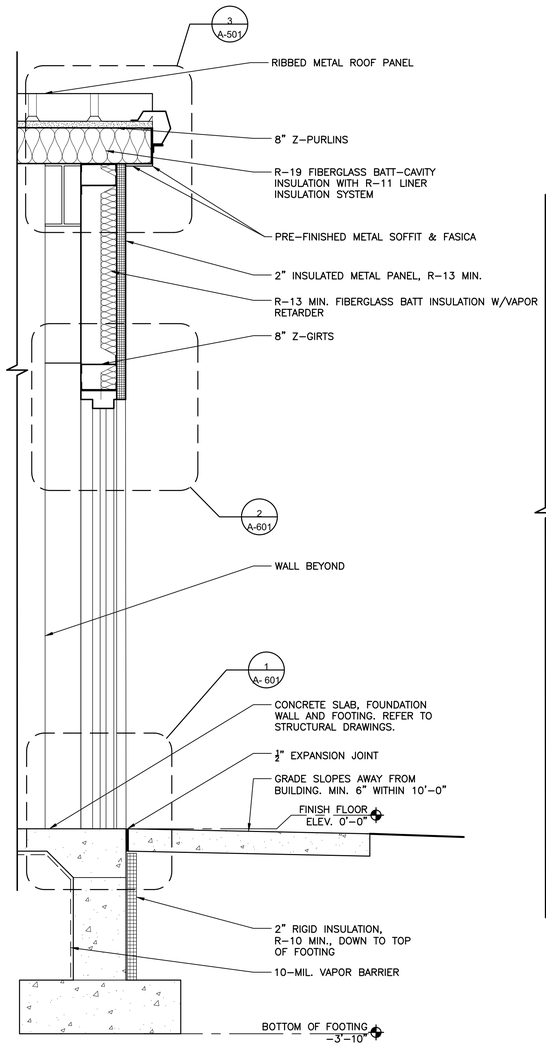
SHEET TITLE:

OPERATION AND STORAGE–ARCHITECTURAL ELEVATIONS ALT 1

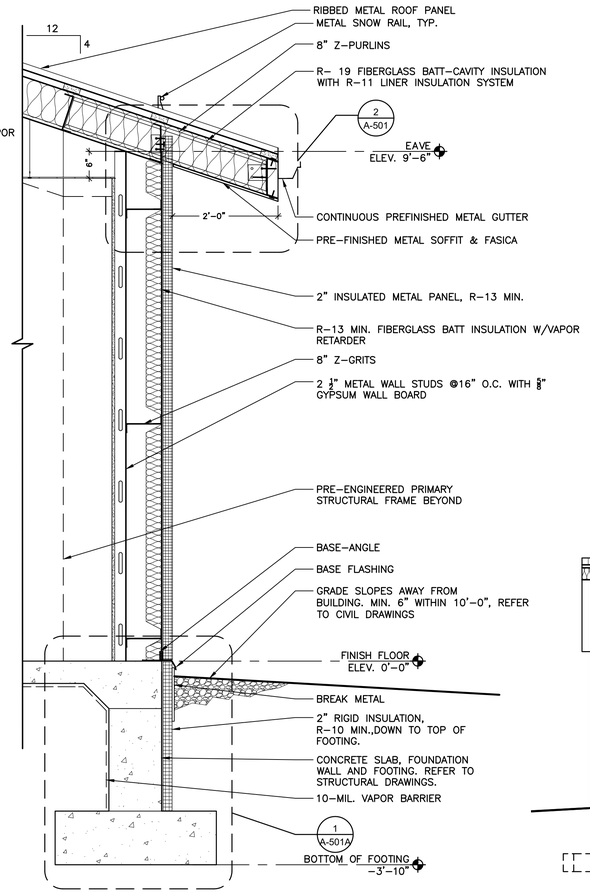
DRAWING NUMBER:

A–OS–201

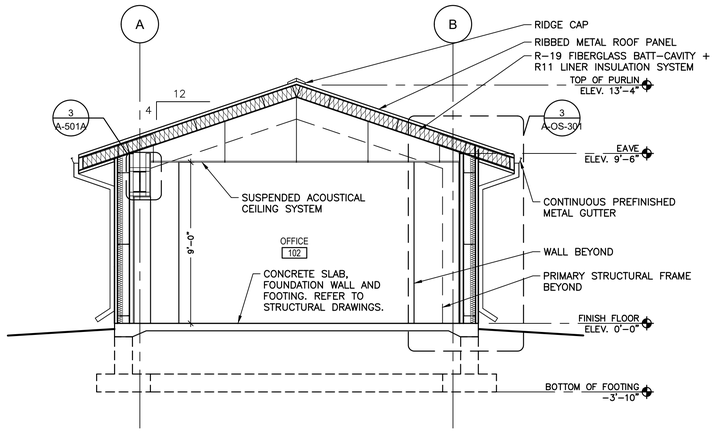
SHEET OF



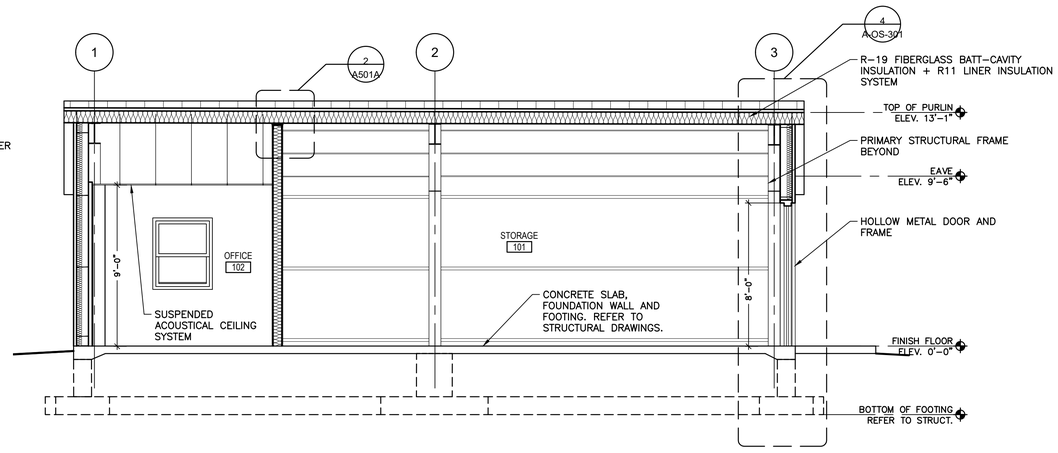
4 WALL SECTION 2
A-OS-301 3/4" = 1'–0"



3 WALL SECTION 1
A-OS-301 3/4" = 1'–0"



2 BUILDING CROSS SECTION
A-OS-301 1/4" = 1'–0"



1 BUILDING LONGITUDINAL SECTION
A-OS-301 1/4" = 1'–0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 – 12:12pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081A–OS–301.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

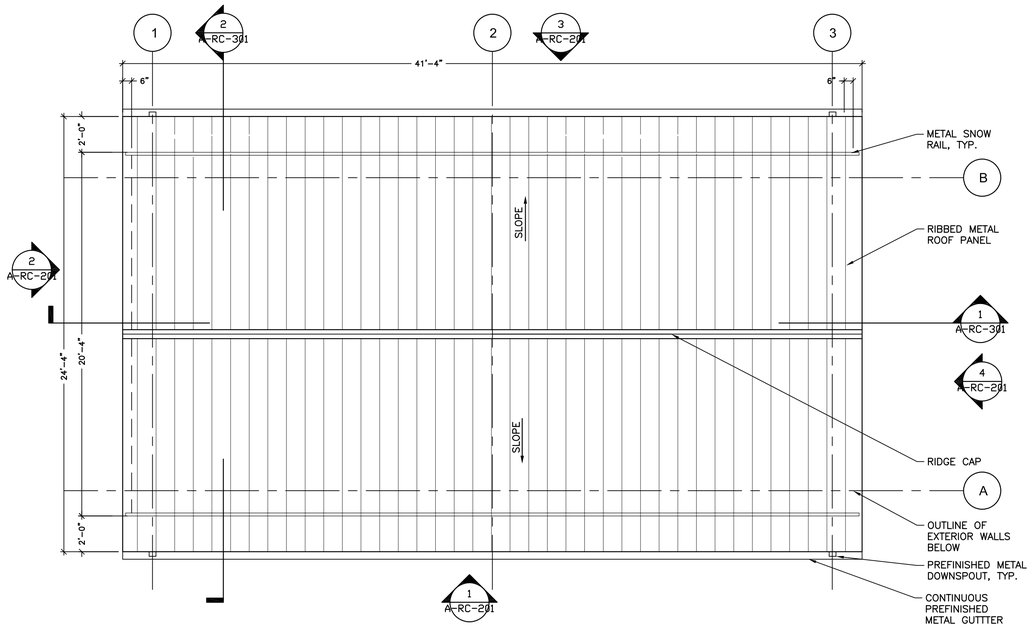
SHEET TITLE:

OPERATION AND STORAGE–ARCHITECTURAL SECTIONS AND WALL SECTIONS ALT 1

DRAWING NUMBER:

A–OS–301

SHEET OF



2 A-RC-101 **ROOF PLAN** 1/4" = 1'-0"

NORTH

RCP LEGEND

- 2x2 A.C.T. CEILING
- 2'x2' LAY-IN LIGHT FIXTURE
- GYB SOFFIT
- + 9'-0" A.F.F. — CEILING HEIGHT
- DIFFUSER, REFER TO MECH DWGS
- AH-1 — HEAT PUMP INDOOR UNIT, REFER TO MECH DWGS
- EXIT LIGHT, REFER TO ELEC DWGS
- TWO HEAD EMERGENCY LIGHT, REFER TO ELEC DWGS
- CEILING MOUNTED OCCUPANCY SENSOR, REFER TO ELEC DWGS

GENERAL NOTES:

1. ALL EXTERIOR AND INTERIOR DIMENSIONS ARE TO STRUCTURAL GRID, CENTERLINE OF COLUMNS. AND FACE OF WALL FINISH UNLESS OHTERWISE NOTED.
2. REFER TO AND COORDINATE WITH CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AS REQUIRED.
3. LAY OUT CEILING GRIDS SYMMETRICALLY ABOUT THE ROOM AS INDICATED. U.O.N.
4. REFER TO SPECIFICATION SECTION 133419 FOR PRE-ENGINEERED METAL BUILDING DESIGN REQUIREMENTS.
5. PROVIDE ± 5'-0" GRAVEL PERIMETER AT GRADE, REFER TO CIVIL DRAWINGS.

FLOOR PLAN LEGEND

- NAME / 101 — ROOM NAME AND NUMBER
- D1 — DOOR NUMBER
- P1 — WALL PARTITION TYPE, SEE LEGEND
- W1 — WINDOW TYPE
- FIRE EXTINGUISHER

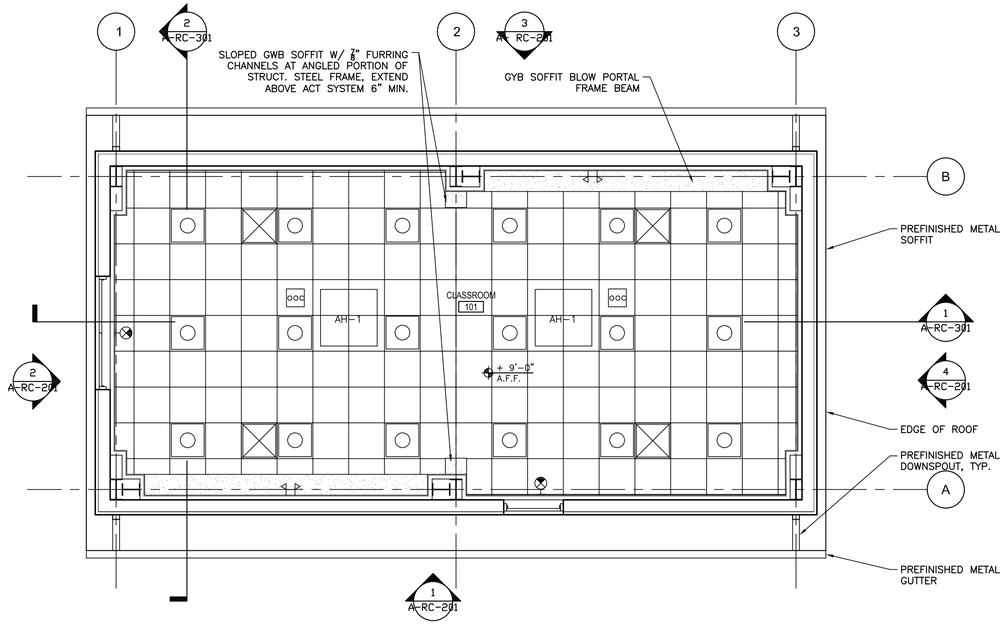
PARTITION TYPE

P-1 — 3 ⅝"

1. 2 ½" METAL STUD @ 16" O.C.
2. PAINTED ⅝" GYPSUM WALL BOARD

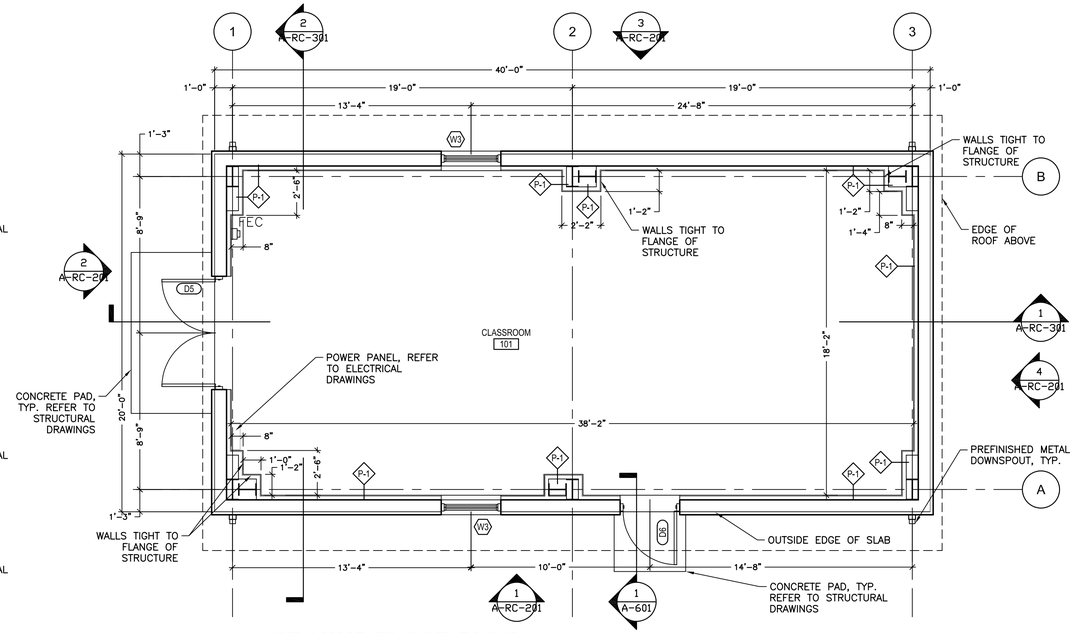
ROOM FINISH SCHEDULE

BUILDING NAME	ROOM NO.	ROOM NAME	FLOOR	BASE	NORTH	SOUTH	EAST	WEST	CEILING		COMMENTS
									MATERIAL	HEIGHT	
RANGE CLASSROOM	101	CLASSROOM	SC-1	BS-1	PT-1	PT-1	PT-1	PT-1	ACT	9'-0"	



2 A-RC-101 **REFLECTED CEILING PLAN** 1/4" = 1'-0"

NORTH



1 A-RC-101 **GROUND FLOOR PLAN** 1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE 11 BEAR MOUNTAIN BRIDGE RD CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

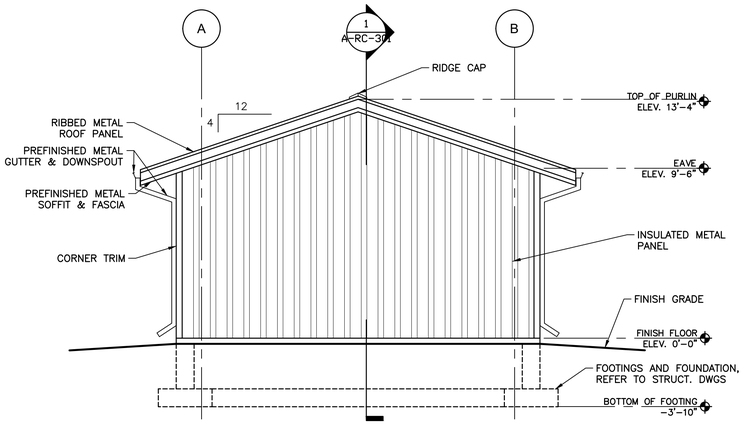
SHEET TITLE: RANGE CLASSROOM BUILDING-ARCHITECTURAL PLANS ALT 2

DRAWING NUMBER: A-RC-101

SHEET OF

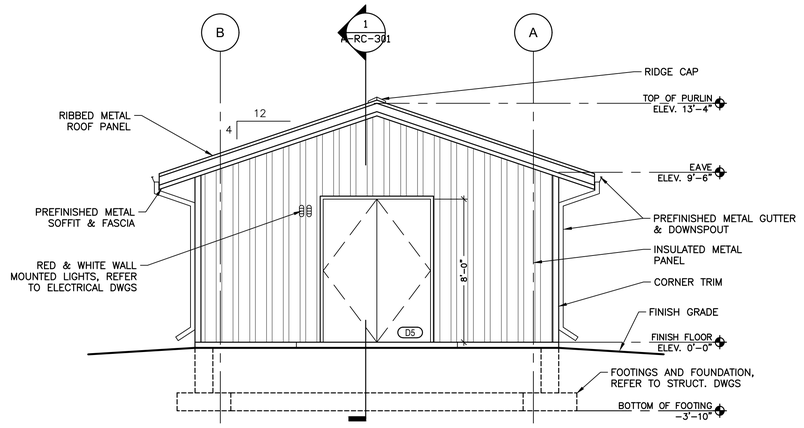
Jul 01,2025 - 2:28pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-RC-101.dwg

36x24 PLOT SHEET



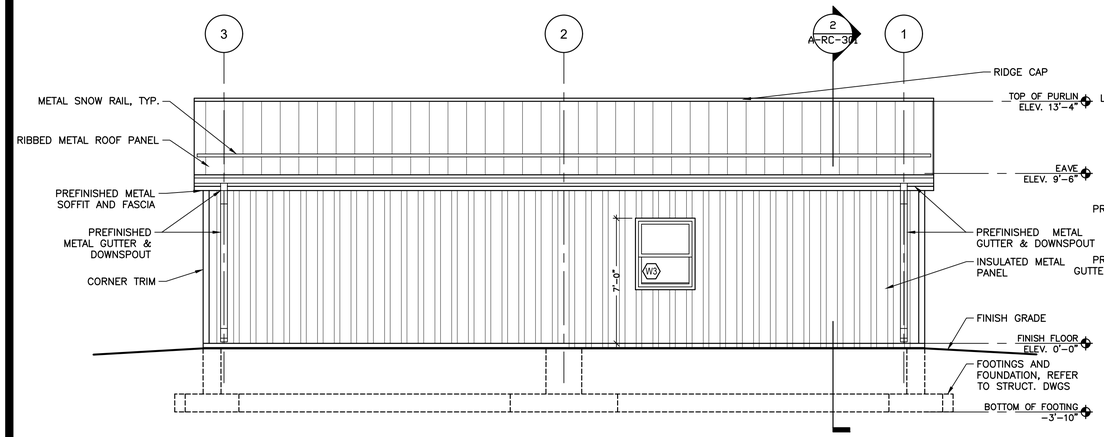
4 A-RC-201 **SOUTH ELEVATION**

1/4" = 1'-0"



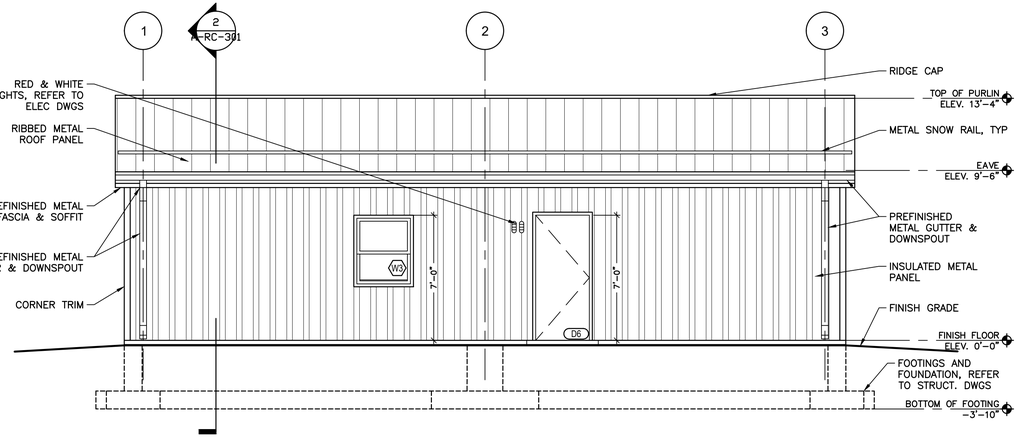
3 A-RC-201 **NORTH ELEVATION**

1/4" = 1'-0"



2 A-RC-201 **EAST ELEVATION**

1/4" = 1'-0"



1 A-RC-201 **WEST ELEVATION**

1/4" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 12:12pm
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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT
OLGA KISLYUK
041855-01
STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

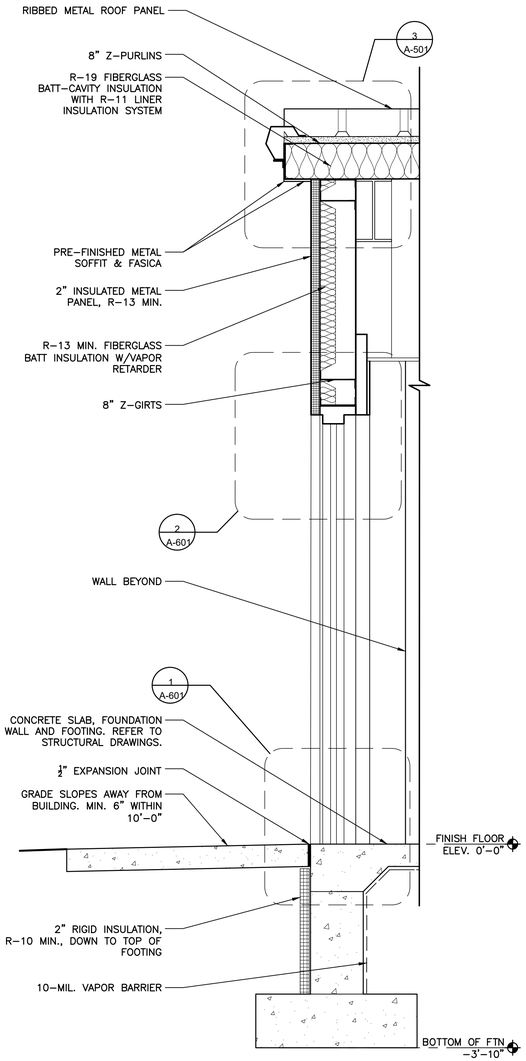
SHEET TITLE:

RANGE CLASSROOM
BUILDING–ARCHITECTURAL
ELEVATIONS
ALT 2

DRAWING NUMBER:

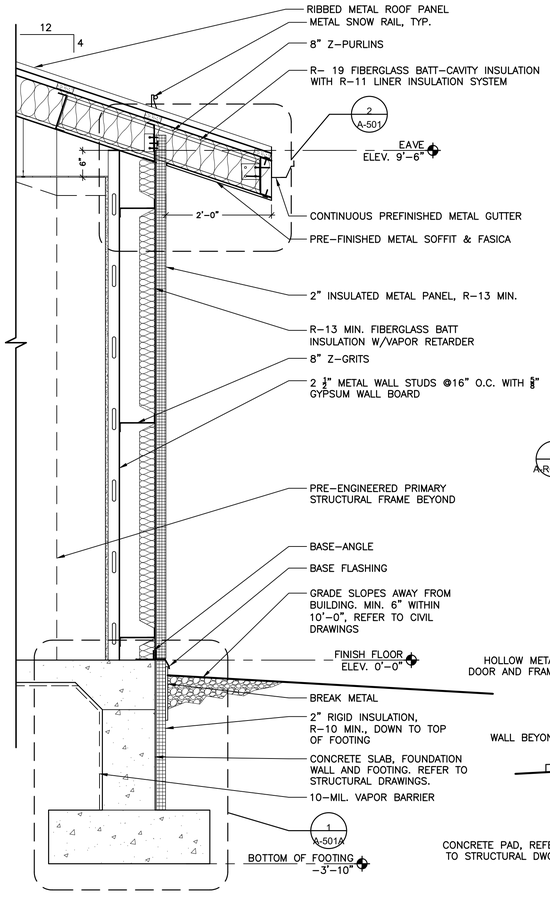
A–RC–201

SHEET OF



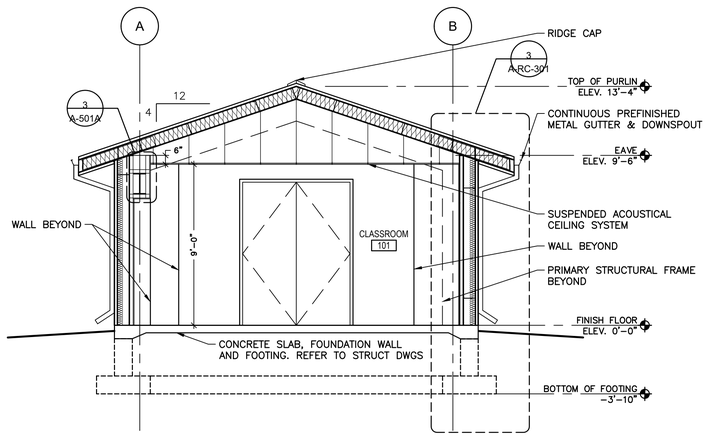
WALL SECTION 2

4 A-RC-301 3/4" = 1'–0"



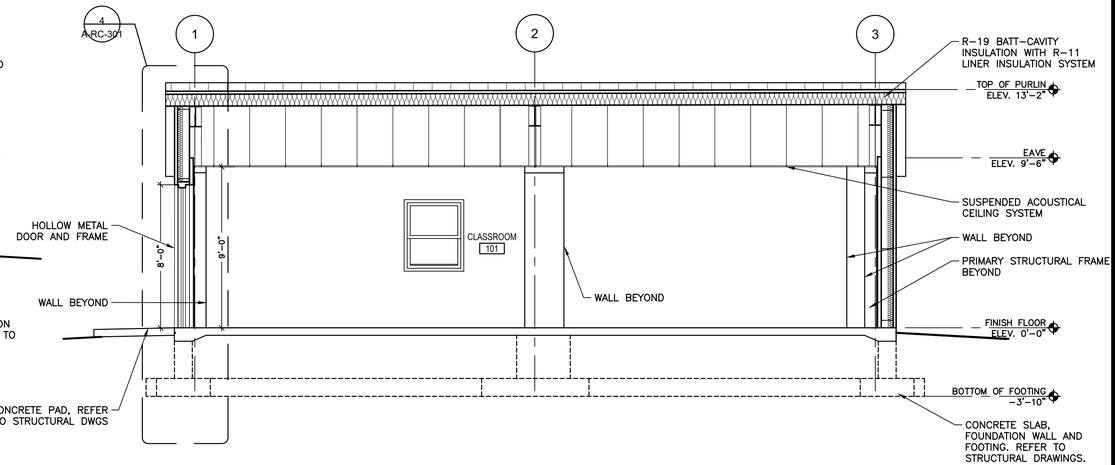
WALL SECTION 1

3 A-RC-301 3/4" = 1'–0"



BUILDING CROSS SECTION

2 A-RC-301 1/4" = 1'–0"



BUILDING LONGITUDINAL SECTION

1 A-RC-301 1/4" = 1'–0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

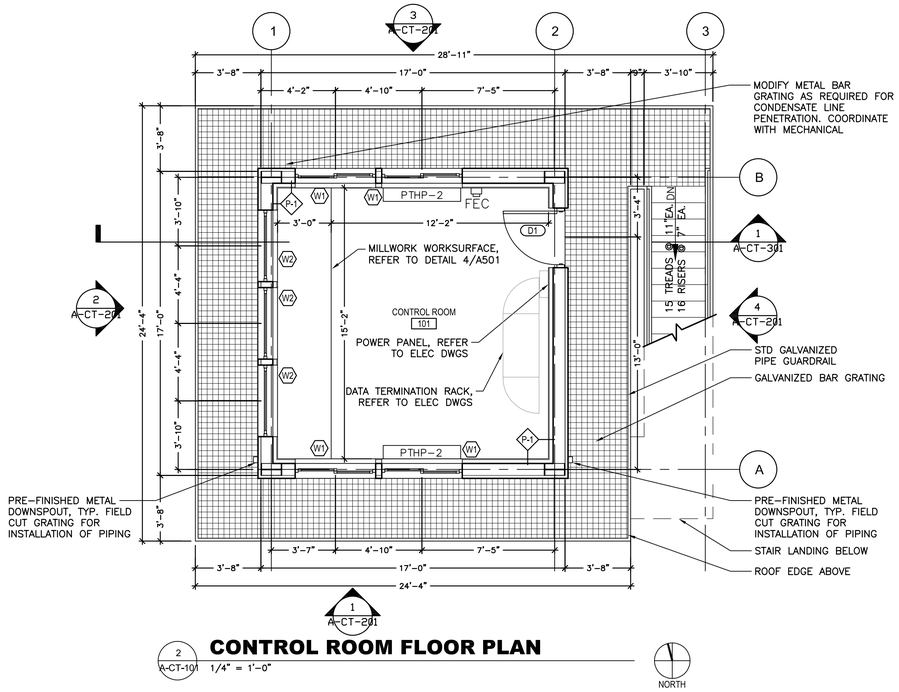
SHEET TITLE:

RANGE CLASSROOM BUILDING–ARCHITECTURAL SECTIONS AND WALL SECTIONS ALT 2

DRAWING NUMBER:

A–RC–301

SHEET OF



CONTROL ROOM FLOOR PLAN

2 A-CT-101 1/4" = 1'-0"

NORTH

FLOOR PLAN LEGEND

NAME 101	ROOM NAME AND NUMBER
P1	WALL PARTITION TYPE, SEE LEGEND
D1	DOOR NUMBER
W1	WINDOW TYPE
	FIRE EXTINGUISHER

GENERAL NOTES:

1. ALL EXTERIOR AND INTERIOR DIMENSIONS ARE TO STRUCTURAL GRID, CENTERLINE OF COLUMNS. AND FACE OF WALL FINISH UNLESS OHTERWISE NOTED.
2. REFER TO AND COORDINATE WITH CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AS REQUIRED.
3. LAY OUT CEILING GRIDS SYMMETRICALLY ABOUT THE ROOM AS INDICATED. U.O.N.
4. REFER TO SPECIFICATION SECTION 133419 FOR PRE-ENGINEERED METAL BUILDING DESIGN REQUIREMENTS.

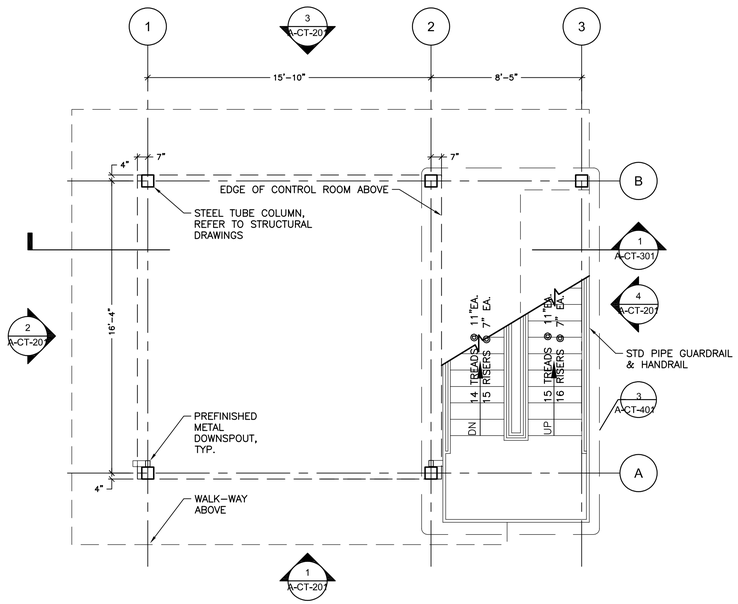
PARTITION TYPE LEGEND

P-1	3 5/8"	(1) 2 1/2" METAL FURRING STUD @ 16" O.C. (2) 5/8" GYPSUM WALL BOARD

ROOM FINISH SCHEDULE

BUILDING NAME	ROOM NO.	ROOM NAME	FLOOR	BASE	NORTH	SOUTH	EAST	WEST	CEILING		COMMENTS
									MATERIAL	HEIGHT	
CONTROL TOWER	101	CONTROL ROOM	SC-1	BS-1	PT-1	PT-1	PT-1	PT-1	ACT	9'-0"	

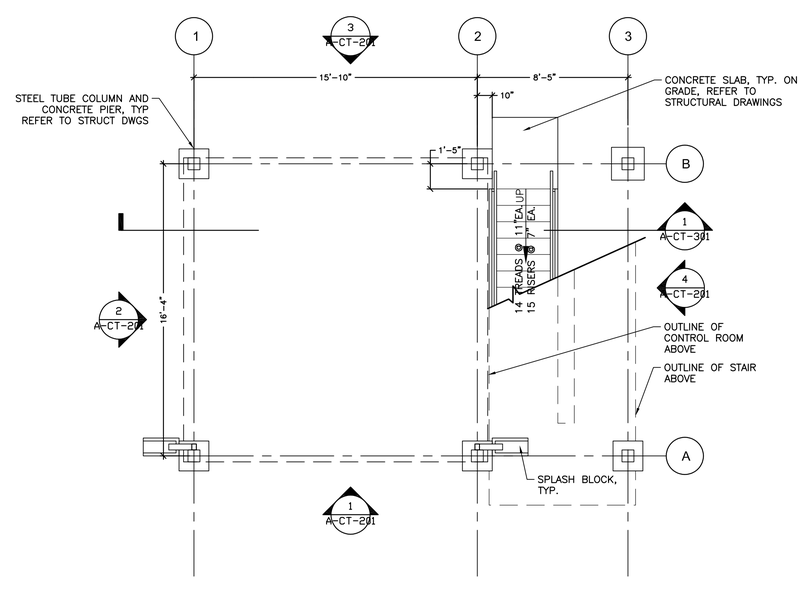
NOTE:
1. ALL INTERIOR/ EXTERIOR STRUCTURAL STEEL TO BE PAINTED.
2. REFER TO SPECIFICATION FOR PAINT TYPES.



MID-LEVEL FLOOR PLAN

2 A-CT-101 1/4" = 1'-0"

NORTH



GROUND FLOOR PLAN

1 A-CT-101 1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 2:14pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-CT-101.dwg

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:

RANGE CONTROL TOWER– ARCHITECTURAL PLANS

DRAWING NUMBER:

A–CT–101

SHEET OF

RCP LEGEND

- 2'x2' A.C.T. CEILING
- 2'x2' LAY-IN LIGHT FIXTURE
- + 9'-0" A.F.F. — CEILING HEIGHT
- TWO HEAD EMERGENCY LIGHT, REFER TO ELEC DWGS

GENERAL NOTES:

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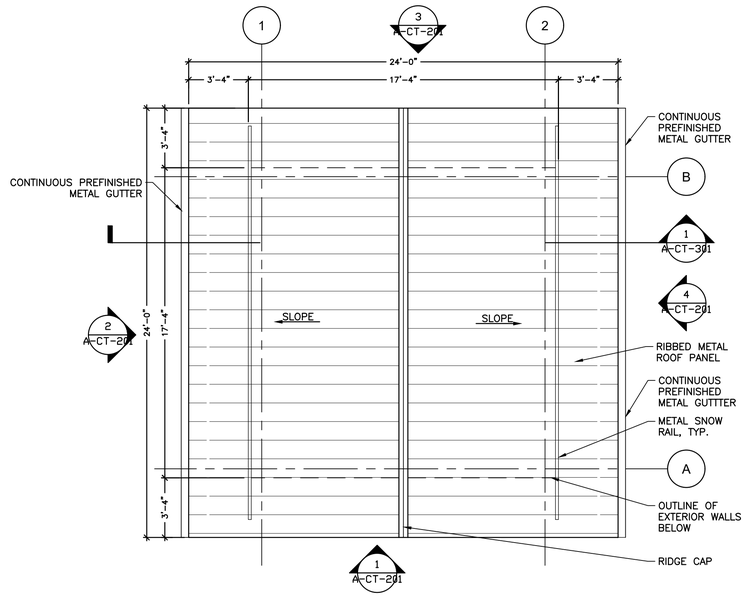
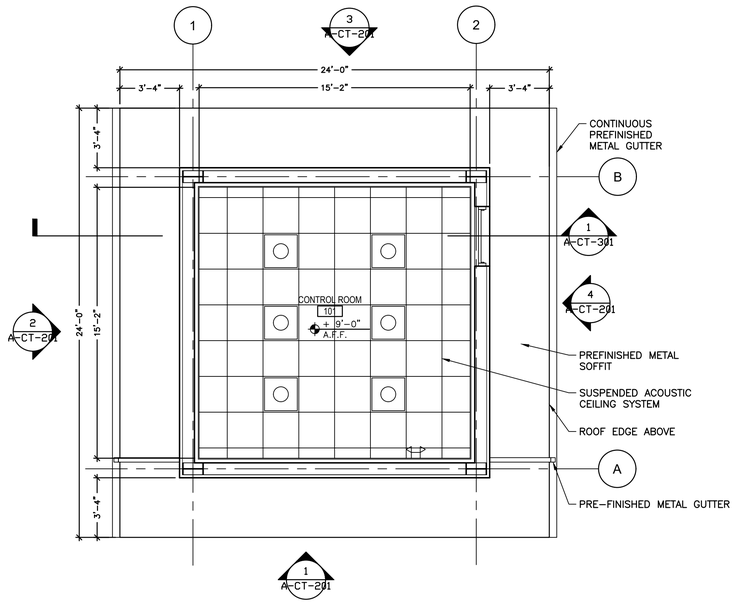
5. PROVIDE ± 5'-0" GRAVEL PERIMETER AT GRADE, REFER TO CIVIL DRAWINGS.



2 A-CT-102 **ROOF PLAN** 1/4" = 1'-0"

NORTH



1 A-CT-102 **REFLECTED CEILING PLAN** 1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 12:12pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-CT-102.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855.01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

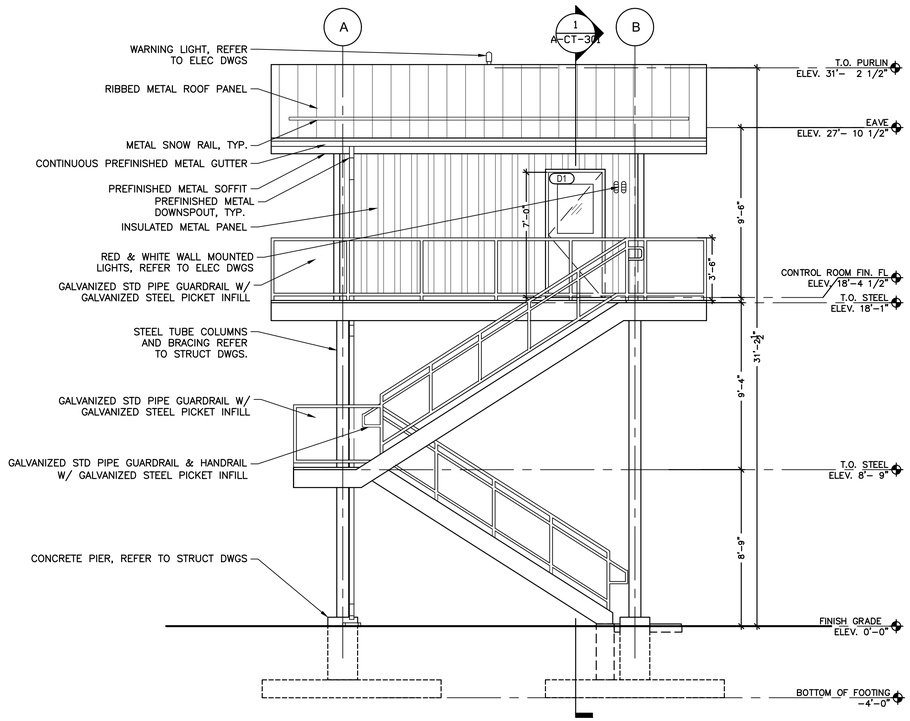
SHEET TITLE:

RANGE CONTROL TOWER– ARCHITECTURAL PLANS

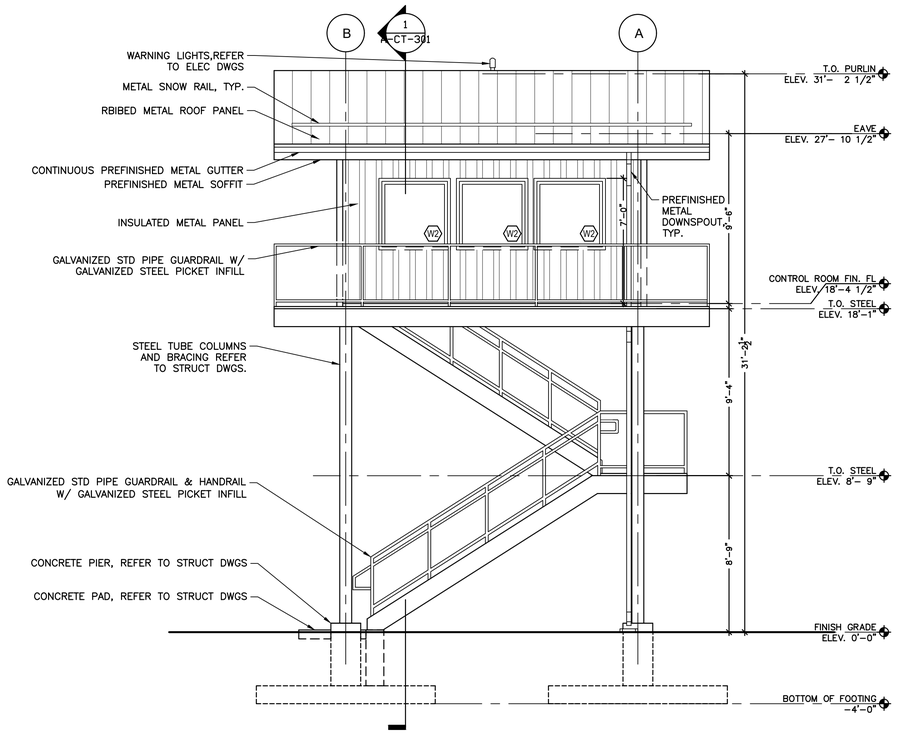
DRAWING NUMBER:

A–CT–102

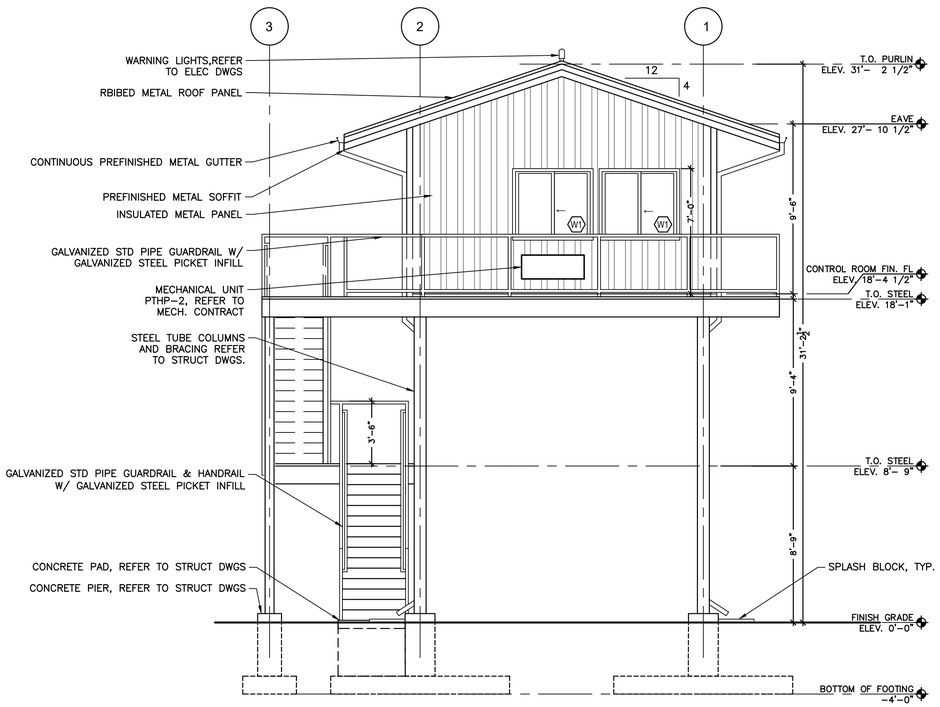
SHEET OF



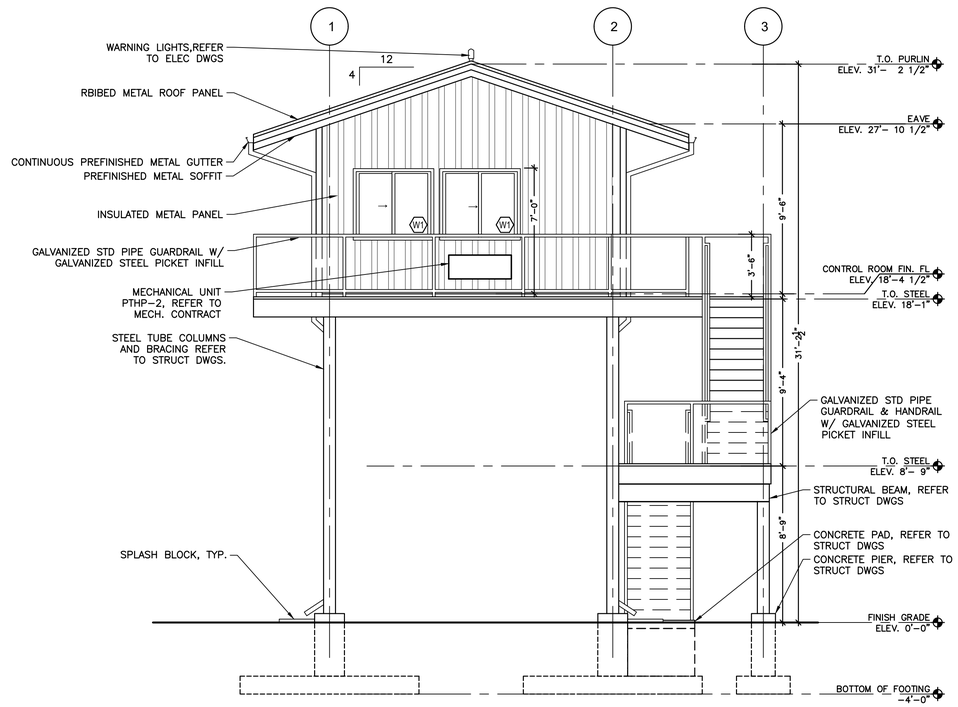
4 A-CT-201 **EAST ELEVATION** 1/4" = 1'-0"



2 A-CT-201 **WEST ELEVATION** 1/4" = 1'-0"



3 A-CT-201 **NORTH ELEVATION** 1/4" = 1'-0"



1 A-CT-201 **SOUTH ELEVATION** 1/4" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 12:12pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-CT-201.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

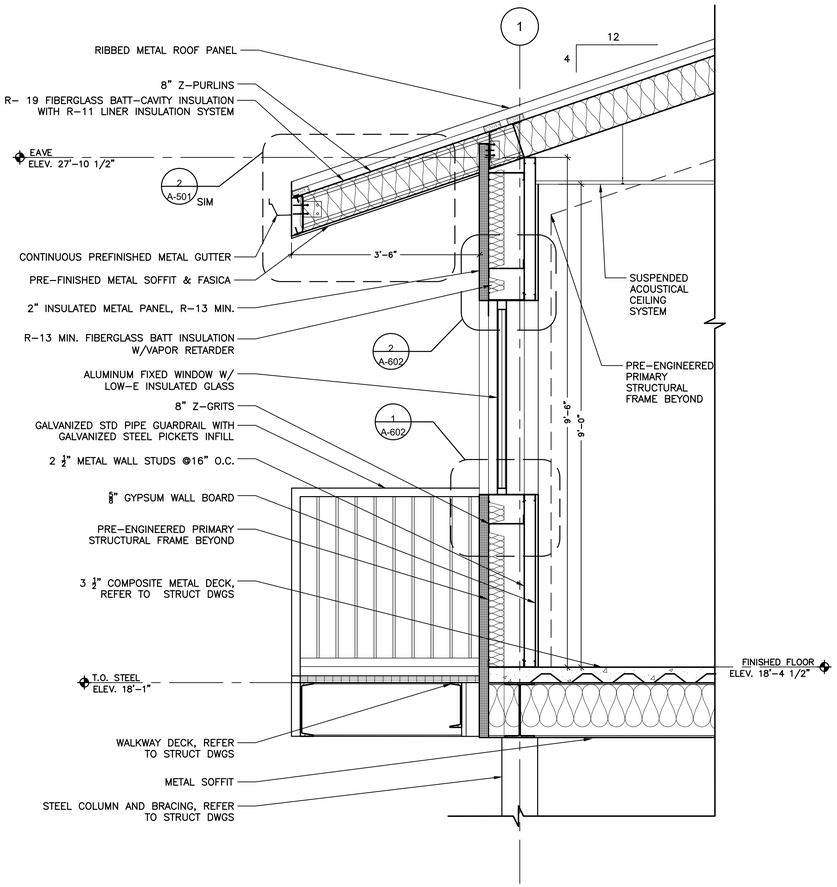
SHEET TITLE:

RANGE CONTROL TOWER– ARCHITECTURAL ELEVATIONS

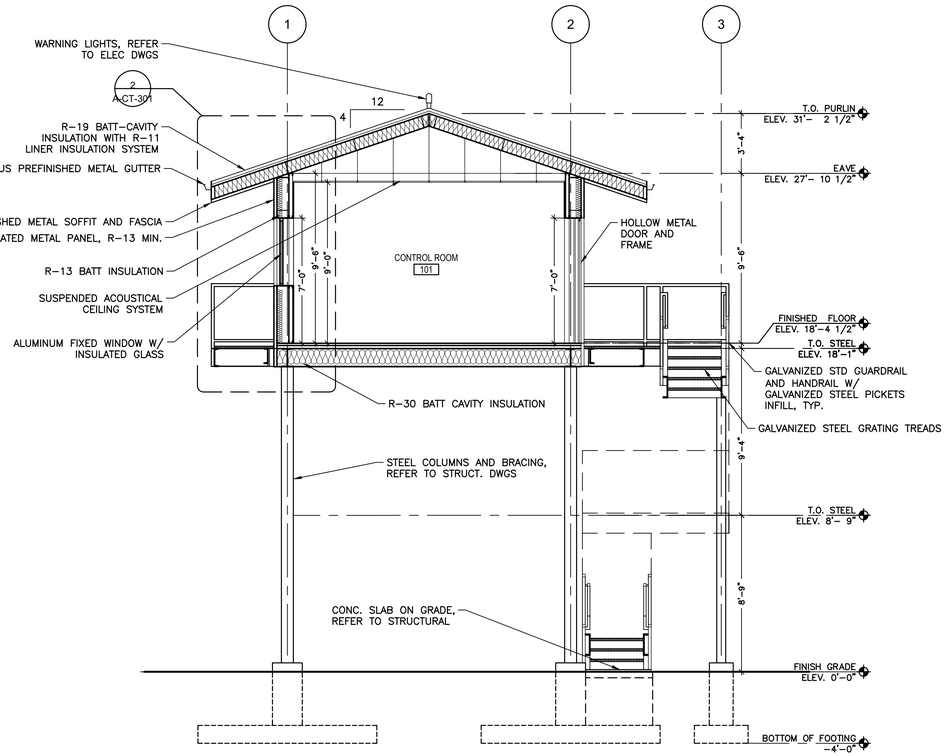
DRAWING NUMBER:

A–CT–201

SHEET OF



2 A-CT-301 TYP. WALL SECTION FOR CONTROL TOWER 3/4" = 1'-0"



1 A-CT-301 BUILDING SECTION 1/4" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855.01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

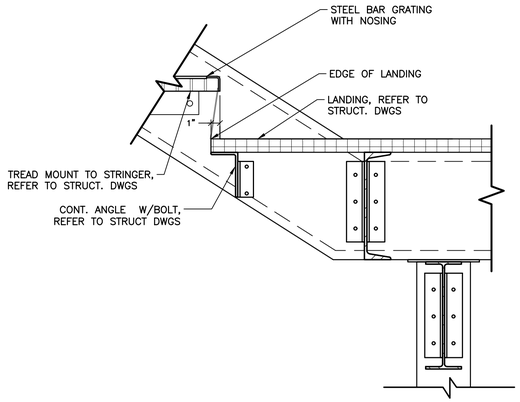
SHEET TITLE:

RANGE CONTROL TOWER– ARCHITECTURAL SECTIONS AND WALL SECTIONS

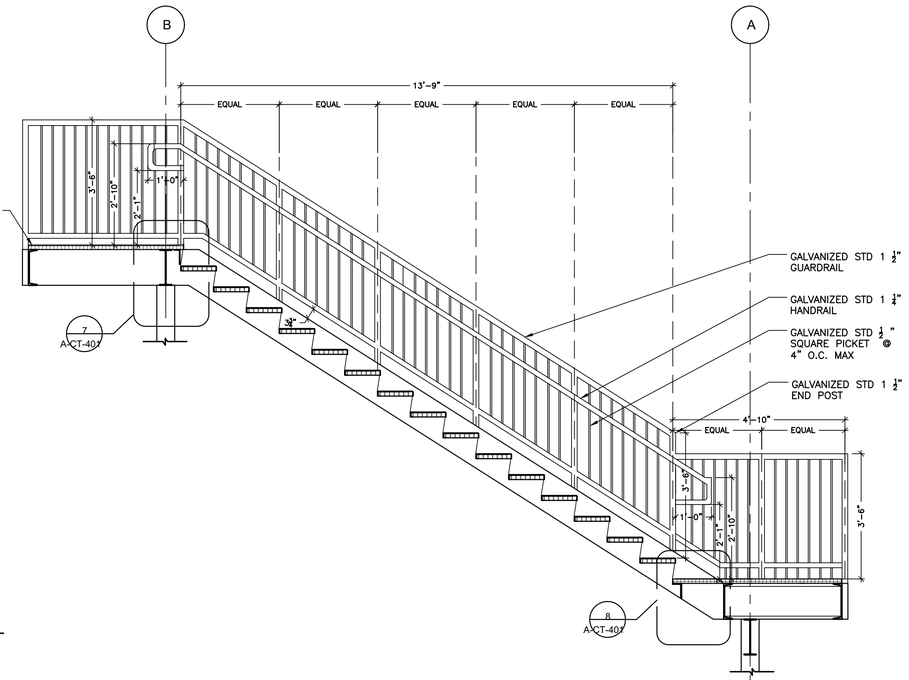
DRAWING NUMBER:

A–CT–301

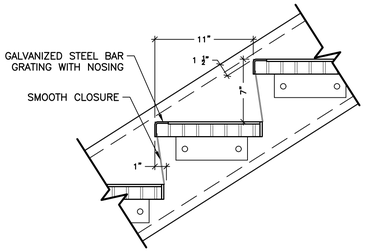
SHEET OF



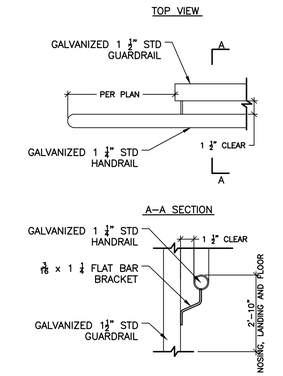
8 STAIR BOTTOM TO STEEL LANDING DETAIL
8 A-CT-401 1 1/2" = 1'-0"



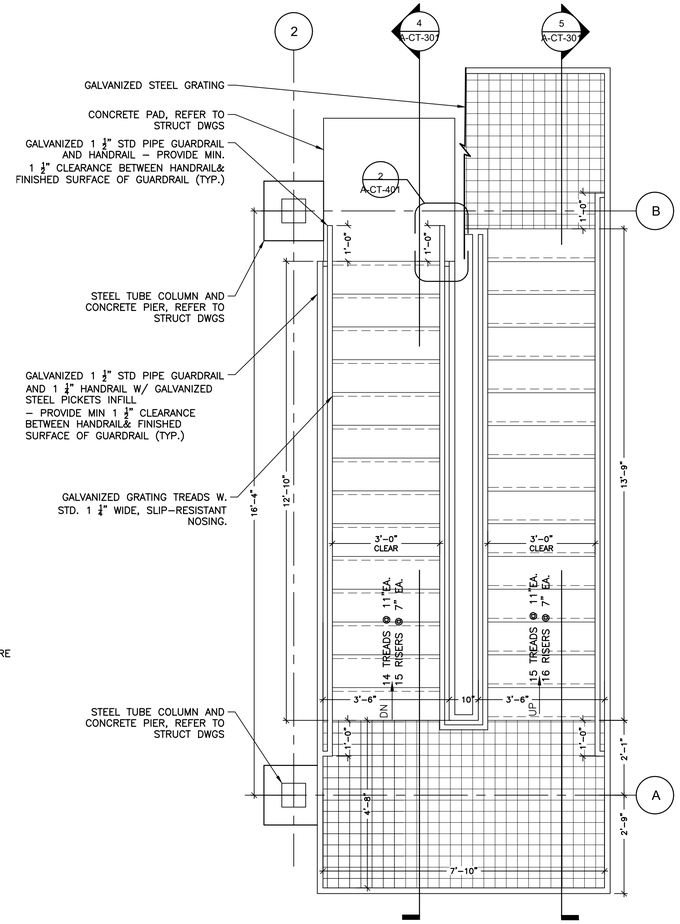
5 TYP. STAIR RAILING SECTION 2
5 A-CT-401 1/2" = 1'-0"



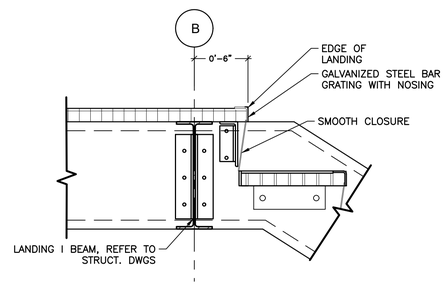
3 STAIR NOSING DETAIL
3 A-CT-401 1 1/2" = 1'-0"



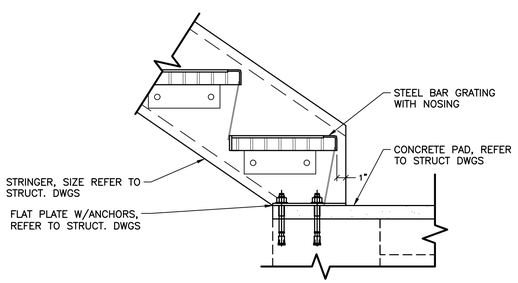
2 HANDRAIL DETAIL
2 A-CT-401 1 1/2" = 1'-0"



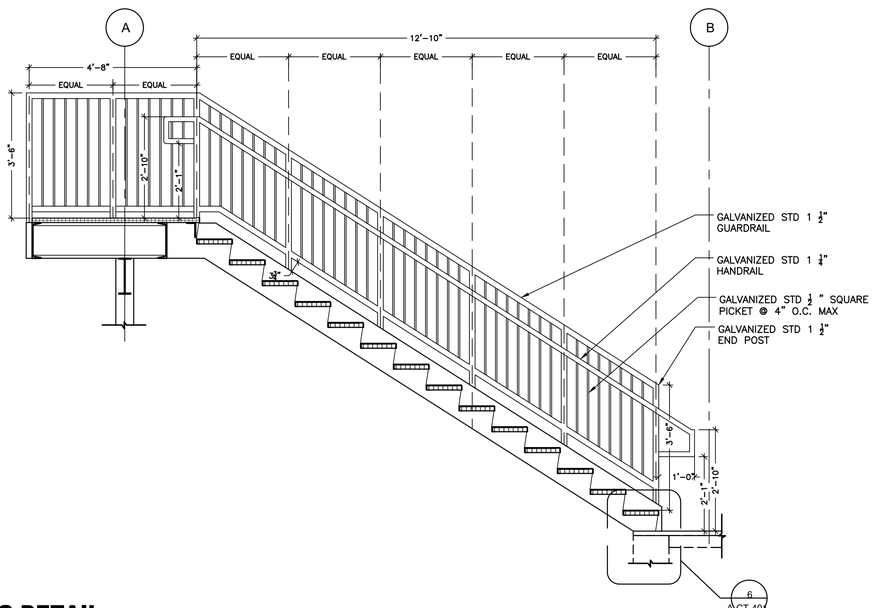
1 ENLARGED STAIR PLAN
1 A-CT-401 1/2" = 1'-0"



7 STAIR TOP LANDING DETAIL
7 A-CT-401 1 1/2" = 1'-0"



6 STAIR BOTTOM TO CONCRETE PAD LANDING DETAIL
6 A-CT-401 1 1/2" = 1'-0"



4 TYP. STAIR RAILING SECTION 1
4 A-CT-401 1/2" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 – 12:13pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-CT-401.dwg

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

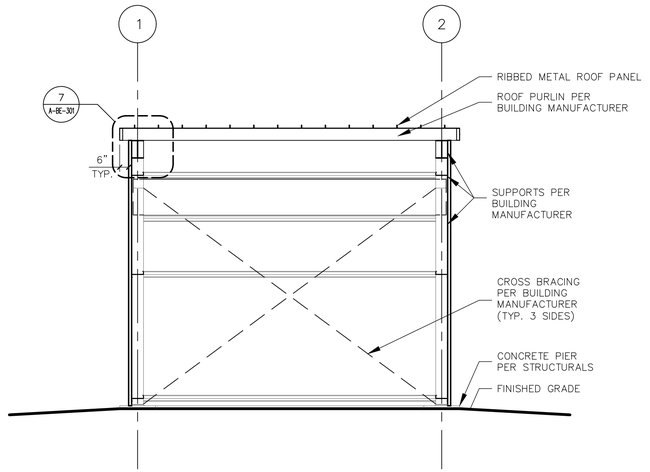
SHEET TITLE:
RANGE CONTROL TOWER– ARCHITECTURAL ENLARGED STAIR AND DETAILS

DRAWING NUMBER:
A–CT–401

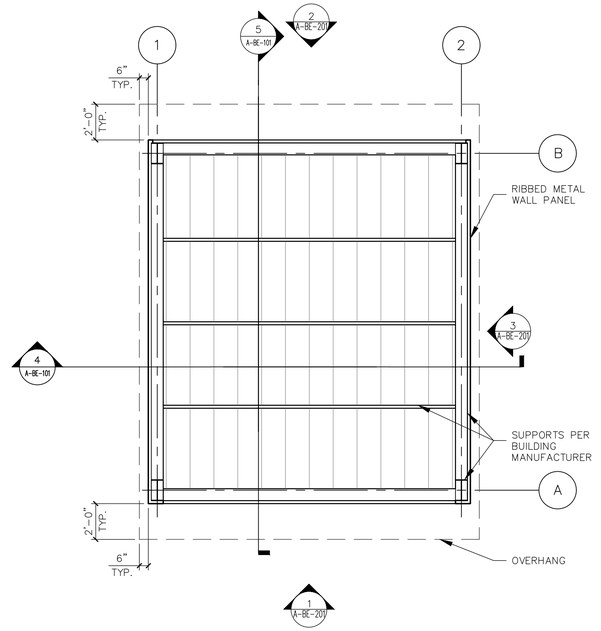
SHEET OF

GENERAL NOTES:

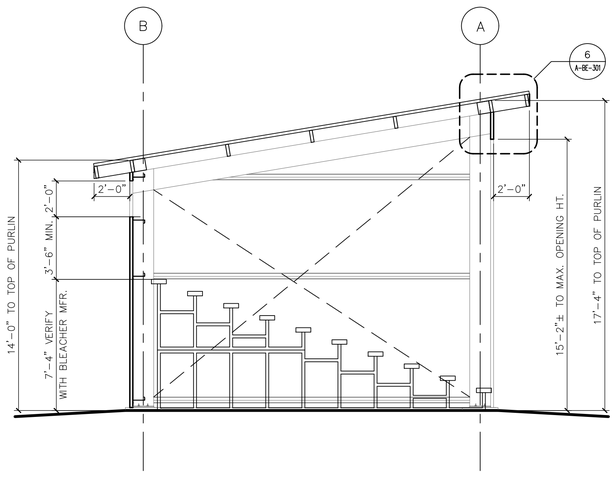
1. ALL DIMENSIONS ARE TO FACE OF WALL FINISH UNLESS OTHERWISE NOTED.
2. REFER TO AND COORDINATE WITH CIVIL, STRUCTURAL AND ELECTRICAL DRAWINGS AS REQUIRED.
3. REFER TO SPECIFICATION SECTION 133419 FOR PRE-ENGINEERED METAL BUILDING DESIGN REQUIREMENTS
4. PROVIDE ±5'-0" GRAVEL PERIMETER AT GRADE, REFER TO CIVIL DRAWINGS.



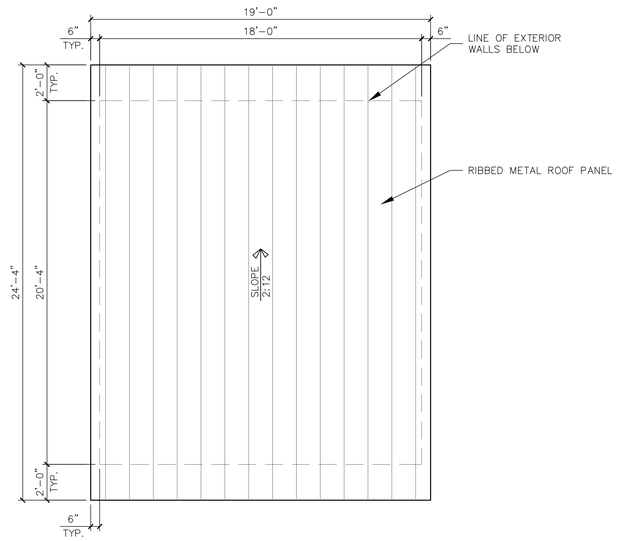
4 A-BE-101 BUILDING SECTION
SCALE: 1/4" = 1' 0"



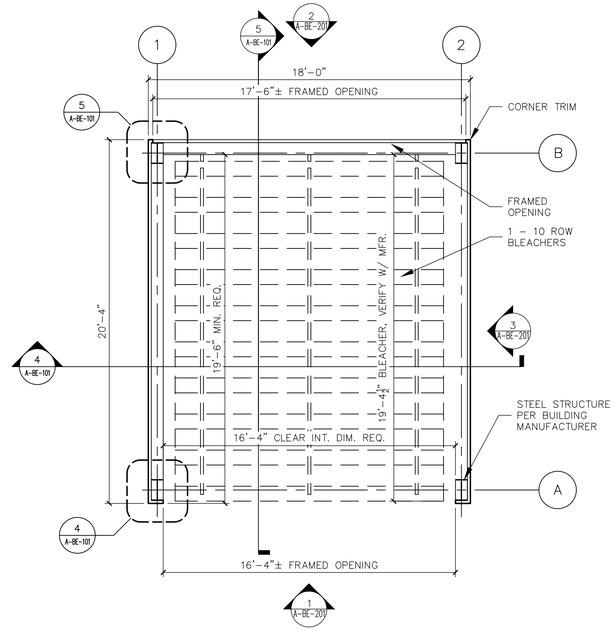
2 A-BE-101 REFLECTED CEILING PLAN
SCALE: 1/4" = 1' 0"



5 A-BE-101 BUILDING SECTION
SCALE: 1/4" = 1' 0"



3 A-BE-101 ROOF PLAN
SCALE: 1/4" = 1' 0"



1 A-BE-101 FLOOR PLAN
SCALE: 1/4" = 1' 0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 30,2025 - 1:49pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ARCH CAD 2022 A-101.dwg

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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REGISTERED ARCHITECT
FRANCINE WALLACE
037384
STATE OF NEW YORK

REGISTRATION EXPIRES: 2/28/2026

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

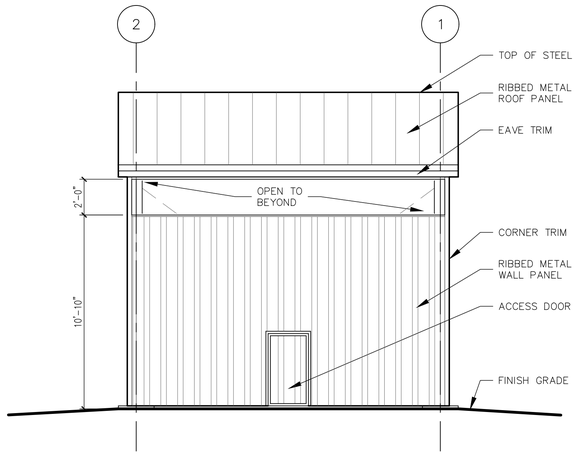
MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	FSW
DRAWN BY:	AWM
FIELD CHECK:	CRB
APPROVED:	FSW

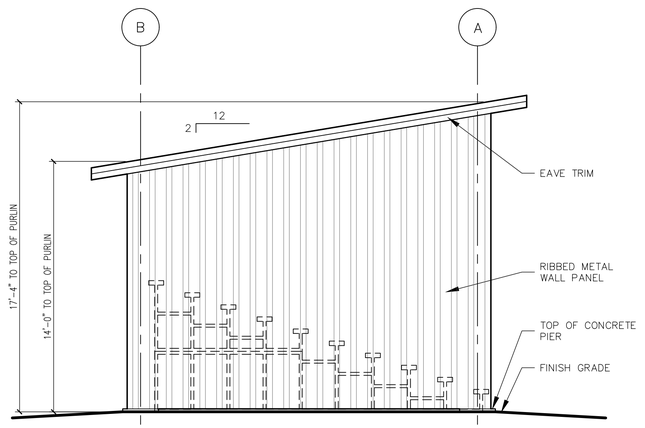
SHEET TITLE:
BLEACHER ENCLOSURE-
ARCHITECTURAL PLANS

DRAWING NUMBER:
A-BE-101

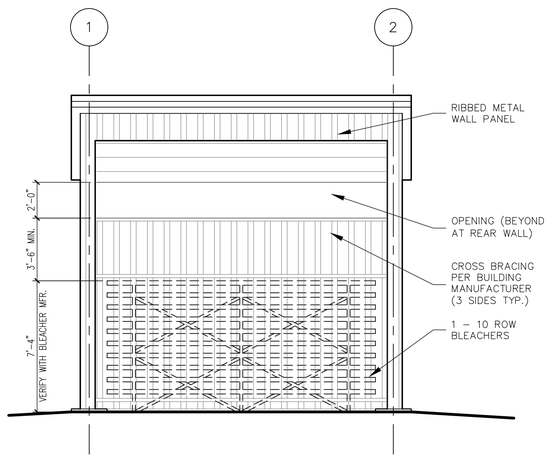
SHEET OF



2 A-BE-101 **EAST ELEVATION**
SCALE: 1/4" = 1' 0"



3 A-BE-101 **NORTH ELEVATION SOUTH SIMILAR**
SCALE: 1/4" = 1' 0"



1 A-BE-101 **WEST ELEVATION**
SCALE: 1/4" = 1' 0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 30,2025 - 1:49pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ARCH CAD 2022 A-201.dwg

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REGISTERED ARCHITECT FRANCINE WALLACE 037384 STATE OF NEW YORK

REGISTRATION EXPIRES: 2/28/2026

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

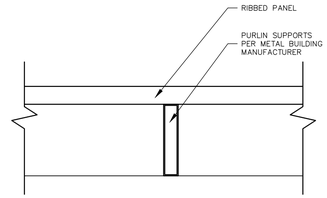
MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	FSW
DRAWN BY:	AWM
FIELD CHECK:	CRB
APPROVED:	FSW

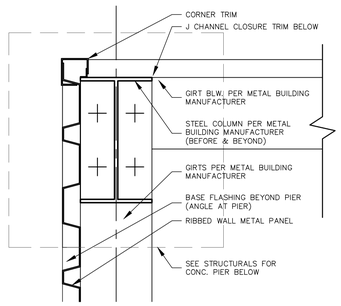
SHEET TITLE:
BLEACHER ENCLOSURE– ARCHITECTURAL ELEVATIONS

DRAWING NUMBER:
A–BE–201

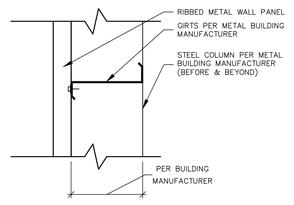
SHEET OF



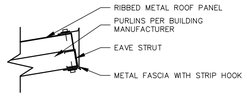
3 A-BE-301 **ROOF SYSTEM**
1 1/2" = 1'-0"



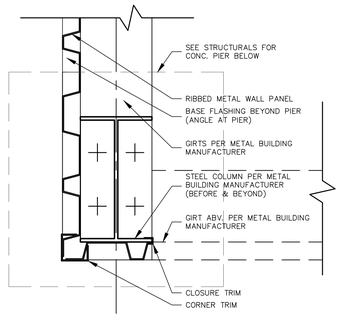
5 A-BE-301 **PLAN DETAIL**
1 1/2" = 1'-0"



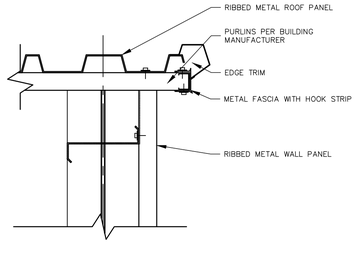
2 A-BE-301 **WALL SYSTEM**
1 1/2" = 1'-0"



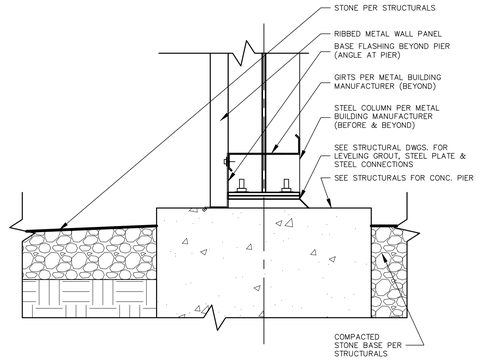
7 **EDGE DETAIL**
1 1/2" = 1'-0"



4 A-BE-301 **PLAN DETAIL**
1 1/2" = 1'-0"



6 **GABLE DETAIL**
1 1/2" = 1'-0"



1 A-BE-301 **BASE OF WALL SYSTEM**
1 1/2" = 1'-0"

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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REGISTERED ARCHITECT FRANCINE WALLACE 037384 STATE OF NEW YORK

REGISTRATION EXPIRES: 2/28/2026

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	FSW
DRAWN BY:	AWM
FIELD CHECK:	CRB
APPROVED:	FSW

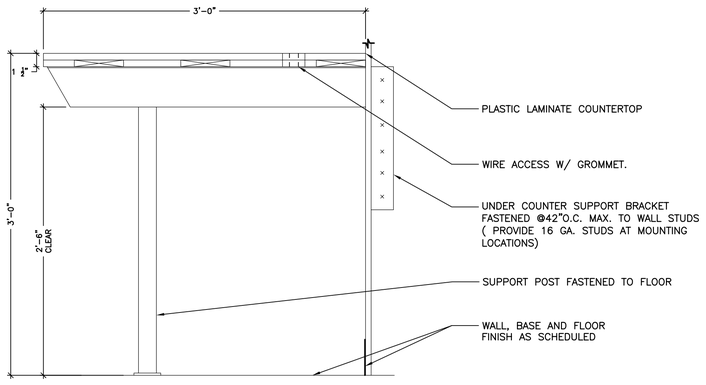
SHEET TITLE:
BLEACHER ENCLOSURE–
ARCHITECTURAL
SECTIONS AND DETAILS

DRAWING NUMBER:
A–BE–301

SHEET OF

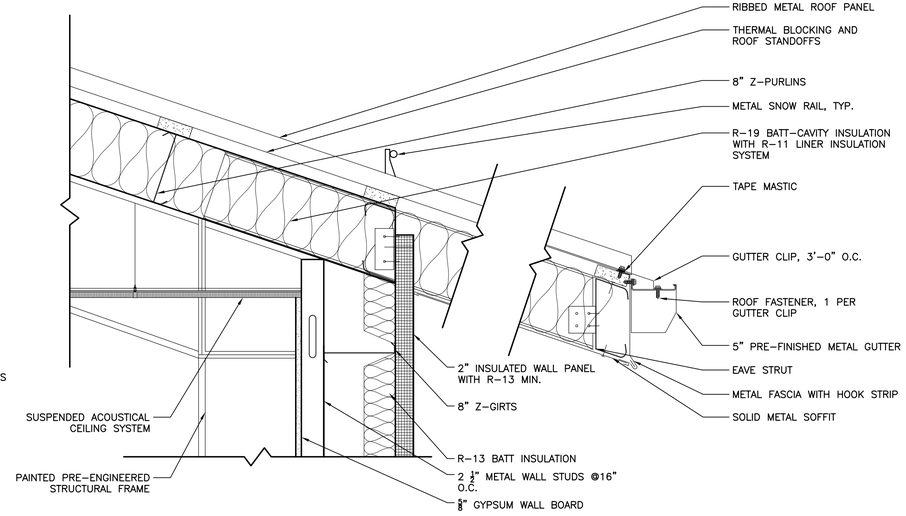
36x24 PLOT SHEET

Jun 30,2025 - 1:50pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ARCH CAD 2022 A-301.dwg



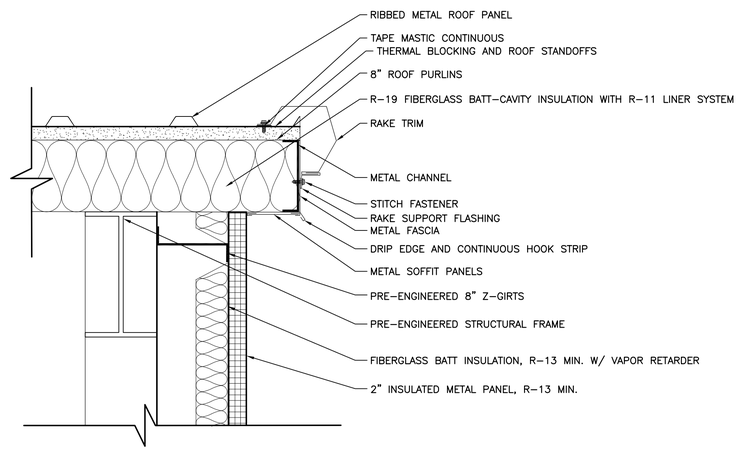
4 A-501 **TYP. WORKSURFACE DETAIL**

1 1/2" = 1'-0"



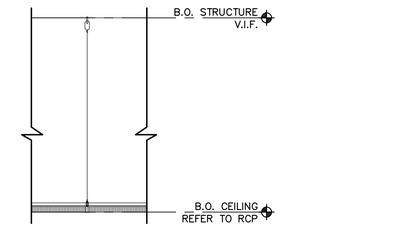
2 A-501 **TYP. EAVE DETAIL**

1 1/2" = 1'-0"



3 A-501 **TYP. GABLE DETAIL**

1 1/2" = 1'-0"



TYPICAL NON-RATED ASSEMBLE
1. 12 GA VERT HANGER WIRE @ 48" O.C. CONT. UP TO STRUCTURE
2. ACT MTL MAIN RUNNER
3. 24" x 24" ACOUSTIC CEILING TILE, REFER TO FINISH SCHEDULE FOR MORE INFORMATION
4. ACT MTL CROSS RUNNER

1 A-501 **TYP. SUSPENDED ACT SYSTEM**

1 1/2" = 1'-0"

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:

ARCHITECTURAL DETAILS BASE BID

DRAWING NUMBER:

A-501

SHEET OF

36x24 PLOT SHEET

Jul 01,2025 – 3:27pm
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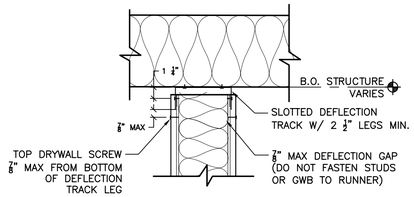
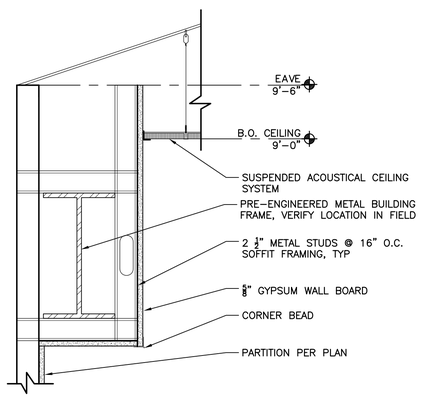
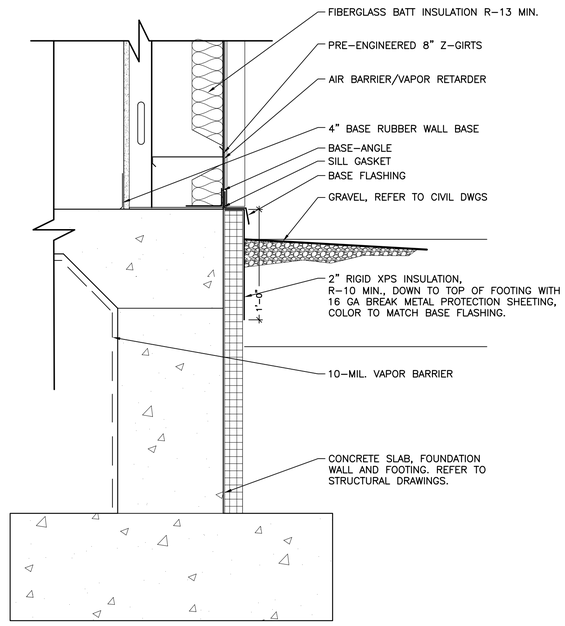


2 A-501A **DEFLECTION TRACK DETAIL**
1 1/2" = 1'-0"



3 A-501A **TYP. GWB SOFFIT DETAIL**
1 1/2" = 1'-0"



1 A-501A **TYP. BASE TO FOUNDATION DETAIL**
1 1/2" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jul 01,2025 - 3:27pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-501A.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK 041855.01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

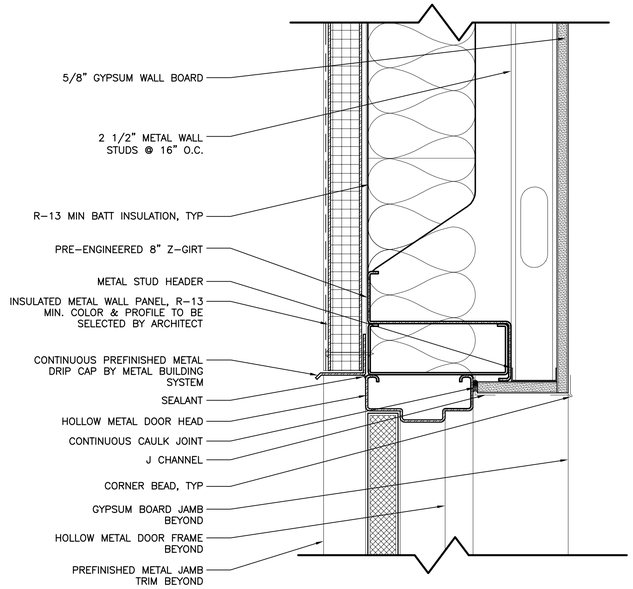
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

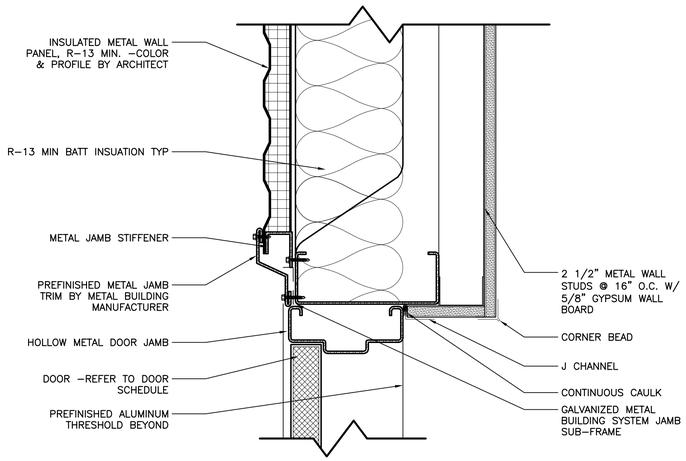
SHEET TITLE:
ARCHITECTURAL
DETAILS
ALT 1 & ALT 2

DRAWING NUMBER:
A–501A

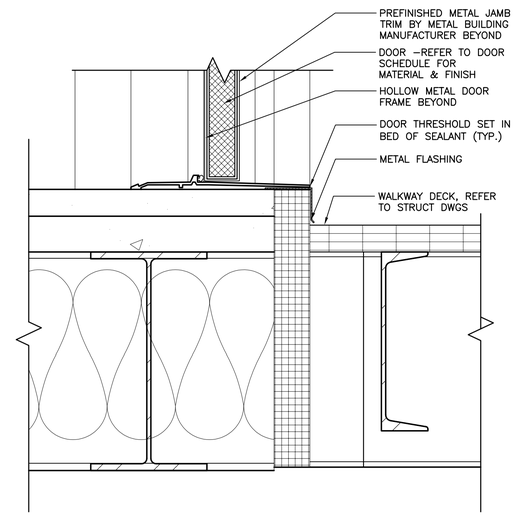
SHEET OF



2 A-601 **EXT. HM. DOOR HEAD DETAIL**
3" = 1'-0"



3 A-601 **EXT. HM. DOOR JAMB DETAIL**
3" = 1'-0"



1 A-601 **EXT. HM. DOOR THRESHOLD DETAIL**
3" = 1'-0"

DOOR SCHEDULE

	DOOR					FRAME			JAMB	HEAD			
NO.	TYPE	WIDTH	HEIGHT	MAT'L	FINISH	TYPE	MAT'L	FINISH	DETAIL	DETAIL	THRESHOLD	GLAZING	HARDWARE SET	COMMENTS
D1	A	3'-0"	7'-0"	HM	PT	1	HM	PT	3/A-601	2/A-601	1/A-601	½ LITE TEMP.	HW 1	

FINISH MATERIAL ABBREVIATIONS

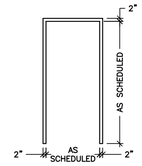
MATERIALS:

HM- HOLLOW METAL
TEMP.- TEMPERED GLAZING

FINISHES:

PT- PAINT

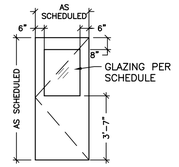
DOOR FRAME TYPES



1

PAINTED SINGLE SWING
HOLLOW METAL
EXTERIOR GRADE

DOOR TYPES



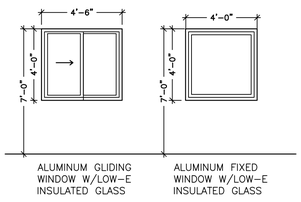
A

PAINTED SINGLE
HOLLOW METAL DOOR
WITH HALF GLASS
EXTERIOR GRADE

WINDOW SCHEDULE

NO.	TYPE	WIDTH	HEIGHT	SILL HEIGHT	JAMB DETAIL	HEAD DETAIL	SILL DETAIL
W1	A	4'-6"	4'-0"	3'-0"	3/A-602	2/A-602	1/A-602
W2	B	4'-0"	4'-0"	3'-0"	3/A-602	2/A-602	1/A-602

WINDOW TYPES



ALUMINUM GLIDING
WINDOW W/LOW-E
INSULATED GLASS

A

ALUMINUM FIXED
WINDOW W/LOW-E
INSULATED GLASS

B

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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REGISTERED ARCHITECT OLGA KISLYUK STATE OF NEW YORK 031855-01

EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	-
APPROVED:	-

SHEET TITLE:
DOOR AND WINDOW SCHEDULE, TYPE AND DETAILS BASE BID

DRAWING NUMBER:
A-601

SHEET OF

Jul 01,2025 - 3:24pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-601.dwg

36x24 PLOT SHEET

ALT 2

DOOR SCHEDULE

	DOOR					FRAME			JAMB DETAIL	HEAD DETAIL	THRESHOLD	GLAZING	HARDWARE SET	COMMENTS
NO.	TYPE	WIDTH	HEIGHT	MAT'L	FINISH	TYPE	MAT'L	FINISH						
D5	C	6'-0"	8'-0"	HM	PT	3	HM	PT	3/A-601	2/A-601	1/A-601	NA	HW 2	
D6	B	3'-0"	7'-0"	HM	PT	1	HM	PT	3/A-601	2/A-601	1/A-601	NA	HW 1	

FINISH MATERIAL ABBREVIATIONS

MATERIALS:

HM– HOLLOW METAL
TEMP.– TEMPERED GLAZING

FINISHES:

PT– PAINT

ALT 1

DOOR SCHEDULE

	DOOR					FRAME			JAMB DETAIL	HEAD DETAIL	THRESHOLD	GLAZING	HARDWARE SET	COMMENTS
NO.	TYPE	WIDTH	HEIGHT	MAT'L	FINISH	TYPE	MAT'L	FINISH						
D2	C	6'-0"	8'-0"	HM	PT	3	HM	PT	3/A-601	2/A-601	1/A-601A	NA	HW 2	
D3	D	3'-0"	7'-0"	HM	PT	2	HM	PT	2/A-602A	1/A-602A	–	NA	HW 3	
D4	B	3'-0"	7'-0"	HM	PT	1	HM	PT	3/A-601	2/A-601	1/A-601A	NA	HW 1	

FINISH MATERIAL ABBREVIATIONS

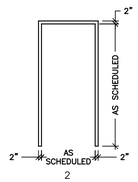
MATERIALS:

HM– HOLLOW METAL
TEMP.– TEMPERED GLAZING

FINISHES:

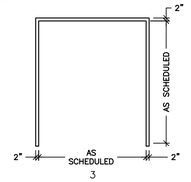
PT– PAINT

DOOR FRAME TYPES



2

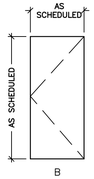
PAINTED SINGLE SWING
HOLLOW METAL
INTERIOR GRADE



3

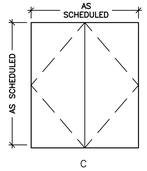
PAINTED DOUBLE SWING
HOLLOW METAL
EXTERIOR GRADE

DOOR TYPES



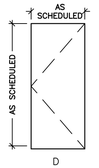
B

PAINTED SINGLE
HOLLOW METAL DOOR
EXTERIOR GRADE



C

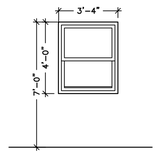
PAINTED PAIR OF
HOLLOW METAL DOOR
EXTERIOR GRADE



D

PAINTED SINGLE
HOLLOW METAL DOOR
INTERIOR GRADE

WINDOW TYPES

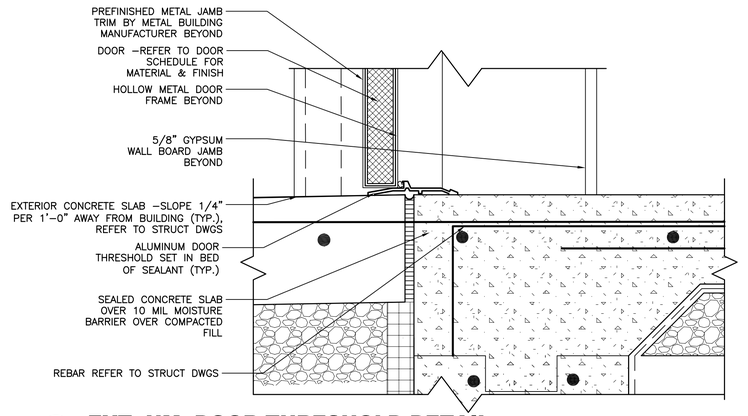


ALUMINUM DOUBLE
HUNG WINDOW W/
LOW-E INSULATED
GLASS

C

WINDOW SCHEDULE

NO.	TYPE	WIDTH	HEIGHT	SILL HEIGHT	JAMB DETAIL	HEAD DETAIL	SILL DETAIL
W3	C	3'-4"	4'-0"	3'-2"	3/A-602	2/A-602	1/A-602



1 / A-601A **EXT. HM. DOOR THRESHOLD DETAIL**
3" = 1'–0"

REVISED DRAWING 07/02/2025

Jul 01,2025 — 3:24pm
B:\20993.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-601A.dwg

36x24 PLOT SHEET

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331
POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE.

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REGISTERED ARCHITECT OLGA KISLYUK 041855-1 STATE OF NEW YORK
EXPIRATION: 2/28/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

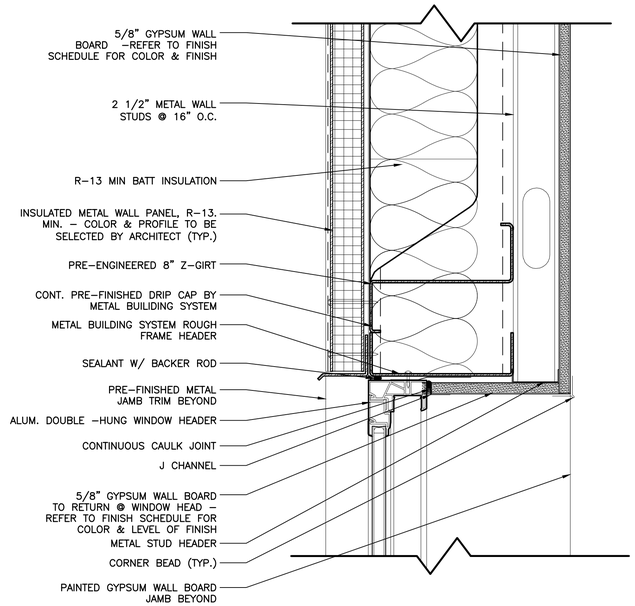
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE:
DOOR AND WINDOW SCHEDULE, TYPE AND DETAILS– ALT 1 & ALT 2

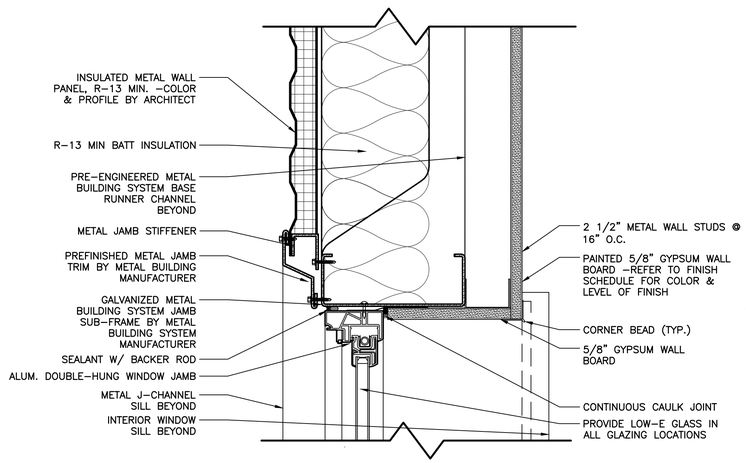
DRAWING NUMBER:
A–601A

SHEET OF



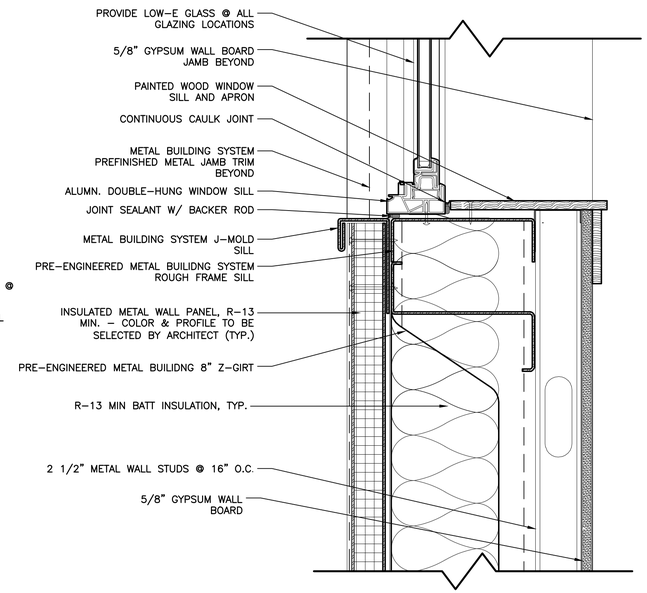
2 A-602 **WINDOW HEAD DETAIL**

3" = 1'–0"



3 A-602 **WINDOW JAMB DETAIL**

3" = 1'–0"



1 A-602 **WINDOW SILL DETAIL**

3" = 1'–0"

REVISED DRAWING 07/02/2025

Jul 01,2025 – 12:12pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081A–602.dwg

36x24 PLOT SHEET

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

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REGISTERED ARCHITECT OLGA KISLYUK 241855-1 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

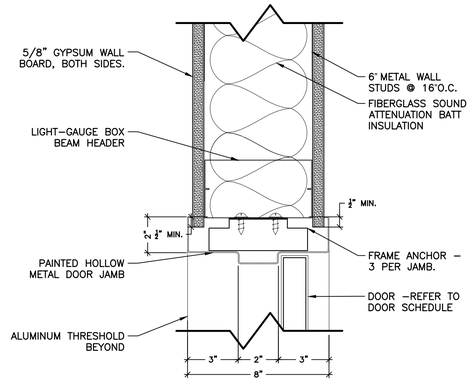
SHEET TITLE:

ARCHITECTURAL WINDOW DETAILS BASE BID

DRAWING NUMBER:

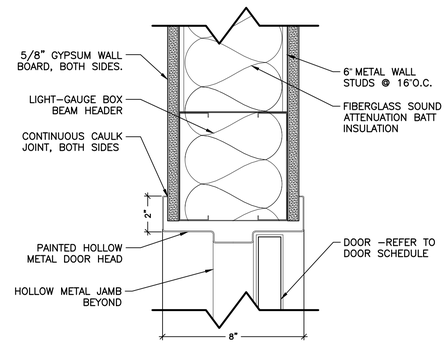
A–602

SHEET OF



2 / A-602A INT. HM. DOOR JAMB DETAIL

3" = 1'-0"



1 / A-602A INT. HM. DOOR HEAD DETAIL

3" = 1'-0"

REVISED DRAWING 07/02/2025

Jul 01,2025 - 12:13pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081A-602A.dwg

36x24 PLOT SHEET

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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REGISTERED ARCHITECT OLGA KISLYUK 041855-01 STATE OF NEW YORK

EXPIRATION: 2/28/2027

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	MHS
DRAWN BY:	CP
FIELD CHECK:	–
APPROVED:	–

SHEET TITLE: ARCHITECTURAL INTERIOR DOOR DETAILS ALT 1

DRAWING NUMBER: A-602A

SHEET OF

ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ADDL	ADDITIONAL
ADJ	ADJACENT, ADJUSTABLE
AESS	ARCHITECTURALLY-EXPOSED STRUCTURAL STEEL
AFF	ABOVE FINISHED FLOOR
AGG	AGGREGATE
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALT	ALTERNATE
ALUM	ALUMINUM
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX	APPROXIMATELY
ARCH	ARCHITECT, ARCHITECTURAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASD	ALLOWABLE STRESS DESIGN
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B/ or BO	BOTTOM OF
BAL	BALANCE
BB	BACK-TO-BACK
BD	BOARD
BF	BRACED FRAME
BG	BACKGOUGE
BL	BRICK LEDGE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM, BENCHMARK
BN	BOUNDARY NAIL
BOS	BOTTOM OF STEEL
B or BOT	BOTTOM
BRG	BEARING
BRKT	BRACKET
BSMT	BASEMENT
BTWN	BETWEEN
BW	BOTH WAYS
CANT	CANTILEVER
CC	CENTER TO CENTER
CF	CUBIC FEET(FOOT), COLD-FORMED
CFMF	COLD-FORMED METAL FRAMING
CG	CENTER OF GRAVITY
CI	CAST IRON
CIP	CAST-IN-PLACE, CAST IRON PIPE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUE, CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CSK	COUNTERSUNK
CTR	CENTER(ED)
CY	CUBIC YARD
d	PENNY
db	BAR DIAMETER
DBL	DOUBLE
DCW	DEMAND CRITICAL WELD
DEG	DEGREE
DEMO	DEMOLITION
DEP	DRPRESS(ION)
DIA or Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIR	DIRECTION
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DO	DITTO
DP	DRILLED PIER, DEEP
DR	DOOR, DRIVE
DS	DOWNSPOUT
DT	DOUBLE TEE
DTL(S)	DETAIL(S)
DWG(S)	DRAWING(S)
DWL(S)	DOWEL(S)
E	EAST
E-W	EAST-WEST
EA	EACH
EE	EACH END
EF	EACH FACE
EJ	EXPANSION JOINT
EJD	EXPANSION JOINT W/ DOWEL
ELAS	ELASTOMERIC
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EMBED	EMBEDDED, EMBEDMENT
EN	EDGE NAIL
ENCL	ENCLOSURE
ENGR	ENGINEER
EOD	EDGE OF DECK
EOR	ENGINEER OF RECORD
EOS	EDGE OF SLAB
EQ	EQUAL
EQ SP	EQUALLY SPACED
EQUIP	EQUIPMENT
ES	EACH SIDE
ETC	ET CETERA
ETR	EXISTING TO REMAIN
EW	EACH WAY
EXIST	EXISTING
EXC	EXCAVATION, EXCAVATE
EXP	EXPAND, EXPANSION
EXT	EXTERIOR
FAB	FABRICATE
FD	FLOOR DRAIN, FOUNDATION DRAIN
FF	FAR FACE
FFE	FINISHED FLOOR ELEVATION
FIN	FINISH(ED)
FIXT	FIXTURE
FLG	FLANGE
FLR	FLOOR
FNDN	FOUNDATION
FO	FACE OF
FP	FULL PENETRATION, FIRE PROOFING
FRAM	FRAMING
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FAR SIDE
FT	FOOT, FEET
FTG	FOOTING
GA	GAGE, GAUGE
GAL	GALLON
GALV	GALVANIZED
GB or GR BM	GRADE BEAM
GC	GENERAL CONTRACTOR
GFRC	GLASS FIBER REINFORCED CONCRETE
GL	GLU-LAM
GR	GRADE, GRIND
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HAS	HEADED ANCHOR STUD
HC	HOLLOW CORE
HD	HEADED, HOLD DOWN, HOT DIPPED
HDG or HD GALV	HOT DIPP(ED) GALVANIZED
HDW	HARDWARE
HEF	HORIZONTAL EACH FACE
HIF	HORIZONTAL INSIDE FACE
HK	HOOK
HM	HOLLOW METAL
HOF	HORIZONTAL OUTSIDE FACE
HP	HIGH POINT
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATION & AIR CONDITIONING
IBC	INTERNATIONAL BUILDING CODE
IF	INSIDE FACE
ID	INSIDE DIAMETER
IN	INCH(ES)
INCL	INCLUDE(D)
INT	INTERIOR, INTERMEDIATE
INFO	INFORMATION
INSP	INSPECT(OR)
INV	INVERT
JST	JOIST
JT	JOINT
k	KIP
KIP	1,000 POUNDS
KO	KNOCKOUT
L	ANGLE
L or LG	LONG, LENGTH
LAM	LAMINATED
LB(S)	POUND(S)
LF	LINEAR FEET(FOOT)
LH	LEFT HAND
LIN	LINEAR
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLO	LONG LEG OUT
LLV	LONG LEG VERT
LOC(S)	LOCATION(S)
LONG	LONGITUDINAL
LRFD	LOAD AND RESISTANCE FACTOR DESIGN
LSL	LAMINATED STRAND LUMBER
LT	LIGHT
LTWT	LIGHTWEIGHT
LVL	LEVEL, LAMINATED VENEER LUMBER
LWC	LIGHTWEIGHT CONCRETE
MACH	MACHINE
MACH RM	MACHINE ROOM
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MCJ	MASONRY CONTROL JOINT
ME	MATCH EXISTING
MECH	MECHANICAL
MEP	MECHANICAL/ELECTRICAL/PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
ML	MICRO-LAM
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
N	NORTH
NF	NEAR FACE
N-S	NORTH-SOUTH
NIC	NOT IN CONTRACT
NM	NON-METALLIC
NO or #	NUMBER
NOM	NOMINAL
NS	NON-SHRINK, NEAR SIDE
NTS	NOT TO SCALE
NWC	NORMAL-WEIGHT CONCRETE
OA	OVERALL
OF	OUTSIDE FACE
OAE	OR APPROVED EQUIVALENT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND, OVERHANG, OVERHEAD
O/O	OUT TO OUT
OPNG	OPENING
OPP	OPPOSITE
OPT	OPTION(AL)
OTLN	OUTLINE
PAF	POWDER ACTUATED FASTENER
PC	PRECAST
PCA	PORTLAND CEMENT ASSOCIATION
PCF	POUNDS PER CUBIC FOOT
PE	PROFESSIONAL ENGINEER
PED	PEDESTAL
PEMB	PRE-ENGINEERED METAL BUILDING
PEN	PENETRATION
PERF	PERFORATED
PERP	PERPENDICULAR
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUM	PLUMBING
PLYWD	PLYWOOD
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PREP	PREPARE(D)
PROJ	PROJECT
PS	PRE-STRESSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT, POST-TENSIONED, PRESSURE TREATED, PRE-TENSIONED
PVC	POLYVINYL CHLORIDE (PLASTIC)
QTY	QUANTITY
R	RISER, RADIUS
RAD	RADIUS
RB	RECTANGULAR BEAM
RC	REINFORCED CONCRETE
RD	ROOF DRAIN
REC	RECESSED
RE or REF	REFER TO, REFERENCE
REG(S)	REGULAR, REGULATION(S)
REINF	REINFORCE(ING)(D)(MENT)
REQD	REQUIRED
RET	RETURN, RETAINING
REV	REVISE(D)(ION)
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RQMT(S)	REQUIREMENT(S)
RTU	ROOF TOP UNIT
RV	ROOF VENT
S	SOUTH
SC	SHEAR CONNECTOR, SLIP CRITICAL, SOLID CORE
SCH or SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET, SAFETY FACTOR
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SJ	SAWCUT JOINT
SLH	SHORT LEG HORIZONTAL
SLRS	SEISMIC LOAD-RESISTING SYSTEM
SLV	SHORT LEG VERTICAL
SOG	SLAB ON GRADE
SP	SPACE(S)
SPEC(S)	SPECIFICATION(S)
SPT or SUPT	SUPPORT
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRAIGHT, STRINGER
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SW	SHEARWALL
SY	SQUARE YARD
SYM	SYMMETRICAL
T	TOP, TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T/ or TO	TOP OF
TEMP	TEMPORARY, TEMPERATURE
THK	THICK(NESS)
THRD	THREAD(ED)
TJ	TOOLED JOINT
TL	TOTAL LOAD
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UC	UNDERCUT
UGND	UNDERGROUND
ULT	ULTIMATE
UNEX	UNEXCAVATED
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
US	UNDERSIDE
UTIL	UTILITY
VEF	VERTICAL EACH FACE
VENT	VENTILATION
VERT	VERTICAL
VIF	VERTICAL INSIDE FACE, VERIFY IN FIELD
VOF	VERTICAL OUTSIDE FACE
VOL	VOLUME
VR	VAPOR RETARDER
W	WEST
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WP	WORK(ING) POINT, WATERPROOFING
WT	WEIGHT, WATERTIGHT
WWF	WELDED WIRE FABRIC
WWR	WELDED WIRE REINFORCEMENT

GENERAL NOTES

1. WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE BUILDING CODE OF NEW YORK STATE, THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) STANDARD SPECIFICATION, THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE, THE AMERICAN WELDING SOCIETY (AWS) CODE AND ALL APPLICABLE ASTM STANDARDS. IN CASES OF CONFLICT, THE MOST STRINGENT SHALL GOVERN.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR INFORMATION NOT NOTED ON THE STRUCTURAL DRAWINGS AND COMPARE THE STRUCTURAL DRAWINGS TO THE ARCHITECTURAL DRAWINGS. REPORT DISCREPANCIES TO THE ARCHITECT IMMEDIATELY. VERIFICATION OF EXISTING DIMENSIONS AND CONDITIONS SHALL BE DONE PRIOR TO THE PREPARATION OF SHOP DRAWINGS.
3. TYPICAL DETAILS SHALL APPLY TO ALL DRAWINGS AND SHALL BE USED EXCEPT WHERE OTHERWISE SHOWN OR NOTED.
4. ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATIONS TO THE STRUCTURE SHOWN ON THESE DRAWINGS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING SUGGESTED.
5. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT WORKERS AND OTHER PERSONS DURING CONSTRUCTION.
6. THE STRUCTURAL DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS OR FIT OF MATERIALS.
7. THE GENERAL CONTRACTOR SHALL BE SOLELY AND EXCLUSIVELY RESPONSIBLE FOR THE ADEQUACY OF ALL SHORING AND BRACING. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION SHORING AND BRACING OF ALL STRUCTURAL WORK AS REQUIRED FOR THE STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
8. REFER TO THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.
9. REPRODUCTION OF ANY PORTION OF THE CONTRACT DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS OR ERECTION DRAWINGS AND IS A VIOLATION OF COPYRIGHT LAWS. ALL PLANS, NOTES, DETAILS, AND SECTIONS MUST BE REDRAWN AND COORDINATED WITH THE CONTRACT DRAWINGS. REPRODUCED CONTRACT DRAWINGS THAT ARE SUBMITTED WILL NOT BE REVIEWED.

FOUNDATION NOTES

1. FOOTINGS MUST BE CARRIED DOWN TO UNDISTURBED NATURAL SUBGRADE MATERIAL HAVING A MINIMUM PRESUMPTIVE SOIL BEARING CAPACITY AS INDICATED UNDER THE STRUCTURAL DESIGN LOADS. BEARING ELEVATIONS GIVEN ARE ESTIMATED DEPTHS. EXACT BEARING ELEVATIONS AND SOIL BEARING CAPACITIES SHALL BE FIELD DETERMINED BY THE TESTING AGENCY'S GEOTECHNICAL ENGINEER.
2. IF BEARING MATERIALS WITH A LOWER BEARING CAPACITY ARE ENCOUNTERED, THE UNDERLYING UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SELECT GRANULAR MATERIAL APPROVED BY THE TECHNICAL ENGINEER.
3. EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN TO SUBGRADE NOT LESS THAN 42" BELOW FINISHED EXTERIOR GRADE.
4. ANY OBSTRUCTIONS ENCOUNTERED DURING EXCAVATION WHICH MAY INTERFERE WITH THE CONSTRUCTION OF ANY OF THE FOUNDATIONS OR WALLS MUST BE REMOVED AND REPLACED IN COMPLIANCE WITH PROJECT SPECIFICATIONS.
5. NO FOUNDATION OR SOIL-SUPPORTED SLABS SHALL BE PLACED IN WATER OR ON OR AGAINST FROZEN GROUND.
6. ALL CONCRETE AND FOUNDATIONS SHALL BE PROTECTED AGAINST FROST UNTIL THE PROJECT IS COMPLETED.
7. FOUNDATION SUBGRADES SHALL BE HAND TRIMMED.
8. OWNER'S GEOTECHNICAL ENGINEER SHALL OBSERVE ALL PROOF-ROLLING, FILL PLACEMENT, AND COMPACTION ACTIVITIES. INSPECT FOUNDATION BEARING GRADES PRIOR TO CONSTRUCTION OF FORMWORK AND PLACEMENT OF CONCRETE.
9. FINISHED EXCAVATIONS AND BEARING GRADES SHALL BE INSPECTED AND APPROVED BY THE TESTING AGENCY'S GEOTECHNICAL ENGINEER IMMEDIATELY BEFORE ANY CONCRETE IS PLACED.
10. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, TEST BORINGS OR TEST PITS. THESE DATA DESCRIBE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND PARTICULAR TIMES SUCH SUBSURFACE EXPLORATIONS WERE PERFORMED.
11. CONCRETE FOR EACH INDIVIDUAL FOOTING SHALL BE PLACED IN A SINGLE CONTINUOUS POUR.
12. BACKFILL UNDER ANY PORTION OF THE BUILDING OR FOUNDATION SHALL BE COMPACTED IN 6" LIFTS OF 95% COMPACTED SELECT GRANULAR MATERIAL..
13. PROTECT ADJACENT STRUCTURES FROM CONSTRUCTION ACTIVITIES AND LOADS.

CONCRETE NOTES

1. CONCRETE MATERIALS AND CONSTRUCTION SHALL CONFORM TO ACI-318 AND ACI-301, LATEST EDITIONS.
2. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

ELEMENTS	STRENGTH	UNIT WEIGHT	EXPOSURE CLASS
FOUNDATIONS, WALLS, AND PIERS	4,500 PSI	145 PCF	F1 S0 W0 C1
EXTERIOR SLABS AND PADS	5,000 PSI	145 PCF	F1 S0 W0 C2
INTERIOR SLABS	4,000 PSI	145 PCF	F0 S0 W0 C0
INTERIOR EQUIPMENT PADS	3,000 PSI	145 PCF	F0 S0 W0 C0
ALL OTHER CONCRETE	4,000 PSI	145 PCF	F0 S0 W0 C0

3. PROVIDE CONSTRUCTION JOINTS WHERE SHOWN. SUBMIT DRAWINGS SHOWING ALL PROPOSED CONSTRUCTION JOINT LOCATIONS FOR APPROVAL PRIOR TO PREPARATION OF AFFECTED REINFORCEMENT SHOP DRAWINGS.
4. SIZES OF CONCRETE PLACEMENT SHALL NOT EXCEED THE FOLLOWING:
   a. WALLS AND GRADE BEAMS:
      - PLACE IN SECTIONS, 24 FOOT MINIMUM LENGTH, AND 90 FOOT MAXIMUM LENGTH.
   b. SLAB-ON-GRADE:
      - AS SHOWN ON PLAN.
5. CONCRETE SLABS, INCLUDING SLABS ON METAL DECK, SHALL BE CAST SO THAT THE SLAB THICKNESS IS AT NO POINT LESS THAN THAT INDICATED ON THE DRAWINGS. FOR STEEL AND METAL DECK FRAMED FLOORS, ALLOW AT LEAST 1/2" AVERAGE ADDITIONAL CONCRETE OVER FRAMED AREAS TO ACCOUNT FOR BEAM AND SLAB DEFLECTIONS.
6. MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS.
7. CONCRETE SHALL REACH 75% OF SPECIFIED STRENGTH BEFORE CONSTRUCTION LOADS ARE APPLIED, UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER-OF-RECORD. CONCRETE STRENGTH SHALL BE VERIFIED WITH 7-DAY CYLINDER BREAKS.
8. NOTE SPECIFICATION REQUIREMENTS FOR SPECIAL INSPECTION OF CONCRETE CONSTRUCTION.

REINFORCEMENT NOTES

1. BAR REINFORCEMENT SHALL CONFORM TO ASTM 615 GRADE 60.
2. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
3. WHERE REINFORCEMENT IS NOT SHOWN ON THE DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE TYPICAL DETAILS OR SIMILAR TO THAT SHOWN FOR MOST NEARLY SIMILAR SITUATIONS AS DETERMINED BY THE ENGINEER. IN NO CASE SHALL REINFORCEMENT BE LESS THAN MINIMUM REINFORCEMENT PERMITTED BY THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE.
4. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. REINFORCEMENT SHALL BE LAPPED AS PER SPLICE SCHEDULE.
5. CONCRETE PROTECTION FROM REINFORCING BARS:
   CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   EXPOSED TO EARTH OR WEATHER: #6 OR LARGER: 2"
   #5 AND SMALLER: 1 1/2"
   ALL OTHER PER LATEST EDITION OF ACI 318.
6. WELDED WIRE FABRIC SHALL BE LAPPED TWO FULL MESH PANELS OR 1'-0 MINIMUM.
7. BEAMS, SLABS AND WALLS SHALL NOT BE SLEEVED OR BOXED OUT OR HAVE THEIR REINFORCEMENT INTERRUPTED EXCEPT AS SPECIFICALLY NOTED ON THE DRAWINGS. PROVIDE ADDITIONAL REINFORCEMENT AROUND OPENINGS AS SHOWN IN THE DETAILS.
8. REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE TESTING AGENCY BEFORE CONCRETE IS PLACED.
9. NOTE SPECIFICATION REQUIREMENTS FOR SPECIAL INSPECTION OF REINFORCEMENT.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING REQUIREMENTS:

W-SHAPES:	ASTM A992/ASTM A572 GRADE 50
CHANNELS:	ASTM A36
ANGLES:	ASTM A36
HOLLOW STRUCTURAL SHAPES:	ASTM A500 GRADE B
PIPE:	ASTM A53 GRADE B
MISC. SHAPES, PLATES, & BARS:	ASTM A36

2. BOLTED CONNECTIONS OF PRIMARY MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", LATEST EDITION. HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENT OF ASTM F3125 GRADE A325 OR GRADE A490, TYPE 1 (3/4" MINIMUM DIAMETER).
3. ALL WELD MATERIAL SHALL BE 70 KSI. ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIAL BEING WELDED.
4. WELDING WORK SHALL BE PERFORMED BY CERTIFIED WELDERS. SUBMIT DOCUMENTATION.
5. WHERE NO CAMBER IS INDICATED, FABRICATE BEAMS WITH NATURAL CAMBER UPWARD.
6. WHERE MOMENT CONNECTIONS ARE DESIGNATED, THE BEAM WEB SHEAR CONNECTION SHALL BE DESIGNED USING HIGH STRENGTH BOLTS IN SLIP CRITICAL TYPE CONNECTIONS FOR THE REACTIONS GIVEN.
7. THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS REQUIRED BY THE AISC SPECIFICATION SECTION J2 - WELDS, BUT SHALL NOT BE LESS THAN ¼" UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
8. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL WITHOUT PRIOR REVIEW AND ACCEPTANCE BY THE ENGINEER OF RECORD.
9. TEMPORARY ERECTION BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD STRUCTURAL STEEL SECURELY IN POSITION. IT SHALL NOT BE REMOVED UNTIL PERMANENT BRACING HAS BEEN INSTALLED. THE BUILDING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS MAY BE FINALLY BOLTED OR WELDED.
10. NOTE SPECIFICATION REQUIREMENTS FOR SPECIAL INSPECTION OF STRUCTURAL STEEL

STEEL DECK NOTES

1. STEEL DECK SHALL BE DESIGNED, FURNISHED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING STANDARDS: AISI "SPECIFICATIONS FOR THE DESIGN OF LIGHT GAGE, COLD-FORMED STRUCTURAL STEEL MEMBERS," AND STEEL DECK INSTITUTE SPECIFICATIONS, DESIGN OF LIGHT GAGE, COLD-FORMED STRUCTURAL STEEL MEMBERS."
2. STEEL DECK SHALL BE FABRICATED FROM SHEET STEEL MEETING THE REQUIREMENTS OF ASTM A653, STRUCTURAL STEEL, GRADE 33, HAVING A MINIMUM G90 GALVANIZED COATING, UNLESS NOTED OTHERWISE.
3. PROVIDE STEEL DECK OF THE DEPTH, PROFILE, AND THICKNESS AS INDICATED.
4. PROVIDE PREMOLDED RUBBER CLOSURE AND FINISH STRIPS AT PERIMETER OF ROOF DECK AND OPENINGS, ATTACHED DIRECTLY TO THE STEEL DECK TO PROVIDE A FINISHED SURFACE FOR THE APPLICATION OF INSULATION AND ROOFING.
5. PROVIDE CONTINUOUS SHEET METAL CLOSURES AT ALL SLAB OPENINGS AND SLAB EDGES, CONTINUOUS DECK CLOSURES AT ALL DECK ENDS, AND COLUMN CLOSURES. CANT STRIPS, SUMP PANS, ETC. AS REQUIRED. PROVIDE SUPPLEMENTAL FRAMING AT OPENINGS AND OTHER DISCONTINUITIES AS REQUIRED TO PROVIDE PROPER SUPPORT FOR STEEL DECK. PROVIDE STRAP ANCHORS OR TEMPORARY SHORING AT CANTILEVERED STEEL DECK AS REQUIRED TO CONTROL SLAB-EDGE DEFLECTIONS.
6. INSTALL DECK PANELS AND ACCESSORIES ACCORDING TO APPLICABLE SPECIFICATIONS AND COMMENTARY IN SDI PUBLICATION NO. 30, MANUFACTURER'S WRITTEN INSTRUCTIONS AND REQUIREMENTS OF THE SPECIFICATIONS.
7. INSTALL DECK ENDS OVER SUPPORTING FRAMING WITH A MINIMUM END BEARING OF 1-1/2". END JOINTS MAY BE BUTTED OR LAPPED 2" MINIMUM AT THE CONTRACTOR'S OPTION. STAGGER ADJACENT STEEL DECK END JOINTS.
8. INSTALL STEEL DECK OVER A MINIMUM OF 3-SPANS IN THE DIRECTION INDICATED. SINGLE SPAN CONDITIONS ARE NOT PERMITTED UNLESS SPECIFICALLY INDICATED. WHERE INDICATED, SINGLE SPAN DECK SHALL BE ADEQUATELY SHORED DURING CONSTRUCTION.
9. FASTEN STEEL DECK PANELS TO SUPPORTING FRAMING WITH ARC SPOT (PUDDLE) WELDS INDICATED BELOW, FASTENED THROUGH THREE SHEET-THICKNESS MINIMUM:
   COMPOSITE FLOOR DECK: 3/4" DIA.- 36 / 4 PATTERN
   OR #12 SELF-DRILLING FASTENERS 36/4 PATTERN
10. FASTEN STEEL DECK SIDE LAPS AS FOLLOWS:
    COMPOSITE FLOOR DECK: 3/8 x 1 1/4" ARC-SEAM WELDS AT 24" O.C. MAXIMUM
11. WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS USING PRE-QUALIFIED METHODS, SUBMIT DOCUMENTATION. MECHANICAL FASTENERS MAY BE SUBSTITUTED FOR WELDS IF INFORMATION IS PROVIDED TO THE ARCHITECT DEMONSTRATING EQUIVALENT DIAPHRAGM STRENGTH AND STIFFNESS.
12. LOADS SUSPENDED FROM STEEL ROOF DECK SHALL NOT EXCEED 50 POUNDS.
13. SUPPORT ALL DUCTWORK, PIPING, CONDUIT SUPPLEMENTAL FRAMING, AND OTHER LARGE LOADS DIRECTLY FROM STRUCTURAL STEEL FRAMING.
14. NOTE SPECIFICATION REQUIREMENTS FOR SPECIAL INSPECTION OF STEEL DECK.

PRE-ENGINEERED METAL BUILDING NOTES

1. DELEGATED DESIGN OF PEMB SYSTEMS IS REQUIRED FOR THIS PROJECT.
2. FOUNDATION DESIGN HAS BEEN BASED UPON PRELIMINARY REACTION LOADS. PEMB COLUMN REACTIONS SHALL BE PROVIDED TO ENGINEER OF RECORD FOR REVIEW PRIOR TO START OF CONSTRUCTION. FOUNDATION DESIGN SUBJECT TO CHANGE BASED UPON FINAL PEMB REACTION LOADS.
3. ROOF FRAMING LAYOUT IS SCHEMATIC. PROVIDE FRAMING LAYOUT, SHOP DRAWINGS OF EACH INDIVIDUAL FRAME TYPE, CONNECTION DETAILS, AND STABILITY BRACING FOR REVIEW. ALL SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE PEMB MANUFACTURES ENGINEERED WHO IS LICENSED IN THE STATE OF NEW YORK.

TENSION LAP SPLICE LENGTHS FOR BARS NOT ENCLOSED IN TIES OR STIRRUPS

BAR SIZE	CONCRETE COMPRESSIVE STRENGTH								
	3,000 PSI			4,000 PSI			5,000 PSI		
	BAR TYPE		STANDARD HOOK DEV	BAR TYPE		STANDARD HOOK DEV	BAR TYPE		STANDARD HOOK DEV
	TOP	OTHER		TOP	OTHER		TOP	OTHER	
#3	42	33	6	36	28	6	33	25	6
#4	56	43	8	48	37	7	43	33	6
#5	70	54	10	61	47	8	54	42	8
#6	84	64	12	73	56	10	65	50	9
#7	122	94	14	106	81	12	95	73	11
#8	139	107	16	121	93	14	108	83	12

NOTES:

4. ALL TABULATED VALUES ARE GIVEN IN INCHES.
2. TENSION SPLICE LENGTHS FOR BARS ENCLOSED IN TIES OR STIRRUPS MUST HAVE CLEAR SPACING OF NO LESS THAN THE BAR DIAMETER, AND A CLEAR COVER NOT LESS THAN THE BAR DIAMETER. VALUES IN THIS TABLE MAY ALSO APPLY TO BARS NOT ENCLOSED IN TIES OR STIRRUPS PROVIDED THE CLEAR SPACING BETWEEN BARS IS 2 TIMES THE BAR DIAMETER AND A CLEAR COVER NOT LESS THAN THE BAR DIAMETER.
3. DIVIDE TABULATED VALUES BY 1.30 TO ACHIEVE STRAIGHT BAR TENSION DEVELOPMENT LENGTHS.
4. APPLY A 1.50 MULTIPLIER ON TABULATED VALUES FOR EPOXY COATED BARS WITH COVER LESS THAN 3 BAR DIAMETERS OR CLEAR SPACING LESS THAN 6 BAR DIAMETERS. APPLY A 1.20 MULTIPLIER ON ALL OTHER EPOXY COATED BARS.
5. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT WITH MORE THAN 12-INCHES OF CONCRETE CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.
6. "SIDE LAP" ALL LAP SPLICES TO MAINTAIN SPECIFIED CONCRETE COVER. WHEN BARS OF DIFFERENT SIZE ARE LAP SPLICED, USE THE SPLICE LENGTH OF THE SMALLER BAR.
7. NON-CONTACT SPLICES NOT PERMITTED.

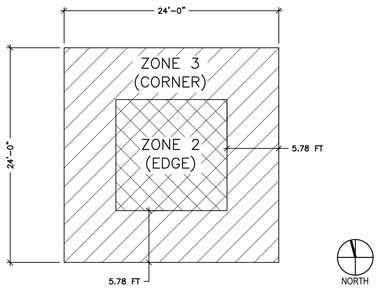
SYMBOLS

- B1, B2... — BEAM MARK
- BP1, BP2... — BEARING PLATE
- C1, C2... — COLUMN MARK
- F1, F2... — FOOTING MARK
- H1, H2... — HEADER MARK
- L1, L2... — LINTEL MARK
- P1, P2... — PIER MARK
- (+X'-X") — INDICATES TOP OF STEEL
- T/ XXX / X'-X" — ELEVATION CALL OUT (PLAN)
- XXX / ELEV. X'-X" — ELEVATION CALL OUT (SECTION / DETAIL)
- XXX — TYPE AND SPAN OF DECK, GRATING, SLAB...
- STEP/CHANGE IN ELEVATION
- SLOPE/CHANGE IN ELEVATION
- DATUM POINT
- FD — FLOOR DRAIN
- DIRECTION OF SLOPE
- [X"] — SLAB DEPRESSION
- WALL DEPRESSION / DOOR THRESHOLD
- —X—X— WELDED WIRE REINFORCEMENT
- S.J. OR I.J. — SLAB CONTROL JOINT
- BRACE SIZE — BRACING
- JOIST BRIDGING
- REVISION SYMBOL
- DECK OR SLAB OPENING
- RTU-X / XXX LB. — MECHANICAL UNIT (OUTLINE) AND OPERATING WEIGHT
- RD — ROOF DRAIN AND FRAMING
- PIER MARK
- FOOTING MARK
- TOP OF PIER ELEVAT

STRUCTURAL DESIGN CRITERIA – RANGE CONTROL TOWER

GOVERNING BUILDING CODE	2020 BUILDING CODE OF NEW YORK STATE
BUILDING RISK CATEGORY	II
PRESUMPTIVE DESIGN SOIL BEARING CAPACITY (PER T18062 NYSBC 2020)	1500 PSF
FLOOR LIVE LOAD	
ASSEMBLY AREAS, BALCONY, AND CORRIDORS	100 PSF
ROOF LOAD	
ROOF CONSTRUCTION LIVE LOAD	20 PSF
COLLATERAL DEAD LOAD (DO NOT CONSIDER WITH UPLIFT)	10 PSF
SNOW LOAD	
SNOW LOAD IMPORTANCE FACTOR, I_s	1.00
GROUND SNOW LOAD, P_g	30 PSF
FLAT ROOF SNOW LOAD, P_f	21 PSF
SLOPED ROOF SNOW LOAD, P_s	21 PSF
SNOW EXPOSURE FACTOR, C_e	0.90
THERMAL FACTOR, C_t	1.10
ROOF SLOPE FACTOR, C_s	1.00
UNBALANCED LOADING	REQUIRED
SNOW DRIFT AT PERIMETER WALKWAY	
DRIFT SURCHARGE LOAD, P_d	29 PSF
DRIFT WIDTH, w	6'-6"
ICE DAM LOAD AT OVERHANGS	45.4 PSF
WIND LOAD	
MAIN WIND FORCE RESISTING SYSTEM	
BASIC ULTIMATE WIND SPEED, V_{ULT}	113 MPH
BASIC NOMINAL WIND SPEED, V_{ASD}	88 MPH
WIND EXPOSURE	C
TOPOGRAPHIC FACTOR, K_{zt}	1.00
WIND DIRECTIONALITY FACTOR, K_d	0.85
VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_z	0.98
MEAN ROOF HEIGHT, h	28'-11"
MAXIMUM WIND PRESSURE, WALLS – HORIZONTAL (PSF)	
PARALLEL TO N–S DIRECTION (WINDWARD / LEEWARD)	24.4/–17.1
PARALLEL TO E–W DIRECTION (WINDWARD / LEEWARD)	24.4/–17.1
MAXIMUM WIND PRESSURE, ROOFS – VERTICAL (PSF)	
PARALLEL TO N–S DIRECTION	
WINDWARD (0–H/2, >H/2)	–33.0/–22.0
PARALLEL TO E–W DIRECTION	
WINDWARD	–24.3
LEEWARD	–19.5
COMPONENTS AND CLADDING (BASED ON MIN. EFFECTIVE AREA = 10 SF)	
MAXIMUM WIND PRESSURE, WALLS (PSF)	
INTERIOR ZONE	32.0/–34.7
END ZONE	32.0/–42.8
MAXIMUM WIND PRESSURE, ROOF (PSF)	
EDGE ZONE	16.0/–67.2
CORNER ZONE	16.0/–91.6
MAXIMUM WIND PRESSURE, OVERHANG	
CORNER ZONE	–86.7
NOTE: POSITIVE AND NEGATIVE NUMBERS INDICATE FORCES/PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES RESPECTIVELY.	
SEISMIC LOAD	
SEISMIC IMPORTANCE FACTOR, I_E	1.00
SITE SOIL CLASSIFICATION, PRESUMED	D
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, S_S	0.277 g
MAPPED ONE SECOND PERIOD SPECTRAL ACCELERATION, S_1	0.060 g
SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{DS}	0.292 g
ONE SECOND PERIOD SPECTRAL DESIGN ACCELERATION, S_{D1}	0.097 g
SEISMIC DESIGN CATEGORY	B
BASIC SEISMIC–FORCE–RESISTING SYSTEM (BCNYS T1617.6.2)	H
SEISMIC RESPONSE COEFFICIENT, C_S	0.097
RESPONSE MODIFICATION FACTOR, R	3
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR, V (N–S DIRECTION / E–W DIRECTION)	6.9 KIPS/6.9 KIPS
FLOOD LOAD	
FLOOD DESIGN CLASS	N/A
HAZARD ZONE X	
RAIN LOAD	
RAIN INTENSITY, i	2.60 IN / HR (60–MIN/100–YEAR DURATION)
	1.48 IN / HR (15–MIN/100–YEAR DURATION)
ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS REQUIRING SEISMIC BRACING	
ARCHITECTURAL COMPONENTS	
IMPORTANCE FACTOR, I_p = 1.0	EXEMPT
IMPORTANCE FACTOR, I_p = 1.5	REQUIRED
M/E/P COMPONENTS	
IMPORTANCE FACTOR, I_p = 1.0	EXEMPT
IMPORTANCE FACTOR, I_p = 1.5	EXEMPT

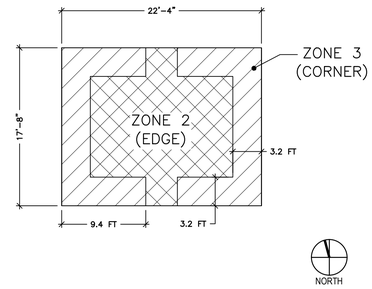
ROOF WIND LOAD DIAGRAM



STRUCTURAL DESIGN CRITERIA – BLEACHER ENCLOSURE

GOVERNING BUILDING CODE	2020 BUILDING CODE OF NEW YORK STATE
BUILDING RISK CATEGORY	II
PRESUMPTIVE DESIGN SOIL BEARING CAPACITY (PER T18062 NYSBC 2020)	1500 PSF
ROOF LOAD	
ROOF CONSTRUCTION LIVE LOAD	20 PSF
COLLATERAL DEAD LOAD (DO NOT CONSIDER WITH UPLIFT)	5 PSF
SNOW LOAD	
SNOW LOAD IMPORTANCE FACTOR, I_S	1.00
GROUND SNOW LOAD, P_g	30.0 PSF
FLAT ROOF SNOW LOAD, P_f	22.7 PSF
SLOPED ROOF SNOW LOAD, P_s	22.0
SNOW EXPOSURE FACTOR, C_e	0.90
THERMAL FACTOR, C_t	1.20
ROOF SLOPE FACTOR, C_s	0.97
WIND LOAD	
MAIN WIND FORCE RESISTING SYSTEM	
BASIC ULTIMATE WIND SPEED, V_{ULT}	113 MPH
BASIC NOMINAL WIND SPEED, V_{ASD}	88 MPH
WIND EXPOSURE	C
TOPOGRAPHIC FACTOR, K_{zt}	1.00
WIND DIRECTIONALITY FACTOR, K_d	0.85
VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_z	0.86
MEAN ROOF HEIGHT, h	15'-8"
MAXIMUM WIND PRESSURE, WALLS – HORIZONTAL (PSF)	
PARALLEL TO N–S DIRECTION (WINDWARD/LEEWARD)	21.5/–15.1
PARALLEL TO E–W DIRECTION (WINDWARD/LEEWARD)	21.5/–13.9
MAXIMUM WIND PRESSURE, ROOFS – VERTICAL (PSF)	
PARALLEL TO N–S DIRECTION	
WINDWARD (0–H/2, H/2–H, >H)	–30.0/–20.3/–18.4
PARALLEL TO E–W DIRECTION	
WINDWARD	–19.8
LEEWARD	–16.4
COMPONENTS AND CLADDING (BASED ON MIN. EFFECTIVE AREA = 10 SF)	
MAXIMUM WIND PRESSURE, WALLS (PSF)	
INTERIOR ZONE	28.1/–30.5
END ZONE	28.1/–37.6
MAXIMUM WIND PRESSURE, ROOF (PSF)	
EDGE ZONE	16.0/–59.0
CORNER ZONE	16.0/–80.5
MAXIMUM WIND PRESSURE, OVERHANG	
EDGE ZONE	–54.7
CORNER ZONE	–76.2
NOTES: POSITIVE AND NEGATIVE NUMBERS INDICATE FORCES/PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES RESPECTIVELY.	
SEISMIC LOAD	
SEISMIC IMPORTANCE FACTOR, I_E	1.00
SITE SOIL CLASSIFICATION	D
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, S_S	0.277 g
MAPPED ONE SECOND PERIOD SPECTRAL ACCELERATION, S_1	0.060 g
SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{DS}	0.292 g
ONE SECOND PERIOD SPECTRAL DESIGN ACCELERATION, S_{D1}	0.097 g
SEISMIC DESIGN CATEGORY	B
BASIC SEISMIC–FORCE–RESISTING SYSTEM (BCNYS T1617.6.2)	H
SEISMIC RESPONSE COEFFICIENT, C_S	0.097
RESPONSE MODIFICATION FACTOR, R	3
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR, V (N–S DIRECTION/E–W DIRECTION)	1.5 KIPS/1.5 KIPS
FLOOD LOAD	
FLOOD DESIGN CLASS	N/A
RAIN LOAD	
RAIN INTENSITY, i	2.60 IN / HR (60–MIN/100–YEAR DURATION)
	1.48 IN / HR (15–MIN/100–YEAR DURATION)
ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS REQUIRING SEISMIC BRACING	
ARCHITECTURAL COMPONENTS	
IMPORTANCE FACTOR, Ip = 1.0	EXEMPT
IMPORTANCE FACTOR, Ip = 1.5	REQUIRED
M/E/P COMPONENTS	
IMPORTANCE FACTOR, Ip = 1.0	EXEMPT
IMPORTANCE FACTOR, Ip = 1.5	EXEMPT

ROOF WIND LOAD DIAGRAM



REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 UNIFORM CODE.

WARNING:

THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

STATE OF NEW YORK
THOMAS JOHN HELD
102266
LICENSED PROFESSIONAL ENGINEER
Expires 12/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
STRUCTURAL DESIGN CRITERIA BASE BID

DRAWING NUMBER:
S–002

SHEET OF

36x24 PLOT SHEET

Jun 27,2025 – 11:01am
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081S–002.dwg

STRUCTURAL DESIGN CRITERIA – OPERATIONS AND STORAGE BUILDING AND RANGE CLASSROOM BUILDING

GOVERNING BUILDING CODE	2020 BUILDING CODE OF NEW YORK STATE
BUILDING RISK CATEGORY	II
PRESUMPTIVE DESIGN SOIL BEARING CAPACITY (PER T18062 NYSBC 2020)	1500 PSF
FLOOR LIVE LOAD	
ASSEMBLY AREAS	100 PSF
OFFICE AREAS	50 PSF
CLASSROOM AREAS	40 PSF
STAIRS AND EXIT WAYS	100 PSF
STORAGE – LIGHT	125 PSF
ROOF LOAD	
ROOF CONSTRUCTION LIVE LOAD	20 PSF
COLLATERAL DEAD LOAD (DO NOT CONSIDER WITH UPLIFT)	10 PSF
SNOW LOAD	
SNOW LOAD IMPORTANCE FACTOR, I_s	1.00
GROUND SNOW LOAD, P_g	30 PSF
FLAT ROOF SNOW LOAD, P_f	19 PSF
SLOPED ROOF SNOW LOAD, P_s	19 PSF
SNOW EXPOSURE FACTOR, C_e	0.90
THERMAL FACTOR, C_t	1.00
ROOF SLOPE FACTOR, C_s	1.00
UNBALANCED LOADING	REQUIRED
ICE DAM LOAD AT OVERHANG	45.4 PSF
WIND LOAD	
MAIN WIND FORCE RESISTING SYSTEM	
BASIC ULTIMATE WIND SPEED, V_{ULT}	113 MPH
BASIC NOMINAL WIND SPEED, V_{ASD}	88 MPH
WIND EXPOSURE	C
TOPOGRAPHIC FACTOR, K_{zt}	1.00
WIND DIRECTIONALITY FACTOR, K_d	0.85
VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_z	0.85
MEAN ROOF HEIGHT, h	11'-0"
MAXIMUM WIND PRESSURE, WALLS – HORIZONTAL (PSF)	
PARALLEL TO N–S DIRECTION (WINDWARD/LEEWARD)	21.4/–10.7
PARALLEL TO E–W DIRECTION (WINDWARD/LEEWARD)	21.3/–14.9
MAXIMUM WIND PRESSURE, ROOFS – VERTICAL (PSF)	
PARALLEL TO N–S DIRECTION	
WINDWARD (0–H, H–2H, >2H)	–23.5/–15.01/–10.7
PARALLEL TO E–W DIRECTION	
WINDWARD	–15.3
LEEWARD	–16.5
COMPONENTS AND CLADDING (BASED ON MIN. EFFECTIVE AREA = 10 SF)	
MAXIMUM WIND PRESSURE, WALLS (PSF)	
INTERIOR ZONE	27.9/–30.2
END ZONE	27.9/–37.3
MAXIMUM WIND PRESSURE, ROOF (PSF)	
INTERIOR ZONE	16.0/–44.4
EDGE ZONE	16.0/–58.6
CORNER ZONE	16.0/–79.8
MAXIMUM WIND PRESSURE, OVERHANG	
EDGE ZONE	–54.3
CORNER ZONE	–75.6

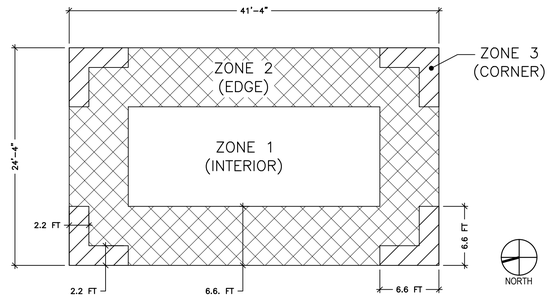
NOTE: POSITIVE AND NEGATIVE NUMBERS INDICATE FORCES/PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES RESPECTIVELY.

SEISMIC LOAD	
SEISMIC IMPORTANCE FACTOR, I_E	1.00
SITE SOIL CLASSIFICATION, PRESUMED	D
MAPPED SHORT PERIOD SPECTRAL ACCELERATION, S_S	0.277 g
MAPPED ONE SECOND PERIOD SPECTRAL ACCELERATION, S_1	0.060 g
SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{DS}	0.292 g
ONE SECOND PERIOD SPECTRAL DESIGN ACCELERATION, S_{D1}	0.097 g
SEISMIC DESIGN CATEGORY	B
BASIC SEISMIC–FORCE–RESISTING SYSTEM (BCNYS T1617.6.2)	H
SEISMIC RESPONSE COEFFICIENT, C_S	0.097
RESPONSE MODIFICATION FACTOR, R	3
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR, V (N–S DIRECTION / E–W DIRECTION)	3.0 KIPS/3.0 KIPS
FLOOD LOAD	
FLOOD DESIGN CLASS	N/A
HAZARD ZONE X	
RAIN LOAD	
RAIN INTENSITY, i	2.60 IN / HR (60–MIN/100–YEAR DURATION)
	1.48 IN / HR (15–MIN/100–YEAR DURATION)

ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS REQUIRING SEISMIC BRACING

ARCHITECTURAL COMPONENTS	
IMPORTANCE FACTOR, I_p = 1.0	EXEMPT
IMPORTANCE FACTOR, I_p = 1.5	REQUIRED
M/E/P COMPONENTS	
IMPORTANCE FACTOR, I_p = 1.0	EXEMPT
IMPORTANCE FACTOR, I_p = 1.5	EXEMPT

ROOF WIND LOAD DIAGRAM



REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 – 3:27pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081S–002A.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

PDG POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

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STATE OF NEW YORK
THOMAS JOHN HELD
102266
LICENSED PROFESSIONAL ENGINEER
Expires 12/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
STRUCTURAL DESIGN CRITERIA ALT 1 & 2

DRAWING NUMBER:
S–002A

SHEET OF

SPECIAL INSPECTIONS

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

1. THIS PROJECT REQUIRES STRUCTURAL TESTS AND SPECIAL INSPECTIONS AS DEFINED IN CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE AS ADOPTED BY THE 2020 NEW YORK STATE BUILDING CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE STATEMENT OF SPECIAL INSPECTIONS, SUBMIT ALL REQUIRED DOCUMENTATION, AND ALLOW THE OWNER'S TESTING AND INSPECTION AGENCY ACCESS TO PERFORM ALL REQUIRED TESTS AND INSPECTIONS. AS PART OF THIS PROGRAM, THE CONTRACTOR SHALL ALSO SUBMIT A COPY OF THEIR QUALITY CONTROL PROCEDURES AND CONTACT INFORMATION FOR ALL PERSONNEL RESPONSIBLE FOR EXECUTION OF SAME.
2. THE FOLLOWING ITEMS ARE INCLUDED IN THE SPECIAL INSPECTIONS PROGRAM:
   - SOILS AND EARTHWORKS - EXCAVATION, SUBGRADE PREPARATION, PROOF-ROLLING, BACKFILL PLACEMENT AND COMPACTION.
   - CONCRETE - FORMWORK INSTALLATION, REINFORCING STEEL INSTALLATION, MIX DESIGNS, PLACEMENT, PROTECTION, BOLTS, CURING, CONSTRUCTION TESTING (SLUMP, AIR CONTENT, COMPRESSIVE STRENGTH, ETC.) FOR FOUNDATIONS, PIERS, FOOTINGS, AND MATS.
   - POST-INSTALLED REINFORCING STEEL AND BOLTS - DRILLING, HOLE PREPARATION AND CLEANING, ADHESIVE INJECTION, REBAR / BOLT INSTALLATION, CURING, AND TIGHTENING.
   - STRUCTURAL STEEL - WELDING, BOLTING.
   - COLD-FORMED STEEL DECK - PLACEMENT, WELDING, AND MECHANICAL FASTENERS.
3. REFER TO STRUCTURAL TESTING AND SPECIAL INSPECTIONS DRAWINGS FOR SCOPE OF WORK, GENERAL NOTES AND REQUIREMENTS.

POST-INSTALLED ANCHORS AND REINFORCING STEEL

VERIFICATION AND/OR INSPECTION	FREQUENCY	STANDARD	REMARKS
MECHANICAL ANCHORS (EXPANSION-, SLEEVE-, AND SCREW-TYPE)			
A. PRIOR TO COMMENCING WORK:	--	ICC-ES REPORT	
- REVIEW CONTRACTOR'S INSTALLATION PROCEDURE	P		
B. PRIOR TO ANCHOR INSTALLATION:	--	ICC-ES REPORT	
- VERIFY TYPE, DIAMETER, LENGTH, FINISH OF EACH ANCHOR.	P		
- VERIFY BASE MATERIAL AND SUITABILITY FOR ANCHOR INSTALLATION.	P		
- VERIFY MAXIMUM ANCHOR TORQUE RATING FOR SCREW-TYPE ANCHORS.	P		
C. DURING ANCHOR INSTALLATION:	--	ICC-ES REPORT	
- VERIFY THE FOLLOWING AT ALL DRILLED HOLES: HOLE DIMENSIONS AND PROPER CLEANING.	C		
- VERIFY THE FOLLOWING FOR ALL ANCHORS: EMBEDMENT, EDGE DISTANCE AND SPACING.	C		
D. AFTER INSTALLATION OF EACH ATTACHED ASSEMBLY:	--	--	VISUALLY INSPECT 100% OF ATTACHED ASSEMBLIES.
- VERIFY THE FOLLOWING AT EACH ASSEMBLY: CONFIGURATION OF ASSEMBLY AND CONTACT WITH SUBSTRATE; ANCHOR ORIENTATION, QUANTITY, AND EDGE DISTANCES.	P		
- VERIFY THE FOLLOWING FOR ALL ANCHORS: THREAD ENGAGEMENT, NUT/HEAD CONTACT WITH ANCHORED ASSEMBLY, AND PLUMB.	P		
E. ANCHOR TESTING:	--		
- TEST EACH INSTALLED ANCHOR WITH CALIBRATED TORQUE WRENCH TO 100% OF THE INSTALLATION TORQUE NOTED IN THE ICC-ES REPORT.	P		TEST 100% OF INSTALLED ANCHORS; TORQUE SHALL BE ATTAINED WITHIN 1/2-TURN OF THE NUT.
ADHESIVE ANCHORS AND REINFORCING STEEL INSTALLED IN HARDENED CONCRETE			
A. PRIOR TO COMMENCING WORK:	--	ICC-ES REPORT	
- REVIEW CONTRACTOR'S INSTALLATION PROCEDURE	P		
B. PRIOR TO ANCHOR INSTALLATION:	--	ICC-ES REPORT	
- VERIFY TYPE, DIAMETER, LENGTH, FINISH OF EACH ANCHOR.	P		
- VERIFY BASE MATERIAL AND SUITABILITY FOR ANCHOR INSTALLATION.	P		
C. DURING ANCHOR INSTALLATION:	--	ICC-ES REPORT	
- VERIFY THE FOLLOWING AT ALL DRILLED HOLES: HOLE DIMENSIONS AND PROPER CLEANING.	C		
- VERIFY THE FOLLOWING FOR ALL ANCHORS: EMBEDMENT, EDGE DISTANCE AND SPACING.	C		
- VERIFY FULL CURE TIME HAS ELAPSED PRIOR TO APPLICATION OF TORQUE OR LOAD.	P		VISUALLY INSPECT 100% OF INSTALLED ANCHORS AND REINFORCEMENT.
D. AFTER INSTALLATION OF EACH ATTACHED ASSEMBLY:	--		VISUALLY INSPECT 100% OF ATTACHED ASSEMBLIES.
- VERIFY THE FOLLOWING AT EACH ASSEMBLY: CONFIGURATION OF ASSEMBLY AND CONTACT WITH SUBSTRATE; ANCHOR ORIENTATION, QUANTITY, AND EDGE DISTANCES.	P		
- VERIFY THE FOLLOWING FOR ALL ANCHORS: THREAD ENGAGEMENT, NUT/HEAD CONTACT WITH ANCHORED ASSEMBLY, AND PLUMB.	P		
E. ANCHOR TESTING:	--	ASTM E 488	
- PERFORM INITIAL STATIC TENSION TESTING AT THE FIRST 3 OF EACH ANCHOR TYPE, BASE MATERIAL, AND POSITION (VERTICAL/DOWN, HORIZONTAL, VERTICAL/OVERHEAD).	C		OBSERVE MINIMUM EDGE DISTANCES PER ASTM E 488 FOR DETERMINING TEST LOCATIONS.
- AFTER INITIAL TESTING, PERFORM VERIFICATION TENSION TESTING AT 1% OF THE REMAINING ANCHORS FOR EACH ANCHOR TYPE, BASE MATERIAL, AND POSITION.	C		OBSERVE MINIMUM EDGE DISTANCES PER ASTM E 488 FOR DETERMINING TEST LOCATIONS.

SPECIAL INSPECTIONS FOR SOIL

VERIFICATION AND/OR INSPECTION	FREQUENCY	STANDARD	REMARKS
SITE PREPARATION			
A. INSPECT SUBGRADE SOILS AND BEARING STRATA FOR PROPER PREPARATION IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS AND/OR GEOTECHNICAL ENGINEERING REPORT.	P	IBC 1705.6	
B. VERIFY THAT EXCAVATIONS HAVE REACHED PROPER DEPTH AND MATERIAL.	P		
C. INSPECT SOIL BEARING SURFACES FOR CONSISTENCY WITH GEOTECHNICAL ENGINEERING REPORT AND TO VERIFY SOIL BEARING CAPACITY.	P		
D. INSPECT WATER CONTROL METHODS AND SURFACE PROTECTION.	P		
E. OBSERVE PROOF ROLLING OF SUBGRADE TO IDENTIFY AREAS OF UNSUITABLE SOILS.	C		
F. OBSERVE REMOVAL OF UNSUITABLE SOIL AND STABILIZATION OF SUBGRADE SOILS, IF NECESSARY.	C		
FILL MATERIAL AND PLACEMENT			
A. INSPECT AND TEST FILL MATERIALS FOR COMPLIANCE WITH THE PROJECT SPECIFICATIONS AND/OR GEOTECHNICAL ENGINEERING REPORT.	P		
B. PERFORM CLASSIFICATION AND TESTING IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS TO DETERMINE OPTIMUM WATER CONTENT AND MAXIMUM DRY DENSITY.	P		
C. VERIFY CORRECT USE AND PLACEMENT OF FILL MATERIALS, INCLUDING DENSITIES AND LIFT THICKNESS, DURING PLACEMENT AND COMPACTION.	C		
D. PERFORM FIELD DENSITY TESTS OF THE IN-PLACE FILL MATERIAL TO VERIFY COMPLIANCE WITH THE PROJECT SPECIFICATIONS AND/OR GEOTECHNICAL ENGINEERING REPORT.	P		

SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION

VERIFICATION AND/OR INSPECTION	FREQUENCY	STANDARD	REMARKS
1. INSPECT REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, VERIFY PLACEMENT AND:	p	ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3 IBC 1908.4	
- GRADE, SIZE, AND QUANTITY.	--		
- BAR CONDITION, COVER, AND PROPER SUPPORT.	--		
- INSPECT FOR DAMAGE TO REINFORCEMENT COATINGS.	--		
- VERIFY BAR SPLICES AND DOWEL EMBEDMENT.	--		
2. INSPECT BOLTS AND ANCHORS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	P	ACI 318 17.8.2	
3. INSPECT BOLTS AND ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.			
- ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	C	ACI 318 17.8.2.4	
- MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED ABOVE.	P	ACI 318 17.8.2	
4. VERIFY USE OF REQUIRED MIX DESIGN(S) INCLUDING MATERIALS, MANUFACTURER'S CERTIFIED MILL TEST REPORTS, AND CURING METHODS.	P	ACI 318 CH. 19, 26.4.3, 26.4.4 IBC 1904.1, 1904.2, 1908.2, 1908.3	
- REVIEW PLANT QUALITY CONTROL PROCEDURES AND BATCHING AND MIXING METHODS	--		
5. PRIOR TO CONCRETE PLACEMENT, SAMPLE FRESH CONCRETE AND FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	C	ASTM C172 ASTM C31 ACI 318 26.4, 26.12 IBC 1908.10	
6. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	P	ACI 318 26.5.3-26.5.5 IBC 1908.9	
- OBSERVE METHODS OF MOISTURE RETENTION AND FORMWORK REMOVAL.	--		

STRUCTURAL STEEL

VERIFICATION AND/OR INSPECTION	FREQUENCY	STANDARD	REMARKS
REQUIRED INSPECTIONS PRIOR TO CONSTRUCTION			
1. REVIEW FABRICATOR CERTIFICATION/QUALITY CONTROL PROCEDURE:	P	IBC 1704.2.5	
- VERIFY THAT THE FABRICATOR MAINTAINS COMPLETE, ACCURATE, AND DETAILED FABRICATION AND QUALITY CONTROL PROCEDURE.	--		
- REVIEW FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND DOCUMENTATION FROM PRIOR AUDITS/INSPECTIONS RELATIVE TO THE CODE REQUIREMENTS FOR FABRICATOR'S SCOPE OF WORK, -- OR --	--		
- IF THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM THE WORK WITHOUT SPECIAL INSPECTION, THE FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE CODE ENFORCEMENT OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.	--		
2. MATERIAL VERIFICATION OF STRUCTURAL STEEL:	P	AISC 360 A3.1, ASTM A6, AND IBC CH. 22	
- CONFIRM IDENTIFICATION MARKINGS CONFORM TO ASTM STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS	--		
- REVIEW MANUFACTURERS CERTIFIED MILL TEST REPORTS	--		
3. MATERIAL VERIFICATION FOR BOLTS, NUTS, AND WASHERS:	--	AISC 360 A3.3, IBC CH. 22, AND APPLICABLE ASTM STANDARDS	
- CONFIRM IDENTIFICATION MARKINGS CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	P		
- REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE	P		
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:	P	AISC 360 A3.5, AWS D1.2, AND IBC CH. 22	
- IDENTIFICATION MARKINGS CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS	--		
- MANUFACTURERS CERTIFICATE OF COMPLIANCE	--		
REQUIRED INSPECTIONS DURING CONSTRUCTION			
1. INSPECT STRUCTURAL STEEL FRAMING FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:	P	AISC 360 N5.7, IBC CH. 22	
- MEMBER LOCATIONS, SIZE, GRADE, CAMBER, ETC.	--		
- DETAILS SUCH A BRACING AND STIFFENING	--		
- APPLICATION OF JOINT DETAILS AT EACH CONNECTION	--		
2. INSPECT BOLTED CONNECTIONS FOR BOLT TYPE AND SIZE, QUANTITY, GEOMETRY AND SPACING, BOLT PROJECTION, ENGAGEMENT AND PENETRATION, NUTS AND NUT/THREAD ENGAGEMENT, WASHER INSTALLATION, AND TIGHTNESS FOR THE FOLLOWING:		AISC 360 M2.5 & N5.6, IBC CH. 22, RCSC SPEC.	INSPECT AND TEST 100% OF SHOP AND FIELD BOLTED CONNECTIONS ACCORDING TO RCSC SPECIFICATION FOR STRUCTURAL JOINTS
- BEARING-TYPE CONNECTIONS	P		
- SLIP-CRITICAL CONNECTIONS	C		
- ANCHOR BOLTS	P		
3. INSPECT STRUCTURAL STEEL WELDING FOR THE FOLLOWING:		AISC 360 M2.4, N5.4, N5.6, AWS D1.1, AND IBC CH. 22	VISUALLY INSPECT 100% OF SHOP AND FIELD WELDS IN ADDITION TO THE SPECIFIC PROCEDURES INDICATED BELOW
- COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	C	ASTM E164	PERFORM ULTRASONIC INSPECTION ON 100% OF SHOP AND FIELD PENETRATION WELDS
- MULTI-PASS FILLET WELDS	C	ASTM E709	PERFORM MAGNETIC PARTICLE INSPECTION ON 15% OF SHOP AND FIELD WELDS SELECTED AT RANDOM
- SINGLE PASS FILLET WELDS > 5/16"	C	ASTM E709	PERFORM MAGNETIC PARTICLE INSPECTION ON 15% OF SHOP AND FIELD WELDS SELECTED AT RANDOM
- SINGLE PASS FILLET WELDS < 5/16"	P	ASTM E709	PERFORM MAGNETIC PARTICLE INSPECTION ON 15% OF SHOP AND FIELD WELDS SELECTED AT RANDOM
- BASE METAL > 1.5" THICK	C	ASTM A435 & ASTM A898	PERFORM ULTRASONIC INSPECTION OF BASE METAL ON 100% OF SHAPES AND PLATES

REQUIRED VERIFICATION AND INSPECTION OF COLD-FORMED STEEL DECK

VERIFICATION AND INSPECTION	QUALITY CONTROL (QC)	QUALITY ASSURANCE (QA)	REFERENCED STANDARD
1. INSPECTION TASKS PRIOR TO DECK PLACEMENT:			
A. VERIFY COMPLIANCE OF MATERIALS WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS.	P	P	SDI-QA/QC 2017
B. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	P	P	SDI-QA/QC 2017
2. INSPECTION TASKS AFTER DECK PLACEMENT:			
A. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS.	P	P	SDI-QA/QC 2017
B. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS COMPLY WITH THE CONSTRUCTION DOCUMENTS.	P	P	SDI-QA/QC 2017
C. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES.	P	P	SDI-QA/QC 2017
3. INSPECTION TASKS PRIOR TO WELDING:			
A. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	O	O	SDI-QA/QC 2017
B. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	O	O	SDI-QA/QC 2017
C. MATERIAL IDENTIFICATION.	O	O	SDI-QA/QC 2017
D. CHECK WELDING EQUIPMENT.	O	O	SDI-QA/QC 2017
4. INSPECTION TASKS DURING WELDING:			
A. USE OF QUALIFIED WELDERS	O	O	SDI-QA/QC 2017
B. CONTROL AND HANDLING OF WELDING CONSUMABLES.	O	O	SDI-QA/QC 2017
C. ENVIRONMENTAL CONDITIONS.	O	O	SDI-QA/QC 2017
D. WPS FOLLOWED.	O	O	SDI-QA/QC 2017
5. INSPECTION TASKS AFTER WELDING:			
A. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDE LAP, AND PERIMETER WELDS.	P	P	SDI-QA/QC 2017
B. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	P	P	SDI-QA/QC 2017
C. VERIFY REPAIR ACTIVITIES.	P	P	SDI-QA/QC 2017
D. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS.	P	P	SDI-QA/QC 2017
6. INSPECTION TASKS PRIOR TO MECHANICAL FASTENING:			
A. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS.	O	O	SDI-QA/QC 2017
B. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	O	O	SDI-QA/QC 2017
C. PROPER STORAGE FOR MECHANICAL FASTENING.	O	O	SDI-QA/QC 2017
7. INSPECTION TASKS DURING MECHANICAL FASTENING:			
A. FASTENERS ARE POSITIONED AS REQUIRED.	O	O	SDI-QA/QC 2017
B. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.	O	O	SDI-QA/QC 2017
8. INSPECTION TASKS AFTER MECHANICAL FASTENING:			
A. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS.	P	P	SDI-QA/QC 2017
B. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS.	P	P	SDI-QA/QC 2017
C. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS.	P	P	SDI-QA/QC 2017
D. VERIFY REPAIR ACTIVITIES.	P	P	SDI-QA/QC 2017
E. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS.	P	P	SDI-QA/QC 2017

NOTES:
1. P = PERFORM.
2. O = OBSERVE.

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 11:09am
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-003.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
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STATE OF NEW YORK
THOMAS JOHN HELD
102266
LICENSED PROFESSIONAL ENGINEER
EXPIRES 31 MAR 2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER: 47574 - C
DESIGNED BY: TJH
DRAWN BY: KNP
FIELD CHECK:
APPROVED:

SHEET TITLE:
STRUCTURAL SPECIAL INSPECTIONS

DRAWING NUMBER:
S-003

SHEET OF

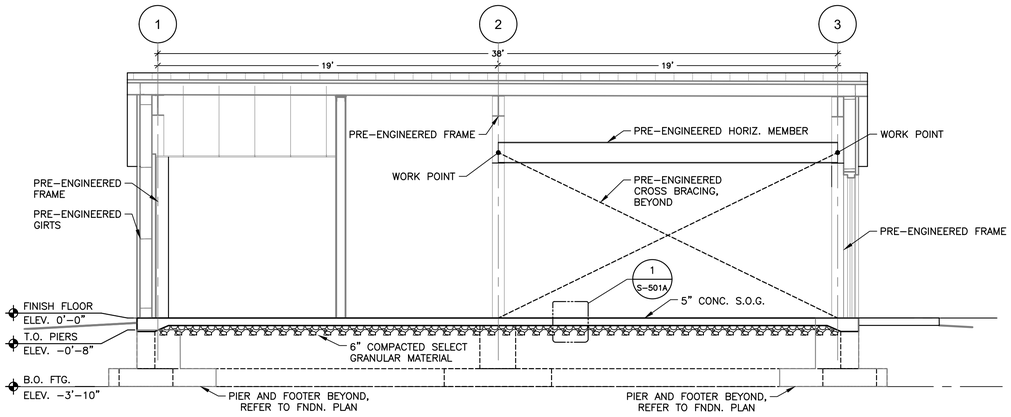
STRUCTURAL NOTES:

1. TOP OF CONCRETE SLAB / FINISH FLOOR = 0'-0" = ELEVATION 91.00'.
2. BOTTOM OF ALL FOOTINGS SHALL BE MINIMUM -3'-6" FROM ADJACENT GRADE ELEVATION, COORDINATE WITH SITE DRAWINGS.
3. INTERIOR CONCRETE SLABS SHALL BE 5" THICK, U.N.O., 4,000 PSI REINFORCED CONCRETE WITH #4 AT 12" ON CENTER, EACH WAY, OVER 10-MIL VAPOR RETARDER, SET OVER 6" SELECT GRANULAR MATERIAL AND COMPACTED TO 95 PERCENT MAXIMUM MODIFIED PROCTOR PER ASTM-D1557.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FLOOR FINISHES.
5. COORDINATE ALL EXTERIOR GRADE WITH SITE DRAWINGS.
6. VERIFY AND COORDINATE ALL UTILITY LOCATIONS, SIZES, AND INVERTS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. PROVIDE SLEEVES AT ALL FOUNDATION WALL PENETRATIONS.
7. BUILDING COLUMNS, WALL FRAMING, LATERAL SYSTEMS, AND ROOF FRAMING BY PEMB. MANUFACTURER, COORDINATE WITH ARCHITECTURAL DRAWINGS, TYPICAL.
8. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

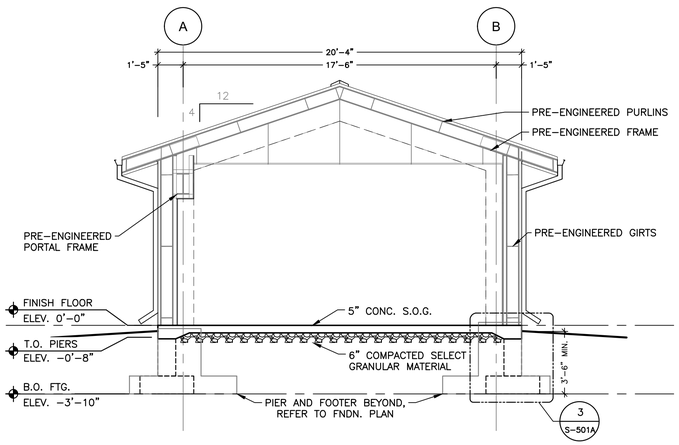
FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCEMENT
F1	5'-0"	5'-0"	1'-0"	(6)#5 E.W.,T&B

PIER SCHEDULE					
MARK	WIDTH	LENGTH	VERT. REINF.	TIES	REMARKS
P1	2'-0"	2'-0"	(12)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.
P2	2'-0"	3'-0"	(14)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.

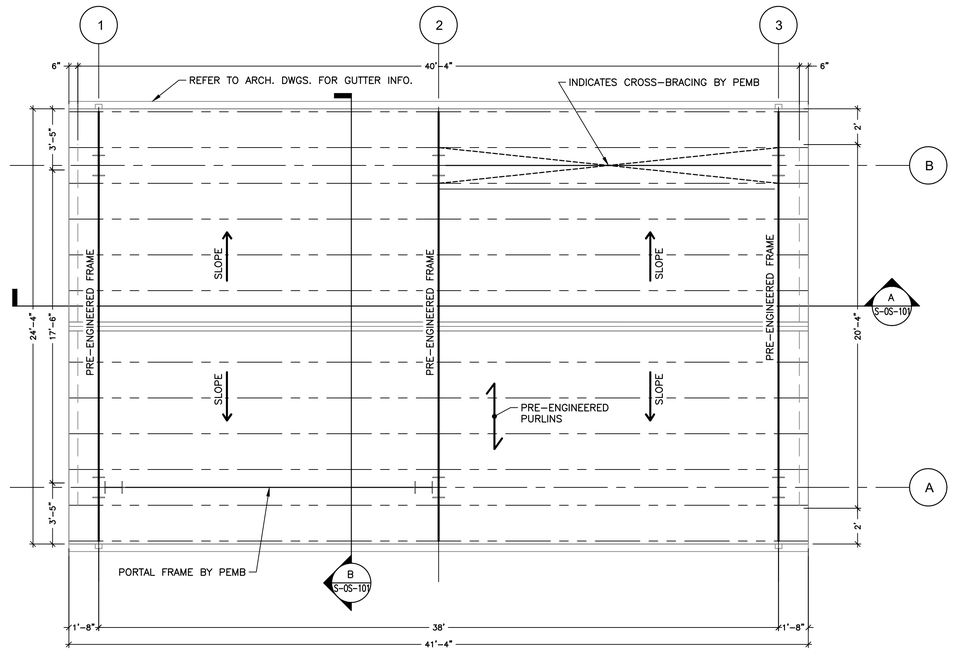
REFER TO DETAIL 3/S-501 FOR TIE DETAILS.



A S-OS-101 **SECTION LOOKING EAST**
1/4" = 1'-0"

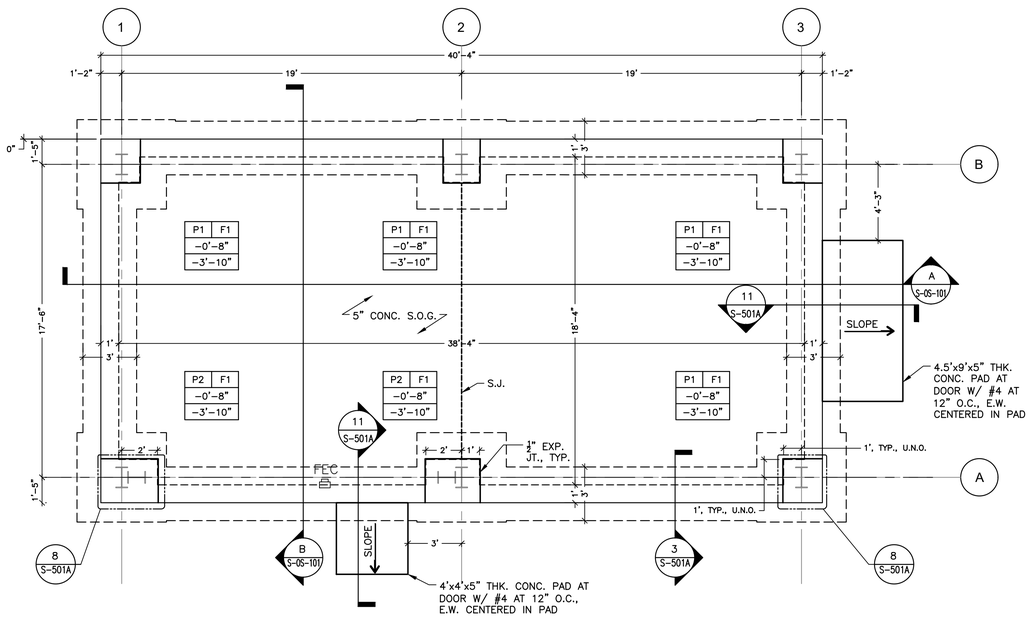


B S-OS-101 **SECTION LOOKING SOUTH**
1/4" = 1'-0"



2 S-OS-101 **ROOF FRAMING PLAN**
1/4" = 1'-0"

NORTH



1 S-OS-101 **FOUNDATION PLAN**
1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 3:28pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-OS-101.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331
POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE (UNIFORM CODE):

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STATE OF NEW YORK · THOMAS JOHN HELD · LICENSED PROFESSIONAL ENGINEER · 102266
Expires 12/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
OPERATIONS AND STORAGE BUILDING – FOUNDATION AND FRAMING PLANS AND SECTION VIEWS ALT 1

DRAWING NUMBER:
S-OS-101

SHEET OF

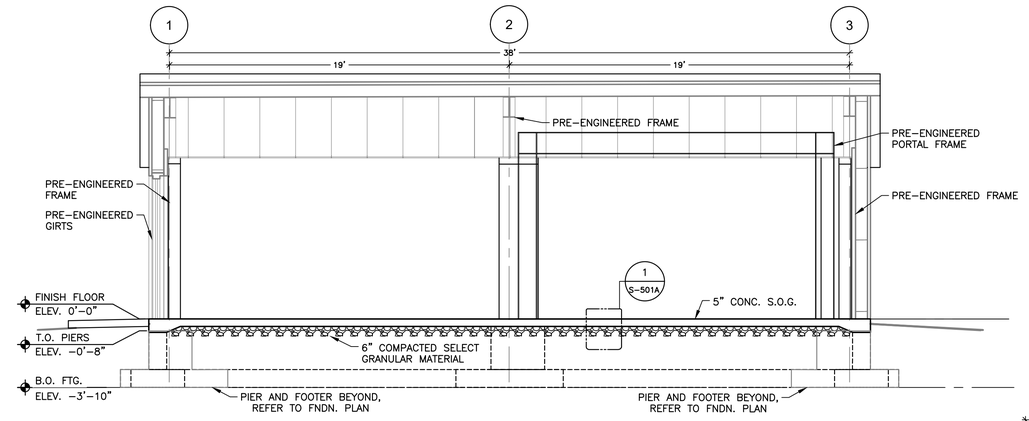
STRUCTURAL NOTES:

1. TOP OF CONCRETE SLAB / FINISH FLOOR = 0'-0" = ELEVATION 91.00'.
2. BOTTOM OF ALL FOOTINGS SHALL BE MINIMUM -3'-6" FROM ADJACENT GRADE ELEVATION, COORDINATE WITH SITE DRAWINGS.
3. INTERIOR CONCRETE SLABS SHALL BE 5" THICK, U.N.O., 4,000 PSI REINFORCED CONCRETE WITH #4 AT 12" ON CENTER, EACH WAY, OVER 10-MIL VAPOR RETARDER, SET OVER 6" SELECT GRANULAR MATERIAL AND COMPACTED TO 95 PERCENT MAXIMUM MODIFIED PROCTOR PER ASTM-D1557.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FLOOR FINISHES.
5. COORDINATE ALL EXTERIOR GRADE WITH SITE DRAWINGS.
6. VERIFY AND COORDINATE ALL UTILITY LOCATIONS, SIZES, AND INVERTS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. PROVIDE SLEEVES AT ALL FOUNDATION WALL PENETRATIONS.
7. BUILDING COLUMNS, WALL FRAMING, LATERAL SYSTEMS, AND ROOF FRAMING BY PEMB. MANUFACTURER, COORDINATE WITH ARCHITECTURAL DRAWINGS, TYPICAL.
8. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCEMENT
F1	5'-0"	5'-0"	1'-0"	(6)#5 E.W.,T&B

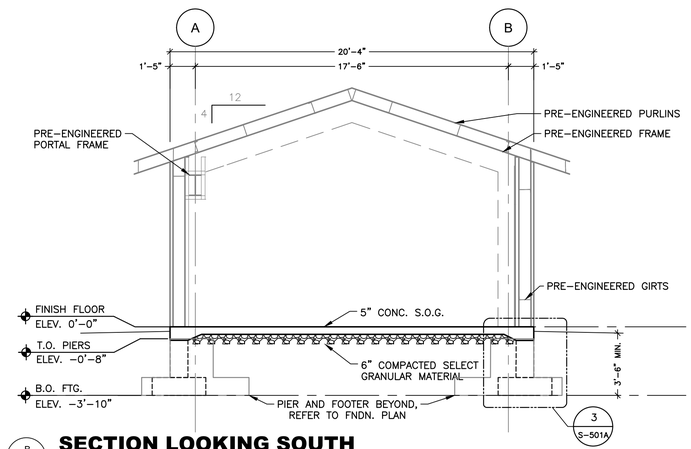
PIER SCHEDULE					
MARK	WIDTH	LENGTH	VERT. REINF.	TIES	REMARKS
P1	2'-0"	2'-0"	(12)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.
P2	2'-0"	3'-0"	(14)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.

REFER TO DETAIL 3/S-501 FOR TIE DETAILS.



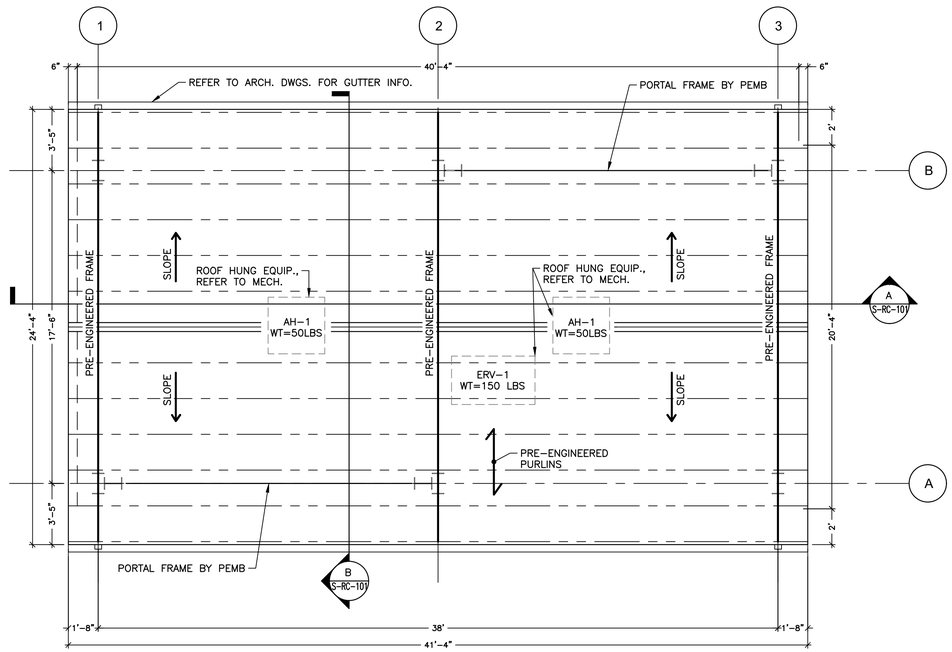
A S-RC-101 **SECTION LOOKING EAST**

1/4" = 1'-0"



B S-RC-101 **SECTION LOOKING SOUTH**

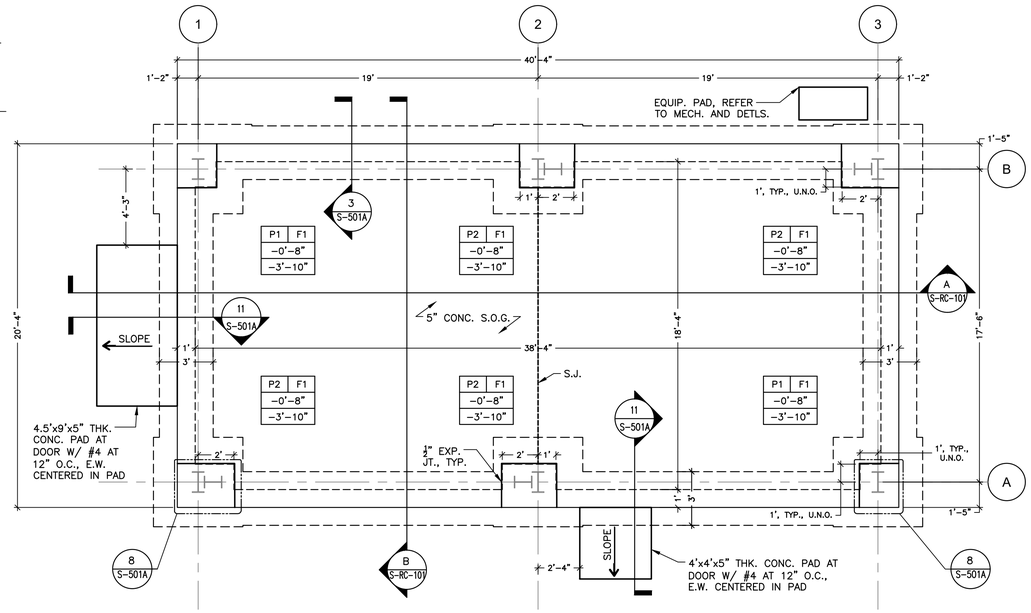
1/4" = 1'-0"



2 S-RC-101 **ROOF FRAMING PLAN**

1/4" = 1'-0"

NORTH



1 S-RC-101 **FOUNDATION PLAN**

1/4" = 1'-0"

NORTH

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK · THOMAS JOHN HELD · LICENSED PROFESSIONAL ENGINEER · 102266 · EXPIRES 08/31/2027

CONTRACT:

CONSTRUCTION

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:

RANGE CLASSROOM BUILDING – FOUNDATION AND FRAMING PLANS AND SECTION VIEWS ALT 2

DRAWING NUMBER:

S-RC-101

SHEET OF

36x24 PLOT SHEET

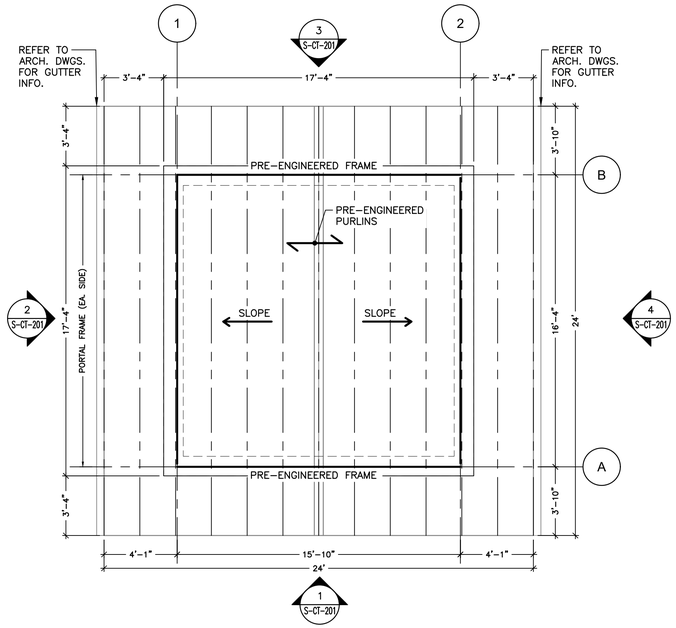
Jun 27,2025 – 2:40pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-RC-101.dwg

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCEMENT
F1	10'–0"	10'–0"	1'–0"	(11)#5 E.W.,T&B
F2	3'–0"	3'–0"	1'–0"	(4)#4 E.W.,T&B

PIER SCHEDULE					
MARK	WIDTH	LENGTH	VERT. REINF.	TIES	REMARKS
P1	1'–8"	1'–8"	(8)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.
P2	1'–4"	1'–4"	(8)#4	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.

REFER TO DETAIL 3/S–501 FOR TIE DETAILS.

BASE PLATE SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	ANCHORS
BP1	1'–2"	1'–2"	3/4"	(4) 3/4" DIA. ANCHOR BOLTS WITH 9" EMBED.
BP2	1'–0"	1'–0"	3/4"	(4) 3/4" DIA. ANCHOR BOLTS WITH 9" EMBED.

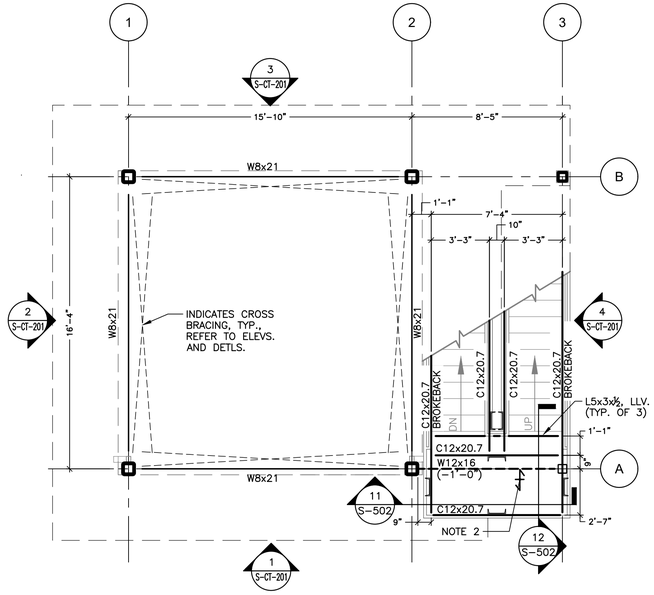


CONTROL ROOM ROOF FRAMING PLAN

4/S-CT-101 — 1/4" = 1'–0"

NOTE:
1. CONTROL ROOM WALL FRAMING, COLUMNS, AND ROOF FRAMING BY PEMB, REFER TO ARCHITECTURAL DRAWINGS, TYPICAL.

NORTH

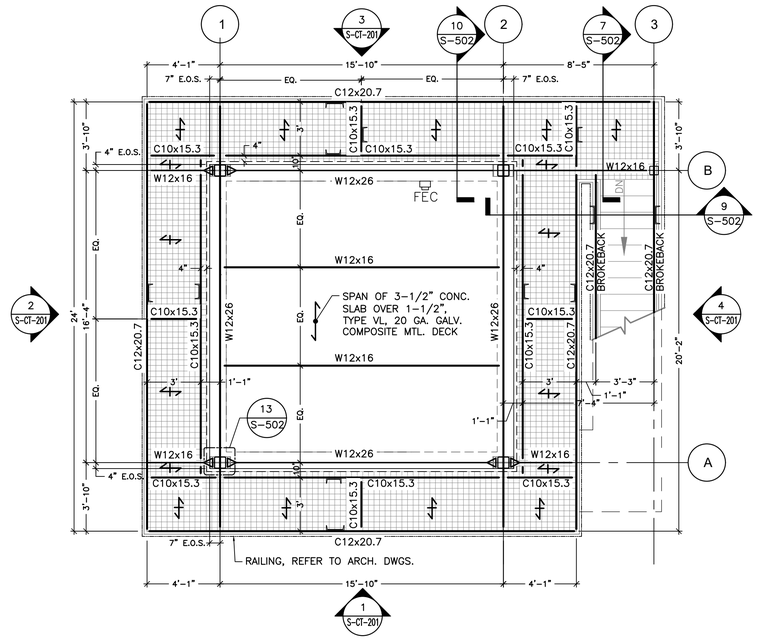


WALK WAY FRAMING PLAN

2/S-CT-101 — 1/4" = 1'–0"

NOTES:
1. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED, TYPICAL.
2. ⟷ INDICATES SPAN OF 1–1/2" HEIGHT x 3/16" THICK, 19–W–4 HOT DIPPED GALVANIZED SERRATED STEEL GRATINGS. TOP OF GRATING = +8'–10½".
3. TOP OF STEEL ELEVATION = +8'–9" FROM FINISH GRADE = 0'–0", UNLESS NOTED OTHERWISE, TYPICAL.
4. ALL CHANNELS AND ANGLES ARE MEASURED FROM THE EXTERIOR FACE OF THE WEB, UNLESS NOTED OTHERWISE, TYPICAL.

NORTH

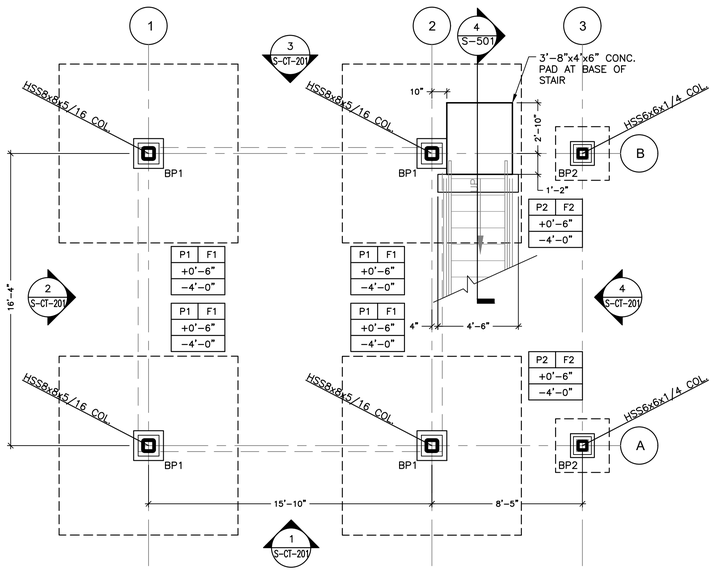


CONTROL ROOM FRAMING PLAN

3/S-CT-101 — 1/4" = 1'–0"

NOTES:
1. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED, TYPICAL.
2. ⟷ INDICATES SPAN OF 1–1/2" HEIGHT x 3/16" THICK, 19–W–4 HOT DIPPED GALVANIZED SERRATED STEEL GRATINGS. TOP OF GRATING = +18'–2½".
3. TOP OF STEEL ELEVATION = +18'–1" FROM FINISH GRADE = 0'–0", UNLESS NOTED OTHERWISE, TYPICAL.
4. TOP OF CONCRETE SLAB ELEVATION = +18'–4½".
5. PROVIDE WWM6x6–W2.1xW2.1 MIN. IN CONCRETE SLAB OVER METAL DECK.
6. ALL CHANNELS ARE MEASURED FROM THE EXTERIOR FACE OF THE WEB, UNLESS NOTED OTHERWISE, TYPICAL.

NORTH



FOUNDATION PLAN

1/S-CT-101 — 1/4" = 1'–0"

NOTES:
1. TOP OF FINISHED GRADE = 0'–0" = DATUM = ELEVATION 94.50', COORDINATE WITH SITE DRAWINGS.
2. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED, TYPICAL.

NORTH

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 – 2:45pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM-CAD\SE081S–CT–101.dwg

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK · THOMAS JOHN HELD · 102266 · LICENSED PROFESSIONAL ENGINEER
Expires: 12/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

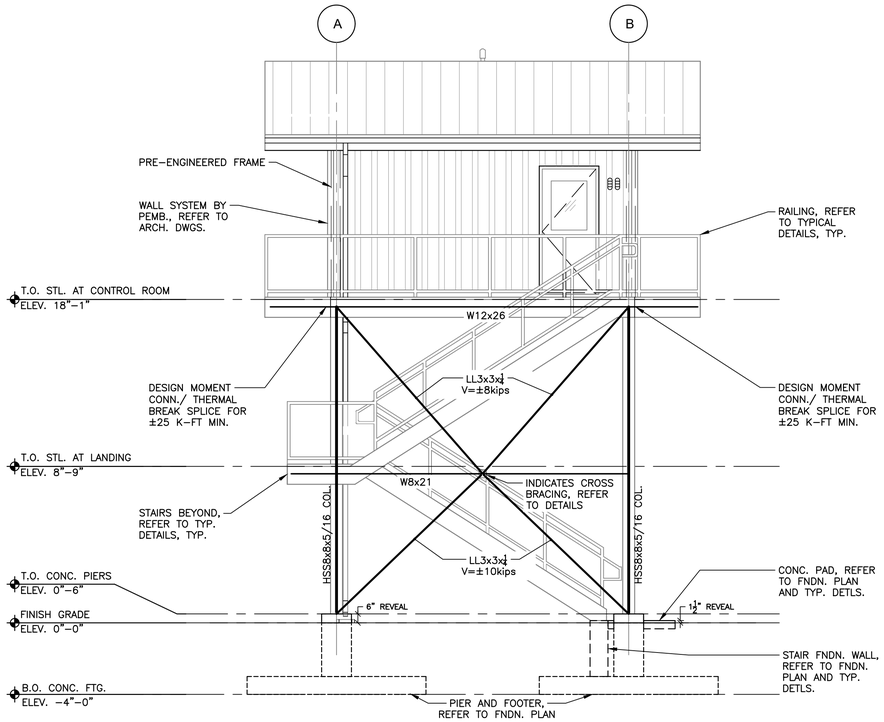
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

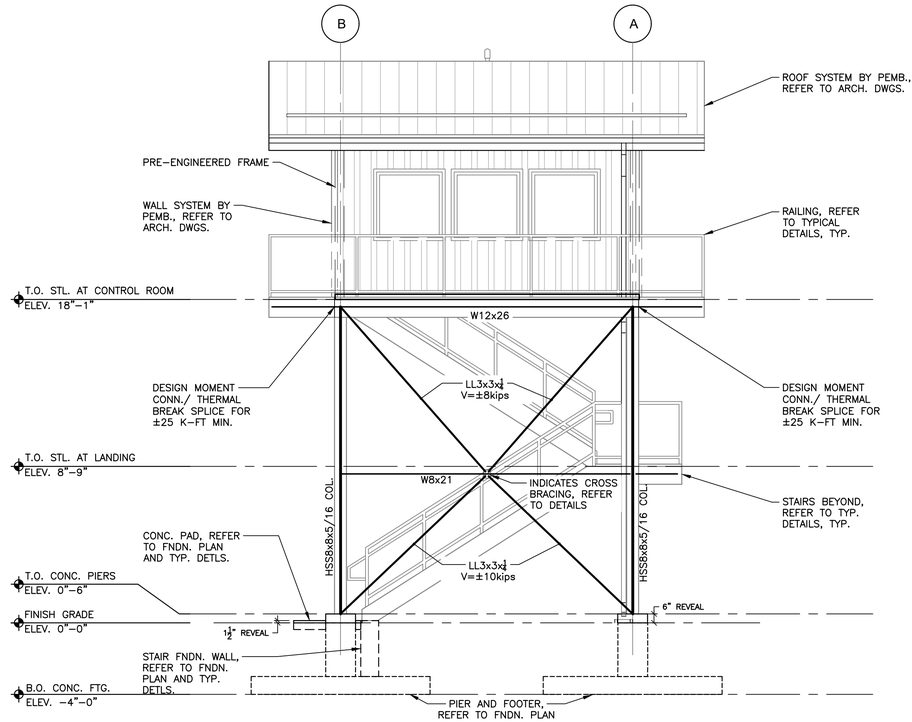
SHEET TITLE:
RANGE CONTROL TOWER – FOUNDATION AND FRAMING PLANS

DRAWING NUMBER:
S–CT–101

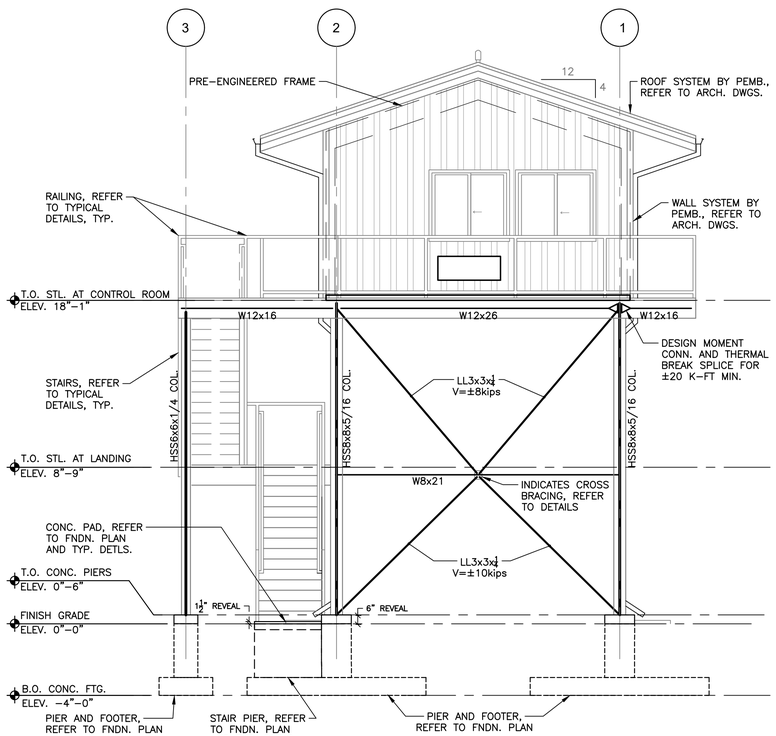
SHEET OF



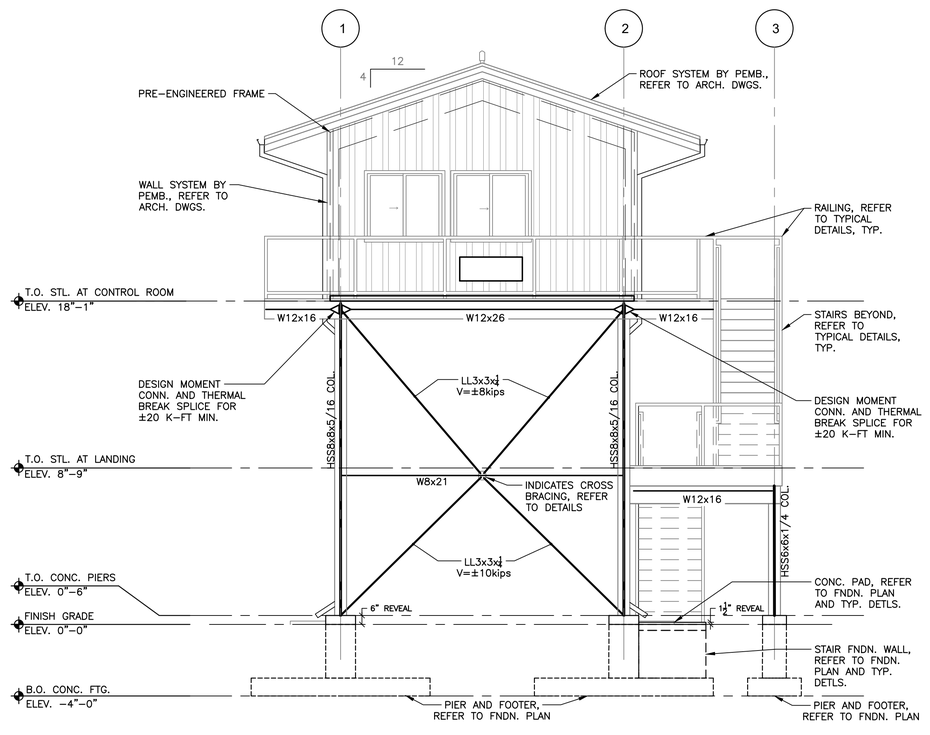
4 S-CT-101 **EAST FRAMING ELEVATION**
1/4" = 1'-0"



2 S-CT-101 **WEST FRAMING ELEVATION**
1/4" = 1'-0"



3 S-CT-101 **NORTH FRAMING ELEVATION**
1/4" = 1'-0"



1 S-CT-101 **SOUTH FRAMING ELEVATION**
1/4" = 1'-0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 2:46pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-CT-201.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK
THOMAS JOHN HELD
LICENSED PROFESSIONAL ENGINEER
102266
Expires 6/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
RANGE CONTROL TOWER FRAMING ELEVATIONS

DRAWING NUMBER:
S-CT-201

SHEET OF

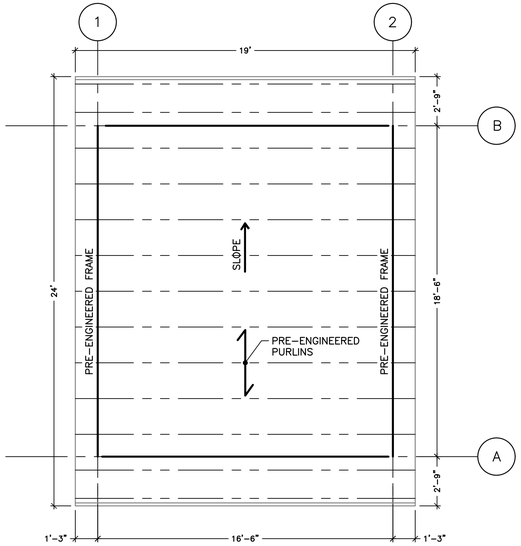
STRUCTURAL NOTES:

1. TOP OF FINISHED GRADE = 0'–0" = ELEVATION 91.40', COORDINATE WITH SITE DRAWINGS.
2. BOTTOM OF ALL FOOTINGS SHALL BE MINIMUM –3'–6" FROM ADJACENT GRADE ELEVATION, COORDINATE WITH SITE DRAWINGS.
3. INTERIOR GRAVEL PAD SHALL BE 6" ITEM B–12 AND COMPACTED TO 95 PERCENT MAXIMUM MODIFIED PROCTOR PER ASTM–D1557, COORDINATE WITH ARCHITECTURAL/SITE DRAWINGS.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FINISHES.
5. OWNER'S GEOTECHNICAL ENGINEER SHALL OBSERVE ALL PROOF–ROLLING, FILL PLACEMENT, AND COMPACTION ACTIVITIES. INSPECT FOUNDATION BEARING GRADES PRIOR TO CONSTRUCTION OF FORMWORK AND PLACEMENT OF CONCRETE.
6. COORDINATE ALL EXTERIOR GRADE WITH SITE DRAWINGS.
7. VERIFY AND COORDINATE ALL UTILITY LOCATIONS, SIZES, AND INVERTS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. PROVIDE SLEEVES AT ALL FOUNDATION WALL PENETRATIONS.
8. BUILDING COLUMNS, WALL FRAMING, LATERAL SYSTEMS, AND ROOF FRAMING BY PEMB. MANUFACTURER, COORDINATE WITH ARCHITECTURAL DRAWINGS, TYPICAL.
9. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCEMENT
F1	5'–0"	5'–0"	1'–0"	(6)#5 E.W.,T&B

PIER SCHEDULE					
MARK	WIDTH	LENGTH	VERT. REINF.	TIES	REMARKS
P1	2'–0"	2'–0"	(12)#5	#3@12" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.

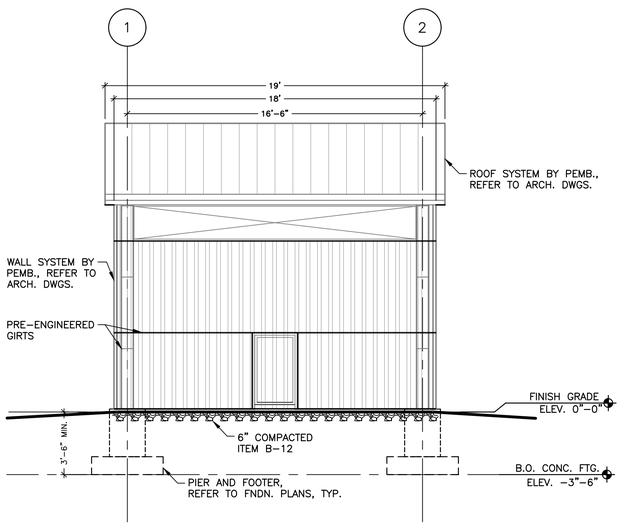
REFER TO DETAIL 3/S–501 FOR TIE DETAILS.



ROOF FRAMING PLAN

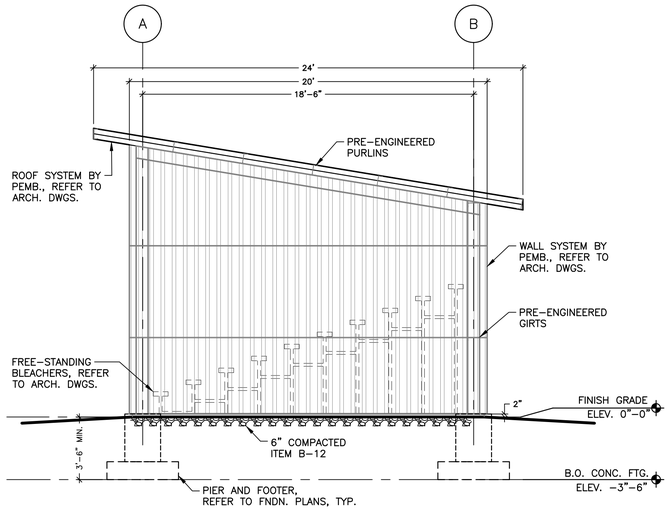
2 S-BE-101 — 1/4" = 1'–0"

NORTH



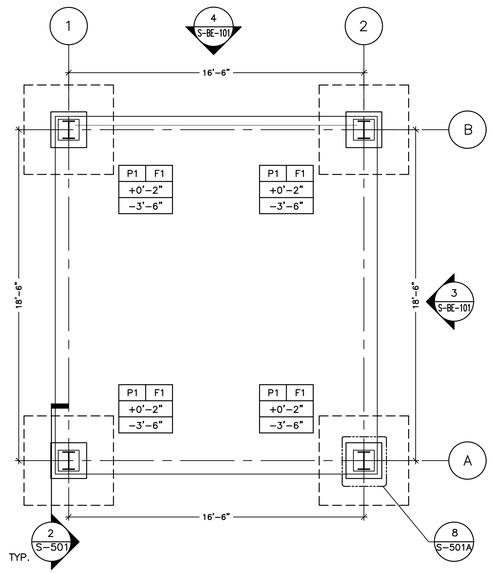
EAST ELEVATION

4 S-BE-101 — 1/4" = 1'–0"



SOUTH ELEVATION

3 S-BE-101 — 1/4" = 1'–0"



FOUNDATION PLAN

1 S-BE-101 — 1/4" = 1'–0"

NORTH

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 – 2:52pm
B:\2099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081S–BE–101.dwg

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK
THOMAS JOHN HELD
102266
LICENSED PROFESSIONAL ENGINEER
Expires 6/30/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
BLEACHER ENCLOSURE FOUNDATION AND FRAMING PLANS AND ELEVATIONS

DRAWING NUMBER:
S–BE–101

SHEET OF

STRUCTURAL NOTES:

1. TOP OF FINISHED GRADE OF GRAVEL = 0'–0" = ELEVATION 89.50', COORDINATE WITH SITE DRAWINGS.
2. BOTTOM OF ALL FOOTINGS SHALL BE MINIMUM –3'–6" FROM ADJACENT GRADE ELEVATION, COORDINATE WITH SITE DRAWINGS.
3. INTERIOR GRAVEL PAD SHALL BE 6" ITEM B–12 AND COMPACTED TO 95 PERCENT MAXIMUM MODIFIED PROCTOR PER ASTM–D1557, COORDINATE WITH ARCHITECTURAL/SITE DRAWINGS.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FINISHES.
5. COORDINATE ALL EXTERIOR GRADE WITH SITE DRAWINGS.
6. VERIFY AND COORDINATE ALL UTILITY LOCATIONS, SIZES, AND INVERTS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. PROVIDE SLEEVES AT ALL FOUNDATION WALL PENETRATIONS.
7. EX. BUILDING COLUMNS, LATERAL SYSTEMS, AND ROOF FRAMING BY PEMB MANUFACTURER. COORDINATE SALVAGE AND REASSEMBLY REQUIREMENTS WITH ARCH. DWGS., ALSO REFER TO MANUFACTURER ASSEMBLY DRAWINGS K.K. ORDER #9046.
8. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	THICKNESS	REINFORCEMENT
F1	6'–4"	6'–4"	1'–0"	(6)#5 E.W.,T&B

PIER SCHEDULE					
MARK	WIDTH	LENGTH	VERT. REINF.	TIES	REMARKS
P1	1'–8"	1'–8"	(8)#6	#3@10" O.C.	PROVIDE (3) #3 TIES WITHIN TOP 5" OF PIER, TYP.

REFER TO DETAIL 3/S–501 FOR SIMILAR TIE DETAILS.

STRUCTURAL DESIGN CRITERIA – RELOCATED MESS

GOVERNING BUILDING CODE: 2020 BUILDING CODE OF NEW YORK STATE

BUILDING RISK CATEGORY: II

PRESUMPTIVE DESIGN SOIL BEARING CAPACITY (PER T18062 NYSBC 2020): 1500 PSF
PRESUMPTIVE LATERAL BEARING PRESSURE (PER T18062 NYSBC 2020): 100 PSF/FT

ROOF LOAD
- ROOF CONSTRUCTION LIVE LOAD: 20 PSF

SNOW LOAD
- SNOW LOAD IMPORTANCE FACTOR, I_S: 1.00
- GROUND SNOW LOAD, P_g: 30.0 PSF
- FLAT ROOF SNOW LOAD, P_f: 22.7 PSF
- SLOPED ROOF SNOW LOAD, P_s: 22.7 PSF
- SNOW EXPOSURE FACTOR, C_e: 0.90
- THERMAL FACTOR, C_t: 1.20
- ROOF SLOPE FACTOR, C_s: 1.00

WIND LOAD
- MAIN WIND FORCE RESISTING SYSTEM
  - BASIC ULTIMATE WIND SPEED, V_{ULT}: 113 MPH
  - BASIC NOMINAL WIND SPEED, V_{ASD}: 88 MPH
  - WIND EXPOSURE: C
  - TOPOGRAPHIC FACTOR, K_{zt}: 1.00
  - WIND DIRECTIONALITY FACTOR, K_d: 0.85
  - VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_z: 0.88
  - MEAN ROOF HEIGHT, h: 18'–2"
  - MAXIMUM WIND PRESSURE, ROOFS – VERTICAL (PSF)
    - PARALLEL TO N–S DIRECTION (WINDWARD/LEEWARD)
      - LOAD CASE A: 23.3/–6.6
      - LOAD CASE B: 3.4/–24.6
    - PARALLEL TO E–W DIRECTION
      - WINDWARD (<H, H–2H, >2H): –20.0/–12.0/–6.7

COMPONENTS AND CLADDING (BASED ON MIN. EFFECTIVE AREA = 10 SF)
- MAXIMUM WIND PRESSURE, ROOF (PSF)
  - CORNER ZONE: 44.1/–64.7
  - EDGE ZONE: 34.7/–36.2
  - INTERIOR ZONE: 22.4/–23.9

NOTES: POSITIVE AND NEGATIVE NUMBERS INDICATE FORCES/PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES RESPECTIVELY.

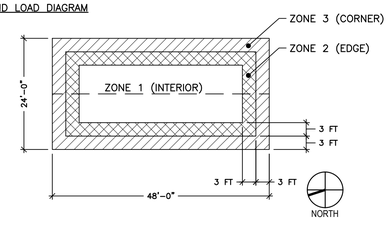
SEISMIC LOAD
- SEISMIC IMPORTANCE FACTOR, I_E: 1.00
- SITE SOIL CLASSIFICATION: D
- MAPPED SHORT PERIOD SPECTRAL ACCELERATION, S_S: 0.277 g
- MAPPED ONE SECOND PERIOD SPECTRAL ACCELERATION, S_1: 0.060 g
- SHORT PERIOD SPECTRAL DESIGN ACCELERATION, S_{DS}: 0.292 g
- ONE SECOND PERIOD SPECTRAL DESIGN ACCELERATION, S_{D1}: 0.097 g
- SEISMIC DESIGN CATEGORY: B
- BASIC SEISMIC–FORCE–RESISTING SYSTEM (BCNYS T1617.6.2): H
- SEISMIC RESPONSE COEFFICIENT, C_S: 0.097
- RESPONSE MODIFICATION FACTOR, R: 3
- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
- DESIGN BASE SHEAR, V (N–S DIRECTION/E–W DIRECTION): 0.3 KIPS/0.3 KIPS

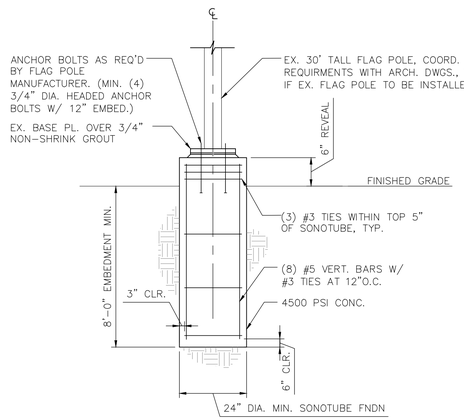
FLOOD LOAD
- FLOOD DESIGN CLASS: N/A
- HAZARD ZONE X

RAIN LOAD
- RAIN INTENSITY, i: 2.60 IN / HR (60–MIN/100–YEAR DURATION); 1.48 IN / HR (15–MIN/100–YEAR DURATION)

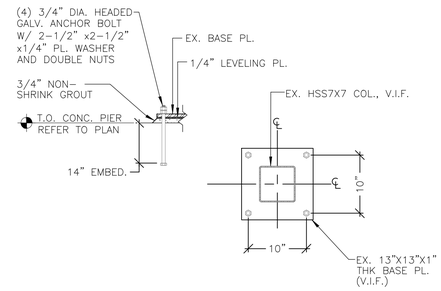
ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS REQUIRING SEISMIC BRACING
- ARCHITECTURAL COMPONENTS
  - IMPORTANCE FACTOR, Ip = 1.0: EXEMPT
  - IMPORTANCE FACTOR, Ip = 1.5: REQUIRED
- M/E/P COMPONENTS
  - IMPORTANCE FACTOR, Ip = 1.0: EXEMPT
  - IMPORTANCE FACTOR, Ip = 1.5: EXEMPT

ROOF WIND LOAD DIAGRAM

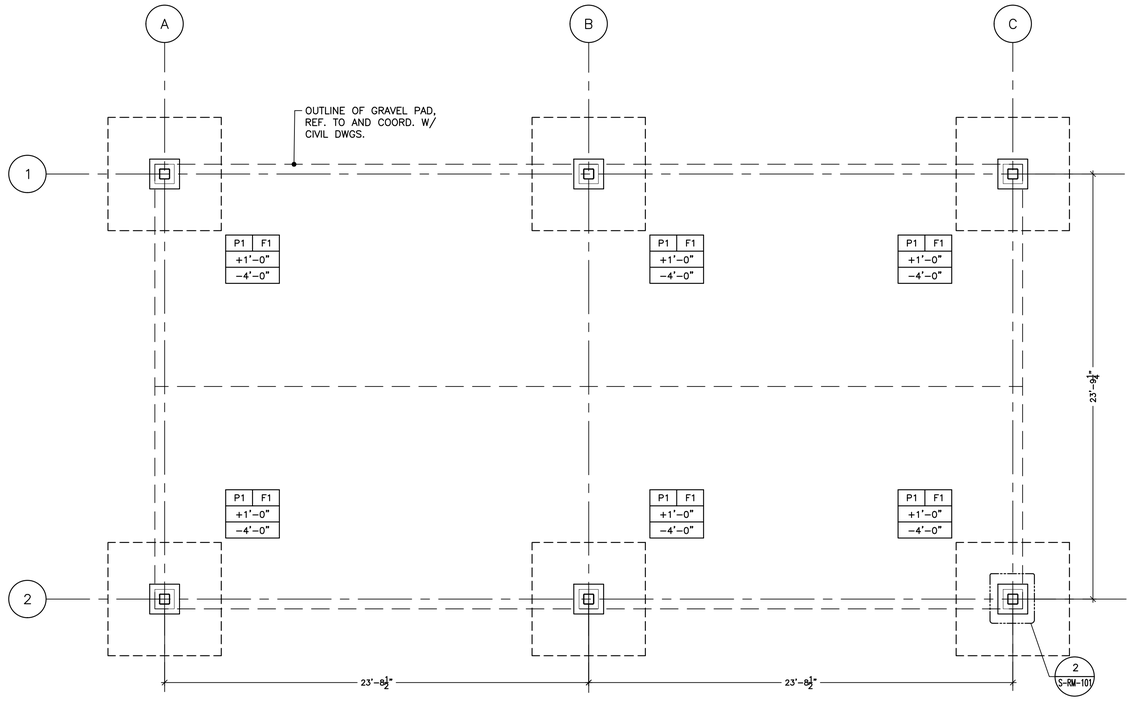




3 / S-RM-101 **FLAG POLE FOUNDATION DETAIL**
N.T.S.



2 / S-RM-101 **RELOCATED MESS EX. COL. BASE PL. ANCHORAGE SECTION AND DETAIL**
N.T.S.



1 / S-RM-101 **RELOCATED MESS FOUNDATION PLAN**
1/4" = 1'–0"

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 – 3:23pm
B:\23099.00 SE081 – Camp Smith ARF Firing Range\06 BIM–CAD\SE081S–RM–101.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK · THOMAS JOHN HELD · 102266 · LICENSED PROFESSIONAL ENGINEER
Expires 5/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

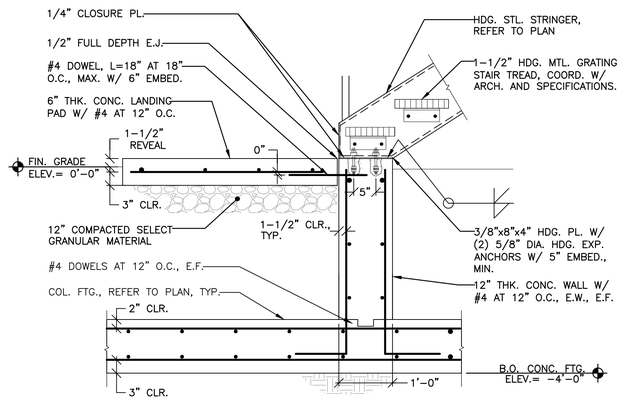
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

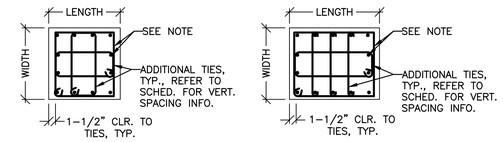
SHEET TITLE:
RELOCATED MESS AND FLAG POLE – FOUNDATION PLAN AND SECTIONS AND DETAILS

DRAWING NUMBER:
S–RM–101

SHEET OF

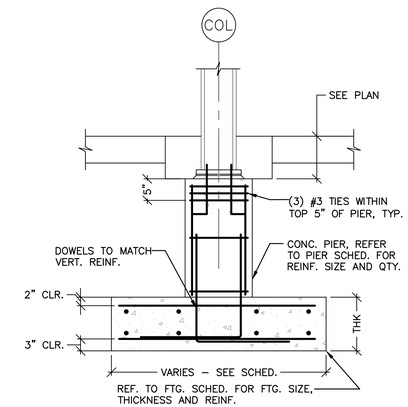


4 S-501 **TYPICAL EXTERIOR STAIR FOUNDATION DETAIL**
N.T.S.

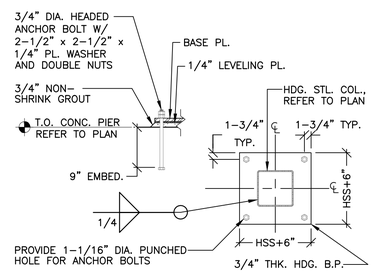


NOTE:
REFER TO PIER SCHEDULE FOR VERTICAL REINFORCING SIZE AND QUANTITY AND TIE REINFORCING SIZE AND SPACING

3 S-501 **TYPICAL PIER DETAIL**
N.T.S.



2 S-501 **TYPICAL EXTERIOR ISOLATED COLUMN FOUNDATION**
N.T.S.



1 S-501 **TYPICAL HSS COLUMN BASE PLATE**
N.T.S.

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 11:38am
B:\2099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-501.dwg

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331
PDG POPLI DESIGN GROUP

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STATE OF NEW YORK · THOMAS JOHN HELD · LICENSED PROFESSIONAL ENGINEER · 102266
Expires 12/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

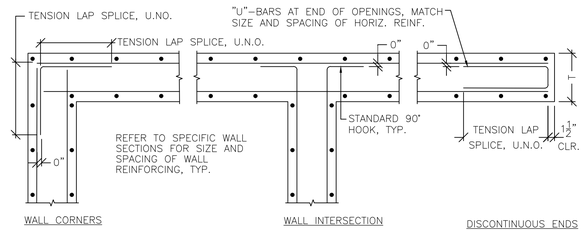
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
STRUCTURAL
TYPICAL DETAILS
BASE BID

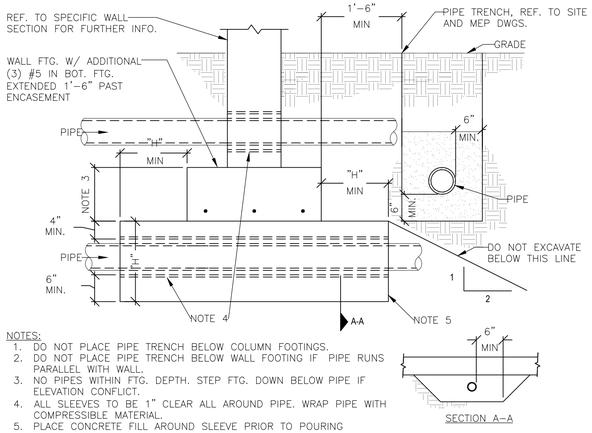
DRAWING NUMBER:
S-501

SHEET OF



13 S-501A **N.T.S.**

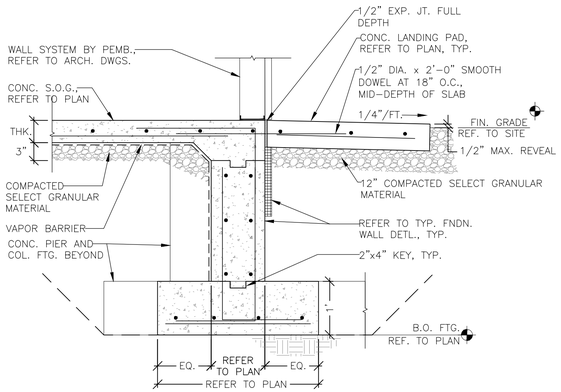
TYPICAL CONCRETE WALL REINFORCING DETAILS



NOTES:
1. DO NOT PLACE PIPE TRENCH BELOW COLUMN FOOTINGS.
2. DO NOT PLACE PIPE TRENCH BELOW WALL FOOTING IF PIPE RUNS PARALLEL WITH WALL.
3. NO PIPES WITHIN FTG. DEPTH. STEP FTG. DOWN BELOW PIPE IF ELEVATION CONFLICT.
4. ALL SLEEVES TO BE 1" CLEAR ALL AROUND PIPE. WRAP PIPE WITH COMPRESSIBLE MATERIAL.
5. PLACE CONCRETE FILL AROUND SLEEVE PRIOR TO POURING FOUNDATION.
6. DIMENSIONS NOTED ARE MINIMUM. IF DIMENSIONS CONFLICT WITH DIMENSIONS GIVEN ELSEWHERE, PROVIDE MORE STRINGENT REQUIREMENT.

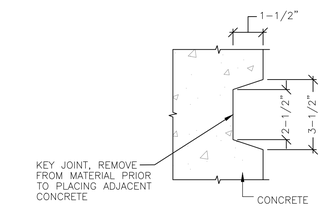
12 S-501A **N.T.S.**

TYPICAL PIPE PENETRATION IN WALL



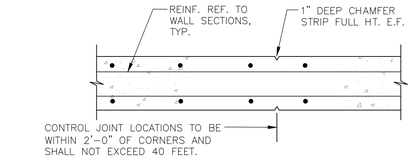
11 S-501A **N.T.S.**

TYPICAL EXTERIOR DOOR THRESHOLD DETAIL



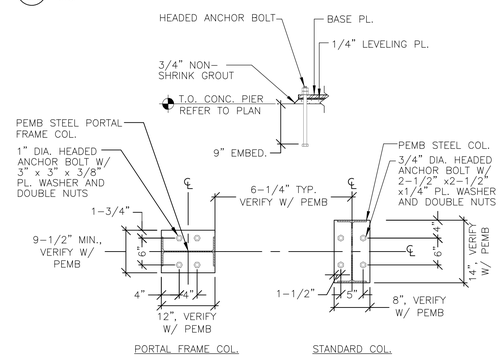
10 S-501A **N.T.S.**

TYPICAL KEY IN CONCRETE



9 S-501A **N.T.S.**

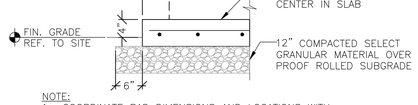
TYPICAL CONCRETE WALL CONTROL JOINT DETAIL



NOTES:
1. 3/4" THICK A36 BASE PL. MIN.
2. PROVIDE 1-1/16" DIA. PUNCHED HOLE FOR 3/4" DIA. ANCHOR BOLTS.
3. PROVIDE 1-3/4" MAX. DIA. PUNCHED HOLE FOR 1" DIA ANCHOR BOLTS.

8 S-501A **N.T.S.**

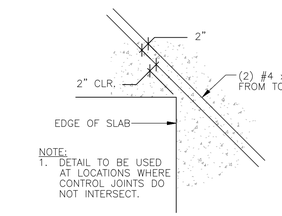
TYPICAL PEMB COLUMN BASE PLATES



NOTE:
1. COORDINATE PAD DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, TYPICAL.

7 S-501A **N.T.S.**

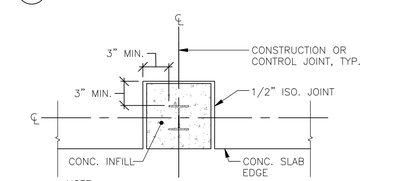
TYPICAL EXTERIOR EQUIPMENT PAD



NOTE:
1. DETAIL TO BE USED AT LOCATIONS WHERE CONTROL JOINTS DO NOT INTERSECT.

6 S-501A **N.T.S.**

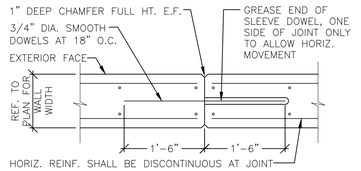
TYPICAL ADDITIONAL REINF. AT CORNERS IN SLAB-ON-GRADE



NOTE:
1. REFER TO PLAN FOR SLAB JOINT LOCATIONS.
2. PROVIDE ADDITIONAL REINFORCEMENT PER DETAIL 7/S-501.

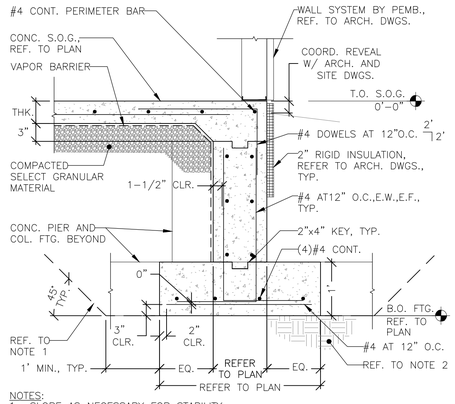
5 S-501A **N.T.S.**

TYPICAL SLAB-ON-GRADE JOINTS AT COLUMNS



4 S-501A **N.T.S.**

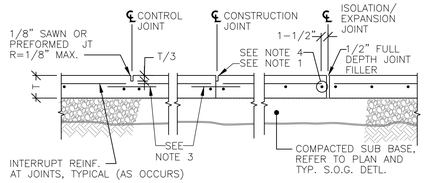
TYPICAL CONCRETE WALL CONSTRUCTION JOINT PLAN



NOTES:
1. SLOPE AS NECESSARY FOR STABILITY.
2. SUITABLE BEARING MATERIAL AS DETERMINED DURING CONSTRUCTION BY THE OWNER'S GEOTECHNICAL CONSULTANT.

3 S-501A **N.T.S.**

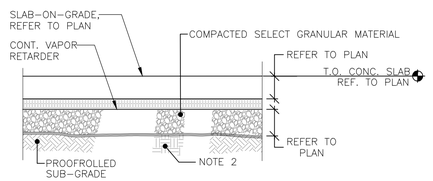
TYPICAL FOUNDATION WALL SECTION



NOTES:
1. LOCATE CONSTRUCTION JOINTS AT CONTROL JOINT LOCATIONS SHOWN ON PLAN. MATCH CONTROL JOINT PROFILE.
2. MAXIMUM SPACING BETWEEN CONTROL JOINTS AS SHOWN ON PLAN.
3. 3/4" x 1'-4" SMOOTH DOWEL AT 18-INCHES ON CENTER. SET AT T/2 BELOW TOP OF SLAB. GREASE ONE END. OCCURS ONLY WHEN REBAR CALLED OUT, NOT TO BE APPLIED WITH EITHER WELDED WIRE FABRIC.
4. FOR REBAR PROVIDE (1) #4 CONT. ALONG JOINT. FOR WELDED WIRE FABRIC PROVIDE CONT. WIRE ALONG JOINT.

2 S-501A **N.T.S.**

TYPICAL SLAB-ON-GRADE CONSTRUCTION JOINTS



NOTES:
1. PROVIDE CONTINUOUS PROTECTION AGAINST WATER INFILTRATION PRIOR TO INSTALLATION OF VAPOR RETARDER AND POROUS SUB BASE. MAINTAIN VAPOR RETARDER AND SUB BASE IN DRY CONDITION UNTIL BUILDING IS OCCUPIED.
2. SELECTED FILL IN AREAS THAT DO NOT STABILIZE UNDER PROOFROLLING.

1 S-501A **N.T.S.**

TYPICAL SLAB-ON-GRADE CONSTRUCTION

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 3:29pm
B:\2099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-501A.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

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STATE OF NEW YORK · THOMAS JOHN HELD · LICENSED PROFESSIONAL ENGINEER · 102266 · Expires 5/31/2027

CONTRACT:
CONSTRUCTION

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

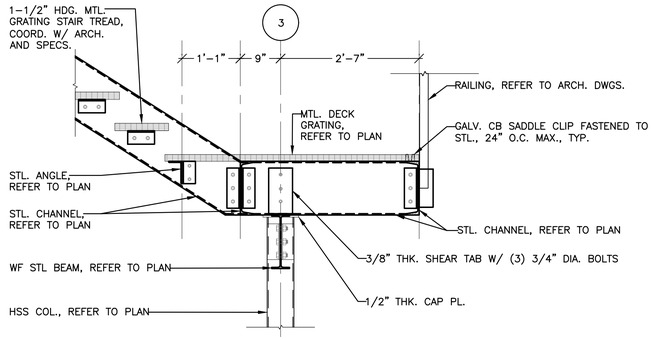
MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

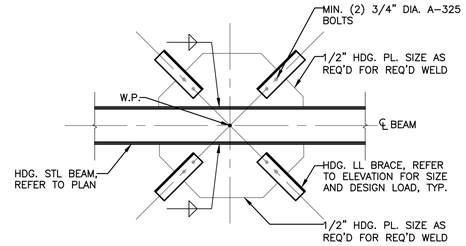
SHEET TITLE:
STRUCTURAL TYPICAL DETAILS ALT 1 & 2

DRAWING NUMBER:
S-501A

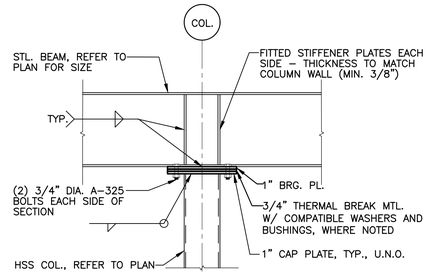
SHEET OF



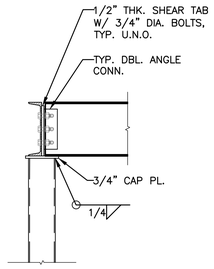
12 S-502 **EXTERIOR STAIR DETAIL AT LANDING**
3/4" = 1'–0"



6 S-502 **TYPICAL BRACE CONNECTION AT BEAM**
N.T.S.

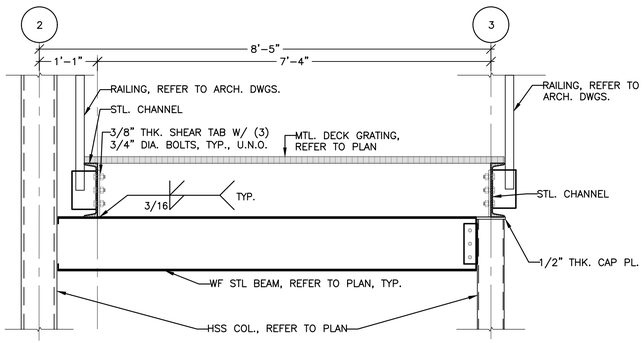


4 S-502 **TYPICAL CANTILEVER BEAM DETAIL**
N.T.S.

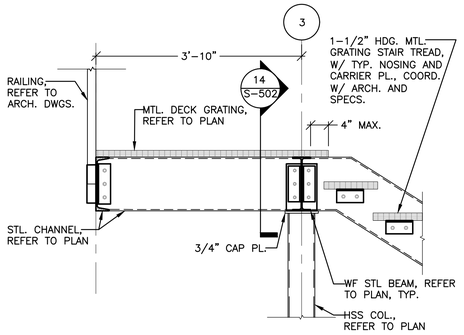


CONNECTION AT TOP OF EXTERIOR STAIR DETAIL

14 S-502 3/4" = 1'–0"



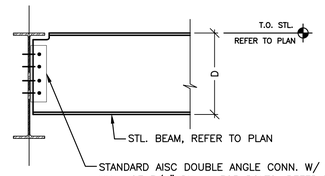
11 S-502 **EXTERIOR STAIR DETAIL AT LANDING**
3/4" = 1'–0"



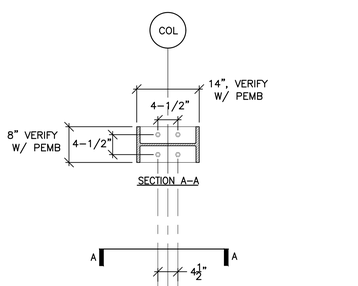
7 S-502 **EXTERIOR STAIR DETAIL AT TOP**
3/4" = 1'–0"

BEAM CONNECTION SCHEDULE	
BEAM SIZE	NUMBER OF BOLTS
W8, W10, C10	(2) – 3/4" DIA.
C12, W12, W14	(3) – 3/4" DIA.

NOTES:
1. ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE MADE WITH DOUBLE L3x3x5/16 GEOMETRIC MINIMUM WITH THE OUTSIDE LEGS BOLTED TO BEAM AS SCHEDULED ABOVE, UNLESS CONDITIONS MANDATE OTHERWISE.
2. ALL BOLTS SHALL BE A325–N.

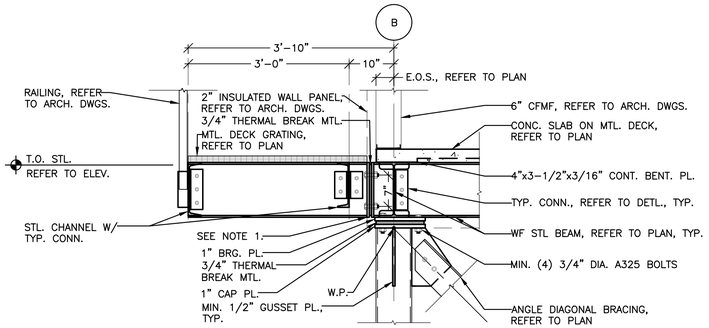


3 S-502 **TYPICAL FRAMED BEAM CONNECTION**
N.T.S.



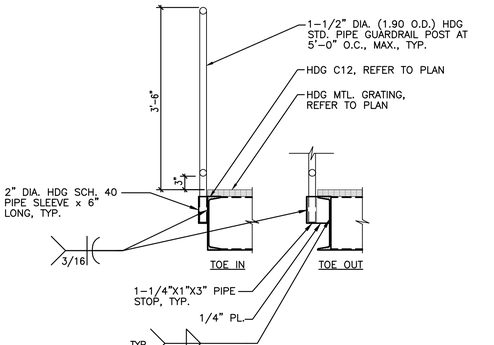
NOTE:
1. REFER TO 9+10/S–502 FOR ADDITIONAL INFORMATION AND DETAILING.

13 S-502 **TYPICAL PEMB COLUMN CONNECTION DETAIL**
3/4" = 1'–0"



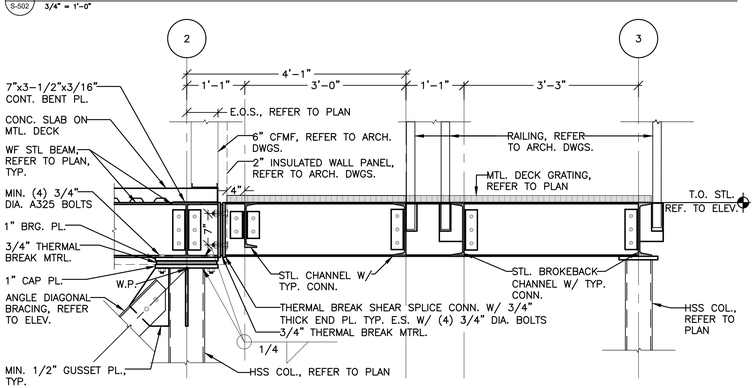
NOTE:
1. 3/4" THICK X 12" WIDE END PL. E.S. W/ (4) 3/4" DIA. SLIP–CRITICAL BOLTS, TOP AND BOTTOM, MIN.

10 S-502 **TYPICAL THERMAL BREAK CONNECTION DETAIL**
3/4" = 1'–0"

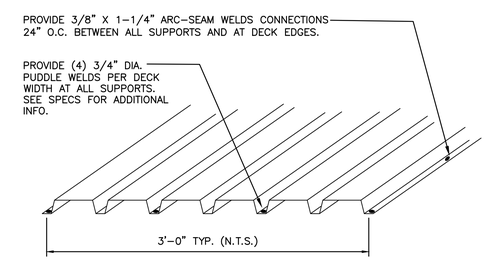


NOTE:
1. TACK WELD RAILING POST TO PIPE SLEEVE ONCE RAILING INSTALLATION IS COMPLETE.

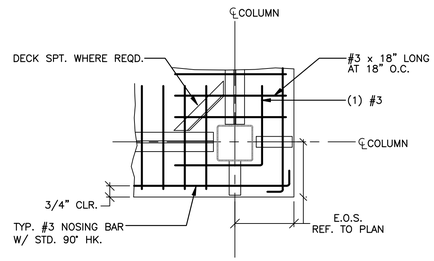
5 S-502 **TYPICAL RAILING DETAIL**
N.T.S.



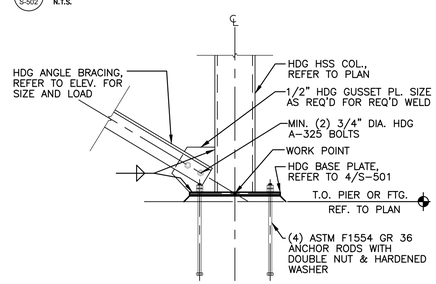
9 S-502 **THERMAL BREAK CONNECTION ALONG COL. LINE B**
3/4" = 1'–0"



5 S-502 **TYPICAL DECK CONNECTION DETAIL**
N.T.S.



2 S-502 **TYPICAL SLAB REINFORCING AT PERIMETER COLUMNS**
N.T.S.



1 S-502 **TYPICAL BRACE CONNECTION AT COLUMN BASE**
N.T.S.

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 27,2025 - 1:38pm
B:\23099.00 SE081 - Camp Smith ARF Firing Range\06 BIM-CAD\SE081S-502.dwg

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 021331

POPLI DESIGN GROUP

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STATE OF NEW YORK · THOMAS JOHN HELD · LICENSED PROFESSIONAL ENGINEER · 102266 · Expires 5/31/2027

CONTRACT: CONSTRUCTION

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1	7/2/2025	ADDENDUM NO. 1
	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - C
DESIGNED BY:	TJH
DRAWN BY:	KNP
FIELD CHECK:	
APPROVED:	

SHEET TITLE: STRUCTURAL TYPICAL DETAILS

DRAWING NUMBER: S–502

SHEET OF

GENERAL NOTES:

A. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE, AND ACCORDANCE WITH ALL APPLICABLE CODES, INCLUDING, BUT NOT LIMITED TO NFPA 70, 90A, 101 AND DIRECTION OF THE AUTHORITY HAVING JURISDICTION.

B. CONTRACTOR SHALL REVIEW ALL TRADES CONTRACT DOCUMENTS AND FIELD VERIFY TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT AND CONDUITS.

C. ALL MATERIALS AND EQUIPMENT SHALL BE COMMERCIAL GRADE AND CARRY AN UNDERWRITERS LABORATORIES (UL) LABEL.

D. RUN SEPARATE NEUTRAL WIRE FOR EACH DEDICATED BRANCH CIRCUIT SHOWN ON THE PLANS.

E. ANY CONDUITS SHOWN ARE SHOWN DIAGRAMMATICALLY. EXACT RUNS SHALL BE DETERMINED IN THE FIELD. FOLLOW MINIMUM SPACING REQUIREMENTS AS ILLUSTRATED IN DETAILS TO REDUCE ELECTROMAGNETIC INTERFERENCE.

F. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED.

G. COORDINATE CONDUIT STUB UP LOCATIONS AND SIZE WITH APPROVED MANUFACTURER'S EQUIPMENT WHERE CONNECTIONS EXIST.

H. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING CONDITIONS.

I. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION, INCLUDING MAINTENANCE OR WIRING CONTINUITY AS REQUIRED. SCHEDULE ANY TEMPORARY OUTAGES REQUIRED WITH THE OWNER; PROVIDE A MINIMUM 2 WEEKS NOTICE PRIOR TO ANY TEMPORARY OUTAGES.

J. CONTRACTOR SHALL NOTIFY THE DR OF ANY EXISTING CONDITIONS DISCOVERED DURING REMOVALS THAT WILL INTERFERE WITH THE INTENT OF THE NEW WORK.

K. IT IS THE INTENT OF THESE DOCUMENTS TO SHOW A COMPLETE WORKING SYSTEM. NOT ALL DETAILS AND INFORMATION REQUIRED FOR A COMPLETE SYSTEM ARE SHOWN WITHIN THESE DOCUMENTS AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COMPLETE WORKING SYSTEM AS INTENDED. ALL INCIDENTAL ITEMS NOT FULLY DESCRIBED, BUT NECESSARY FOR THE COMPLETE INSTALLATION ARE TO BE PROVIDED.

L. ALL WORK TO BE COMPLETED UNDER THE DIRECTION OF THE RANGE DESIGN GUIDE AS PROVIDED BY THE US ARMY CORPS OF ENGINEERS.

M. PROVIDE MARKOUT OF EXISTING UNDERGROUND UTILITIES FOR ALL AREAS PRIOR TO ANY EXCAVATION.

ABBREVIATIONS:

A	AMPERES
AFCI	ARC FAULT CURRENT INTERUPT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ATS	AUTOMATIC TRANSFER SWITCH
BATT	BATTERY
BKR	BREAKER
BLDG	BUILDING
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CT	CURRENT TRANSFORMER
DN	DOWN
DTR	DATA TERMINATION RACK
DWG	DRAWING
EMERG	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FA-PE	FIRE ALARM SYSTEM POWER EXTENDER
FEC	FIRE EXTINGUISHER CABINET
FIN	FINISH, FINISHED
FLR	FLOOR
GND	GROUND
HP	HORSEPOWER
JB	JUNCTION BOX
KVA	KILO VOLT AMP
KW	KILOWATT(S)
LTG	LIGHTING
MAX	MAXIMUM
MIN	MINIMUM
N	NEW
OC	ON CENTER
OS/OP	OWNER SUPPLIED/OWNER INSTALLED
PAR	PARTIAL CIRCUIT
PVC	POLYVINYL CHLORIDE
RECEP	RECEPTACLE
TEL	TELEPHONE
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
W	WATTS
WG	WIRE GUARD
WM	WIREMOLD
WP	WEATHERPROOF

BRANCH CIRCUITS SCHEDULE	
CIRCUIT BREAKER	CONDUCTOR
120 VOLT, 1P CIRCUITS	
15A-1P, 20A-1P	2#12 & 1#12G IN 3/4"C
25A-1P, 30A-1P	2#10 & 1#10G IN 3/4"C
35A-1P, 40A-1P	2#8 & 1#10G IN 3/4"C
240 VOLT, 2P CIRCUITS	
15A-2P, 20A-2P	2#12 & 1#12G IN 3/4"C
25A-2P, 30A-2P	2#10 & 1#10G IN 3/4"C
35A-2P, 40A-2P	2#8 & 1#10G IN 3/4"C
45A-2P, 50A-2P	2#6 & 1#10G IN 3/4"C
60A-2P	2#4 & 1#10G IN 3/4"C

BRANCH CIRCUIT SCHEDULE NOTES:

A. WIRING BASED ON MAX FEEDER LENGTH OF 150FT FOR 120V CIRCUITS AND 250FT FOR 240V CIRCUITS.

B. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UPGRADE CONDUIT AND WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.

ELECTRICAL SYMBOLS - LIGHTING PLAN

- $ₙ — SWITCH (# SUBSCRIPT AS INDICATED BELOW):
  BLANK = SINGLE POLE; 2 = DOUBLE POLE; 3 = THREE-WAY; 4 = FOUR-WAY; D = DIMMER; K = KEY OPERATED; LV= LOW VOLTAGE; P = WITH PILOT LIGHT; LM= LOW VOLTAGE MASTER; RC= REMOTE CONTROL; PB= PUSH BUTTON STATION; WP= WEATHER PROOF; T = TIMER OPERATED; OCC= OCCUPANCY SENSOR
- (A) — RECESSED DOWNLIGHT FIXTURE, LETTER INDICATES TYPE.
- (A) — LIGHT FIXTURE, RECESSED, 610x1220mm (2'x4'); LETTER INDICATES TYPE.
- (A) — LIGHT FIXTURE, SURFACE MOUNTED, 610x1220mm (2'x4'); LETTER INDICATES TYPE.
- (E) — LIGHT FIXTURE, RECESSED, 610x610mm (2'x2'); LETTER INDICATES TYPE.
- (E) — LIGHT FIXTURE, SURFACE MOUNTED, 2'x2' [610x610mm]; LETTER INDICATES TYPE.
- (S) — LIGHT FIXTURE, STRIP; LETTER INDICATES TYPE.
- LIGHT FIXTURE, WALL MOUNTED
- LIGHTING, ONE HEAD EMERGENCY BATTERY POWER
- LIGHTING, TWO HEAD EMERGENCY BATTERY POWER
- LIGHT POLE, ONE LUMINAIRE
- LIGHT POLE, TWO LUMINAIRES
- LIGHT POLE, POST TOP MOUNT LUMINAIRE
- LIGHTING WALL PACK, EXTERIOR BUILDING
- EXIT SIGN, WALL MOUNTED WITH DIRECTIONAL ARROWS AND FACES AS SHOWN
- EXIT SIGN, CEILING MOUNTED WITH DIRECTIONAL ARROWS AND FACES AS SHOWN
- OCC — CEILING MOUNTED OCCUPANCY SENSOR
- PP — LOW VOLTAGE POWER PACK

ELECTRICAL SYMBOLS - DIAGRAM

- DELTA CONNECTION
- MOTOR, SINGLE-PHASE
- MOTOR, THREE-PHASE
- TRANSFORMER
- WYE CONNECTION
- EARTH GROUND
- J — JUNCTION BOX
- PB — PULL BOX
- SWITCH, MULTIPOSITION
- SWITCH, SINGLE BREAK
- NORMALLY CLOSED RELAY CONTACT
- NORMALLY OPEN RELAY CONTACT
- FUSE WITH RATING
- CIRCUIT BREAKER
- DRAWOUT AIR CIRCUIT BREAKER
- 50 — RELAY; NUMBER INDICATES RELAY TYPE
  50 = INSTANTANEOUS OVERCURRENT OR RATE-OF-RISE
  51 = AC-TIME OVERCURRENT
  67 = AC-DIRECTIONAL OVERCURRENT
  86 = LOCKING OUT

ELECTRICAL SYMBOLS - POWER PLAN

- MOTOR, SINGLE-PHASE
- MOTOR, THREE-PHASE
- T — TRANSFORMER, PLAN
- WYE CONNECTION
- EARTH GROUND
- J — JUNCTION BOX
- BRANCH CIRCUIT HOMERUN. LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
- PB — PULL BOX
- —UGE— UNDERGROUND ELECTRICAL
- DATA OUTLET
  AT EACH DATA/TELECOMMUNICATIONS OUTLET PROVIDE AN ADDITIONAL 10' OF CABLING ABOVE CEILING TO ACCOMMODATE POTENTIAL FUTURE RELOCATION

ELECTRICAL SYMBOLS - POWER PLAN

- DP — DISTRIBUTION PANEL
- PANELBOARD, FLUSH MOUNTED
- PANELBOARD, SURFACE MOUNTED
- RECEPTACLE, DUPLEX
- RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER
- RECEPTACLE, QUADRAPLEX
- RECEPTACLE, SINGLE
- RECEPTACLE, SINGLE WITH SWITCH
- RECEPTACLE, SPECIAL PURPOSE
  A = 120V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 5-20R.
  B = 208V, 20A, 1 PHASE, 2-POLE, 3W, NEMA 6-20R.
  C = 120V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 5-30R.
  D = 208V, 30A, 1 PHASE, 2-POLE, 3W, NEMA 6-30R.
  E = 208V, 60A, 1 PHASE, 3-POLE, 4W, NEMA 14-60R.
  F = 208V, 30A, 3 PHASE, 3-POLE 4W, NEMA 15-30R.
  G = 208V, 50A, 3 PHASE, 3 POLE, 4W, NEMA 15-30R.
  H = 208V, 60A, 3 PHASE, 3 POLE, 4W, NEMA 15-60R.
- RECEPTACLE, SWITCHED DUPLEX
- DISCONNECT SWITCH, FUSED
- DISCONNECT SWITCH, UNFUSED
- STARTER, COMBINATION WITH DISCONNECT SWITCH

REVISED DRAWING 07/02/2025

NEW YORK STATE Office of General Services
DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711
ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.
CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASE H. SIKEMA · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL—HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
ABBREVIATIONS, SYMBOLS AND GENERAL NOTES

DRAWING NUMBER:
E–001

SHEET OF

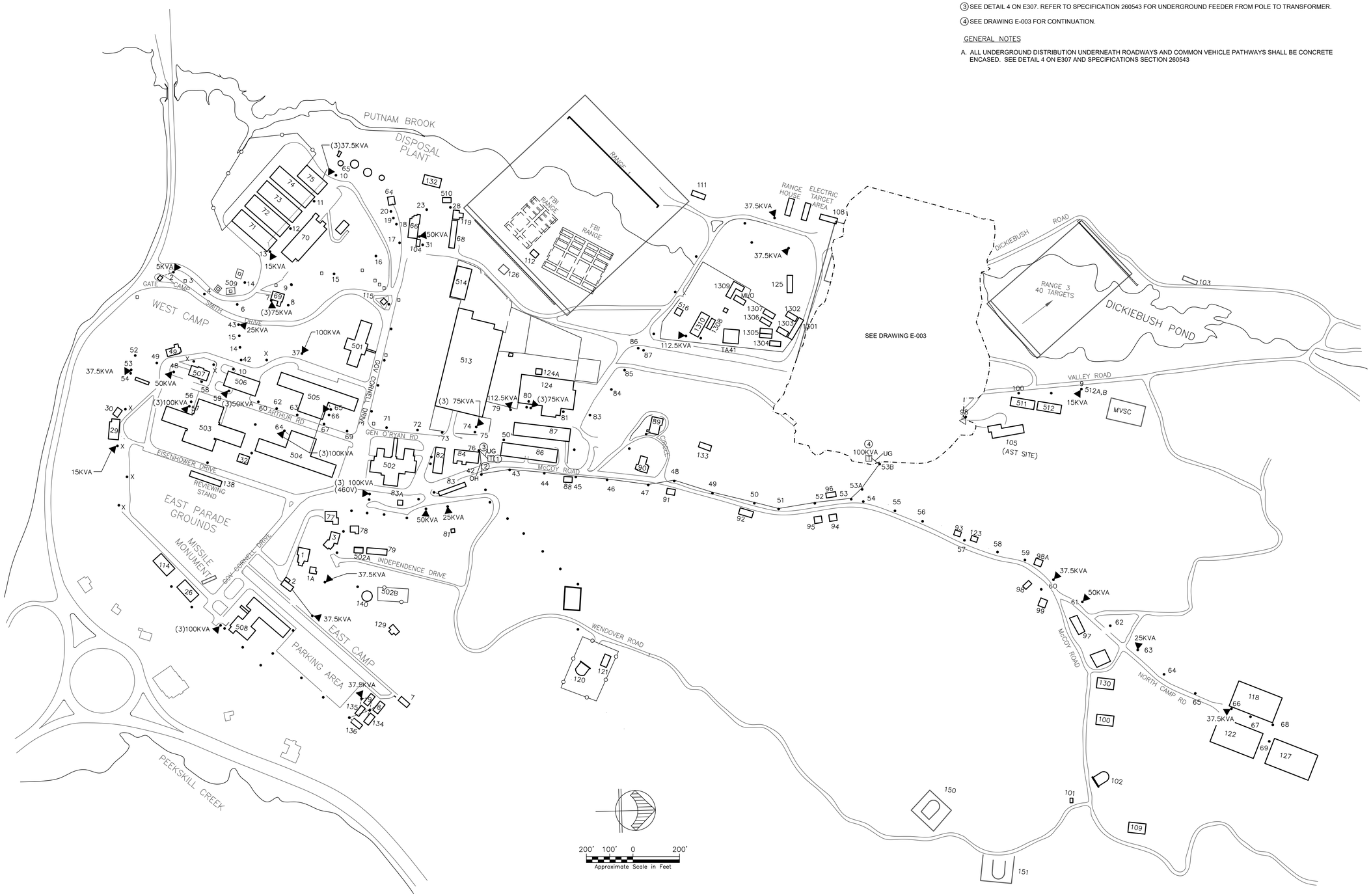
36x24 PLOT SHEET
Jun 30,2025 – 1:07pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ELEC CAD 2022 E-001.dwg

DRAWING NOTES

1. UTILIZE EXISTING TRANSFORMER 3AC (300KVA, 13.2KV-4160/2400V). PROVIDE (3) 5KV 1/0 XLPE AND (1) 600V 4/0G IN 4" PVC CONCRETE ENCASED UNDERGROUND TO POLE 76.
2. PROVIDE (3) 5KV 1/0 XLPE AND (1) 600V 4/0G OVERHEAD FROM POLE 76 TO POLE 53B AT FIRING RANGE AS INDICATED. PROVIDE ADEQUATE CLEARANCE OF UTILITIES OVER ROAD (MINIMUM 18FT).
3. SEE DETAIL 4 ON E307. REFER TO SPECIFICATION 260543 FOR UNDERGROUND FEEDER FROM POLE TO TRANSFORMER.
4. SEE DRAWING E-003 FOR CONTINUATION.

GENERAL NOTES

A. ALL UNDERGROUND DISTRIBUTION UNDERNEATH ROADWAYS AND COMMON VEHICLE PATHWAYS SHALL BE CONCRETE ENCASED. SEE DETAIL 4 ON E307 AND SPECIFICATIONS SECTION 260543



REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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STATE OF NEW YORK · CASEY H. SIRES · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL—HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
SITE PLAN

DRAWING NUMBER:
E–002

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ELEC CAD 2022 E-002.dwg

DRAWING NOTES:

1. PROVIDE DIRECT BURIED DATA AND DIRECT BURIED SECONDARY LOW VOLTAGE POWER CABLES AS INDICATED IN DETAIL REFERENCED. INSTALL DIRECT BURIED SECONDARY POWER AND DATA CABLES AT A MINIMUM OF 4" SEPARATION.
2. PRIMARY ELECTRICAL UNDERGROUND POWER FROM POLE 53B. REFER TO DETAIL #4 ON E-307. SEE E-002 FOR CONTINUATION. MEDIUM VOLTAGE POWER TO TERMINATE AT 150KVA TRANSFORMER.
3. PROVIDE WP IN USE NEMA 5-20 GFCI QUAD RECEPTACLE FOR RANGE LIMIT MARKER. PROVIDE 2#12 AND 1#12G DIRECT BURIED FROM PB (SIT LOAD CENTER) TO RANGE LIMIT MARKER FOR POWER.
4. PROVIDE 2#2 AND 1#8G FROM CONTROL TOWER TO RANGE LIMIT MARKER LIGHT FIXTURES FOR ON/OFF CONTROL. CONTROL AND CONTACTOR IN CONTROL TOWER. SEE DETAIL 10 ON E308.
5. PROVIDE 2" CONDUIT CONNECTING BUILDINGS WITH PULLSTRING FOR FUTURE USE. COORDINATE WITH DR.

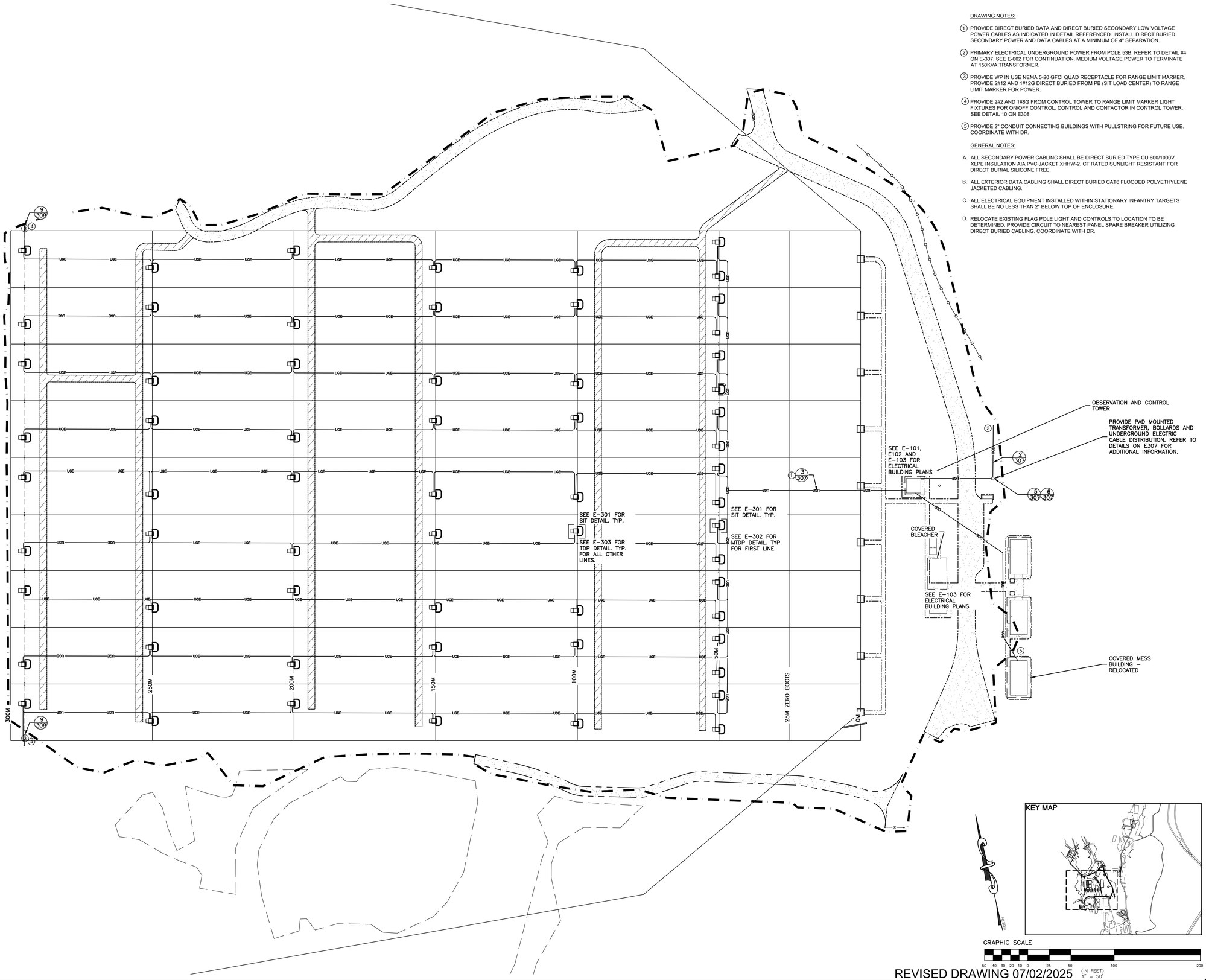
GENERAL NOTES:

A. ALL SECONDARY POWER CABLING SHALL BE DIRECT BURIED TYPE CU 600/1000V XLPE INSULATION AIA PVC JACKET XHHW-2. CT RATED SUNLIGHT RESISTANT FOR DIRECT BURIAL SILICONE FREE.

B. ALL EXTERIOR DATA CABLING SHALL DIRECT BURIED CAT6 FLOODED POLYETHYLENE JACKETED CABLING.

C. ALL ELECTRICAL EQUIPMENT INSTALLED WITHIN STATIONARY INFANTRY TARGETS SHALL BE NO LESS THAN 2" BELOW TOP OF ENCLOSURE.

D. RELOCATE EXISTING FLAG POLE LIGHT AND CONTROLS TO LOCATION TO BE DETERMINED. PROVIDE CIRCUIT TO NEAREST PANEL SPARE BREAKER UTILIZING DIRECT BURIED CABLING. COORDINATE WITH DR.



KEY MAP

GRAPHIC SCALE

50 40 30 20 10 0 25 50 100 200 (IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASE H. SMELKER · 081178 · LICENSED PROFESSIONAL ENGINEER
EXPIRES 6-30-25
6-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
RANGE SITE PLAN
BASE BID

DRAWING NUMBER:
E–003

SHEET OF

Jun 30,2025 – 1:07pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ELEC CAD 2022 E-003 BASE BID.dwg

36x24 PLOT SHEET

DRAWING NOTES:

1. PROVIDE DIRECT BURIED DATA AND DIRECT BURIED SECONDARY LOW VOLTAGE POWER CABLES AS INDICATED IN DETAIL REFERENCED. INSTALL DIRECT BURIED SECONDARY POWER AND DATA CABLES AT A MINIMUM OF 4" SEPARATION.
2. PRIMARY ELECTRICAL UNDERGROUND POWER FROM POLE 53B. REFER TO DETAIL #4 ON E-307. SEE E-002 FOR CONTINUATION. MEDIUM VOLTAGE POWER TO TERMINATE AT 150KVA TRANSFORMER.
3. PROVIDE WP IN USE NEMA 5-20 GFCI QUAD RECEPTACLE FOR RANGE LIMIT MARKER. PROVIDE 2#12 AND 1#12G DIRECT BURIED FROM PB (SIT LOAD CENTER) TO RANGE LIMIT MARKER FOR POWER.
4. PROVIDE 2#2 AND 1#8G FROM CONTROL TOWER TO RANGE LIMIT MARKER LIGHT FIXTURES FOR ON/OFF CONTROL. CONTROL AND CONTACTOR IN CONTROL TOWER. SEE DETAIL 10 ON E308.
5. PROVIDE 2" CONDUIT CONNECTING BUILDINGS WITH PULLSTRING FOR FUTURE USE. COORDINATE WITH DR.

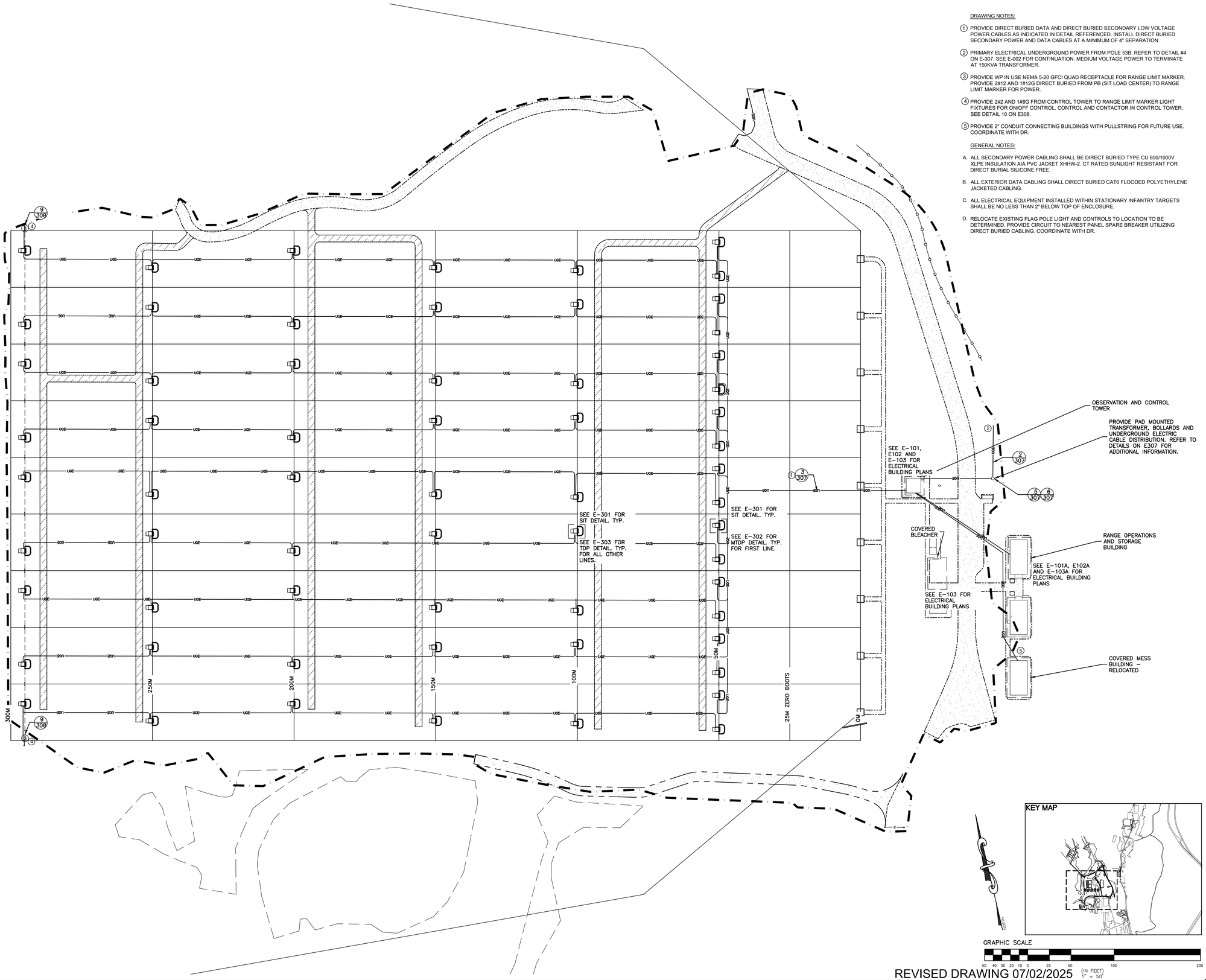
GENERAL NOTES:

A. ALL SECONDARY POWER CABLING SHALL BE DIRECT BURIED TYPE CU 600/1000V XLPE INSULATION AIA PVC JACKET XHHW-2. CT RATED SUNLIGHT RESISTANT FOR DIRECT BURIAL SILICONE FREE.

B. ALL EXTERIOR DATA CABLING SHALL DIRECT BURIED CAT6 FLOODED POLYETHYLENE JACKETED CABLING.

C. ALL ELECTRICAL EQUIPMENT INSTALLED WITHIN STATIONARY INFANTRY TARGETS SHALL BE NO LESS THAN 2" BELOW TOP OF ENCLOSURE.

D. RELOCATE EXISTING FLAG POLE LIGHT AND CONTROLS TO LOCATION TO BE DETERMINED. PROVIDE CIRCUIT TO NEAREST PANEL SPARE BREAKER UTILIZING DIRECT BURIED CABLING. COORDINATE WITH DR.



KEY MAP

GRAPHIC SCALE

50 40 30 20 10 0 25 50 100 200 (IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASEY H. SMELKER · 081178 · LICENSED PROFESSIONAL ENGINEER
EXPIRES 6-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
RANGE SITE PLAN ALT 1

DRAWING NUMBER:
E–003A

SHEET OF

Jun 30,2025 – 1:07pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ELEC CAD 2022 E-003A ALT 1.dwg
36x24 PLOT SHEET

DRAWING NOTES:

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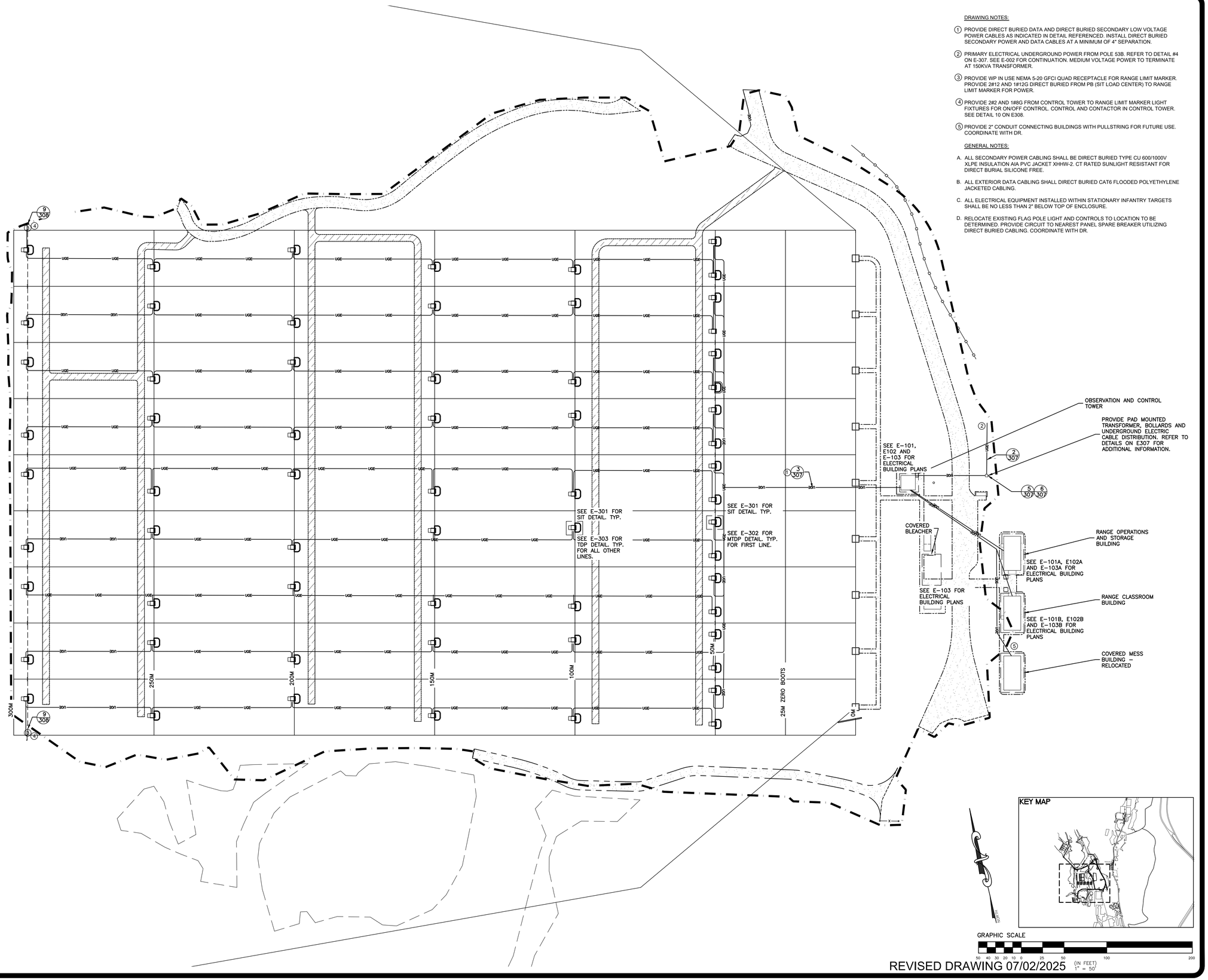

KEY MAP

GRAPHIC SCALE

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(IN FEET)
1" = 50'

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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CERTIFICATE OF AUTHORIZATION #: 037711

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PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASEY H. SABEY · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

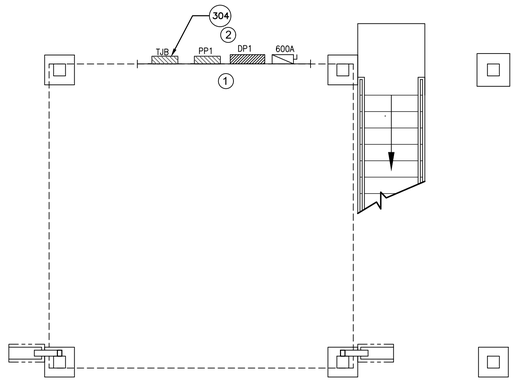
SHEET TITLE:
RANGE SITE PLAN
ALT 1&2

DRAWING NUMBER:
E–003B

SHEET OF

36x24 PLOT SHEET

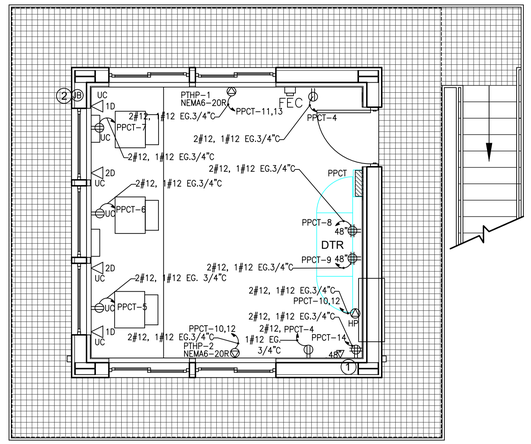
Jun 30,2025 – 1:07pm
S:\EDP\EDP23-05\Drawings\EDP23-05 ELEC CAD 2022 E-003B ALT 1&2.dwg



DRAWING NOTES:

1. PROVIDE NEMA 3R LOCKABLE PANELBOARDS AND NEMA 4X TOWER JUNCTION BOXES. PROVIDE ALL NECESSARY WIREWAYS AND UNISTRUT RACKING TO ADEQUATELY MOUNT EQUIPMENT. REFER TO SPECIFICIATIONS FOR METHODS AND MATERIALS. REFER TO DETAIL 9 ON E-307 FOR ADDITIONAL INFORMATION.
2. PROVIDE BUILDING ELECTRODE GROUNDING GRID. SEE DETAIL 8 ON E-307.

1 CONTROL TOWER GROUND FLOOR ELECTRICAL GROUNDING AND EQUIPMENT LAYOUT PLAN



DRAWING NOTES:

1. PROVIDE PHONE BOARD AND TWO (2) CAT 6 ETHERNET PORTS FOR PHONE. PROVIDE CAT 6 CABLING AND CONDUIT (WHERE EXPOSED) TO CLASSROOM AND STORAGE OFFICE TELEPHONE BOARD. SEE SPECIFICATION 273601. PHONE FURNISHED BY OTHERS, INSTALLED BY OWNER.
2. PROVIDE FLUSH MOUNTED JUNCTION BOX ON EXTERIOR OF CONTROL TOWER AND 3/4" EMT CONDUIT INTO BUILDING ABOVE CEILING. CAP AND MAKE WEATHERTIGHT. OWNER TO UTILIZE AND PROVIDE PA SYSTEM TO DR FOR FUTURE USE.

2 CONTROL TOWER CONTROL ROOM ELECTRICAL POWER PLAN

GENERAL NOTES (ALL DRAWINGS):

A. ALL CONDUCTORS AND EQUIPMENT NOT SHOWN FOR CLARITY. COORDINATE WITH ALL TRADES AND PROVIDE ALL ELECTRICAL MATERIALS AND INSTALLATIONS AS DIRECTED BY MANUFACTURER FOR ALL INSTALLED EQUIPMENT.

B. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

C. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

D. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

E. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

F. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

G. REFER TO E-602 FOR MECHANICAL EQUIPMENT SCHEDULE AND WIRING INFORMATION.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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PATRIOT DESIGN & CONSULTING STILL SERVING

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STATE OF NEW YORK · CASE H. SARGENT · 081178 · LICENSED PROFESSIONAL ENGINEER · 5-30-25 · EXPIRES 6-30-26

CONTRACT:

ELECTRICAL–HVAC

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:

POWER AND SPECIAL SYSTEMS PLANS BASE BID

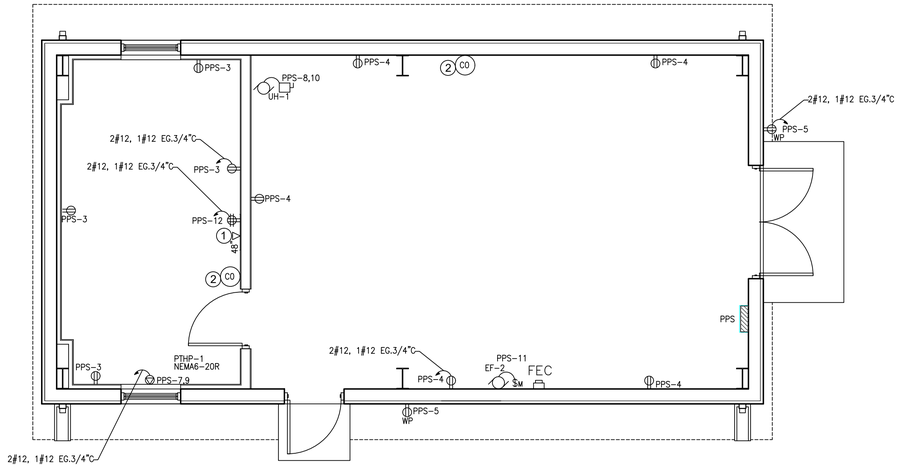
DRAWING NUMBER:

E–101

SHEET OF

Jun 30,2025 - 1:07pm
S:\EDP\EDP23--05\Drawings\EDP23-05 ELEC CAD 2022 E-101.dwg

36x24 PLOT SHEET



1 STORAGE BUILDING ELECTRICAL POWER PLAN

DRAWING NOTES:

1. PROVIDE PHONE BOARD AND TWO (2) CAT 6 ETHERNET PORTS FOR PHONE. PROVIDE CAT 6 CABLING AND CONDUIT (WHERE EXPOSED) TO CONTROL TOWER PHONE BOARD. PHONE FURNISHED BY OTHERS, INSTALLED BY OWNER.

2. PROVIDE SINGLE STATION BATTERY OPERATED CO DETECTOR.

GENERAL NOTES (ALL DRAWINGS):

A. ALL CONDUCTORS AND EQUIPMENT NOT SHOWN FOR CLARITY. COORDINATE WITH ALL TRADES AND PROVIDE ALL ELECTRICAL MATERIALS AND INSTALLATIONS AS DIRECTED BY MANUFACTURER FOR ALL INSTALLED EQUIPMENT.

B. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

C. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

D. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

E. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

F. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

G. REFER TO E-602 FOR MECHANICAL EQUIPMENT SCHEDULE AND WIRING INFORMATION.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

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081178
LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

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TITLE:
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RECORD FIRE FIRING RANGE

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⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
POWER AND SPECIAL
SYSTEMS PLANS
ALT 1

DRAWING NUMBER:
E–101A

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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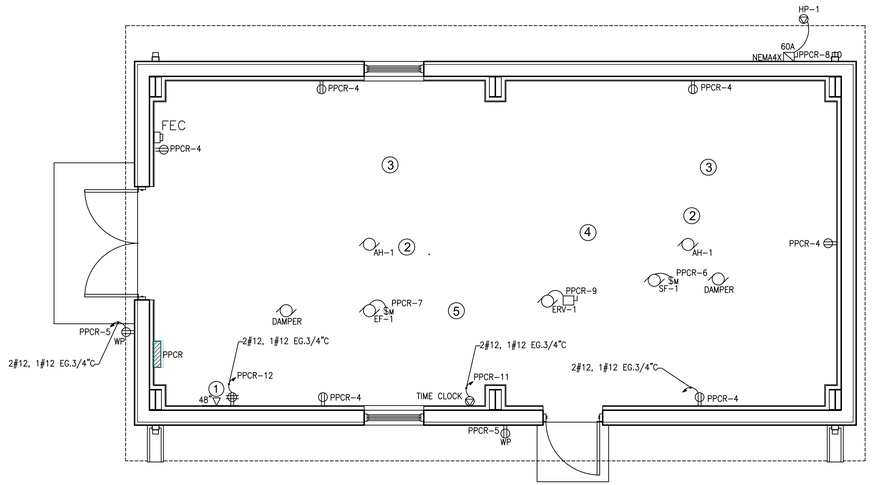

1 CLASSROOM ELECTRICAL POWER PLAN

DRAWING NOTES:

1. PROVIDE PHONE BOARD AND TWO (2) CAT 6 ETHERNET PORTS FOR PHONE. PROVIDE CAT 6 CABLING AND CONDUIT (WHERE EXPOSED) TO CONTROL TOWER PHONE BOARD. PHONE PROVIDED BY OWNER.
2. PROVIDE MANUAL STARTER. SINGLE THROW.
3. INDOOR HEAT PUMP UNIT POWERED BY OUTDOOR UNIT.
4. PROVIDE NON-FUSED DISCONNECT.
5. PROVIDE LINE VOLTAGE WIRING BETWEEN DAMPERS, EXHAUST FAN, SUPPLY FAN AND TIME CLOCK.

GENERAL NOTES (ALL DRAWINGS):

A. ALL CONDUCTORS AND EQUIPMENT NOT SHOWN FOR CLARITY. COORDINATE WITH ALL TRADES AND PROVIDE ALL ELECTRICAL MATERIALS AND INSTALLATIONS AS DIRECTED BY MANUFACTURER FOR ALL INSTALLED EQUIPMENT.

B. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

C. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

D. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

E. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

F. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

G. REFER TO E-602 FOR MECHANICAL EQUIPMENT SCHEDULE AND WIRING INFORMATION.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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STATE OF NEW YORK
CASEY H. SABEAN
081178
LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

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FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
POWER AND SPECIAL
SYSTEMS PLANS
ALT 1&2

DRAWING NUMBER:
E–101B

SHEET OF

36x24 PLOT SHEET

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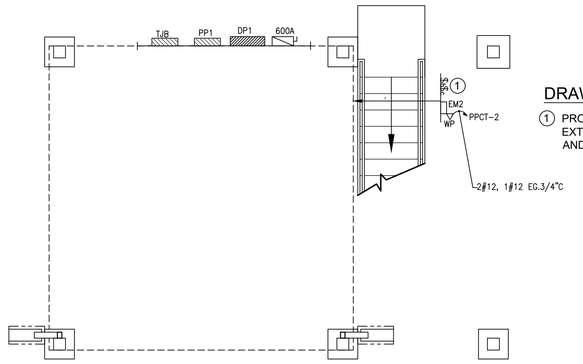
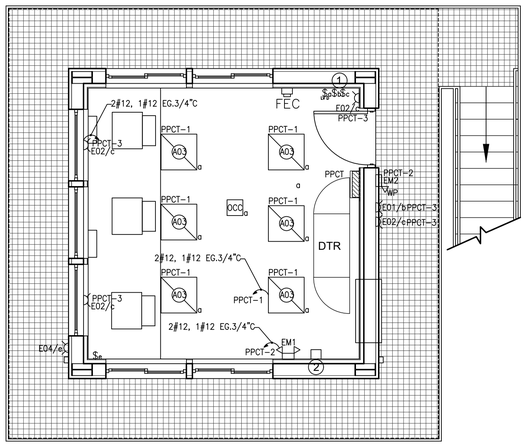


DRAWING NOTES:

1. PROVIDE SEPARATE FIXTURES AND THREE WAY SWITCHING FOR EXTERIOR WHITE LIGHTS (E01) AND RED LIGHTS (E02). COLOR CODE AND IDENTIFY LIGHT SWITCHES BY COLOR.

1 CONTROL TOWER GROUND FLOOR ELECTRICAL STAIR LIGHTING PLAN



DRAWING NOTES:

1. PROVIDE SEPARATE FIXTURES AND THREE WAY SWITCHING FOR EXTERIOR WHITE LIGHTS (E01) AND RED LIGHTS (E02). COLOR CODE AND IDENTIFY LIGHT SWITCHES BY COLOR.
2. LIGHTING CONTACTOR AND ON/OFF SWITCH FOR DOWN RANGE LIMIT MARKER LIGHTING CONTROL REFER TO DETAIL 10 ON E308.

2 CONTROL TOWER CONTROL ROOM ELECTRICAL LIGHTING PLAN

GENERAL NOTES (ALL DRAWINGS):

A. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

C. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

D. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

E. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · CASEY H. SIKES · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

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CRB	5/30/2025	BID DOCUMENT

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DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
LIGHTING PLANS
BASE PLAN

DRAWING NUMBER:
E–102

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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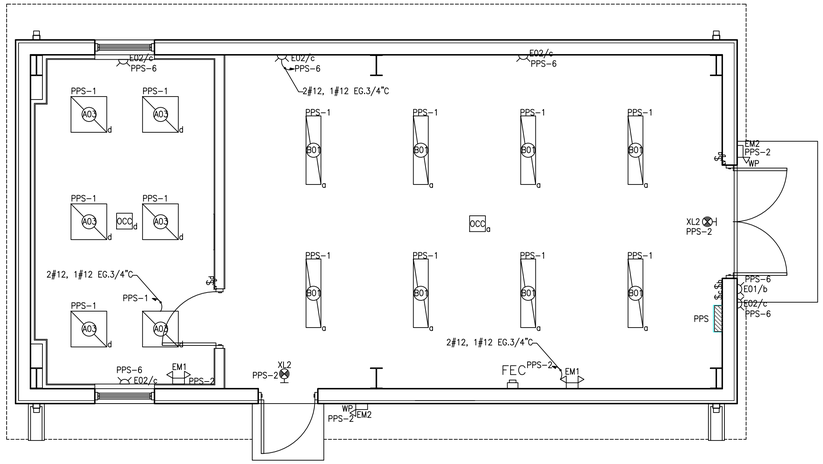

1 STORAGE BUILDING ELECTRICAL LIGHTING PLAN

GENERAL NOTES (ALL DRAWINGS):

A. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

C. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

D. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

E. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

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STATE OF NEW YORK · CASEY H. SABEAN · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL – HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

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DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
LIGHTING PLANS
ALT 1

DRAWING NUMBER:
E–102A

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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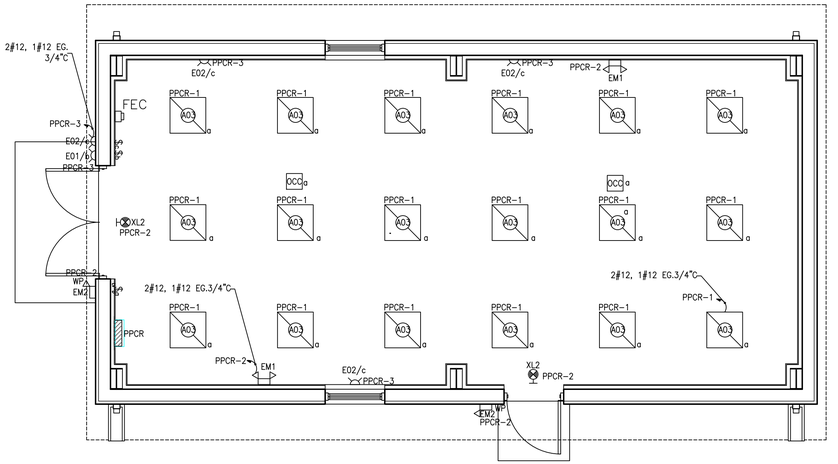

1 CLASSROOM ELECTRICAL LIGHTING PLAN

GENERAL NOTES (ALL DRAWINGS):

A. PROVIDE GROUNDING PER NEC FOR ALL ELECTRICAL EQUIPMENT AND ASSOCIATED EQUIPMENT. REFER TO DETAILS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS OF ALL EQUIPMENT.

C. ALL EXPOSED WIRING SHALL BE RUN IN CONDUITS OR SURFACE RACEWAY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

D. ALL DEVICES SHALL BE LABELED. SEE DETAIL 7 ON E-307.

E. ALL OCC SENSORS TO CONTROL UPON OCCUPANCY TO 50%. MANUAL SWITCH ON TO 100%.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · CASEY H. SABEAN · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL – HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
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CORTLANDT MANOR, NY 10567

CLIENT:
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APPROVED:	CHS

SHEET TITLE:
LIGHTING PLANS
ALT 1&2

DRAWING NUMBER:
E–102B

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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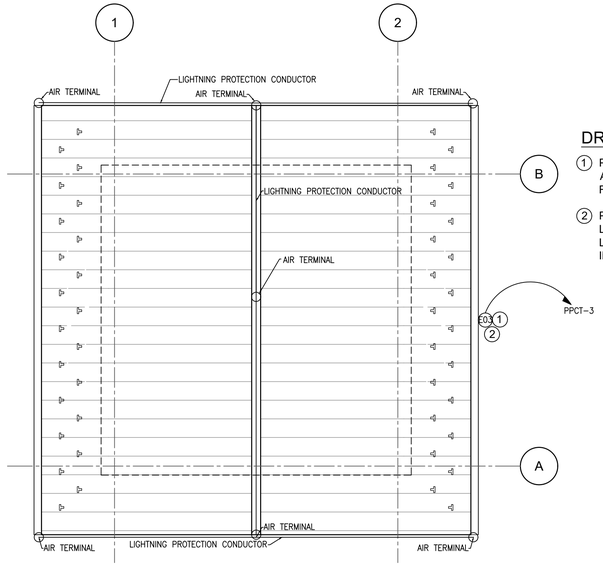


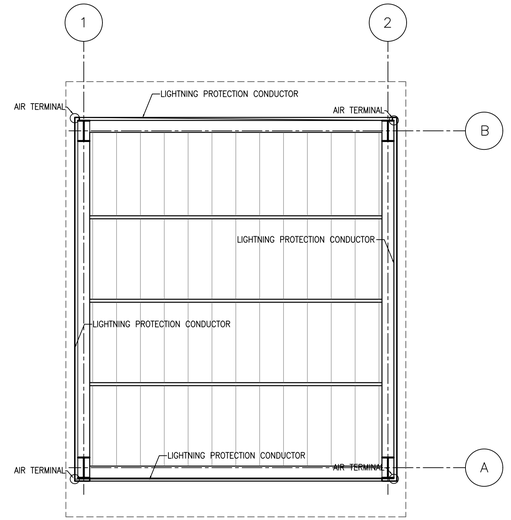
DRAWING NOTES:

1. PROVIDE HELIPAD WARNING LIGHT, E03, AT LOCATION SHOWN. SEE LIGHTING FIXTURE SCHEDULE ON E-602.
2. PROVIDE PHOTOCELL FOR WARNING LIGHT AND CONNECT TO EXTERIOR LIGHTING CIRCUIT PPCT - #3 AS INDICATED.

1 CONTROL TOWER ROOF LIGHTNING PROTECTION PLAN

SCALE: $\frac{1}{4}$"= 1'-0"

NORTH



2 BLEACHER ROOF LIGHTNING PROTECTION PLAN

SCALE: $\frac{1}{4}$"= 1'-0"

NORTH

GENERAL NOTES (FOR DRAWING DETAILS):

A. PROVIDE CLASS 1 LIGHTNING PROTECTION SYSTEM. REFER TO LIGHTNING PROTECTION SYSTEM SPECIFICATION 264112.

B. RUN DOWN CONDUCTORS FOR ALL AIR TERMINALS AND MOUNT TO TOWER STRUCTURAL STEEL. LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED AT A MAXIMUM OF EVERY 36" ON CENTER. BOND LIGHTNING PROTECTION SYSTEM TO BUILDING GROUNDING SYSTEM. CABLE CONNECTION AND GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR BONDED WITH HIGH COMPRESSION CONNECTIONS TO THE BUILDING GROUNDING SYSTEM.

C. CONTRACTOR SHALL OBTAIN SERVICES OF LIGHTNING PROTECTION VENDOR TO PROVIDE SYSTEM WITH UL MASTER LABEL.

D. REFER TO DRAWING E306 FOR LIGHTNING PROTECTION DETAILS. INSTALLATION SHALL COMPLY WITH NFPA 780 FOR CLASS 1 INSTALLATION.

E. PROVIDE DOWN CONDUCTOR AND DELTA GROUND AT ALL CORNERS AND AT 60'-0" INTERVALS.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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STATE OF NEW YORK · CASEY H. SMITH · 081178 · LICENSED PROFESSIONAL ENGINEER

5-30-25

EXPIRES 6-30-26

CONTRACT:

ELECTRICAL–HVAC

TITLE:

PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
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CLIENT:

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APPROVED:	CHS

SHEET TITLE:

LIGHTNING PROTECTION
PLANS
BASE BID

DRAWING NUMBER:

E–103

SHEET OF

Jun 30,2025 - 1:08pm
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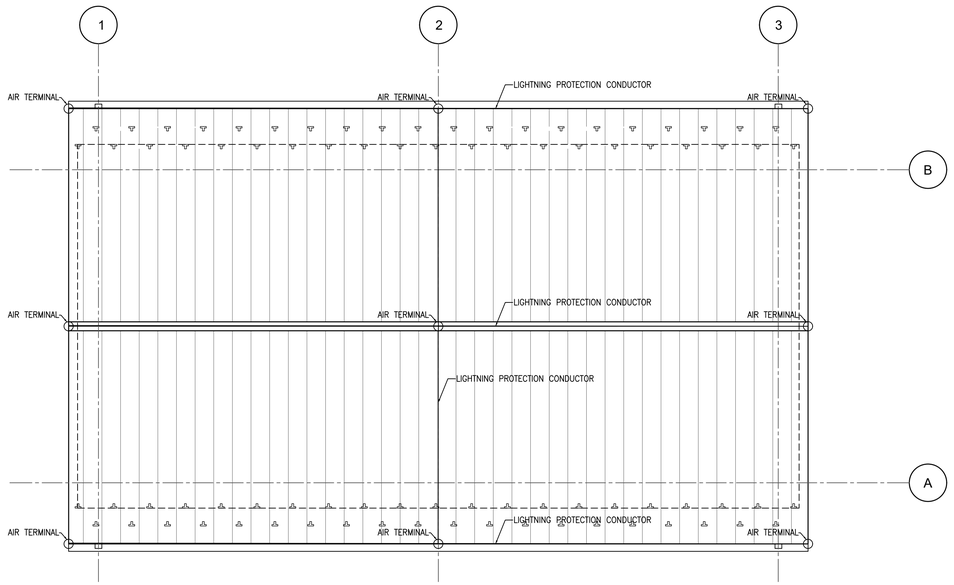
36x24 PLOT SHEET



1 CLASSROOM ROOF LIGHTNING PROTECTION PLAN

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

NORTH

GENERAL NOTES (FOR DRAWING DETAILS):

A. PROVIDE CLASS 1 LIGHTNING PROTECTION SYSTEM. REFER TO LIGHTNING PROTECTION SYSTEM SPECIFICATION 264112.

B. RUN DOWN CONDUCTORS FOR ALL AIR TERMINALS AND MOUNT TO TOWER STRUCTURAL STEEL. LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED AT A MAXIMUM OF EVERY 36" ON CENTER. BOND LIGHTNING PROTECTION SYSTEM TO BUILDING GROUNDING SYSTEM. CABLE CONNECTION AND GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR BONDED WITH HIGH COMPRESSION CONNECTIONS TO THE BUILDING GROUNDING SYSTEM.

C. CONTRACTOR SHALL OBTAIN SERVICES OF LIGHTNING PROTECTION VENDOR TO PROVIDE SYSTEM WITH UL MASTER LABEL.

D. REFER TO DRAWING E306 FOR LIGHTNING PROTECTION DETAILS. INSTALLATION SHALL COMPLY WITH NFPA 780 FOR CLASS 1 INSTALLATION.

E. PROVIDE DOWN CONDUCTOR AND DELTA GROUND AT ALL CORNERS AND AT 60'-0" INTERVALS.

REVISED DRAWING 07/02/2025

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STATE OF NEW YORK · CASEY H. SABEENA · 081178 · LICENSED PROFESSIONAL ENGINEER
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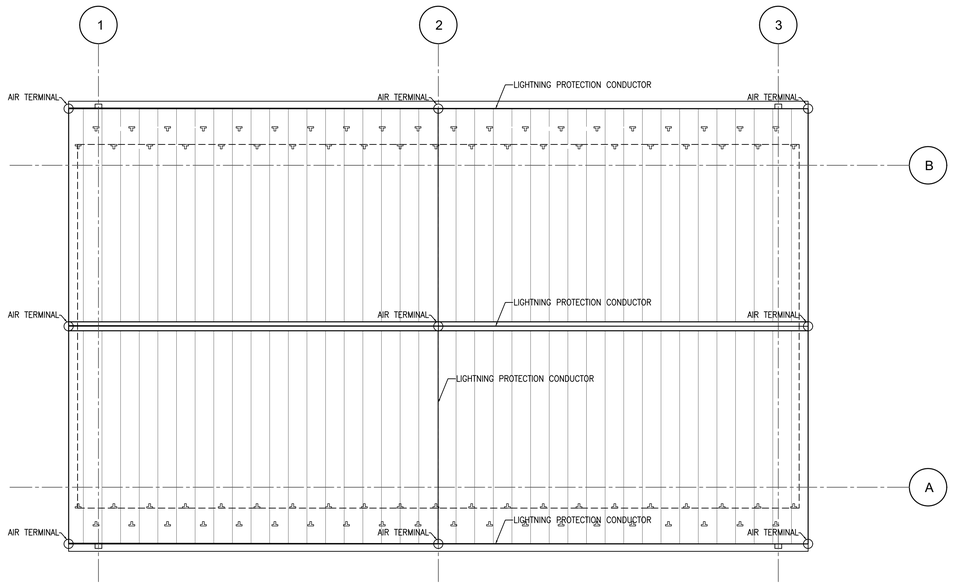

2 OPS AND STORAGE ROOF LIGHTNING PROTECTION PLAN

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

GENERAL NOTES (FOR DRAWING DETAILS):

A. PROVIDE CLASS 1 LIGHTNING PROTECTION SYSTEM. REFER TO LIGHTNING PROTECTION SYSTEM SPECIFICATION 264112.

B. RUN DOWN CONDUCTORS FOR ALL AIR TERMINALS AND MOUNT TO TOWER STRUCTURAL STEEL. LIGHTNING PROTECTION CONDUCTORS SHALL BE FASTENED AT A MAXIMUM OF EVERY 36" ON CENTER. BOND LIGHTNING PROTECTION SYSTEM TO BUILDING GROUNDING SYSTEM. CABLE CONNECTION AND GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED OR BONDED WITH HIGH COMPRESSION CONNECTIONS TO THE BUILDING GROUNDING SYSTEM.

C. CONTRACTOR SHALL OBTAIN SERVICES OF LIGHTNING PROTECTION VENDOR TO PROVIDE SYSTEM WITH UL MASTER LABEL.

D. REFER TO DRAWING E306 FOR LIGHTNING PROTECTION DETAILS. INSTALLATION SHALL COMPLY WITH NFPA 780 FOR CLASS 1 INSTALLATION.

E. PROVIDE DOWN CONDUCTOR AND DELTA GROUND AT ALL CORNERS AND AT 60'-0" INTERVALS.

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NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE:

TO THE BEST OF THE REGISTERED DESIGN PROFESSIONAL'S KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND/OR SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 ENERGY CODE.

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STATE OF NEW YORK · CASEY H. SABEAN · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
LIGHTNING PROTECTION
PLANS
ALT 1&2

DRAWING NUMBER:
E–103B

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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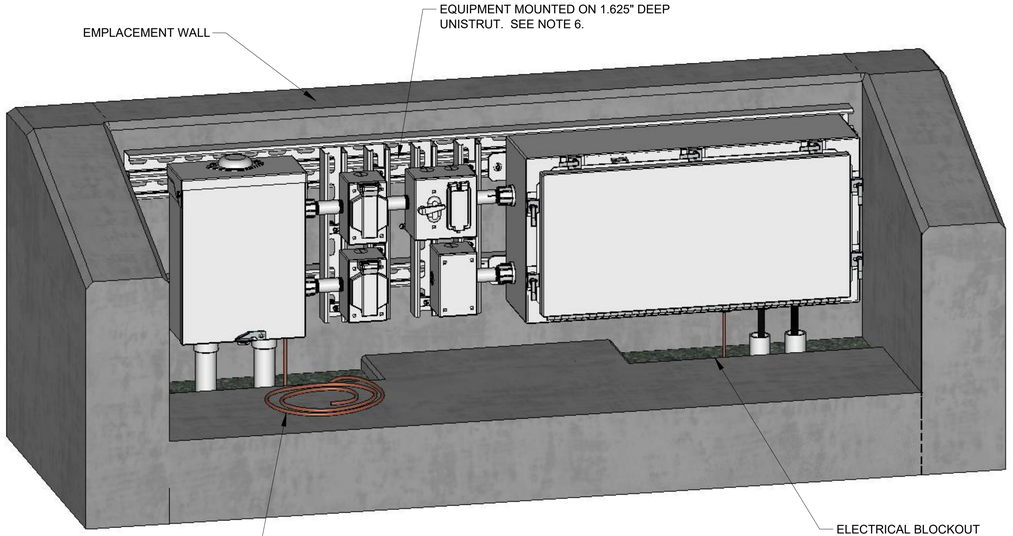
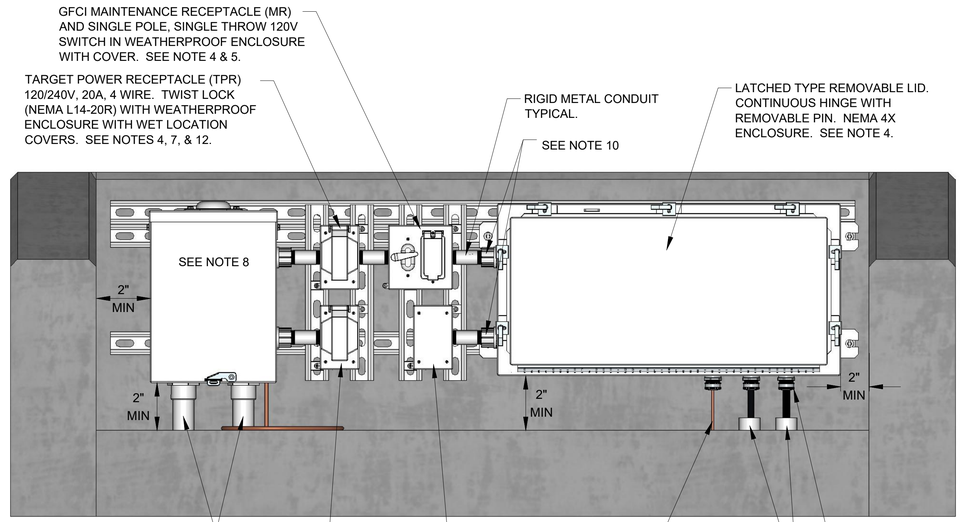


ISOMETRIC ELEVATION
STATIONARY INFANTRY TARGET

NOT TO SCALE



FRONT ELEVATION
STATIONARY INFANTRY TARGET

NOT TO SCALE

NOTES:

1. CONDUIT TO EXTEND 5 FEET BEYOND EMPLACEMENT.
2. CABLES/CONDUITS ARE ROUTED FROM SIDE OF BERM TO PREVENT CABLE DAMAGE DURING MAINTENANCE OF BERM.
3. ROUTE UNDER SLAB. POWER AND DATA INSTALLED IN SAME TRENCH.
4. EQUIPMENT SHALL NOT BE MOUNTED HIGHER THAN 2" FROM TOP OF EMPLACEMENT WALL.
5. POWER TO DATA PANEL RECEPTACLE IN MTDP SHALL BE ROUTED THROUGH SINGLE POLE SINGLE THROW SWITCH.
6. ALL EQUIPMENT SHALL BE MOUNTED ON 1.625" DEEP UNISTRUT. NO EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED DIRECTLY TO CONCRETE WALL.
7. TPR, APR AND DPR SHALL NOT BE GFCI PROTECTED.
8. PERMANENTLY LABEL THE EMPLACEMENT ACCORDING TO THE CIVIL AND ELECTRICAL DESIGNATIONS.
9. PROVIDE SEAL FITTINGS AS SHOWN IN CABLE SEAL FITTING DETAIL ON SHEET E-305 FOR ALL CABLE ENTRANCES INTO NEMA 4, 4X, OR 6P RATED ENCLOSURES.
10. INSTALL MYERS TYPE HUBS ON ALL CONDUIT PENETRATIONS TO SIDE OF ENCLOSURE.
11. ALL DIMENSIONS SHOWN IN INCHES UNLESS OTHERWISE NOTED.
12. PROVIDE TARGET AND AUXILIARY OUTLETS WITH NEMA 3R WET LOCATION COVERS MAKING OUTLETS SUITABLE FOR USE IN WET LOCATIONS. SEE DETAIL SHEET E-305 FOR WET LOCATION COVER. IN USE COVERS WITH COVERS INTENDED TO CLOSE OVER THE INSERTED CORD ARE NOT ACCEPTABLE AS THESE COVERS WILL NOT CLOSE OVER TARGET OR AUXILIARY CORDS.
13. DEVIATIONS TO THE EQUIPMENT SIZES, EQUIPMENT NUMBERS, RECEPTACLE COVERS, OR CABLE ENTRY METHODS INTO ENCLOSURES WILL REQUIRE RANGE TRAINING AND LAND PROGRAM HUNTSVILLE CENTER MANDATORY CENTER OF EXPERTISE APPROVAL.
14. CONDUIT STUBBED UP AS CLOSE TO CABLE SEAL FITTING AS POSSIBLE.
15. SEE SHEET E-303 FOR ADDITIONAL INFORMATION ON TARGET DATA PANELS. SEE SHEET E-302 FOR ADDITIONAL INFORMATION ON MASTER TARGET DATA PANELS.
16. PROVIDE GROUNDING IN ACCORDANCE WITH EMPLACEMENT GROUNDING DETAIL ON SHEET E-305.

PANEL BOARD: **PB-xx** LOCATION: **SIT** MOUNTED: **SURFACE** FEED: **BOTTOM**

100A MAIN MAIN LUGS ONLY ASYM A.I.C MIN.: **10,000**

VOLTAGE: **240/120** PHASE: **1** WIRE: **3** RATING: **NEMA 3R**

LOAD SERVED	NO. POLES	TRIP AMPS	WIRE SIZE	VA/ PHASE A	VA/ PHASE B	CKT NO.	CKT NO.	VA/ PHASE A	VA/ PHASE B	WIRE SIZE	TRIP AMPS	NO. POLES	LOAD SERVED
SURGE ARRESTOR	2	----	---	---		1	2	480		12	20	2	TPR (NEMA L14-20R)
					---				480				
SUB FEED THRU LUGS	2	----	---	---		5	6	50		12	20	1	ARP AND DPR
					---		8		180	---	20	1	MNT. RECEPTACLE
				0	0			530	660				

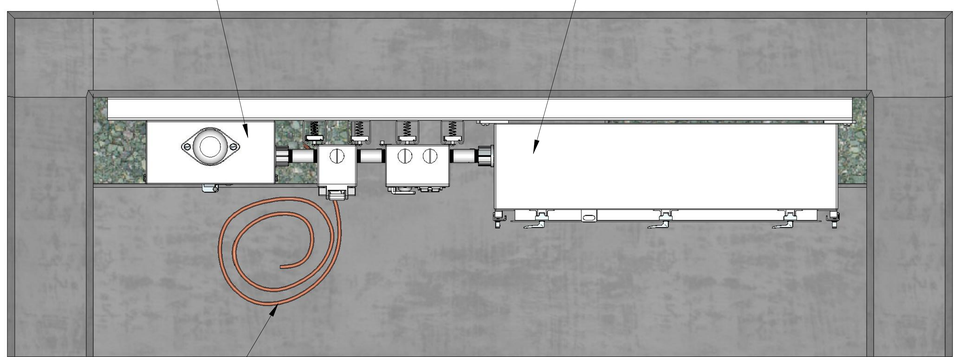
TOTAL VA PHASE A: **530**
TOTAL VA PHASE B: **660**

TOTAL CONNECTED WATTAGE: **1190**
95% DEMAND WATTAGE: **960**
TOTAL DEMAND AMPS: **4**

SUPPLIED FROM: DP-01

GENERAL NOTE:

THIS EMPLACEMENT DETAIL ALSO APPLIES FOR BATTLE EFFECTS SIMULATORS, MORTAR SIMULATION DEVICES, AND SOUND EFFECTS SIMULATORS.



TOP ELEVATION
STATIONARY INFANTRY TARGET

NOT TO SCALE

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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STATE OF NEW YORK · CASEY H. SABEY · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL—HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
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CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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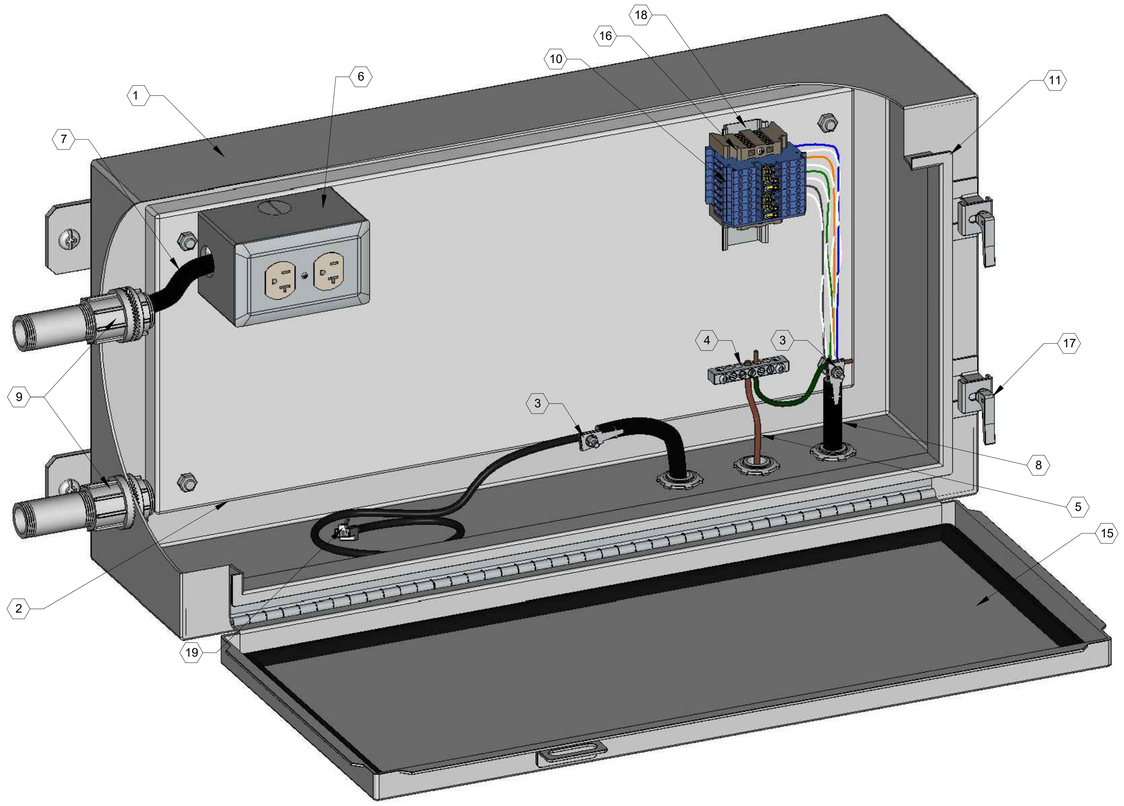
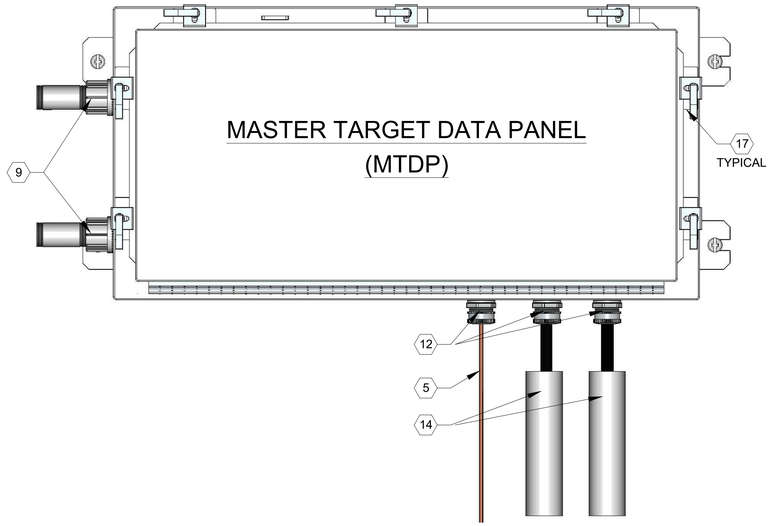
FIELD CHECK:	–
APPROVED:	CHS

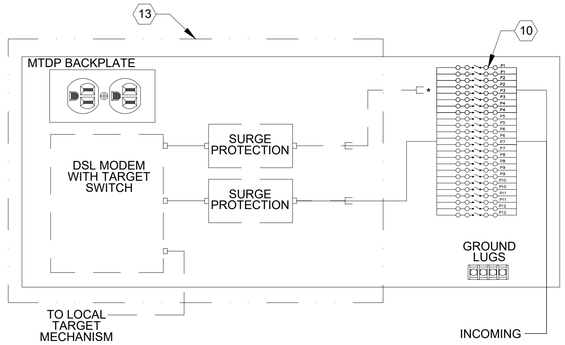
SHEET TITLE:
STATIONARY INFANTRY TARGET DETAILS

DRAWING NUMBER:
E–301

SHEET OF







TYPICAL MASTER TARGET DATA PANEL (MTDP) DETAIL AT TARGET EMPLACEMENT

NOT TO SCALE

KEYED NOTES REPRESENTED WITH ⟨#⟩:

1. ENCLOSURE SHALL BE 16 GAUGE MINIMUM STAINLESS STEEL SHEET METAL WITH WALL MOUNT BRACKETS. ENCLOSURE SHALL CARRY A NEMA 4X RATING AND BE TESTED BY UL OR OTHER APPROVED TESTING AGENCY. (SEE GENERAL NOTE 3.)
2. METAL BACK PLATE TO SECURE COMPONENTS INSIDE ENCLOSURE.
3. METALLIC CABLE SHEATH GROUNDING CLAMP AND GROUNDING CONNECTOR. BOND CABLE ARMOR/SHIELD TO BACK PLATE GROUND BAR. ALL CABLES IN ENCLOSURE MUST BE BONDED TO GROUND. ALL CABLE GROUNDS MAY NOT BE SHOWN IN THIS DETAIL
4. GROUND BAR - SECURE TO METAL BACK PLATE.
5. #6 AWG BARE COPPER GROUNDING CONDUCTOR.
6. DATA PANEL RECEPTACLE (DPR) - 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDING TYPE IN A STANDARD SINGLE-GANG METAL BOX AND GALVANIZED STEEL DEVICE PLATE. DPR SHALL NOT BE GFCI PROTECTED.
7. 2/C #12 WITH GROUND CORD IN CONDUIT FROM SINGLE POLE SINGLE THROW SWITCH FOR 120 VOLT, 1-PHASE SERVICE TO DUPLEX RECEPTACLE. SEE TARGET EMPLACEMENT ELECTRICAL DETAIL FOR SWITCH LOCATIONS
8. DIRECT BURIAL GRADE CAT 6 ARMORED CABLES. BOND CABLE SHIELD TO TDP BACK PLATE GROUNDING. ALL CABLES NOT SHOWN FOR CLARITY.
9. PROVIDE MYERS HUB TYPE FITTING AT CONDUIT PENETRATION.
10. KNIFE DISCONNECT TERMINAL BLOCK SECTIONS WITH 4 SCREW TYPE CONNECTIONS. NUMBER OF TERMINALS AS REQUIRED BY DATA CABLES (8 TERMINAL BLOCKS), ONE TERMINAL BLOCK FOR EACH WIRE. SEE DETAIL SHEET E-305.
11. MTDP SHALL HAVE A ROLLED FLANGE AROUND PERIMETER OF OPENING.
12. PROVIDE ONE CABLE SEAL FITTING FOR EACH CABLE. SEE "TYPICAL CABLE SEAL FITTING DETAIL." SHEET E-305.
13. 14" X 10" SPACE FOR INSTALLATION OF TARGET COMMUNICATIONS EQUIPMENT. POWER OUTLET AND GROUND LUG ARE ONLY COMPONENTS INSTALLED IN THIS SPACE THAT IS NOT BY THE TARGET VENDOR. AREA MEASURED FROM SIDE OF ENCLOSURE NOT EDGE OF BACKPLATE.
14. CONDUIT WITH DIRECT BURIAL CAT 6 ARMORED CABLES, SEE TARGET EMPLACEMENT PLAN AND ELEVATION. STUB CONDUIT UP ABOVE SLAB AND SEAL WATERTIGHT WITH DUCT SEALANT - FOAM IS NOT ACCEPTABLE.
15. HINGED COVER WITH CORROSION-RESISTANT STAINLESS STEEL CAPTIVE CLAMPS. HINGE MUST HAVE REMOVABLE PIN. PROVIDE A SEAMLESS FOAM-IN-PLACE GASKET FOR A WATERTIGHT AND DUST TIGHT SEAL.
16. SUPPORT BRACKET FOR BUSBAR TERMINAL BLOCK. PROVIDE ONE SUPPORT BRACKET ON EACH END OF TERMINAL BLOCKS.
17. PROVIDE ENCLOSURE WITH FAST OPERATING CLAMP ASSEMBLY. BOLT TYPE CLAMPS ARE NOT ACCEPTABLE.
18. STANDARD PROFILE DIN RAIL. LENGTH SHALL BE AS REQUIRED TO ACCOMMODATE TERMINAL BLOCK SECTIONS AND SUPPORT BRACKETS.
19. SHIELDED RJ-45 MALE CONNECTOR

WIRING SCHEMATIC

PROVIDED BY CONSTRUCTION CONTRACTOR

PROVIDED BY TARGET VENDOR

* CONNECTION TO DATA CABLE BY TARGET VENDOR

WIRING PAIRS

P1	PAIR ONE	WHITE/BLUE
P2	PAIR TWO	WHITE/ORANGE
P3	PAIR THREE	WHITE/GREEN
P4	PAIR FOUR	WHITE/BROWN
P5	PAIR FIVE	WHITE/SLATE
P6	PAIR SIX	RED/BLUE
P7	PAIR SEVEN	RED/ORANGE
P8	PAIR EIGHT	RED/GREEN
P9	PAIR NINE	RED/BROWN
P10	PAIR TEN	RED/SLATE
P11	PAIR ELEVEN	BLACK/BLUE
P12	PAIR TWELVE	BLACK/ORANGE

UN-TERMINATED WIRE PAIRS SHALL BE CONNECTED TO GROUND

GENERAL NOTES:

1. PROVIDE CABLE IDENTIFICATION DIRECTORY ON INSIDE OF COVER.
2. LABEL ALL CABLES WITH ADHESIVE POLYETHYLENE WRAP AROUND LASER PRINTED LABELS INDICATING CABLE DESTINATION AND CABLE TYPE.
3. MTDP SHALL BE 24"W X 12"H X 6"D.
4. ALL COMPONENTS INSTALLED INSIDE MTDP ENCLOSURES SHALL BE SECURED BY MECHANICAL MEANS. ADHESIVES ARE NOT ALLOWED FOR SECURING COMPONENTS INSIDE MTDP ENCLOSURES.
5. CAT 6 PAIRS TO UTILIZE TIA/EIA 568B STANDARD.

REVISED DRAWING 07/02/2025

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SHEET TITLE:

MASTER TARGET DATA PANEL DETAILS

DRAWING NUMBER:

E–302

SHEET OF

36x24 PLOT SHEET

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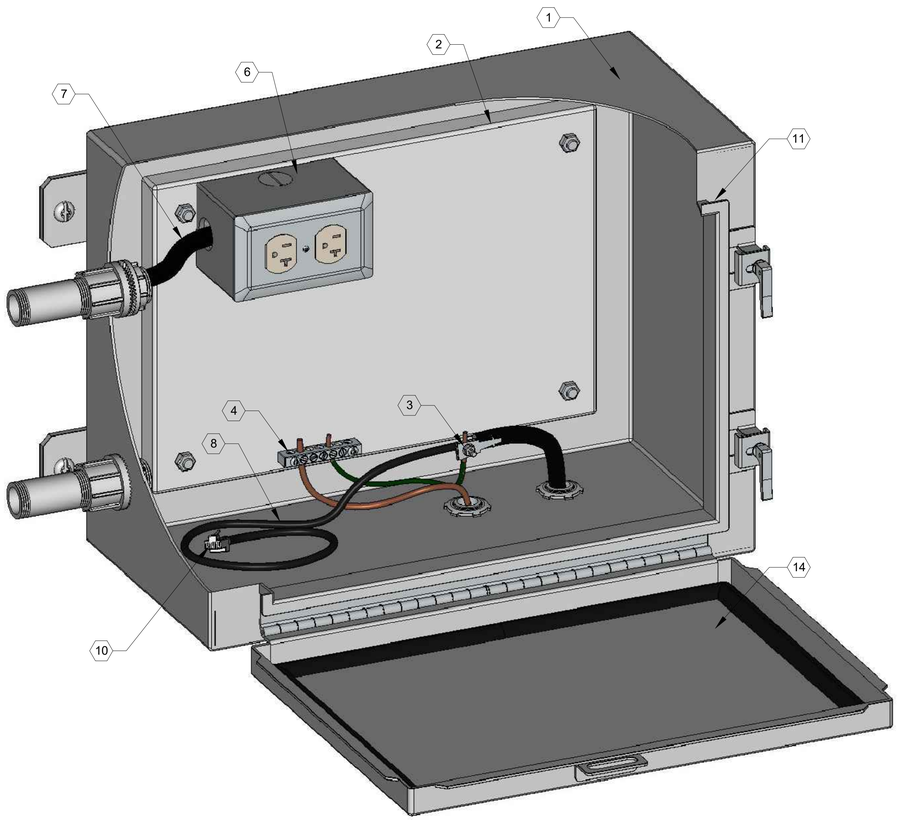
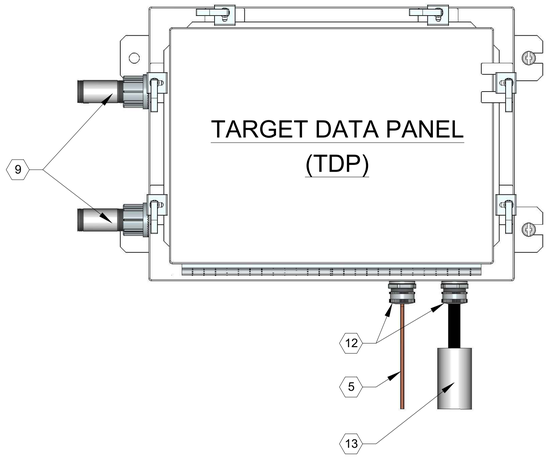


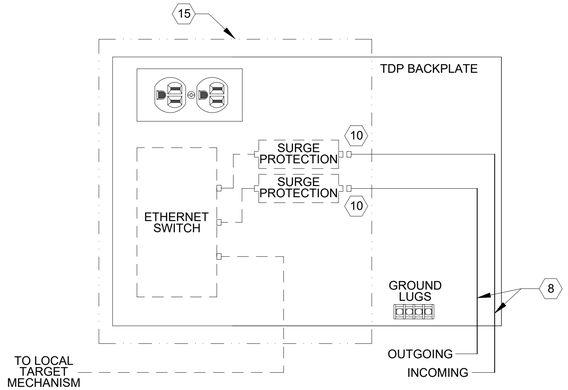
TYPICAL TARGET DATA PANEL (TDP) DETAIL AT TARGET EMPLACEMENT

NOT TO SCALE

KEYED NOTES REPRESENTED WITH (#):

1. ENCLOSURE SHALL BE 16 GAUGE MINIMUM STAINLESS STEEL SHEET METAL WITH WALL MOUNT BRACKETS. ENCLOSURE SHALL CARRY A NEMA 4X RATING AND BE TESTED BY UL OR OTHER APPROVED TESTING AGENCY. PROVIDE ENCLOSURE WITH FAST OPERATING CLAMP ASSEMBLY. BOLT TYPE CLAMPS ARE NOT ACCEPTABLE. (SEE GENERAL NOTE 3.)
2. METAL BACK PLATE TO SECURE COMPONENTS INSIDE ENCLOSURE.
3. METALLIC CABLE SHEATH GROUNDING CLAMP AND GROUNDING CONNECTOR, BOND CABLE ARMOR/SHIELD TO TDP BACK PLATE GROUNDING BAR. ALL GROUND CABLES NOT SHOWN FOR CLARITY.
4. GROUND BAR - SECURE TO METAL BACK PLATE.
5. #6 AWG BARE COPPER GROUNDING CONDUCTOR.
6. DATA PANEL RECEPTACLE (DPR) - 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDING TYPE IN A STANDARD SINGLE-GANG METAL BOX AND GALVANIZED STEEL DEVICE PLATE. CONNECT DPR AHEAD OF GFCI MAINTENANCE RECEPTACLE TO AVOID NUISANCE TRIPPING.
7. 2/C #12 WITH GROUND CORD IN CONDUIT FROM CIRCUIT BREAKER LOADCENTER FOR 120 VOLT, 1-PHASE SERVICE TO DUPLEX RECEPTACLE. RECEPTACLE SHALL NOT BE FED FROM ANY GROUND FAULT INTERRUPTING DEVICE.
8. DIRECT BURIAL GRADE CATEGORY 6 SHIELDED CABLES. COIL 3' SLACK IN TDP AT EACH END AND PROVIDE STRAIN RELIEF. BOND CABLE SHIELD TO TDP BACK PLATE GROUNDING. ALL CABLES NOT SHOWN FOR CLARITY.
9. PROVIDE MYERS HUB TYPE FITTING AT CONDUIT PENETRATION.
10. TERMINATE ON MALE RJ-45 CONNECTOR UTILIZING TIA/EIA 568B.
11. TDP SHALL HAVE A ROLLED FLANGE AROUND PERIMETER OF OPENING.
12. PROVIDE ONE CABLE SEAL FITTING FOR EACH CABLE. SEE "TYPICAL CABLE SEAL FITTING DETAIL." SHEET E-305
13. CONDUIT WITH DIRECT BURIAL GRADE CAT 6 CABLES, SEE TARGET EMPLACEMENT PLAN AND ELEVATION, STUB CONDUIT UP ABOVE SLAB AND SEAL WATERTIGHT WITH DUCT SEALANT - FOAM IS NOT ACCEPTABLE.
14. HINGED COVER WITH CORROSION-RESISTANT STAINLESS STEEL CAPTIVE CLAMPS. HINGE MUST HAVE REMOVABLE PIN. PROVIDE A SEAMLESS FOAM-IN-PLACE GASKET FOR A WATERTIGHT AND DUST TIGHT SEAL.
15. 10" X 10" SPACE FOR INSTALLATION OF TARGET COMMUNICATIONS EQUIPMENT. POWER OUTLET AND GROUND LUG ARE ONLY COMPONENTS INSTALLED IN THIS SPACE THAT IS NOT BY THE TARGET VENDOR. AREA MEASURED FROM SIDE OF ENCLOSURE NOT EDGE OF BACKPLATE.





MTDP DATA WIRING SCHEMATIC

PROVIDED BY MCA CONTRACTOR

PROVIDED BY OPA CONTRACTOR

GENERAL NOTES:

1. PROVIDE CABLE IDENTIFICATION DIRECTORY ON INSIDE OF COVER.
2. LABEL ALL CABLES WITH ADHESIVE POLYETHYLENE WRAP AROUND LASER PRINTED LABELS INDICATING CABLE DESTINATION AND CABLE TYPE.
3. TDP SHALL BE 16"W X 12"H X 6"D.
4. ALL COMPONENTS INSTALLED INSIDE TDP ENCLOSURES SHALL BE SECURED BY MECHANICAL MEANS. ADHESIVES ARE NOT ALLOWED FOR SECURING COMPONENTS INSIDE TDP ENCLOSURES.
5. CAT 6 DATA CABLES PROVIDE THE MINIMUM PERFORMANCE REQUIREMENTS FOR COPPER DATA CABLES. DATA CABLES THAT EXCEED CAT 6 PERFORMANCE REQUIREMENTS MAY BE USED AS LONG AS ALL PHYSICAL REQUIREMENTS SPECIFIED HEREIN ARE MAINTAINED.

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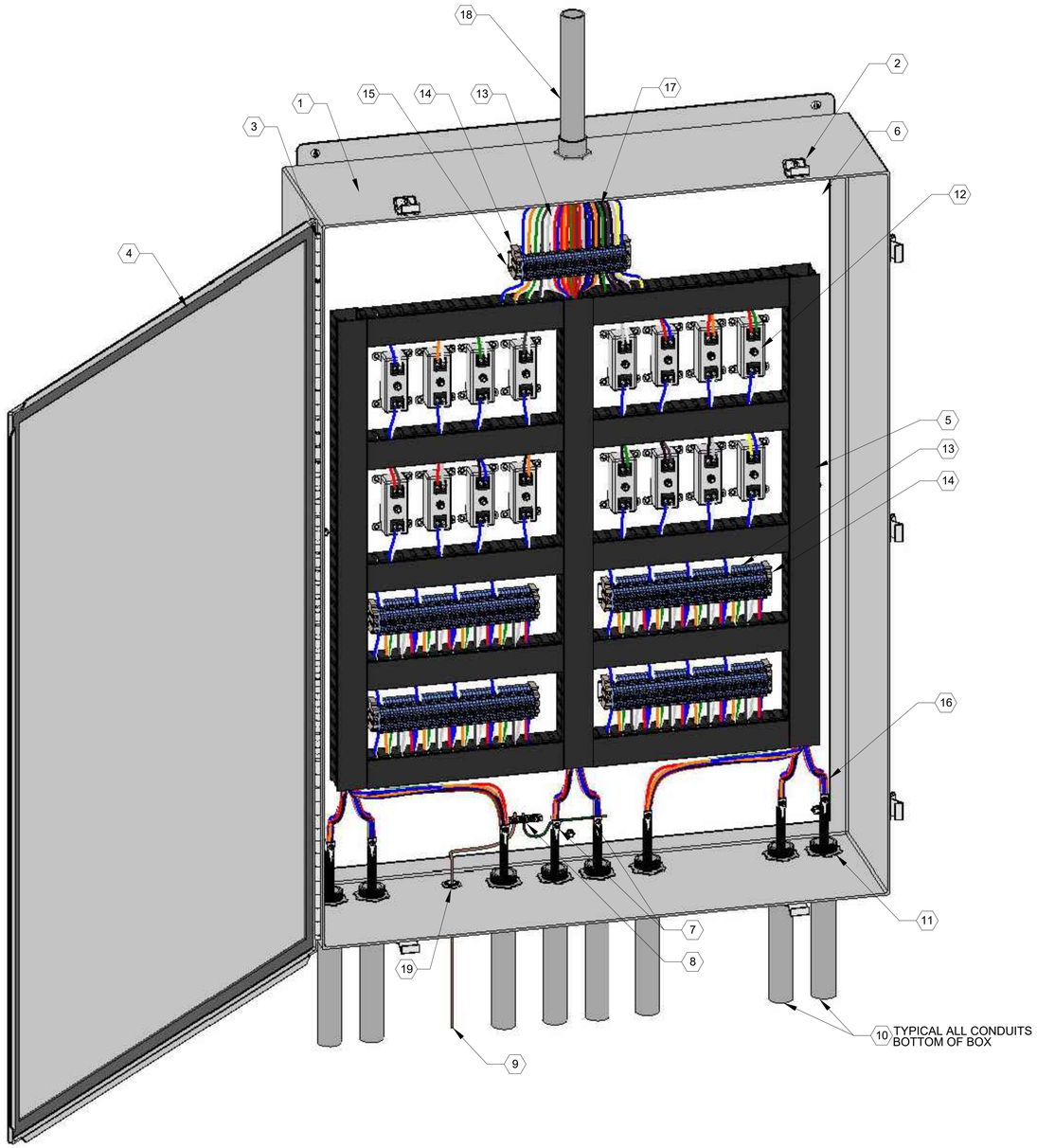
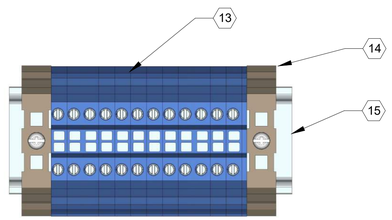


TOWER JUNCTION BOX (TJB) DETAIL

NOT TO SCALE

KEYED NOTES REPRESENTED WITH (#):

1. ENCLOSURE SHALL BE 16 GAUGE MINIMUM STAINLESS STEEL SHEET METAL WITH WALL MOUNT BRACKETS. ENCLOSURE SHALL CARRY A NEMA 4X RATING AND BE TESTED BY UL OR OTHER APPROVED TESTING AGENCY.
2. PROVIDE ENCLOSURE WITH SCREW-DOWN CLAMPS ON THREE SIDES OF THE DOOR.
3. PROVIDE ENCLOSURE WITH REMOVABLE HEAVY GAUGE STAINLESS STEEL CONTINUOUS HINGE PIN. HINGES SHALL ALLOW THE DOOR TO BE REMOVED FROM THE ENCLOSURE.
4. PROVIDE ENCLOSURE DOOR WITH A SEAMLESS FOAM-IN-PLACE GASKET. ADHESIVE BACK FOAM STYLE GASKETS ARE NOT ACCEPTABLE.
5. CABLE MANAGEMENT WIRE WAY FOR TWISTED PAIRS.
6. METAL BACK PLATE TO SECURE COMPONENTS INSIDE ENCLOSURE.
7. METALLIC CABLE SHEATH GROUNDING CLAMP AND GROUNDING CONNECTOR, BOND CABLE ARMOR/SHIELD TO TJB BACK PLATE GROUNDING BAR. ALL GROUND CABLES NOT SHOWN FOR CLARITY.
8. GROUND BAR - SECURE TO METAL BACK PLATE.
9. #6 AWG BARE COPPER GROUNDING CONDUCTOR.
10. CONDUITS WITH DIRECT BURIAL CATEGORY 6 ARMORED DATA CABLE. NOT ALL WIRES AND CONDUIT ARE SHOWN. PROVIDE NUMBER AND SIZE OF CONDUITS AS DEFINED IN THE DOWNRANGE DATA 1-LINE DIAGRAM.
11. PROVIDE A WEATHER PROOF CONDUIT CONNECTION TO TJB. CONNECTOR TO BE A MYERS HUB TYPE FITTING OR EQUIVALENT.
12. 3-STAGE LIGHTNING ARRESTOR MODULES RATED FOR DSL LINES. NUMBER SHOWN IS TYPICAL. GROUNDING OF LIGHTNING ARRESTOR NOT SHOWN IN DETAIL. GROUND LIGHTING ARRESTOR AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ONE LIGHTNING ARRESTOR FOR EACH GROUP OF TARGETS SERVED ON A DSL DATA LINE. SEE 1-LINE DIAGRAM FOR NUMBER OF SURGE ARRESTORS.
13. DIN RAIL MOUNTED FEED-THROUGH TERMINAL BLOCK SECTIONS WITH 2 SCREW TYPE CONNECTIONS. LENGTH OF DIN RAIL SHALL BE AS REQUIRED TO ACCOMMODATE TERMINAL BLOCK SECTIONS AND SUPPORT BRACKETS. TERMINAL BLOCK SECTION SHALL ACCEPT WIRE SIZES OF #24 AWG. TERMINATED ON TERMINAL BLOCKS UTILIZING TIA/EIA 568B. PROVIDE NUMBER OF SECTIONS TO ACCOMMODATE ALL TWISTED WIRE PAIRS. SEE DOWNRANGE DATA 1-LINE DIAGRAM FOR NUMBER OF TWISTED PAIRS.
14. SUPPORT BRACKET FOR DATA CABLE TERMINAL BLOCK. PROVIDE ONE SUPPORT BRACKET ON EACH END OF TERMINAL BLOCKS.
15. STANDARD PROFILE DIN RAIL. LENGTH SHALL BE AS REQUIRED TO ACCOMMODATE TERMINAL BLOCK SECTIONS AND SUPPORT BRACKETS.
16. TWISTED WIRE PAIRS FROM DOWNRANGE CATEGORY 6 ARMORED DATA CABLE. NUMBER OF WIRES SHOWN IS TYPICAL. SEE DOWNRANGE DATA 1-LINE DIAGRAM FOR NUMBER OF WIRE PAIRS REQUIRED IN TJB.
17. CATERGORY 6 TWISTED WIRE PAIRS FOR CONNECTION OF DOWNRANGE DATA CABLES TO THE DATA TERMINATION RACK. NUMBER OF WIRE PAIRS SHOWN IS TYPICAL. SEE DOWNRANGE DATA 1-LINE DIAGRAM FOR NUMBER OF WIRE PAIRS REQUIRED BETWEEN THE TJB AND THE DATA TERMINATION RACK.
18. 3" RIGID CONDUIT THAT CONNECTS THE TJB TO THE CONTROL ROOM OF THE CONTROL TOWER. THIS CONDUIT SHALL CONTAIN THE TWISTED PAIR CABLE THAT CONNECTS THE TJB TO THE DATA TERMINATION RACK.
19. PROVIDE A CABLE SEAL FITTING FOR GROUND CONDUCTOR PENETRATION INTO THE TJB. SEE "TYPICAL CABLE SEAL FITTING DETAIL". SHEET E-305.



TYPICAL TERMINAL BLOCK SECTION DETAIL

NOT TO SCALE

GENERAL NOTES:

1. TJB SHALL BE 48"H X 36"W X 12"D.
2. NOT ALL WIRE AND CABLE CONTAINED IN THE TJB ARE SHOWN IN THIS DETAIL. SEE THE DOWNRANGE 1-LINE DIAGRAM FOR THE NUMBER OF DATA CABLES RUNNING FROM THE TJB DOWNRANGE, THE NUMBER OF WIRE PAIRS REQUIRED INSIDE THE TJB, THE NUMBER OF LIGHTING ARRESTORS REQUIRED IN THE TJB, AND THE NUMBER OF WIRE PAIRS REQUIRED BETWEEN THE TJB AND THE DATA TERMINATION RACK.
3. PROVIDE CABLE IDENTIFICATION DIRECTORY ON INSIDE OF COVER.
4. LABEL ALL CABLES WITH ADHESIVE POLYETHYLENE WRAP AROUND LASER PRINTED LABELS INDICATING CABLE DESTINATION AND CABLE TYPE.
5. ALL COMPONENTS INSTALLED INSIDE TJB ENCLOSURES SHALL BE SECURED BY MECHANICAL MEANS. ADHESIVES ARE NOT ALLOWED FOR SECURING COMPONENTS INSIDE TJB ENCLOSURES.

REVISED DRAWING 07/02/2025

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASE H. SAREMI · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF
MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
TOWER JUNCTION
BOX DETAILS

DRAWING NUMBER:
E–304

SHEET OF

Jun 30,2025 – 1:08pm
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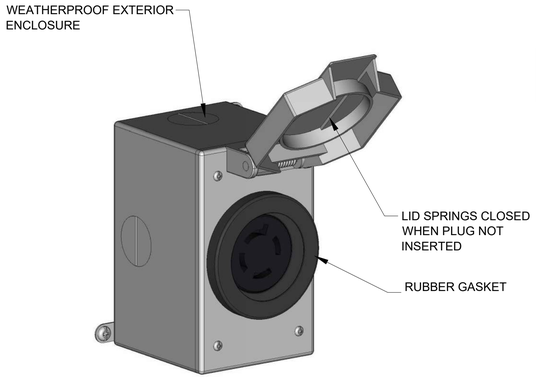
36x24 PLOT SHEET

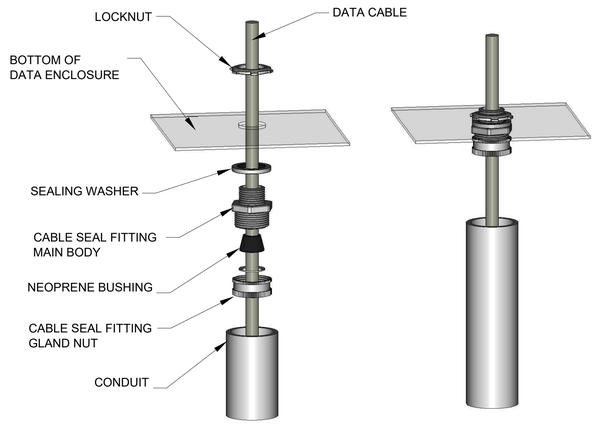


NOTE:

WEATHERPROOF, IN-USE WET LOCATION COVERS SHALL BE PROVIDED WITH ETHYLENE PROPYLENE RUBBER GASKETS AROUND THE FACE OF THE RECEPTACLE TO PREVENT THE ENTRANCE OF MOISTURE AND DIRT WITH COVER OPEN AND PLUG INSERTED. COVER SHALL ACCEPT MALE PLUG WITH DIAMETER OF 1.8" - 1.95".

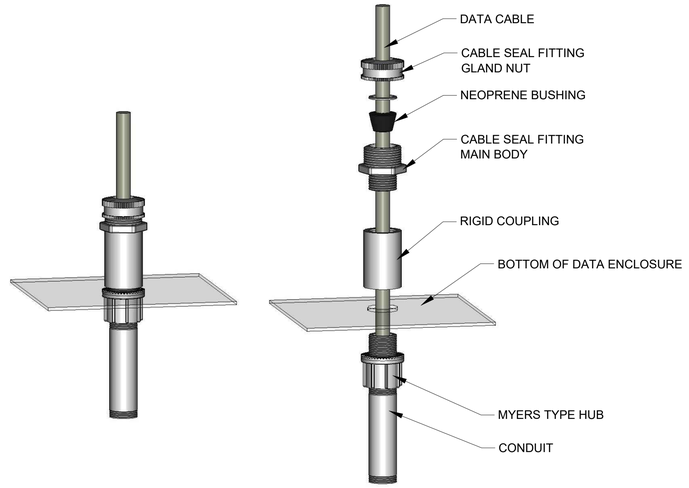
WET LOCATION RECEPTACLE COVER

NOT TO SCALE



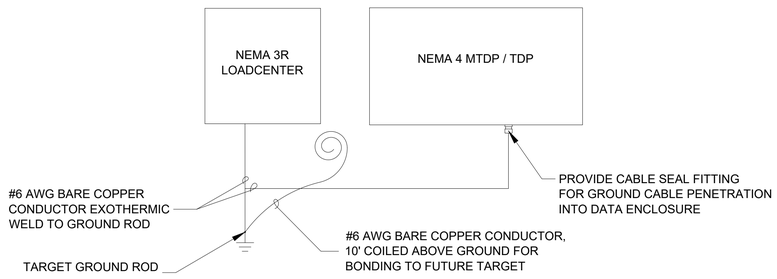
CABLE SEAL FITTING DETAIL

NOT TO SCALE



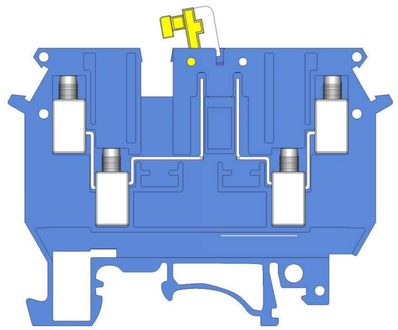
CONDUIT / CABLE SEAL FITTING DETAIL

NOT TO SCALE



EMPLACEMENT GROUNDING DETAIL

NOT TO SCALE



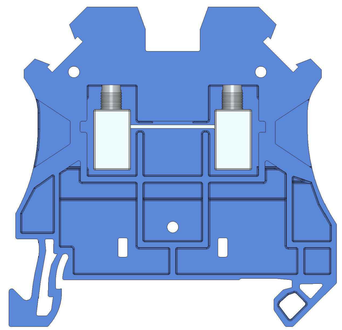
FRONT VIEW

TOP VIEW

WIRING DIAGRAM
SCREW CONNECTIONS, 4 TERMINALS, CENTER DISCONNECT

KNIFE DISCONNECT TERMINAL BLOCK

NOT TO SCALE



FRONT VIEW

TOP VIEW

WIRING DIAGRAM
SCREW CONNECTIONS, 2 TERMINALS, FEED-THROUGH TYPE

FEED-THROUGH TERMINAL BLOCK

NOT TO SCALE

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 30,2025 - 1:08pm
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CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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STATE OF NEW YORK · CASEY H. SABEAN · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL—HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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APPROVED:	CHS

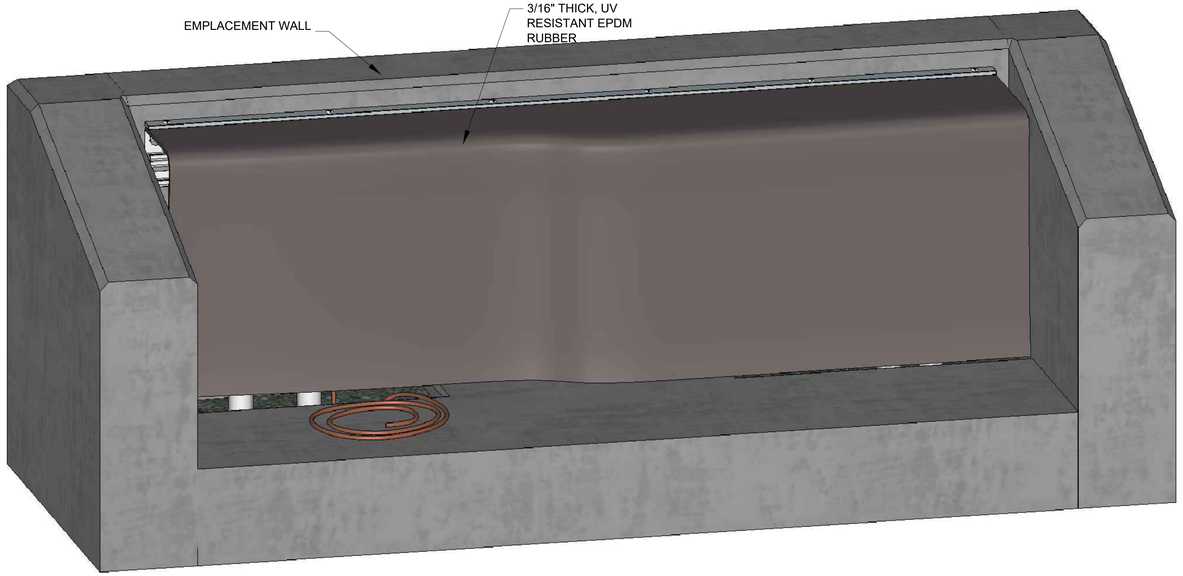
SHEET TITLE:

DETAILS

DRAWING NUMBER:

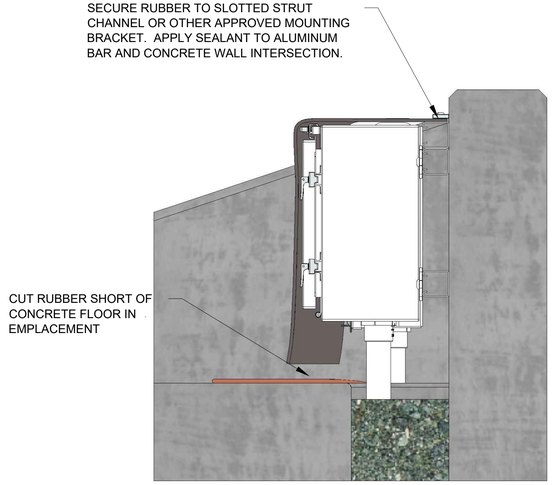
E–305

SHEET OF



SIT EMPLACEMENT WITH RUBBER FLAP

NOT TO SCALE



RUBBER FLAP SIDE VIEW

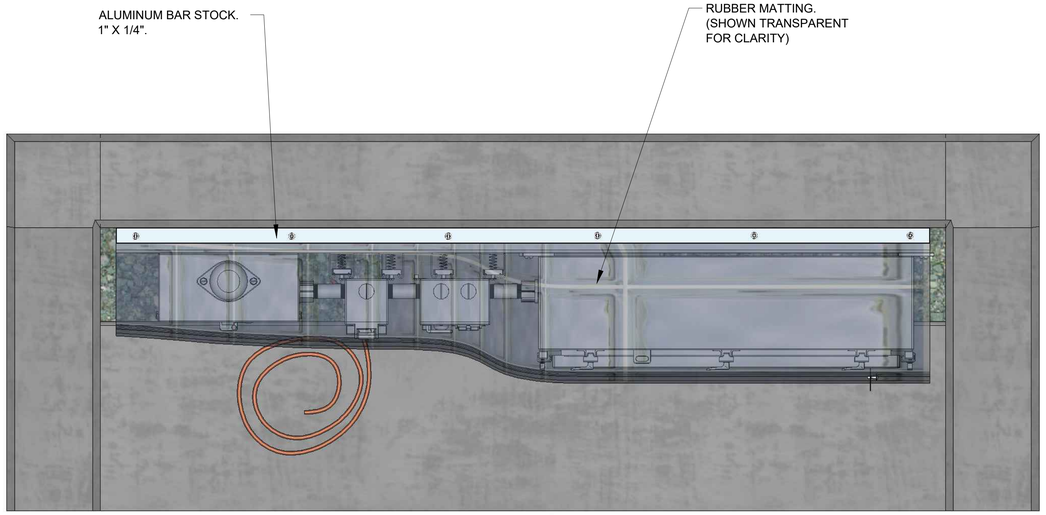
NOT TO SCALE

INSTALLATION NOTES:

1. INSTALL RUBBER MATTING OVER THE ENTIRE EMPLACEMENT TO BLOCK MOISTURE AND DIRECT SUNLIGHT TO ALL COMMUNICATIONS AND ELECTRICAL EQUIPMENT. MOUNT RUBBER MAT TO CONCRETE EMPLACEMENT ABOVE DATA ENCLOSURE WITH ALUMINUM BAR STOCK AND APPROVED CONCRETE FASTENERS. RUBBER MAT SHALL DRAPE OVER DATA ENCLOSURE AND BE CUT TO A HEIGHT JUST ABOVE THE CONCRETE EMPLACEMENT FLOOR. A CONTINUOUS BEAD OF APPROVED SEALANT SHALL BE APPLIED TO ALUMINUM FLASHING (BAR STOCK) AT CONCRETE WALL TO PREVENT WATER SEEPAGE BETWEEN MATTING AND WALL.
2. THE DETAILS PRESENTED ON THIS PLAN ARE REPRESENTATIONAL ONLY. DETAILS DO NOT REFLECT ALL OF THE OUTLETS AND BOXES THAT ARE REQUIRED. EMPLACEMENTS SHALL BE INSTALLED AS PRESENTED ON THE EMPLACEMENT DETAIL PLANS. RUBBER MATS MUST COVER ALL OF THE INSTALLED EQUIPMENT.

MATERIALS:

1. RUBBER MATTING SHALL BE ONE PIECE, 54" WIDE X 30" HIGH 3/16" THICK, UV RESISTANT EPDM RUBBER. (HTTP://WWW.RUBBERCAL.COM.HTML OR FUNCTIONALLY APPROVED EQUAL).
2. BAR STOCK SHALL BE SOLID ALUMINUM 54" WIDE X 1" HIGH X 1/4" THICK, INSTALLED USING APPROVED CONCRETE FASTENERS.
3. SEALANT SHALL BE A FLEXIBLE BUTYL RUBBER PRODUCT TO PROVIDE A 100% WATERTIGHT SEAL.



RUBBER FLAP TOP VIEW

NOT TO SCALE

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

Jun 30,2025 - 1:07pm
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STATE OF NEW YORK · CASE H. SARSEN · 081178 · LICENSED PROFESSIONAL ENGINEER
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SHEET TITLE:
DETAILS

DRAWING NUMBER:
E–306

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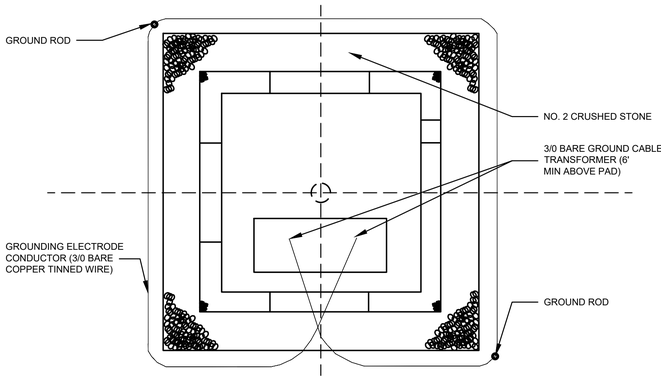
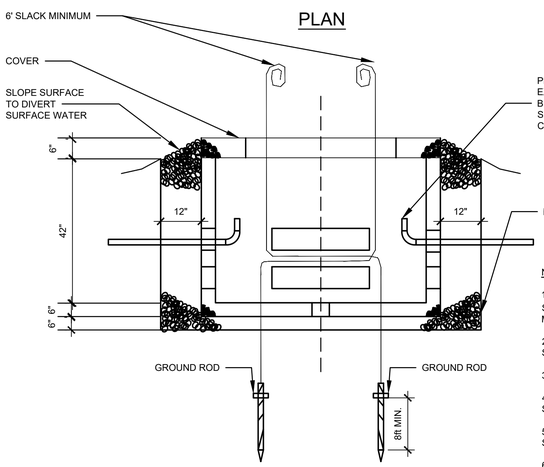
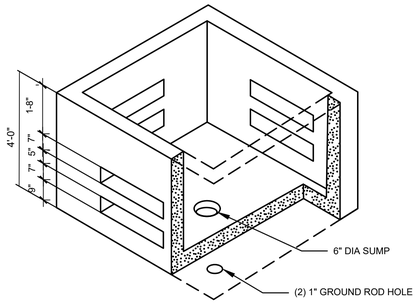
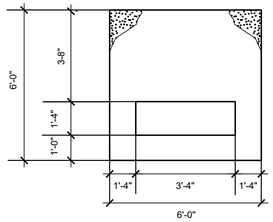


PLAN



ELEVATION





STANDARD 75-500 KVA TRANSFORMER
COVER SHOWN FOR REFERENCE. COORDINATE COVER WITH ACTUAL TRANSFORMER TO BE INSTALLED, CUSTOM FABRICATION MAY BE NECESSARY

NOTES:

1. STONE FOR BASE AND SIDES OF THE BOX PAD SHALL BE 3/4" MINIMUM TO 1-1/2" MAXIMUM CRUSHED ROCK OF WASHED STONE. ¾" CRUSHED FORK OF WASHED STONE MAY BE USED FOR UP TO 6" IN LOCATIONS WHERE WINDOW BREAKAGE MAY BE A PROBLEM. FOR THE BASE, STONE SHALL BE PLACED ON UNDISTURBED OR WELL TAMPERED EARTH.

2. AREA AROUND THE BOX PAD SHALL BE GRADED SO THAT SURFACE WATER SHALL DRAIN AWAY FROM CRUSHED STONE OIL CONTAINMENT.

3. THE BOX PAD SHALL BE INSTALLED SUCH THAT THE TOP SURFACE IS LEVEL TO WITHIN 1/4" HIGH TO LOW.

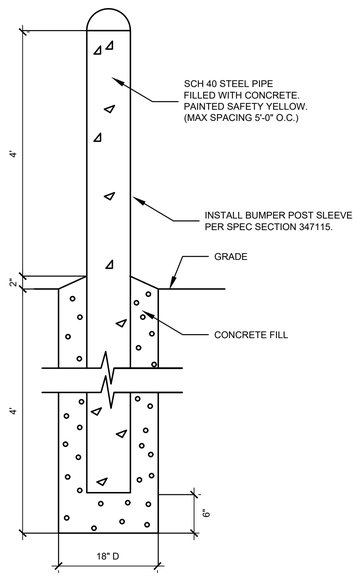
4. IN GENERAL, 4" CONDUIT SHALL BE USED FOR BOTH PRIMARY AND SECONDARY CONDUCTORS. HOWEVER, THE SECONDARY CONDUIT SHOULD BE SIZED ACCORDING TO THE SECONDARY CONDUCTORS BEING INSTALLED.

5. PERMANENT SUPPORT SHALL BE PROVIDED FOR THE SECONDARY CONDUCTORS SUCH THAT THE TOTAL WEIGHT SUPPORTED BY EACH TRANSFORMER BUSHING SHALL NOT EXCEED TEN POUNDS.

6. GROUNDING ELECTRODE CONDUCTOR SHALL BE 3/0 AWG.

5 PAD MOUNT TRANSFORMER VAULT DETAIL

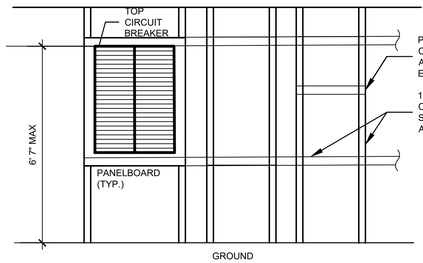
NTS



6 BOLLARD POST DETAIL

NTS

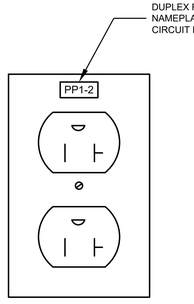
TOWER



9 PANELBOARD MOUNTING DETAIL

NTS

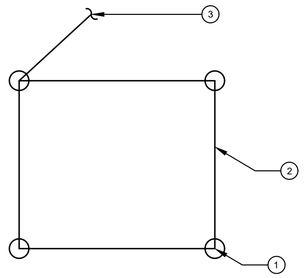
PANELBOARD MOUNTING DETAIL IS DIAGRAMMATIC ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



LABEL SHALL BE CLEAR, SELF-ADHESIVE WITH BLACK 1/4" HIGH TEXT

7 TYPICAL ELECTRICAL LABELING

NTS



DETAIL NOTES:

① 3/4" X 10'-0" COPPER GROUNDING ROD. DRIVE FULL LENGTH INTO GROUND TO 1'-0" MINIMUM BELOW FINISHED GRADE, TYPICAL. LOCATE GROUND ROD NEAR EACH TOWER LEG.

② #4/0 AWG BARE COPPER MINIMUM GROUNDING CONDUCTOR. GROUNDING SYSTEM TO YIELD A RESISTANCE OF 25 OHMS OR LESS.

③ 600V #4/0AWG INSULATED COPPER CONDUCTOR INSTALLED IN SCH40 PVC TO SERVICE ENTRANCE GROUNDING BUS.

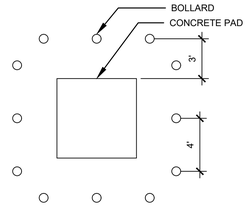
GENERAL NOTES:

A. DTR AND POWER PANEL GROUND POINTS SHALL BE CONNECTED TO A SINGLE GROUND POINT WITH A MINIMUM #6 AWG, INSULATED, STRANDED, COPPER CABLE.

B. DETAIL IS DIAGRAMMATIC. PROVIDE ADDITIONAL GROUND RODS AND CONDUCTORS AS NECESSARY TO ACHIEVE SPECIFIED MAXIMUM RESISTANCE TO GROUND.

8 CONTROL TOWER SERVICE ENTRANCE GROUNDING DETAIL

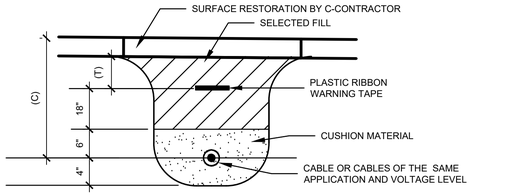
NTS



10 BOLLARD LAYOUT DETAIL

NTS

BOLLARD LAYOUT DETAIL IS DIAGRAMMATIC ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



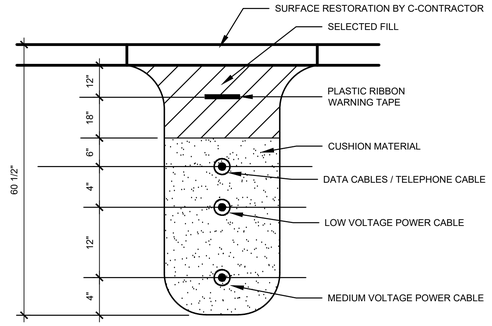
CABLE DEPTH (C)
48" FOR MEDIUM VOLTAGE CABLES
36" FOR LOW VOLTAGE POWER CABLES
36" FOR FO AND CAT 6 DATA CABLES

WARNING TAPE DEPTH (T)
24" FOR MEDIUM VOLTAGE CABLES
12" FOR LOW VOLTAGE POWER CABLES
12" FOR FO AND CAT 6 DATA CABLES

1 TRENCH: SINGLE CABLE OR VOLTAGE

NTS

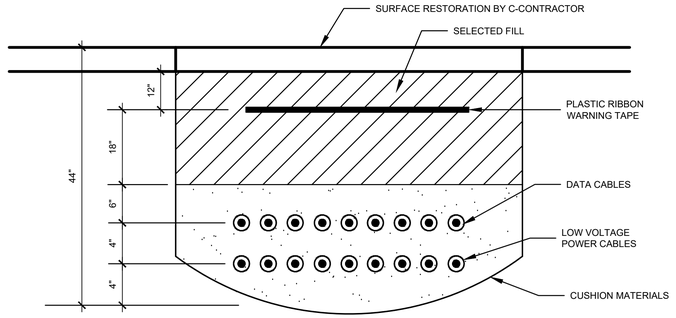
TRENCH DETAILS ARE DIAGRAMMATIC ONLY. REFER TO C-CONTRACT, SITE PLANS AND ONE LINE DIAGRAMS FOR TYPES AND QUANTITIES.



2 TRENCH: MEDIUM & LOW VOLTAGE POWER & DATA CABLES

NTS

TRENCH DETAILS ARE DIAGRAMMATIC ONLY. REFER TO C-CONTRACT, SITE PLANS AND ONE LINE DIAGRAMS FOR TYPES AND QUANTITIES.



3 TRENCH: LOW VOLTAGE POWER & DATA CABLE

NTS

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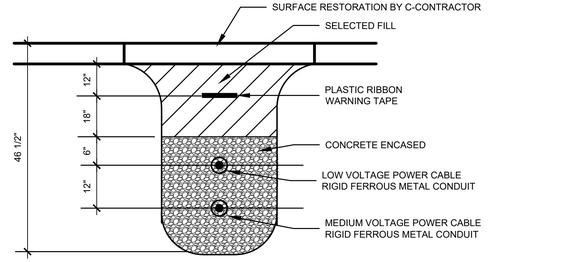

4 TRENCH: ROADWAYS AND PARKING AREAS

NTS

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REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
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STATE OF NEW YORK · CASE H. SIBLEY · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL—HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
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11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

⚠ SDC	7/2/2025	ADDENDUM NO. 1
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PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
DETAILS

DRAWING NUMBER:
E–307

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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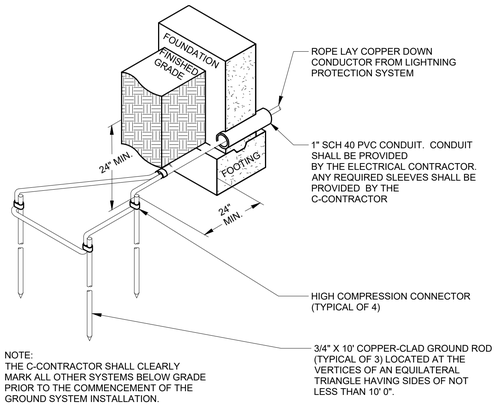
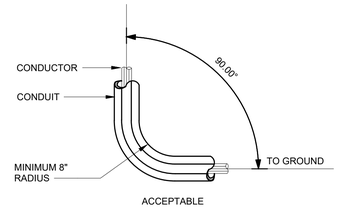


NOTE:
THE C-CONTRACTOR SHALL CLEARLY MARK ALL OTHER SYSTEMS BELOW GRADE PRIOR TO THE COMMENCEMENT OF THE GROUND SYSTEM INSTALLATION.

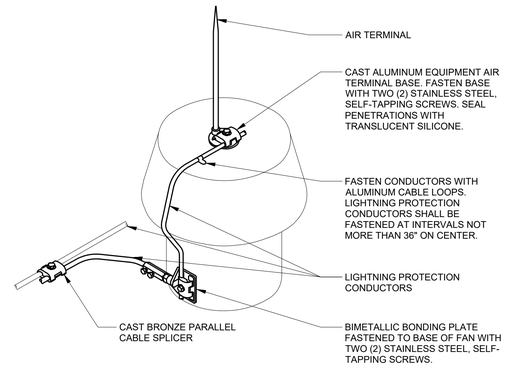
2 LIGHTNING CONTROL DELTA GROUND DETAIL

NTS



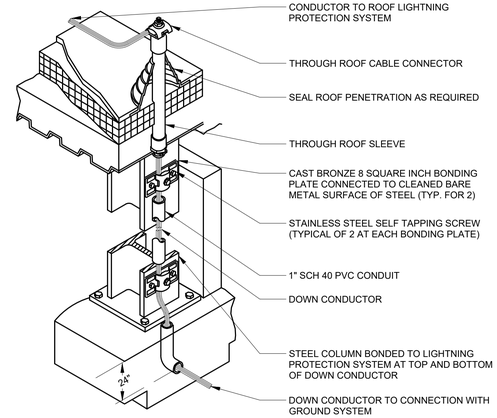
1 LIGHTNING CONTROL BEND REQUIREMENTS DETAIL

NTS



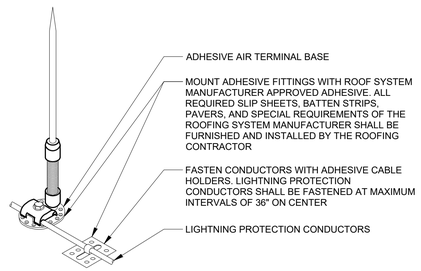
4 LIGHTNING CONTROL EXHAUST FAN AIR TERMINAL DETAIL

NTS



3 LIGHTNING CONTROL DOWN CONDUCTOR BONDED TO STEEL DETAIL

NTS



5 LIGHTNING CONTROL MID ROOF AIR TERMINAL DETAIL

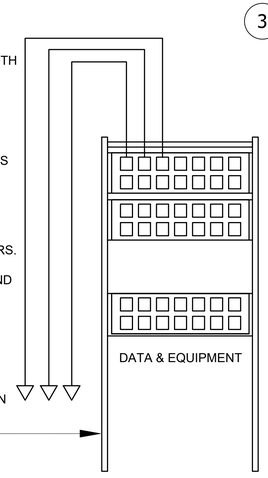
NTS

CABLES AND ASSOCIATED JACKS (BOTH ENDS) SHALL BE COLOR CODED TO DENOTE SYSTEM.

TELEPHONE OUTLETS SHALL NOT TERMINATE IN DTR. SEE FLOOR PLANS FOR PHONE BOARD LOCATIONS.

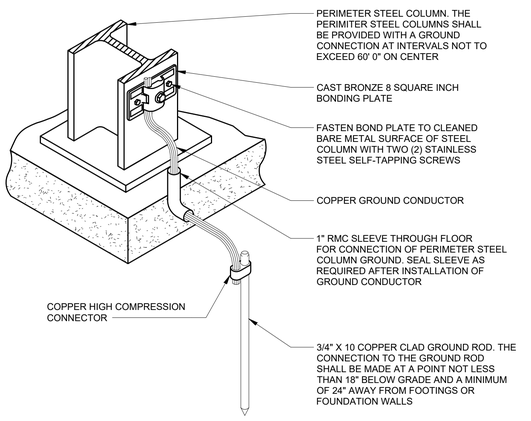
DTR SHALL BE 19", 36" DEEP, 84" TALL ENCLOSED RACK WITH VENTED DOORS. MINIMUM CLEARANCE 36" WORKING SPACE IN FRONT, BACK, AND ONE SIDE. OPPOSITE SIDE SHALL BE MINIMUM OF 6" CLEAR.

FREESTANDING DATA TERMINATION RACK WITH PATCH PANELS AS REQUIRED (TYP.)



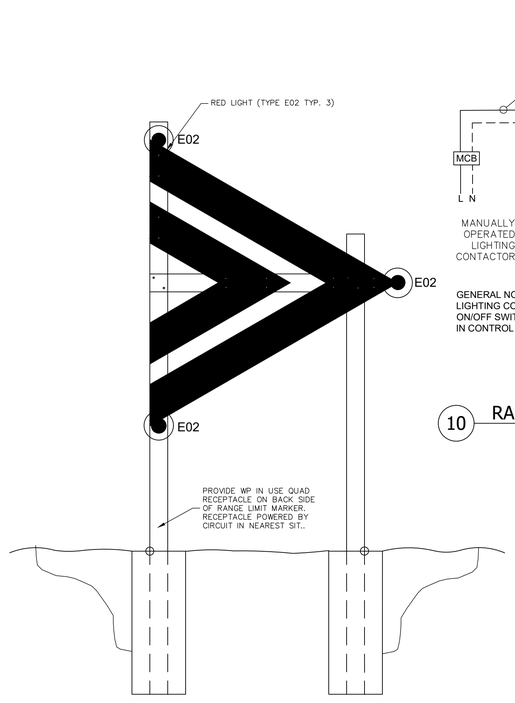
8 DATA TERMINATION RACK ELEVATION

NTS



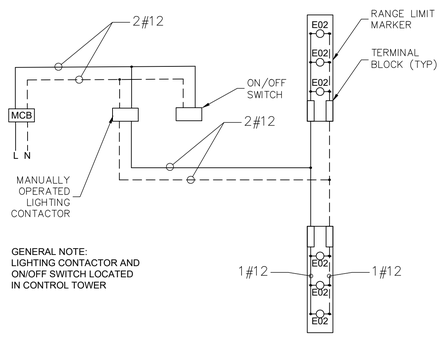
6 LIGHTNING CONTROL STRUCTURAL STEEL GROUNDING DETAIL

NTS



9 RANGE LIMIT MARKER

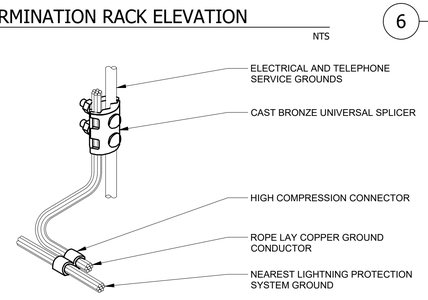
NTS



GENERAL NOTE:
LIGHTING CONTACTOR AND ON/OFF SWITCH LOCATED IN CONTROL TOWER

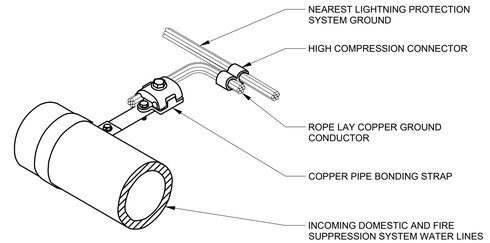
10 RANGE LIMIT MARKER LIGHTING CONTACTOR DIAGRAM

NTS



7 LIGHTNING CONTROL POTENTIAL EQUALIZING BONDING DETAIL

NTS



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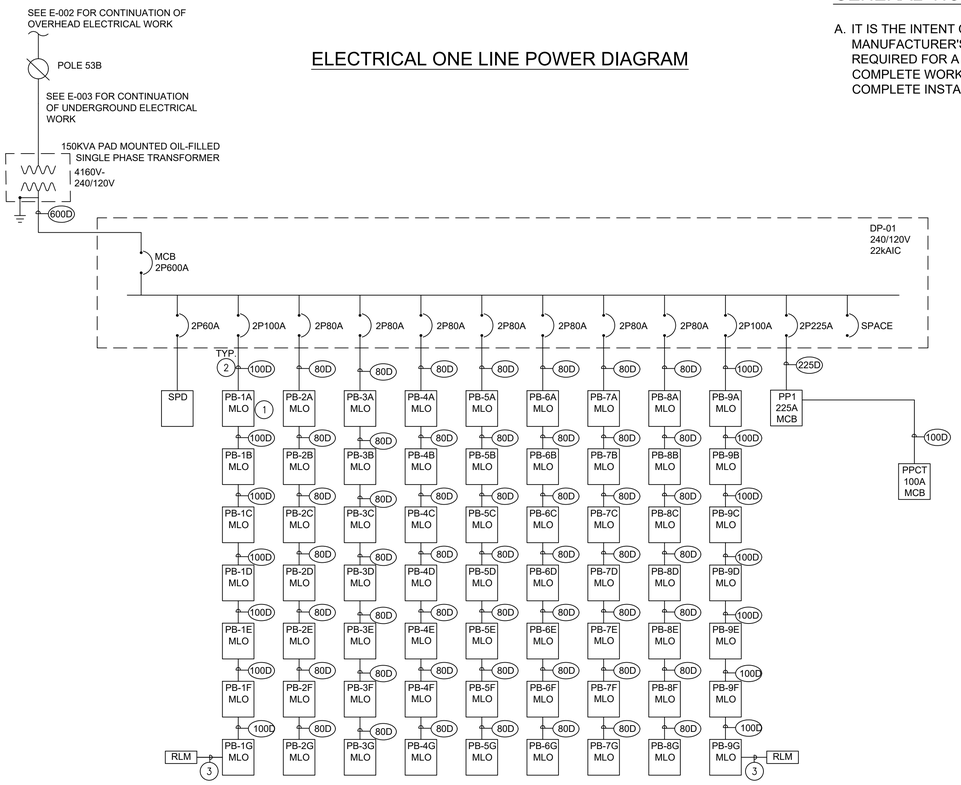
SHEET OF

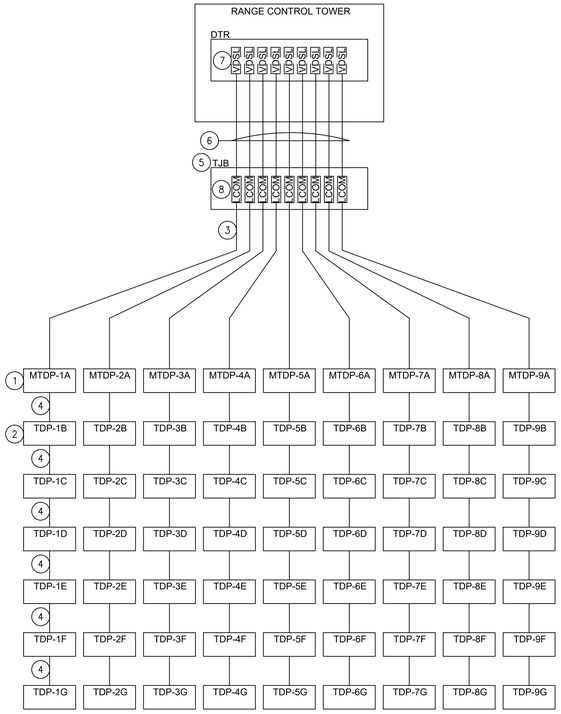
ELECTRICAL ONE LINE POWER DIAGRAM



GENERAL NOTES

A. IT IS THE INTENT OF THESE RISER DIAGRAMS TO SHOW A COMPLETE WORKING SYSTEM. REFER TO DETAILS AND MANUFACTURER'S INSTALLATION MANUALS FOR ADDITIONAL INFORMATION. NOT ALL DETAILS AND INFORMATION REQUIRED FOR A COMPLETE SYSTEM ARE SHOWN AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COMPLETE WORKING SYSTEM AS INTENDED. ALL INCIDENTAL ITEMS NOT FULLY DESCRIBED, BUT NECESSARY FOR THE COMPLETE INSTALLATION ARE TO BE PROVIDED.

DOWN RANGE DATA DISTRIBUTION DIAGRAM



DRAWING NOTES

1. PANEL PB-1A. SEE DRAWING E-301 FOR PANELBOARD SCHEDULE. TYPICAL FOR ALL PB UNLESS OTHERWISE NOTED. USE BURNDY VERSITAPE OR APPROVE EQUAL TO CONNECT NEUTRALS AND GROUND WIRES TO FEED NEXT/PREVIOUS PB.
2. ALL DOWNRANGE EXTERIOR SECONDARY CABLING SHALL BE DIRECT BURIED TYPE CU 600/1000V XLPE INSULATION AIA PVC JACKET XHHW-2. CT RATED SUNLIGHT RESISTANT FOR DIRECT BURIAL SILICONE FREE.
3. PROVIDE (2) #12 AND (1) #12 GND DIRECT BURIED FROM SIT PANEL TO WP IN USE QUAD RECEPTACLE SERVING RANGE LIMIT MARKER. PROVIDE SINGLE ON/OFF SWITCH IN CONTROL TOWER TO CONTROL ALL RANGE LIMIT MARKERS.

FEEDER SCHEDULE (COPPER 600V) SINGLE PHASE 3-WIRE W/GROUND			
MAXIMUM AMPERE RATING	DWG TAG	PHASE, NEUTRAL, & GROUND CONDUCTORS	CONDUIT
20	20D	3#12 & 1#12G	3/4"
30	30D	3#10 & 1#10G	3/4"
40	40D	3#8 & 1#10G	3/4"
50	50D	3#6 & 1#10G	1"
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70	70D	3#4 & 1#8G	1-1/4"
80	80D	3#3 & 1#8G	1-1/4"
90	90D	3#2 & 1#8G	1-1/2"
100	100D	3#2 & 1#8G	1-1/2"
110	110D	3#1 & 1#6G	2"
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300	300D	3#350KCMIL & 1#4G	3"
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400	400D	3#600KCMIL & 1#2G	3-1/2"
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2000	2000D	(5 SETS OF) 3#600KCMIL & 1#250KCMIL G	(5) 3-1/2"
FEEDER SCHEDULE NOTES:			
1. WIRING SIZES ARE BASED ON COPPER THWN/THHN AS PRESCRIBED IN NEC			
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3. WHERE MULTIPLE SETS ARE INDICATED, PROVIDE PHASE, NEUTRAL AND GROUNDING CONDUCTOR IN EACH CONDUIT OF EQUAL LENGTH AND MANUFACTURER.			

DRAWING NOTES

1. LATCHED TYPE MASTER TARGET DATA PANEL. SEE DRAWING E-302. TYPICAL OF (9) MASTER TARGET DATA PANELS (MTDP A).
2. LATCHED TYPE TARGET DATA PANEL. SEE DRAWING E-303. TYPICAL OF (54) TARGET DATA PANELS (TDP B THROUGH TDP G).
3. ARMORED CAT 6 DIRECT BURIED SHIELDED FOUR PAIR DATA CABLE. TYPICAL OF (9).
4. ARMORED CAT 6 DIRECT BURIED SHIELDED FOUR PAIR DATA CABLE. TYPICAL OF (9). DATA RUNS BETWEEN TARGETS MUST BE LESS THAN 300FT.
5. TOWER JUNCTION BOX. SEE DRAWING E-304.
6. (3) CAT 6 CABLES IN 3" CONDUIT.
7. VERY HIGH SPEED DIGITAL SUBSCRIBER LINE. TYPICAL OF (9). MODEMS SHALL BE PROVIDED AND INSTALLED BY TARGET VENDOR; CONTRACTOR SHALL TERMINATE CAT6 ON PATCH PANEL IN DTR.
8. L-COM SURGE PROTECTOR. PROVIDE HGLND-D1-DT HYPERLINK WIRELESS BRAND INDOOR DIN 3 RAIL MOUNT DSL/TELEPHONE LIGHTNING SURGE PROTECTOR; OR APPROVED EQUIVALENT. TYPICAL OF (9).

GENERAL NOTES

A. ALL EXTERIOR DATA CABLING SHALL BE DIRECT BURIED CAT6 FLOODED POLYETHYLENE JACKETED CABLING.

REVISED DRAWING 07/02/2025

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SHEET TITLE:
ONE–LINE DIAGRAMS
BASE BID

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E–601

SHEET OF

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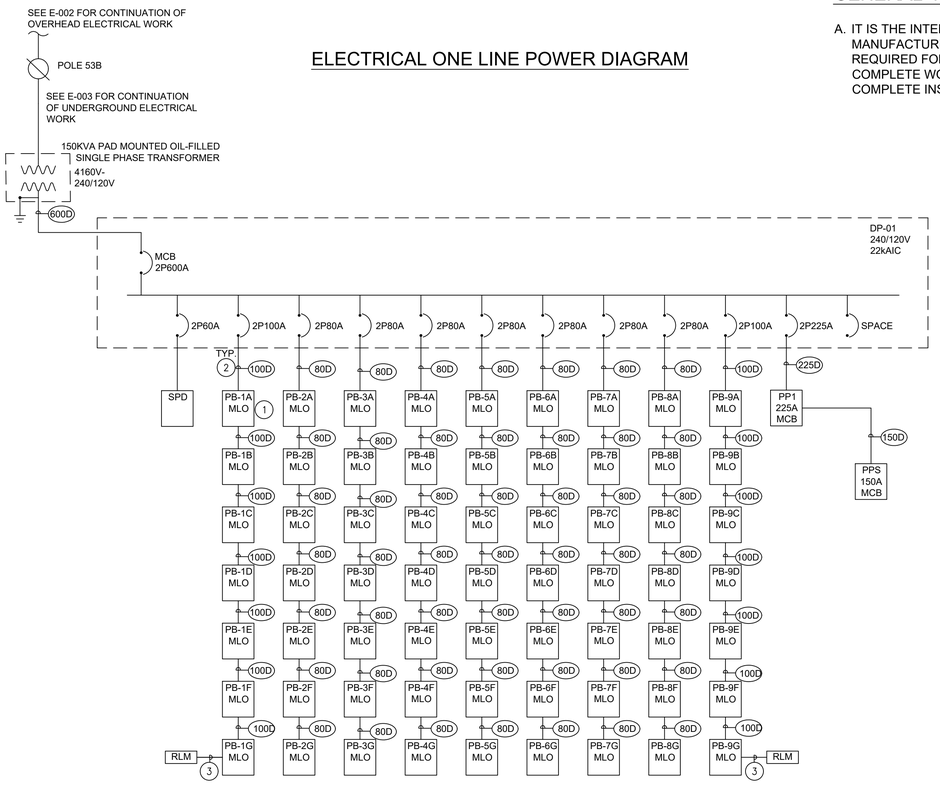

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MAXIMUM AMPERE RATING	DWG TAG	PHASE, NEUTRAL, & GROUND CONDUCTORS	CONDUIT
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STATE OF NEW YORK · CASE H. SIKEMA · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
⚠ SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
ONE–LINE DIAGRAMS
ALT 1

DRAWING NUMBER:
E–601A

SHEET OF

36x24 PLOT SHEET
Jun 30,2025 – 1:06pm
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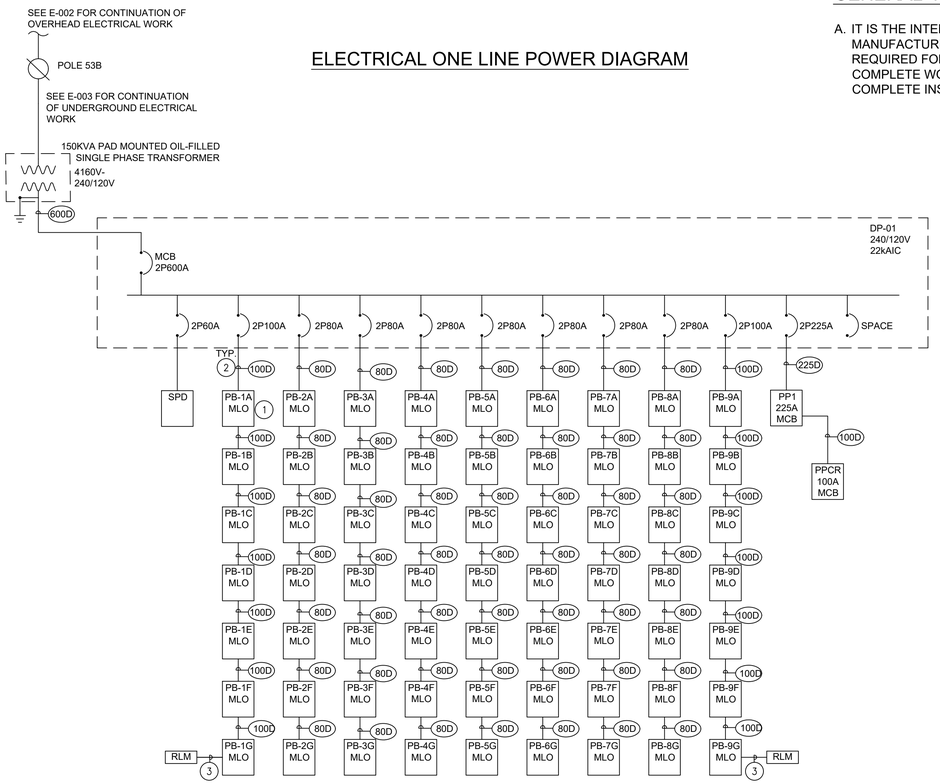
ELECTRICAL ONE LINE POWER DIAGRAM



GENERAL NOTES

A. IT IS THE INTENT OF THESE RISER DIAGRAMS TO SHOW A COMPLETE WORKING SYSTEM. REFER TO DETAILS AND MANUFACTURER'S INSTALLATION MANUALS FOR ADDITIONAL INFORMATION. NOT ALL DETAILS AND INFORMATION REQUIRED FOR A COMPLETE SYSTEM ARE SHOWN AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COMPLETE WORKING SYSTEM AS INTENDED. ALL INCIDENTAL ITEMS NOT FULLY DESCRIBED, BUT NECESSARY FOR THE COMPLETE INSTALLATION ARE TO BE PROVIDED.

DRAWING NOTES

1. PANEL PB-1A. SEE DRAWING E-301 FOR PANELBOARD SCHEDULE. TYPICAL FOR ALL PB UNLESS OTHERWISE NOTED. USE BURNDY VERSITAPE OR APPROVE EQUAL TO CONNECT NEUTRALS AND GROUND WIRES TO FEED NEXT/PREVIOUS PB.

2. ALL DOWNRANGE EXTERIOR SECONDARY CABLING SHALL BE DIRECT BURIED TYPE CU 600/1000V XLPE INSULATION AIA PVC JACKET XHHW-2. CT RATED SUNLIGHT RESISTANT FOR DIRECT BURIAL SILICONE FREE.

3. PROVIDE (2) #12 AND (1) #12 GND DIRECT BURIED FROM SIT PANEL TO WP IN USE QUAD RECEPTACLE SERVING RANGE LIMIT MARKER. PROVIDE SINGLE ON/OFF SWITCH IN CONTROL TOWER TO CONTROL ALL RANGE LIMIT MARKERS.

FEEDER SCHEDULE (COPPER 600V) SINGLE PHASE 3-WIRE W/GROUND			
MAXIMUM AMPERE RATING	DWG TAG	PHASE, NEUTRAL, & GROUND CONDUCTORS	CONDUIT
20	20D	3#12 & 1#12G	3/4"
30	30D	3#10 & 1#10G	3/4"
40	40D	3#8 & 1#10G	3/4"
50	50D	3#6 & 1#10G	1"
60	60D	3#4 & 1#10G	1-1/4"
70	70D	3#4 & 1#8G	1-1/4"
80	80D	3#3 & 1#8G	1-1/4"
90	90D	3#2 & 1#8G	1-1/2"
100	100D	3#2 & 1#8G	1-1/2"
110	110D	3#1 & 1#6G	2"
125	125D	3#1/0 & 1#6G	2"
150	150D	3#1/0 & 1#6G	2"
175	175D	3#2/0 & 1#6G	2"
200	200D	3#3/0 & 1#6G	2-1/2"
225	225D	3#4/0 & 1#4G	2-1/2"
250	250D	3#250KCMIL & 1#4G	2-1/2"
300	300D	3#350KCMIL & 1#4G	3"
350	350D	3#500KCMIL & 1#2G	3-1/2"
400	400D	3#600KCMIL & 1#2G	3-1/2"
450	450D	(2 SETS OF) 3#4/0 & 1#2G	(2) 2-1/2"
500	500D	(2 SETS OF) 3#250KCMIL & 1#2G	(2) 2-1/2"
600	600D	(2 SETS OF) 3#350KCMIL & 1#1G	(2) 2-1/2"
700	700D	(2 SETS OF) 3#500KCMIL & 1#1/0G	(2) 3"
800	800D	(2 SETS OF) 3#600KCMIL & 1#1/0G	(2) 3"
1000	1000D	(3 SETS OF) 3#500KCMIL & 1#2/0G	(3) 3"
1200	1200D	(3 SETS OF) 3#600KCMIL & 1#3/0G	(3) 3-1/2"
1600	1600D	(4 SETS OF) 3#600KCMIL & 1#4/0G	(4) 3-1/2"
2000	2000D	(5 SETS OF) 3#600KCMIL & 1#250KCMIL G	(5) 3-1/2"
FEEDER SCHEDULE NOTES:			
1. WIRING SIZES ARE BASED ON COPPER THWN/THHN AS PRESCRIBED IN NEC			
2. CONDUIT SIZES ARE BASED ON EMT.			
3. WHERE MULTIPLE SETS ARE INDICATED, PROVIDE PHASE, NEUTRAL AND GROUNDING CONDUCTOR IN EACH CONDUIT OF EQUAL LENGTH AND MANUFACTURER.			

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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SHEET TITLE:
ONE–LINE DIAGRAMS
ALT 1&2

DRAWING NUMBER:
E–601B

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 - 1:07pm
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LIGHTING FIXTURE SCHEDULE

TAG	DESCRIPTION	BASIS OF DESIGN MANUFACTURER	MODEL	SIZE	MOUNTING	LUMENS (lm)	WATTS (w)	LPD (lm/w)	MIN. CRI	COLOR TEMP (K)	BALLAST	VOLTAGE	FINISH	NOTES
A03	2X2 RECESSED LED	LITHONIA	CPX-ALO7-80CRI-SWW7-SWL-MVOLT	2X2	RECESSED	2500/3200/4000	20-34	VARY	80	35/40/50	LED	MVOLT	SATIN WHITE	VARIABLE LUMEN AND COLOR TEMP
B01	4X1 LED STRIP LIGHT	LITHONIA	CSS-L48-ALO3-MVOLT-SWW3-80CRI	4" STRIP	PENDANT	3851-5884	27-43	VARY	80	35/40/50	LED	MVOLT	WHITE	VARIABLE LUMEN AND COLOR TEMP
E01	EXTERIOR LED - WHITE	BARNLIGHT	BLE-W-QS-CGG-200-CLR-E26	10"X5"	WALL	-	100	-	-	-	INCANDESCENT LAMP	120	CLEAR LED	
E02	EXTERIOR LED - RED	BARNLIGHT	BLE-W-QS-CGG-200-CLR-E26	10"X5"	WALL	-	100	-	-	-	INCANDESCENT LAMP	120	CLEAR LED	SPECIFY WITH SUNLITE INCANDESCENT VAPORPROOF TO ACHIEVE RED LIGHT
E03	HELIPAD WARNING LIGHT	FLIGHT LIGHT INC	FL-410-R-AC1-S-LSM-P FL-81021	11.25" H	LOW SURFACE MOUNT	-	116	-	-	-	INCANDESCENT LAMP	120	RED	MOUNT TO TOP OF OBSERVATION TOWER, PHOTOSENSOR CONTROL 'ON' AT NIGHT. FAA/ETL L-810/ICAO ANNEX 14 COMPLIANT
E04	EXTERIOR FLOOD LIGHT	LITHONIA	ESXF2 ALO SWW2 KY DDB ALO SWW2 PE 120-277 80CRI	10"X7"	KNUCKLE	3500-7500L	200	VARY	-	30/40/50	LED	120	BLACK	IP66 RATED COLOR AND LUMEN SELECTABLE
EX1	EXIT SIGN	LITHONIA	EXRG EL M6	12"X7.2"	CEILING	-	1	-	-	-	LED	120/277	R/G SWITCHABLE	
EM1	EMERGENCY BATTERY PACK WITH (2) HEADS	LITHONIA	ELM6L-LV/OLT-L TP-SDRT	13.4"X6"	SURFACE	1100	5	220	-	-	LED	MVOLT	WHITE	CAPABLE OF SUPPORTING REMOTE HEAD
EM2	EMERGENCY BATTERY PACK WITH (1) HEAD	LITHONIA	ELMRE-LP220L-SGL WP/VS SML W	5"X7"	SURFACE	110	1.2	92	-	-	LED	-	WHITE	EXTERIOR RATED WITH ACCESSORY AS SCHEDULED - REMOTE HEAD

GENERAL NOTES

A. ALL FIXTURES SHALL CARRY A UL LABEL.

B. THESE NUMBERS ARE NOT COMPLETE CATALOG NUMBERS. PROVIDE ALL REQUIREMENTS ON SCHEDULE, NOTES, SPECS AND DRAWINGS.

C. PROVIDE ALL MOUNTING HARDWARE NECESSARY FOR A COMPLETE INSTALLATION.

D. MODELS ARE GIVEN FOR QUALITY ONLY. SUBSTITUTE LIGHT FIXTURES SHALL BE OF APPROVED EQUIVALENT OR GREATER AS APPROVED BY OWNER.

MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT			ELECTRICAL LOAD				POWER CONNECTION				STARTER				DISCONNECT/SAFETY SWITCH				NOTES
EQUIP TAG	EQUIPMENT TYPE	LOCATION	HP	FLA	VOLTAGE	PHASE	BREAKER SIZE	WIRE AND CONDUCTOR SIZE	CONNECTION BY DIVISION	HOMERUN TO PANEL	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	
UH-1	UNIT HEATER	STORAGE	4.02		208	1	60	3#3, 1#6G, 1-1/4"C	26	PPS - #3,10					NON-FUSED	1	EC	EC	
ERV-1	ENERGY RECOVERY VENTILATOR	CLASSROOM BUILDING			120	1		2#12, 1#12 EG, 3/4"C	26	PPCR - #9					NON-FUSED	1	EC	EC	
PTHP-1	PTHP	OFFICE SPACE		14.78	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
PTHP-2	PTHP	CONTROL TOWER		14.78	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
AH-1	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG., 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC					
AH-2	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG., 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC	60A, RATED FUSED 50				
HP-1	HEAT PUMP (OUTDOOR UNIT)	CLASSROOM		23.2	208	1	50	2#10, 1#10EG, 3/4"C	26	PPCR - #5,10					60A FUSED	4X	EC	EC	1
SF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #8	MANUAL MOTOR STARTER	1	EC	EC					
EF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #7	MANUAL MOTOR STARTER	1	EC	EC					
EF-2	FAN	STORAGE	1/6W		120	1	20	2#12, 1#12 EG, 3/4"C	26	PPS - #11	MANUAL MOTOR STARTER	1	EC	EC					

EQUIPMENT SCHEDULE NOTES:

1. PROVIDE SPARE 3/4" C WITH PULLSTRING FROM INDOOR UNIT TO OUTDOOR UNIT(S) TO ACCOMMODATE CONTROL WIRING.

BUS AMPS: 600A							MCB:	600	A	NEMA 3R
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 22kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)	CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
FIRING LINE 01	100A	2	1	3.36	3.36		2	2	100A	FIRING LINE 02
			3			3.36 3.36	4			
FIRING LINE 03	100A	2	5	3.36	3.36		6	2	100A	FIRING LINE 04
			7			3.36 3.36	8			
FIRING LINE 05	100A	2	9	3.36	3.36		10	2	100A	FIRING LINE 06
			11			3.36 3.36	12			
FIRING LINE 07	100A	2	13	3.36	3.36		14	2	100A	FIRING LINE 08
			15			3.36 3.36	16			
FIRING LINE 09	100A	2	17	3.86	14.4		18	2	225A	PP1
			19			3.36 15.4	20			
SPD	60A	2	21				22	2	15A	SPARE
			23				24			
SPACE			25				26			SPACE
			27				28			
Total Load (kVA):				45.1		45.6	TOTAL CONN. (kVA):			90.7
Total Amp (A):				187.9		190	TOTAL CONN. (A):			190

PP1										
BUS AMPS: 250A							MLO:	225	A	NEMA 3R
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 10kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)	CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
PPS (STORAGE)	150A	2	1	5.4	6.6		2	2	100A	PPCR (CLASSROOM)
			3			6.2 7.3	4			
PPCT (CONTROL TOWER)	100A	2	5	2.3	0		6	2	100A	SPARE
			7			1.9 0	8			
SPACE			9				10			SPACE
			11				12			
SPACE			13				14			SPACE
			15				16			
SPACE			17				18			SPACE
			19				20			
SPACE			21				22			SPACE
			23				24			
Total Load (kVA):				14.4		15.4	TOTAL CONN. (kVA):			29.8
Total Amp (A):				60		64.2	TOTAL CONN. (A):			64.2

PPCT (CONTROL TOWER) BASE BID										
BUS AMPS: 100A						MCB:	100	A	MOUNT: SURFACE	
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V		PANEL AIC RATING: 10kA				
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)	B(kVA)	CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION	
LIGHTING	20	1	1	0.2	0.025	2	1	20	LIGHTING EMERGENCY AND EXIT	
LIGHITNG EXTEIOR	20	1	3		0.04 0.36	4	1	20	RECEPTACLES GENERAL	
RECEPT COMP	20	1	5	0.18	0.18	6	1	20	RECEPT COMP	
RECEPT COMP	20	1	7		0.18 0.36	8	1	20	RECPT DATA RACK	
RECEPT DATA RACK	20	1	9	0.36	0.48	10	2	20	PTHP-2	
PTHP-2	20	1	11		0.48 0.48	12				
	20	1	13	0.48	0.36	14	1	20	QUAD - TELEPHONE BOARD	
RANGE LIMIT MARKER RIGHT	20	1	15		.3	16	1	20	SPARE	
RANGE LIMIT MARKER LEFT	20	1	17	.3		18	1	20	SPARE	
SPARE	20	1	19			20	1	20	SPARE	
SPARE	20	1	21			22	1	20	SPARE	
SPARE	20	1	23			24	1	20	SPARE	
Total Load (kVA):				2.3	1.9	TOTAL CONN. (kVA):			4.2	
Total Amp (A):				9.6	7.9	TOTAL CONN. (A):			9.6	

REVISED DRAWING 07/02/2025

NEW YORK STATE Office of General Services

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CERTIFICATE OF AUTHORIZATION #: 037711

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PATRIOT DESIGN & CONSULTING STILL SERVING

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SHEET TITLE:

LIGHTING AND PANELBOARD SCHEDULES BASE BID

DRAWING NUMBER:

E–602

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT			ELECTRICAL LOAD				POWER CONNECTION				STARTER				DISCONNECT/SAFETY SWITCH				NOTES
EQUIP TAG	EQUIPMENT TYPE	LOCATION	HP	FLA	VOLTAGE	PHASE	BREAKER SIZE	WIRE AND CONDUCTOR SIZE	CONNECTION BY DIVISION	HOMERUN TO PANEL	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	
UH-1	UNIT HEATER	STORAGE	4.02		208	1	80	3#3, 1#8G., 1-1/4"C	26	PPS - #8,10					NON-FUSED	1	EC	EC	
ERV-1	ENERGY RECOVERY VENTILATOR	CLASSROOM BUILDING			120	1		2#12, 1#12 EG, 3/4"C	26	PPCR - #3					NON-FUSED	1	EC	EC	
PTHP-1	PTHP	OFFICE SPACE		14.78	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
PTHP-2	PTHP	CONTROL TOWER		14.78	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
AH-1	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG, 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC					
AH-2	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG, 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC					
HP-1	HEAT PUMP (OUTDOOR UNIT)	CLASSROOM		23.2	208	1	50	2#10, 1#10EG, 3/4"C	26	PPCR - #9, 10					60A, RATED FUSED 50	4X	EC	EC	1
SF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #5	MANUAL MOTOR STARTER	1	EC	EC					
EF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #7	MANUAL MOTOR STARTER	1	EC	EC					
EF-2	FAN	STORAGE	18W		120	1	20	2#12, 1#12 EG., 3/4"C	26	PPS - #11	MANUAL MOTOR STARTER	1	EC	EC					

EQUIPMENT SCHEDULE NOTES:

1. PROVIDE SPARE 3/4" C WITH PULLSTRING FROM INDOOR UNIT TO OUTDOOR UNIT(S) TO ACCOMMODATE CONTROL WIRING.

PPS (STORAGE) (ALT 1)

BUS AMPS: 150A							MCB:	100	A	MOUNT: SURFACE
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 10kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)	CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
LIGHTING	20	1	1	0.48	0.05		2	1	20	EMERGENCY LIGHTING & EXIT
RECEPTACLES INTERIOR	20	1	3			0.54	4	1	20	RECEPTACLES INTERIOR
RECEPTACLES EXTERIOR	20	1	5	0.36	0.04		6	1	20	LIGHTING EXTERIOR
PTHP-1	20	1	7			0.48	8	2	40	UH-1
		1	9	0.48	3.75		10			
EF-2	20	1	11			0.5	12	1	20	QUAD - TELEPHONE BOARD
SPARE	20	1	13				14	1	20	SPARE
SPARE	20	1	15				16	1	20	SPARE
SPARE	20	1	17				18	1	20	SPARE
SPARE	20	1	19				20	1	20	SPARE
SPARE	20	1	21				22	1	20	SPARE
SPARE	20	1	23				24	1	20	SPARE
Total Load (kVA):				5.2		6.2	TOTAL CONN. (kVA):			11.4
Total Amp (A):				21.7		25.8	TOTAL CONN. (A):			25.8

PP1

BUS AMPS: 250A						MLO:	225	A	NEMA 3R
PHASE/WIRE: 1P 3W			VOLTAGE: 120/240V			PANEL AIC RATING: 10kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)	B(kVA)	CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
PPS (STORAGE)	150A	2	1	5.2	6.9	2	2	100A	PPCR (CLASSROOM)
			3		6.2 7.3	4			
PPCT (CONTROL TOWER)	60A	2	5	7.3	0	6	2	60A	SPARE
			7		1.8 0	8			
SPACE			9			10			SPACE
			11			12			
SPACE			13			14			SPACE
			15			16			
SPACE			17			18			SPACE
			19			20			
SPACE			21			22			SPACE
			23			24			
Total Load (kVA):				14.4	15.4	TOTAL CONN. (kVA):			29.8
Total Amp (A):				60	64.2	TOTAL CONN. (A):			64.2

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 020682

PATRIOT DESIGN & CONSULTING
STILL SERVING

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STATE OF NEW YORK · CASEY H. SIKES · 081178 · LICENSED PROFESSIONAL ENGINEER
5-30-25
EXPIRES 6-30-26

CONTRACT:
ELECTRICAL–HVAC

TITLE:
PROVIDE AUTOMATED
RECORD FIRE FIRING RANGE

LOCATION:
CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:
NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:
LIGHTING AND PANELBOARD SCHEDULES ALT 1

DRAWING NUMBER:
E–602A

SHEET OF

36x24 PLOT SHEET

Jun 30,2025 – 1:07pm
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MECHANICAL EQUIPMENT SCHEDULE

EQUIPMENT			ELECTRICAL LOAD				POWER CONNECTION				STARTER				DISCONNECT/SAFETY SWITCH				NOTES
EQUIP TAG	EQUIPMENT TYPE	LOCATION	HP	FLA	VOLTAGE	PHASE	BREAKER SIZE	WIRE AND CONDUCTOR SIZE	CONNECTION BY DIVISION	HOMERUN TO PANEL	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	TYPE	NEMA ENCLOSURE	FURNISHED BY	INSTALLED BY	
UH-1	UNIT HEATER	STORAGE	0.02		208	1	20	2#12, 1#12G, 1 1/4"C	26	PPS - #8, 10					NON-FUSED	1	EC	EC	
ERV-1	ENERGY RECOVERY VENTILATOR	CLASSROOM BUILDING			120	1		2#12, 1#12 EG, 3/4"C	26	PPCR - #9					NON-FUSED	1	EC	EC	
PTHP-1	PTHP	OFFICE SPACE		14.7/8	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
PTHP-2	PTHP	CONTROL TOWER		14.7/8	208	1	20	2#12, 1#12 EG, 3/4"C	26	REFER TO PLANS									
AH-1	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG, 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC					
AH-2	HEAT PUMP (INDOOR UNIT)	CLASSROOM			208	1	N/A	2#12, 1#12 EG, 3/4"C	26	POWERED FROM OUTDOOR UNIT	MANUAL MOTOR STARTER	1	EC	EC					
HP-1	HEAT PUMP (OUTDOOR UNIT)	CLASSROOM		23.2	208	1	50	2#10, 1#10EG, 3/4"C	26	PPCR - #8, 10					60A, RATED FUSED 50	4X	EC	EC	1
SF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #6	MANUAL MOTOR STARTER	1	EC	EC					
EF-1	FAN	CLASSROOM	1		120	1	40	2#12, 1#12 EG, 3/4"C	26	PPCR - #7	MANUAL MOTOR STARTER	1	EC	EC					
EF-2	FAN	STORAGE	1/6		120	1	20	2#12, 1#12 EG, 3/4"C	26	PPS - #11	MANUAL MOTOR STARTER	1	EC	EC					

EQUIPMENT SCHEDULE NOTES:

1. PROVIDE SPARE 3/4" C WITH PULLSTRING FROM INDOOR UNIT TO OUTDOOR UNIT(S) TO ACCOMMODATE CONTROL WIRING.

PPCR (CLASSROOM) (ALT 1&2)

BUS AMPS: 100A							MCB:	100	A	MOUNT: SURFACE
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 10kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)		CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
LIGHTING	20	1	1	0.4	0.05			2	1	20	EMERGENCY LTNG AND EXIT
LIGHTING EXTEIOR	20	1	3			0.04	1.08	4	1	20	RECEPT GENERAL
RECEPT EXTERIOR	20	1	5	0.36	1.8			6	1	40	SF-1
EF-1	40	1	7			1.8	3.48	8	2	50	HP-1
ERV-1	20	1	9	0.8	3.48			10			
SF/EF TIME CLOCK	20	1	11			0.5	0.36	12	1	20	QUAD - TELEPHONE BOARD
SPARE	20	1	13					14	1	20	SPARE
SPARE	20	1	15					16	1	20	SPARE
SPARE	20	1	17					18	1	20	SPARE
SPARE	20	1	19					20	1	20	SPARE
SPARE	20	1	21					22	1	20	SPARE
SPARE	20	1	23					24	1	20	SPARE
Total Load (kVA):				6.9		7.3		TOTAL CONN. (kVA):			14.2
Total Amp (A):				28.8		30.4		TOTAL CONN. (A):			30.4

DP1

BUS AMPS: 600A							MCB:	600	A	NEMA 3R
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 22kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)		CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
FIRING LINE 01	100A	2	1	3.35	3.35			2	2	100A	FIRING LINE 02
			3			3.35	3.35	4			
FIRING LINE 03	100A	2	5	3.35	3.35			6	2	100A	FIRING LINE 04
			7			3.35	3.35	8			
FIRING LINE 05	100A	2	9	3.35	3.35			10	2	100A	FIRING LINE 06
			11			3.35	3.35	12			
FIRING LINE 07	100A	2	13	3.35	3.35			14	2	100A	FIRING LINE 08
			15			3.35	3.35	16			
FIRING LINE 09	100A	2	17	3.35	19.4			18	3	200A	DP1
			19			3.35	16.4	20			
SPD	60A	2	21					22	2	150A	SPARE
			23					24			
SPACE			25					26			SPACE
			27					28			
Total Load (kVA):				45.1		45.6		TOTAL CONN. (kVA):			90.7
Total Amp (A):				187.9		190		TOTAL CONN. (A):			190

PP1

BUS AMPS: 250A							MLO:	225	A	NEMA 3R
PHASE/WIRE: 1P 3W				VOLTAGE: 120/240V			PANEL AIC RATING: 10kA			
CIRCUIT DESCRIPTION	TRIP AMPS	POLE	CIRC NO.	A(kVA)		B(kVA)		CIRC NO.	POLE	TRIP AMPS	CIRCUIT DESCRIPTION
PPS (STORAGE)	150A	2	1	5.4	6.9			2	2	100A	PPCR (CLASSROOM)
			3			8.2	7.3	4			
PPCT (CONTROL TOWER)	60A	2	5	2.3	0			6	1	60A	SPARE
			7			1.9	0	8			
SPACE			9					10			SPACE
			11					12			
SPACE			13					14			SPACE
			15					16			
SPACE			17					18			SPACE
			19					20			
SPACE			21					22			SPACE
			23					24			
Total Load (kVA):				14.4		15.4		TOTAL CONN. (kVA):			29.8
Total Amp (A):				60		64.2		TOTAL CONN. (A):			64.2

REVISED DRAWING 07/02/2025

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STATE OF NEW YORK — CASEY H. SIKES — 081178 — LICENSED PROFESSIONAL ENGINEER

5-30-25

EXPIRES 6-30-26

CONTRACT:

ELECTRICAL – HVAC

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

MARK	DATE	DESCRIPTION
1 SDC	7/2/2025	ADDENDUM NO. 1
CRB	5/30/2025	BID DOCUMENT

PROJECT NUMBER:	47574 - E
DESIGNED BY:	ACS
DRAWN BY:	SDC
FIELD CHECK:	–
APPROVED:	CHS

SHEET TITLE:

LIGHTING AND PANELBOARD SCHEDULES ALT 1&2

DRAWING NUMBER:

E–602B

SHEET OF

Jun 30,2025 – 1:06pm
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36x24 PLOT SHEET

HVAC CONTROLS SCOPE

1. DUCTLESS SPLIT SYSTEM HEAT PUMP:
   - 1.1. PROVIDE WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT TO INTERFACE WITH SPLIT SYSTEM.
   - 1.2. SUMMER TEMPERATURE: SET ROOM TEMPERATURE SETPOINT TO 70°F (ADJ) DURING OCCUPIED HOURS AND 80°F (ADJ) DURING UNOCCUPIED HOURS.
   - 1.3. WINTER TEMPERATURE: SET ROOM TEMPERATURE SETPOINT TO 70°F (ADJ) DURING OCCUPIED HOURS AND 60°F (ADJ) DURING UNOCCUPIED HOURS.
   - 1.4. SPLIT SYSTEM CONTROL IS INTERNAL TO THE UNIT BY HEAT PUMP MANUFACTURER'S CONTROLLER.
2. PTAC UNITS:
   - 2.1. PROVIDE WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT TO INTERFACE WITH PTAC UNITS.
   - 2.2. SUMMER TEMPERATURE: SET ROOM TEMPERATURE SETPOINT TO 70°F (ADJ) DURING OCCUPIED HOURS AND 80°F (ADJ) DURING UNOCCUPIED HOURS.
   - 2.3. WINTER TEMPERATURE: SET ROOM TEMPERATURE SETPOINT TO 70°F (ADJ) DURING OCCUPIED HOURS AND 60°F (ADJ) DURING UNOCCUPIED HOURS.
   - 2.4. PTAC CONTROL IS INTERNAL TO THE UNIT BY PTAC MANUFACTURER'S CONTROLLER.
3. UNIT HEATER
   - 3.1. UNIT HEATER CONTROL IS PROVIDED BY A UNIT MOUNTED LINE VOLTAGE THERMOSTAT.
   - 3.2. WINTER TEMPERATURE: SET ROOM TEMPERATURE SETPOINT TO 60°F (ADJ).
4. ERV-1, SF-1 AND EF-1
   - 4.1. VENTILATION AIR SYSTEM IS CONTROLLED BY A WALL MOUNTED TIME CLOCK. SET TIME CLOCK TO OPEN DAMPERS AND ENERGIZE SUPPLY AND EXHAUST FANS DURING HOURS OF OCCUPATION. DAMPERS WILL CLOSE AND FANS WILL DE-ENERGIZE DURING UNOCCUPIED HOURS. COORDINATE WITH DIRECTOR'S REPRESENTATIVE.
5. EF-2
   - 5.1. EF-2 WILL BE CONTROLLED BY A WALL MOUNTED SWITCH.

SYMBOLS LEGEND

- REFRIGERANT GAS PIPING
- REFRIGERANT LIQUID PIPING
- CONDENSATE DRAIN
- PIPE DOWN
- FLEXIBLE CONNECTOR
- (X) KEYED NOTE DESIGNATOR
- VOLUME DAMPER
- (M) MOTORIZED DAMPER
- (T) THERMOSTAT
- (TC) TIME CLOCK
- (S) WALL SWITCH
- CONTROLS WIRING

CODE SUMMARY

CLASSIFICATION OF WORK (EBCNYS CHAPTER 6, SECTION 603):
WORK AREA 1: OFFICES 1C24 AND 1S01 – ALTERATION – LEVEL 2
WORK AREA 2: ALL OTHER AREAS – ALTERATION – LEVEL 1

OCCUPANCY CLASSIFICATION (BCNYS, SECTION 303.4): A-3

CONSTRUCTION CLASSIFICATION (BCNYS, SECTION 603): II (B)

SEISMIC REQUIREMENTS (BC1613 – ASCE 7-16)

SEISMIC RISK CATEGORY – II
SITE CLASS – D
SEISMIC DESIGN CATEGORY – B

ALL NON STRUCTURAL COMPONENTS HAVE AN IMPORTANCE FACTOR (Ip)=1.0, THEREFORE NO SEISMIC RESTRAINT IS REQUIRED.

HYDRONIC PIPING (MCNYS, CHAPTER 12)

HYDRONIC PIPING COMPLIES WITH CHAPTER 12 OF THE MCNYS

PIPING INSULATION (ECCCNYS), CHAPTER 4

HYDRONIC PIPING INSULATION COMPLIES WITH C403.11.3

FIRE RATED CONSTRUCTION

NOT APPLICABLE. NO PENETRATIONS THROUGH RATED PARTITIONS. FIRE STOPPING NOT REQUIRED.

LEGEND:

EBCNYS	2020 EXISTING BUILDING CODE OF NEW YORK STATE
BCNYS	2020 BUILDING CODE OF NEW YORK STATE
MCNYS	2020 MECHANICAL CODE OF NEW YORK STATE
PCNYS	2020 PLUMBING CODE OF NEW YORK STATE
ECCCNYS	2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE
ASCE 7-16	AMERICAN SOCIETY OF CIVIL ENGINEERS – 2016, MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES

COMPLY WITH THE FOLLOWING REQUIREMENTS DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
- 2020 BUILDING CODE OF NEW YORK STATE, CHAPTER 33, SAFEGUARDS DURING CONSTRUCTION.
- 2020 EXISTING BUILDING CODE, CHAPTER 15, CONSTRUCTION SAFEGUARDS
- 2020 FIRE CODE OF NEW YORK STATE, CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

REFER TO SPECIFICATION SECTION 014100 REGULATORY REQUIREMENTS FOR ADDITIONAL INFORMATION. DEMONSTRATE COMPLIANCE WITH REGULATORY REQUIREMENTS IN THE SITE SPECIFIC SAFETY PLAN REQUIRED PER SPECIFICATION SECTION 011100.

ABBREVIATIONS LEGEND

AH	AIR HANDLER	HP	HORSE POWER	SF	SQUARE FOOT
APD	AIR PRESSURE DROP	HZ	HERTZ	SP	STATIC PRESSURE
BTU	BRITISH THERMAL UNIT	IN	INCHES	TEMP	TEMPERATURE
BTUH	BTU PER HOUR	LAT	LEAVING AIR TEMPERATURE	TYP	TYPICAL
CFM	CUBIC FEET PER MINUTE	LBS	POUNDS	W	WIDTH/WATTS
COP	COEFFICIENT OF PERFORMANCE	MAX	MAXIMUM	WB	WET BULB
D	DEPTH/DRAIN	MBH	THOUSANDS OF BTU/HR	WC	WATER COLUMN
DB	DRY BULB	MCA	MINIMUM CIRCUIT AMPACITY	WPD	WATER PRESSURE DROP
DEG	DEGREE	MIN	MINIMUM		
DIA/ø	DIAMETER	MOCP	MAXIMUM OVERCURRENT PROTECTION		
DN	DOWN	NO	NUMBER		
EA	EXHAUST AIR	OA	OUTSIDE AIR		
EAT	ENTERING AIR TEMPERATURE	PD	PRESSURE DROP		
ECM	ELECTRONICALLY COMMUTATED MOTOR	PH	PHASE		
EER	ENERGY EFFICIENCY RATIO	PSIG	POUNDS PER SQUARE INCH GAUGE		
ESP	EXTERNAL STATIC PRESSURE	PTHP	PACKAGED TERMINAL HEAT PUMP		
EX	EXISTING	RA	RETURN AIR		
°F	DEGREES FAHRENHEIT	RL	REFRIGERANT LIQUID		
FPM	FEET PER MINUTE	RPM	REVOLUTIONS PER MINUTE		
FT	FEET	RS	REFRIGERANT SUPPLY		
FT WC	FEET OF WATER COLUMN	SA	SUPPLY AIR		
H	HEIGHT	SEER	SEASONAL ENERGY EFFICIENCY RATIO		

REVISED DRAWING 07/02/2025

Jul 02,2025 - 9:17am
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36x24 PLOT SHEET

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DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP
CERTIFICATE OF AUTHORIZATION #: 037711

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SAGE ENGINEERING ASSOCIATES, LLP

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STATE OF NEW YORK — DAVID P. LAVIGNE — 077495 — LICENSED PROFESSIONAL ENGINEER

CONTRACT: HVAC

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

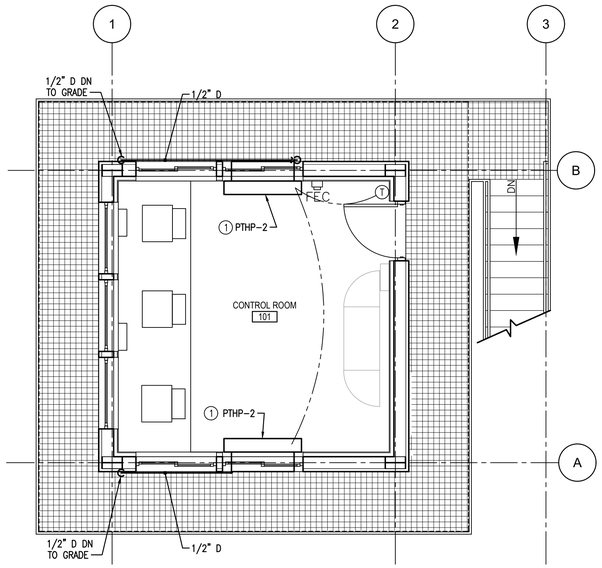
MARK	DATE	DESCRIPTION
1	07/02/2025	ADDENDUM NO. 1
	05/30/2025	BID SUBMISSION

PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE: CODE BLOCK, SYMBOLS LEGEND AND ABBREVIATIONS

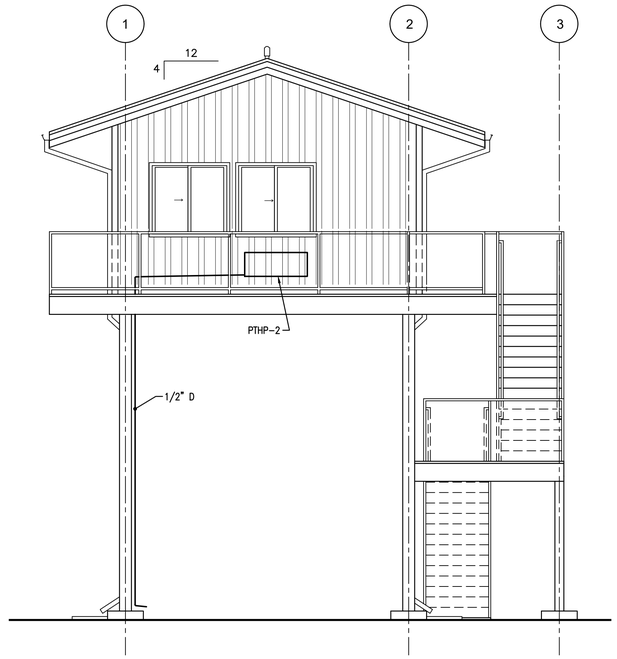
DRAWING NUMBER: M-001

SHEET OF



RANGE CONTROL TOWER
HVAC INSTALLATION PLAN - 3RD FLOOR

1 / M-CT-101 SCALE: 1/4" = 1'-0"



RANGE CONTROL TOWER
ELEVATION VIEW - SOUTH

2 / M-CT-101 SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. COORDINATE WITH "E" CONTRACTOR TO PROVIDE RECEPTACLE A MAXIMUM OF 24" OF UNIT

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

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STATE OF NEW YORK · DAVID P. LAVELLE · 077495 · LICENSED PROFESSIONAL ENGINEER

CONTRACT: HVAC

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
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CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE: RANGE CONTROL TOWER – MECHANICAL PLANS

DRAWING NUMBER: M-CT-101

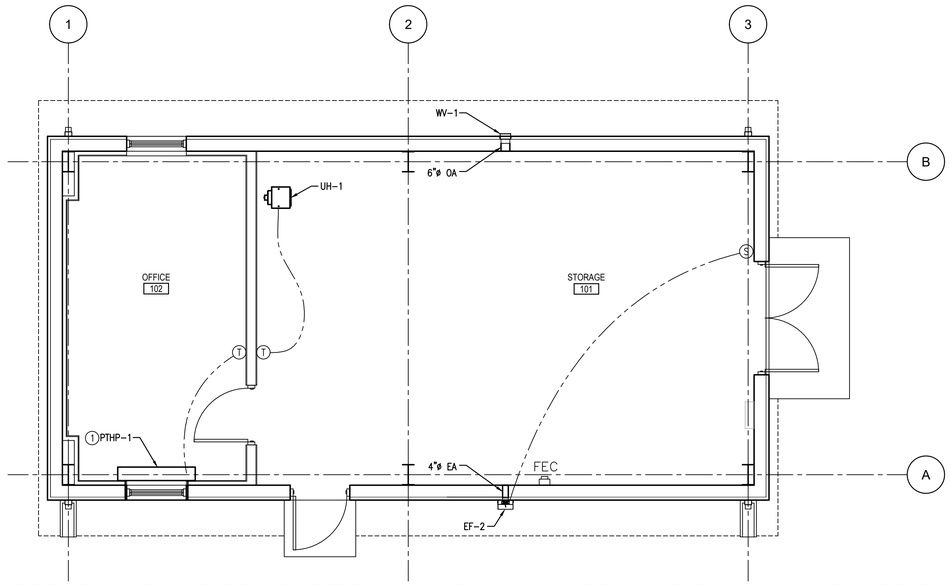
SHEET OF

Jul 02,2025 - 9:17am
W:\Work\EDP\4062 OGS Camp Smith Firing Range\CAD\M-CT-101.dwg

36x24 PLOT SHEET

KEYED NOTES:

1. COORDINATE WITH "E" CONTRACTOR TO PROVIDE RECEPTACLE A MAXIMUM OF 24" OF UNIT



1 M-OS-101 OPERATIONS AND STORAGE BUILDING HVAC INSTALLATION PLAN - FLOOR PLAN
SCALE: 1/4" = 1'-0"

NOTE:

1. ALL WORK ON THIS DRAWING IS PART OF ALTERNATE 1 ONLY.

REVISED DRAWING 07/02/2025

36x24 PLOT SHEET

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SAGE ENGINEERING ASSOCIATES, LLP

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STATE OF NEW YORK · DAVID P. LAVELLE · 077495 · LICENSED PROFESSIONAL ENGINEER

CONTRACT: HVAC

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

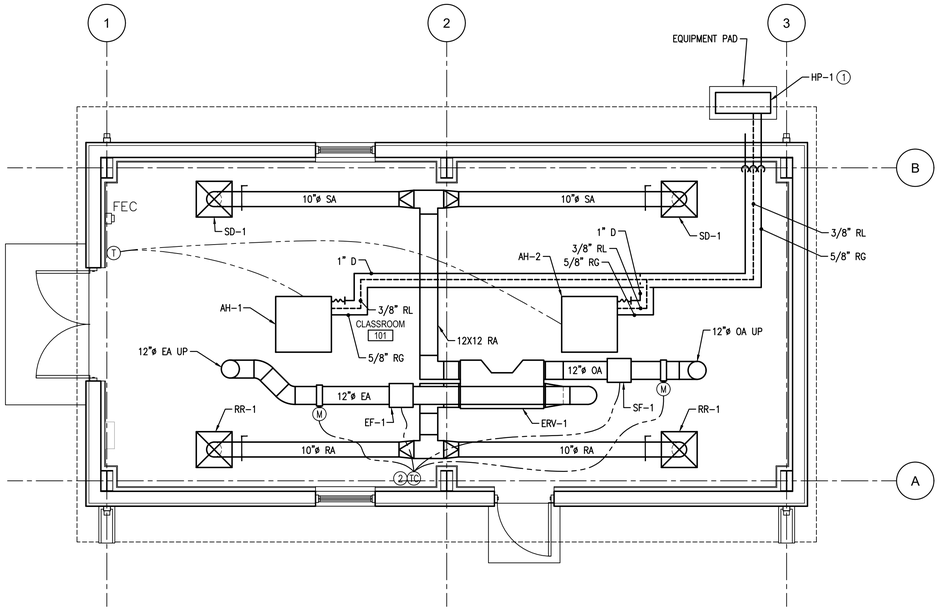
MARK	DATE	DESCRIPTION
1	07/02/2025	ADDENDUM NO. 1
	05/30/2025	BID SUBMISSION

PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE: OPERATIONS AND STORAGE BUILDING – MECHANICAL PLANS – ALTERNATE 1

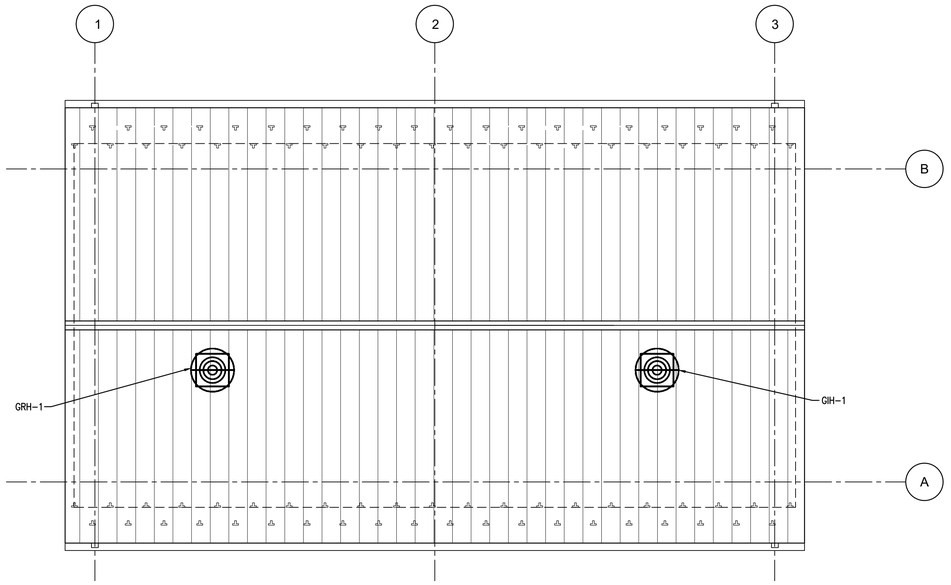
DRAWING NUMBER: M-OS-101

SHEET OF



1 M-RC-101 CLASSROOM HVAC INSTALLATION PLAN

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



2 M-RC-101 CLASSROOM HVAC INSTALLATION PLAN - ROOF

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

KEYED NOTES:

1. PROVIDE HEAT PUMP WITH MANUFACTURE'S 18" STAND.
2. SET TO OPERATE DURING HOURS OF OCCUPATION. COORDINATE TIMES WITH DIRECTOR'S REPRESENTATIVE.

NOTE:

1. ALL WORK ON THIS DRAWING IS PART OF ALTERNATE 2 ONLY.

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services

DESIGN & CONSTRUCTION

CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

ENVIRONMENTAL DESIGN PARTNERSHIP, LLP.

CERTIFICATE OF AUTHORIZATION #: 0018644

SAGE ENGINEERING ASSOCIATES, LLP

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CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

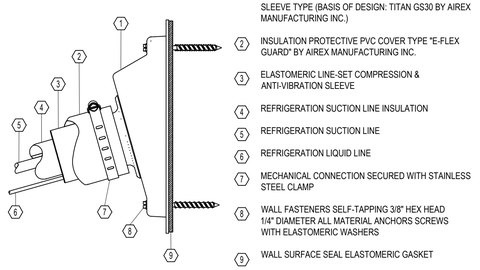
SHEET TITLE: RANGE CLASSROOM BUILDING – MECHANICAL PLANS – ALTERNATE 2

DRAWING NUMBER: M-RC-101

SHEET OF

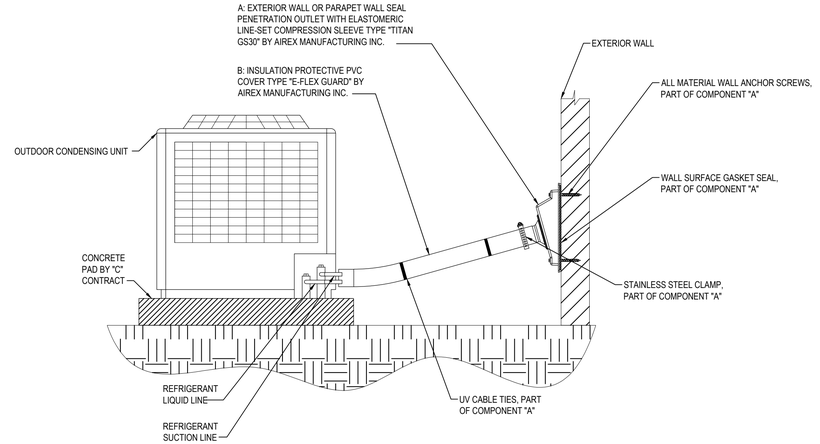
Jul 02,2025 - 9:17am
W:\Work\EDP\40662 OGS Camp Smith Firing Range\CAD\M-RC-101.dwg

36x24 PLOT SHEET

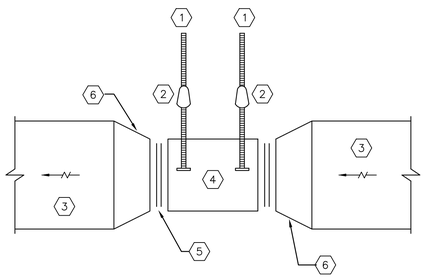


1. EXTERIOR WALL OR PARAPET WALL SEAL PENETRATION OUTLET WITH ELASTOMERIC LINE-SET COMPRESSION SLEEVE TYPE (BASIS OF DESIGN: TITAN GS30 BY AIREX MANUFACTURING INC.)
2. INSULATION PROTECTIVE PVC COVER TYPE "E-FLEX GUARD" BY AIREX MANUFACTURING INC.
3. ELASTOMERIC LINE-SET COMPRESSION & ANTI-VIBRATION SLEEVE
4. REFRIGERATION SUCTION LINE INSULATION
5. REFRIGERATION SUCTION LINE
6. REFRIGERATION LIQUID LINE
7. MECHANICAL CONNECTION SECURED WITH STAINLESS STEEL CLAMP
8. WALL FASTENERS SELF-TAPPING 3/8" HEX HEAD 1/4" DIAMETER ALL MATERIAL ANCHORS SCREWS WITH ELASTOMERIC WASHERS
9. WALL SURFACE SEAL ELASTOMERIC GASKET

1 M-501 REFRIGERATION PIPE PENETRATION DETAIL – ALTERNATE 2
SCALE: NONE



2 M-501 AIR-COOLED CONDENSING UNIT / REFRIGERANT PIPING DETAIL – ALTERNATE 2
SCALE: NONE



1. HANGER RODS TO STRUCTURE ABOVE
2. COMBINATION RUBBER AND SPRING ISOLATORS
3. DUCT SIZE AS SHOWN ON PLAN
4. IN-LINE FAN
5. FLEX CONNECTION (TYP.)
6. TRANSITION PIECE FROM DUCT SIZE TO FAN CONNECTION SIZE

3 M-501 CENTRIFUGAL INLINE FAN DETAIL – ALTERNATE 2
SCALE: NONE

NOTE:

1. ALL WORK ON THIS DRAWING IS PART OF ALTERNATE 2 ONLY

REVISED DRAWING 07/02/2025

NEW YORK STATE | Office of General Services
DESIGN & CONSTRUCTION

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STATE OF NEW YORK · DAVID P. LAVELLE · 077495 · LICENSED PROFESSIONAL ENGINEER

CONTRACT: HVAC

TITLE: PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION: CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT: NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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	05/30/2025	BID SUBMISSION

PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE: DETAILS AND CONTROLS DIAGRAMS – ALTERNATE 2

DRAWING NUMBER: M-501

SHEET OF

Jul 02,2025 - 9:17am
W:\Work\EDP\4062 OGS Camp Smith Firing Range\CAD\M-501.dwg
36x24 PLOT SHEET

PTHP SCHEDULE

TAG	SERVICE/LOCATION	TYPE	QUANTITY	COOLING CAPACITY TOTAL (MBH)	EER	HEATING CAPACITY TOTAL (MBH)	COP	AIR FLOW HIGH/LOW (CFM)	OUTSIDE AIR FLOW (CFM)	REFRIGERANT TYPE	ELECTRIC HEATER CAPACITY (KW)	UNIT WEIGHT (LBS)	ELECTRICAL DATA			BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
													VOLTS/HZ/PH	MCA	AMPS		
PTHP-2	CONTROL TOWER	PACKAGED TERMINAL	2	12,000	10.5	11,000	3.3	375/260	20	R410A	3.4	150	230/60/1	14.78	20	ISLANDAIRE EZDR122231#46AA	1,2,3,4,5,6,7

1. 42"Wx16"H DIMENSIONS.
2. PROVIDE STANDARD GRILLE.
3. PROVIDE STANDARD WALL SLEEVE.
4. PROVIDE WITH NEMA PLUG #6-20R.
5. PROVIDE WITH CONDUIT KIT WITH JUNCTION BOX.
6. PROVIDE WITH CONDENSATE DRAIN KIT. INSTALL WITH 1/4" PER FOOT PITCH FROM INDOOR TO OUTDOORS.
7. PROVIDE ONE UNIT WITH WALL THERMOSTAT INTERFACE, MASTER AND ONE UNIT WITH WALL THERMOSTAT INTERFACE, SLAVE.

REVISED DRAWING 07/02/2025

Jul 02,2025 - 9:17am
W:\Work\EDP\40662 OGS Camp Smith Firing Range\CAD\M-601.dwg

36x24 PLOT SHEET

NEW YORK STATE | **Office of General Services**

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CONSULTANT: ENVIRONMENTAL DESIGN PARTNERSHIP, LLP

CERTIFICATE OF AUTHORIZATION #: 037711

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CERTIFICATE OF AUTHORIZATION #: 0018644

SAGE ENGINEERING ASSOCIATES, LLP

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STATE OF NEW YORK · DAVID P. LAVELLE · 077495 · LICENSED PROFESSIONAL ENGINEER

CONTRACT:

HVAC

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

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11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE:

SCHEDULES

DRAWING NUMBER:

M-601

SHEET OF

FAN SCHEDULE

TAG	LOCATION	SERVICE	TYPE	DRIVE	CFM	ESP IN W.C.	RPM	ELECTRICAL DATA				MOTOR CONTROLLER TYPE	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
								MOTOR HP	BRAKE HP	VOLTS	PH.			
EF-2	STORAGE	STORAGE	WALL MOUNTED	DIRECT DRIVE	80	0.4	2,995	18 W	9.37 W	115	1	A1	FANTECH RVF4	2,3,4

1. PROVIDE MOTORIZED DAMPERS, WIRING BY "E" CONTRACTOR.
2. POWER INFORMATION PROVIDED IN WATTS.
3. PROVIDE WITH OPTIONAL FLANGE FOR WALL MOUNTING.
4. ALTERNATE 1.

PTHP SCHEDULE

TAG	SERVICE/LOCATION	TYPE	QUANTITY	COOLING CAPACITY TOTAL (MBH)	EER	HEATING CAPACITY TOTAL (MBH)	COP	AIR FLOW HIGH/LOW (CFM)	OUTSIDE AIR FLOW (CFM)	REFRIGERANT TYPE	ELECTRIC HEATER CAPACITY (KW)	UNIT WEIGHT (LBS)	ELECTRICAL DATA			BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
													VOLTS/HZ/PH	MCA	AMPS		
PTHP-1	OFFICE SPACE	PACKAGED TERMINAL	1	9,500	11.4	8,500	3.5	375/260	20	R410A	3.4	150	230/60/1	14.78	20	ISLANDAIRE EZDR092231F46AA	1,2,3,4,5,6,8

1. 42"Wx16"H DIMENSIONS.
2. PROVIDE STANDARD GRILLE.
3. PROVIDE STANDARD WALL SLEEVE.
4. PROVIDE WITH NEMA PLUG #6-20R.
5. PROVIDE WITH CONDUIT KIT WITH JUNCTION BOX.
6. PROVIDE WITH CONDENSATE DRAIN KIT. INSTALL WITH 1/4" PER FOOT PITCH FROM INDOOR TO OUTDOORS.
7. PROVIDE ONE UNIT WITH WALL THERMOSTAT INTERFACE, MASTER AND ONE UNIT WITH WALL THERMOSTAT INTERFACE, SLAVE.
8. ALTERNATE 1.

INTAKE/RELIEF HOOD SCHEDULE

TAG	LOCATION	SERVICE	CFM	HOOD VELOCITY (FPM)	AIR PRESSURE DROP (IN WC)	THROAT SIZE (ø)	HOOD SIZE (ø)	CURB CAP SIZE (LxW)	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
WV-1	WALL	STORAGE	80	15	NA	6	NA	NA	FANTECH COM6M	3,4

1. FURNISH ROOF CURB TO MATCH ROOF PITCH TO C-CONTRACT.
2. PROVIDE INSECT SCREEN.
3. PROVIDE WITH OPTIONAL BACK-DRAFT DAMPER MODEL RSK 6 OR EQUAL.
4. ALTERNATE 1.

ELECTRIC UNIT HEATER SCHEDULE

TAG	LOCATION / SERVICE	CAPACITY (KW)	LENGTH X WIDTH X HEIGHT (IN. X IN. X IN.)	ELECTRICAL		BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
				VOLTS	PHASE		
UH-1	STORAGE	3.0	17.25" X 14.25" X 17.5"	240	1	MODINE HER-30C-1101	1

1. PROVIDE WITH UNIT MOUNTED LINE VOLTAGE THERMOSTAT

NOTE:

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REVISED DRAWING 07/02/2025

Jul 02,2025 - 9:17am
W:\Work\EDP\4062 005 Camp Smith Firing Range\CAD\M-601A.dwg

36x24 PLOT SHEET

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DESIGN & CONSTRUCTION

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CERTIFICATE OF AUTHORIZATION #: 037711

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STATE OF NEW YORK · DAVID P. LAVIGNE · 077495 · LICENSED PROFESSIONAL ENGINEER

CONTRACT:

HVAC

TITLE:

PROVIDE AUTOMATED RECORD FIRE FIRING RANGE

LOCATION:

CAMP SMITH TRAINING SITE
11 BEAR MOUNTAIN BRIDGE RD
CORTLANDT MANOR, NY 10567

CLIENT:

NEW YORK STATE DIVISION OF MILITARY AND NAVAL AFFAIRS

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	05/30/2025	BID SUBMISSION

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DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE:

SCHEDULES – ALTERNATE 1

DRAWING NUMBER:

M-601A

SHEET OF

FAN SCHEDULE

TAG	LOCATION	SERVICE	TYPE	DRIVE	CFM	ESP IN W.C.	RPM	ELECTRICAL DATA				MOTOR CONTROLLER TYPE	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
								MOTOR HP	BRAKE HP	VOLTS	PH.			
SF-1	CLASSROOM	CLASSROOM	INLINE FAN	DIRECT DRIVE, ECM	2000	1	1,049	1	0.58	115	1	A1	TCF DSI165AE	1,4
EF-1	CLASSROOM	CLASSROOM	INLINE FAN	DIRECT DRIVE, ECM	2000	1	1,049	1	0.58	115	1	A1	TCF DSI165AE	1,4

1. PROVIDE MOTORIZED DAMPERS, WIRING BY "E" CONTRACTOR.
2. POWER INFORMATION PROVIDED IN WATTS.
3. PROVIDE WITH OPTIONAL FLANGE FOR WALL MOUNTING.
4. ALTERNATE 2.

HEAT PUMP INDOOR UNIT/OUTDOOR UNIT

INDOOR UNIT

TAG	SERVICE	NUMBER OF INDOOR UNTIS	COOLING AIRFLOW RATE, DRY (CFM)	BTUH COOLING	BTUH HEATING	MOUNTING	ELECTRICAL			BASIS OF DESIGN MANUFACTURER & MODEL NO.
							VOLTS	PHASE	HZ	
AH-1,2	CLASSROOM	2	618/706/777	24,000	27,000	CEILING	208	1	60	SAMSUNG AM024BN4PCH/AA

OUTDOOR UNIT

TAG	COOLING CAPACITY BTUH	COOLING SEER BTU/W*H	HEATING CAPACITY BTUH	HEATING HSPF BTU/W*H	OPERATING TEMPERATURE RANGE °F				ELECTRICAL DATA					REFRIGERANT TYPE	REFRIGERANT (LBS)	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
					COOLING		HEATING		VOLTS	PH	HZ	MCA	MOCP				
					MAX.	MIN.	MAX.	MIN.									
HP-1	48,000	17.2	54,000	10.4	118.4	23.0	78.8	-13.0	208	1	60	29	50	R410A	7.05	SAMSUNG AM048TXMDCH/AA	ALL

1. PROVIDE WITH MERV13 FILTER KIT.
2. PROVIDE WITH BASE HEATER.
3. INDOOR UNIT IS POWERED FROM EXTERIOR UNIT (BY E-CONTRACT). MECHANICAL CONTRACTOR TO PROVIDE 14/3 CONNECTOR WIRE FOR CONTROLS/POWER FROM CONDENSING UNIT TO EVAPORATOR.

ENERGY RECOVERY VENTILATOR SCHEDULE

TAG	SERVICE	PERFORMANCE										ELECTRICAL DATA		BASIS OF DESIGN MANUFACTURER & MODEL NO.	MAX. UNIT WEIGHTS (LBS)	REMARKS
						WINTER				SUMMER						
		CFM	ESP	SENSIBLE EFF %	LATENT EFF %	OA DB/WB	RA DB/WB	SA DB/WB	HEAT LOAD REDUCTION (BTU)	OA DB/WB	RA DB/WB	SA DB/WB	COOLING LOAD REDUCTION (BTU)	VOLTS	PHASE			
ERV-1	CLASSROOM BUILDING	500	0.78	86.0	8.0	3/3	68/52	59/35	30,096	91/73	72/60	75/62	10,260	120	1	BPE-XE-MIR-1000	140	1, 2, 3, 4

1. PROVIDE DIGITAL TIME CLOCK - WALL MOUNTED (TC7D-W)
2. PROVIDE MERV-8 FILTER.
3. PROVIDE NON-FUSED DISCONNECT.
4. PROVIDE GRAVITY BACKDRAFT DAMPERS ON OUTSIDE AIR AND EXHAUST AIR AIRSTREAMS.

INTAKE/RELIEF HOOD SCHEDULE

TAG	LOCATION	SERVICE	CFM	HOOD VELOCITY (FPM)	AIR PRESSURE DROP (IN WC)	THROAT SIZE (ø)	HOOD SIZE (ø)	CURB CAP SIZE (LxW)	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
GIH-1	ROOF	CLASSROOM	500	610	0.062	12	29	22x22	GREENHECK GRSI-12	1,2,4
GRH-1	ROOF	CLASSROOM	500	610	0.062	12	29	22x22	GREENHECK GRSR-12	1,2,4

1. FURNISH ROOF CURB TO MATCH ROOF PITCH TO C-CONTRACT.
2. PROVIDE INSECT SCREEN.
3. PROVIDE WITH OPTIONAL BACK-DRAFT DAMPER MODEL RSK 6 OR EQUAL.
4. ALTERNATE 2.

DIFFUSER, REGISTER AND GRILLE SCHEDULE

TAG	TYPE	SIZE	NECK SIZE	PATTERN	MOUNTING	MATERIAL	BASIS OF DESIGN MANUFACTURER & MODEL NO.	REMARKS
SD-1	SQUARE	24X24	10	SQUARE CONE	LAY-IN	ALUMINUM	PRICE SCD	NA
RR-1	SQUARE	24X24	10	EGG CRATE	LAY-IN	ALUMINUM	PRICE 80	NA

NOTE:

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REVISED DRAWING 07/02/2025

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PROJECT NUMBER:	47574 - H
DESIGNED BY:	AGC
DRAWN BY:	AGC
FIELD CHECK:	–
APPROVED:	DPL

SHEET TITLE: SCHEDULES – ALTERNATE 2

DRAWING NUMBER: M-601B

SHEET OF

Jul 02,2025 - 9:17am
W:\Work\EDP\40620 OGS Camp Smith Firing Range\CAD\M-601B.dwg

36x24 PLOT SHEET