BALTIMORE COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF CONSTRUCTION CONTRACTS ADMINISTRATION
111 WEST CHESAPEAKE AVENUE
TOWSON, MARYLAND 21204

Contract No. 25022 PP0
Project No's. 10000636
Essex Police Precinct 11 New Addition & Renovations (LEED SILVER CERTIFICATION) -
216 & 222 North Marlyn Avenue, Essex, Maryland 21221
Essex – District 15c7

ADDENDUM NO. 4

DATE: 1/12/2026

Contact: Anthony Crews, 410-887-3531, tcrews@baltimorecountymd.gov

To All Bidders

This addendum is hereby made a part of the Proposal and the Special Provisions, and is hereby incorporated into the Contract. Should this addendum conflict with any portion of the Special Provisions, the Proposal, or any prior addenda, this addendum shall supersede and control.

Please note the attached changes, corrections, and/or information in connection with the contract and submit bids and be otherwise governed accordingly.

For Your Information

Attached are questions and answers. Revised and attached to be inserted: Page 2 Table of Contents adding new page 2271A, Unit and Allowance Price Schedule.

In the Specifications

Revised and attached to be inserted: New pages 44-48, Table of Contents deleting Section 08 43 33 – Bullet Resistant Aluminum Store Front. Delete old pages 44-48. New pages 58-61, Section 01 21 00 – Allowances. Delete old pages 58-61. New pages 62-64, Section 01 22 00 – Unit Prices. Delete old pages 62-64. Delete pages 528-531 in its entirety, Section 08 43 33 – Bullet Resistant Aluminum Storefronts. New pages 532-537, Section 08 43 33.13 – Security Storefront Bullet Resistant Aluminum Framing & Doors. Delete old pages 532-537. New pages 639-645, Section 09 62 00 – Rubber Tile Flooring. Delete old pages 639-645. New pages 652-657, Section 09 65 19 – Resilient Tile Flooring. Delete old pages 652-657. New pages 658-667, Section 09 66 23 – Resinous Matrix Terrazzo Flooring. Delete old pages 658-667. New pages 668-674, Section 09 67 26 – Decorative High-Performance Flooring System. Delete old pages 668-674. New pages 708-719, Section 10 14 00 – Signage. Delete old pages 708-719. New pages 795-803, Section 12 49 40 – Roller Shades. Delete pages 795-803. New pages 1807-1830, Section 31 20 00 – Earth Moving. Delete old pages 1807-1830.

Contract No.25022 PP0
Addendum No.4
January 12, 2026

In the Proposal

Attached to be inserted: New page 2271A, Unit & Allowance Pricing Schedule.

In the Drawings

Revised and attached to be inserted: New drawing numbers 2025-0967-0980, 2025-0998, 2025-1014-1016, 2025-1026-1027, 2025-1038, 2025-1052 & 2025-1138.

Attachments – 150

Please sign below acknowledging receipt of this addendum and return with your bid.

_____	_____
Company Name	**Signature**

Murphy & Dittenhafer
ARCHITECTS

Addendum No. 4
January 12, 2026

Essex Police Precinct 11 New Addition & Renovations (25022 PP0)

216 & 222 North Marlyn Avenue, Essex, Maryland 21221.
This Addendum is hereby made part of the 100% Construction Documents dated July 14, 2025 (Project Manual and Drawings) for the above referenced project.

The provisions of this Addendum are intended to supplement and/or supersede the provisions of the Construction Documents only where contrary thereto.

This Addendum contains changes to the requirements of the Project Manual. Such changes shall be incorporated into the Construction Documents and shall apply to work with the same meaning and force as if they had been included in the original Documents. Whenever this Addendum modifies a portion of a paragraph of the Project Manual, the remainder of the paragraph affected shall remain in force.

The conditions and terms of the basic Specifications shall govern work described in this Addendum. Whenever the conditions of work, and the quality or quantity of materials, or workmanship are not fully described in this Addendum, the conditions of work, etc., included in the basic Specifications for similar items of work shall apply to the work described in this Addendum.

If no similar items of work are included in the basic Specifications, the best quality of material and workmanship shall apply, and all work shall be subject to the written acceptance of the Architect.

GENERAL ITEMS

NOTE: Do not send Substitution Requests for products. There will be no substitutions during the Bidding Phase.

Responses to solicitations received prior to the issuance of this addendum are as follows:

1. ***Question:*** *Please confirm, in conjunction with Bowman Consulting Engineers (MEP Engineer), if Schwank will be accepted as an alternate MFG for the electric infrared heaters on this project.*
   Response: *No, this manufacturer is not approved.*

2. ***Question:*** *Please confirm, in conjunction with Bowman Consulting Engineers (MEP Engineer), if RuppAir will be accepted as an alternate MFG for general HVAC fans on this project.*
   Response: *No, this manufacturer is not approved.*

3. ***Question:*** *Please confirm, in conjunction with Bowman Consulting Engineers (MEP Engineer), if RuppAir will be accepted as an alternate MFG for DOAS and RTUs on this project.*

Murphy & Dittenhafer, Inc.
805 North Charles Street
Baltimore, Maryland 21201
410•625•4823
410•625•4674 FAX

Response: *No, this manufacturer is not approved.*

4. ***Question:*** *Please confirm, in conjunction with Bowman Consulting Engineers (MEP Engineer), if Hitachi will be accepted as an alternate MFG for VRF systems on this project.*
   Response: *No, this manufacturer is not approved.*

5. ***Question:*** *Please confirm, in conjunction with Bowman Consulting Engineers (MEP Engineer), if Hitachi will be accepted as an alternate MFG for split systems on this project.*
   Response: *No, this manufacturer is not approved.*

6. ***Question:*** *Please clarify the amount that will be utilized as the basis for award, including whether the award will be based on the Total Base Bid plus Allowances 1 and 2 and Alternates 1 through 4, or on a different combination of the Base Bid, Allowances, and/or Alternates.*
   Response: *Basis for award will primarily be the total base bid plus allowances.*

7. ***Question:*** *Due to the number of distinct trades and subcontractors required for this project, achieving the 30% MBE participation goal will present significant challenges and will likely not be cost-effective for the County. We respectfully request that the County consider adjusting the MBE participation goal for this project.*
   Response: *The MWBE goal for this contract was determined by examination of areas that could be subcontracted and the amount of available MWBE firms approved for those areas. Should any bidders find that they cannot meet the project goal, they must utilize the forms in the MWBE packet demonstrating evidence of a good-faith effort to meet the goal.*

8. ***Question:*** *To allow bidders to focus on preparing the most competitive cost proposal at the time of bid submission, we respectfully request that the County consider permitting submission of MBE Form C (MWBE Subcontractor Disclosure and Participation Statement) within five (5) days following the bid opening.*
   Response: *This document must be completed and submitted with the bid/proposal to Baltimore County.*

9. ***Question:*** *To allow bidders to focus on preparing the most competitive cost proposal at the time of bid submission, we respectfully request that the County consider permitting submission of MBE Form B (Subcontractor Participation Schedule) within five (5) days following the bid opening.*
   Response: *This document must be completed and submitted with the bid/proposal to Baltimore County.*

10. ***Question:*** *Specification Section 312319 (Dewatering) section 1.3 indicates that 'dewatering observation wells are part of dewatering allowance. However, there is no allowance indicated for dewatering. Please clarify.*
    Response: See attached revised Allowances spec section 012100, which identifies an allowance for dewatering.

11. ***Question:*** *Please clarify whether Add Alternate No. 1 includes upgrading the glass at the transaction window from Level 3 to Level 5, or if this alternate is intended to apply only to the exterior storefront systems.*
    Response: Per the Alternate specification and the drawings, the Add Alternate No.1 only applies to the exterior storefront systems.

12. ***Question:*** *Please confirm that this project does not have a U.S. Citizen only requirement for on-site workers.*
    Response: *Contractors must be legally allowed to work within Baltimore County and must pass a background check by Baltimore County Police Department to be on-site for the project.*

13. ***Question:*** *Please confirm that BIM is not a requirement for this project.*

Response: Per various specification sections, BIM is required for coordination, but not for recording As-Builts.

14. ***Question:*** *Please confirm that this project will be completed during normal working hours only.*
    Response: *Project will be completed during normal working hours. Any work needed outside of working hours to be coordinated with Police and BCPM.*

15. ***Question:*** *Please confirm that this project does not have a tax exemption status for the contractors and all offerors are to include taxes within their pricing.*
    Response: *Project does not have a tax exemption status.*

16. ***Question:*** *Please confirm that all work within specification section 27 60 00 and as shown on the Telecom drawings for the ERRCS is the responsibility of the contractor and is to be included within our price.*
    Response: Confirmed, this is to be by Contractor.

17. ***Question:*** *Drawings A-106 / A-107 show 1,000 SF of photovoltaic panels on the rooftop of Wing A, however on Roof Power Drawing E304 photovoltaic panels are not shown in this location. Please clarify if photovoltaic panels are required at this location per A106 / A107.*
    Response: *T*he PV panels areas does include the roof area above the sally port and will include all components of a photovoltaic system for a complete and operable system. Refer to specifications for additional information about the system. See attached revised sheet E304.

18. ***Question:*** *Please clarify if the cable trays and telecommunications racks as shown on the telecom drawings are to be furnished and installed by the Contractor or the Owner. The Responsibility Matrix on TA002 does not provide clear direction for these items.*
    Response: - Cable Trays and Raceways are by the GC, while Telecom Racks are by Owner, see items 7 & 9 in the Low Voltage Systems Responsibilities Matrix. Also see 270528.36 Cable trays for Communications Systems and 270528 Telecommunication Cabling Infrastructure which outline the necessary pathways and associated hardware to be provided by the GC. Specifically, telecom racks are not included in Part 2 of section 270528 but both sections include overhead raceways via cable tray and ladder racking.

19. ***Question:*** *Please provide specifications / product information for the Walk Off Mat shown on drawings A-601 & A-602.*
    Response: Refer to CPT-3 in specification section 096810.

20. ***Question:*** *Please provide details of the stair treads for the interior stairs, as no stair tread details are provided on A425.*
    Response: See specification 05 50 00 - Metal Fabrications and Steel Stairs. A typical detail has been added for clarity, see attached revised A-513 PLAN & SECTION DETAILS – STAIRS.

21. ***Question:*** *Drawing A600 indicates Room 003 (Fitness Room) is hatched for flooring type RT-2. However, the Finish Schedule on the same sheet lists base type RT-1 for this room and does not specify a corresponding flooring type. Please clarify the correct flooring finish intended for Room 003.*
    Response: Room 003 (Fitness Room) is to be RT-1, the large cross hatch. The schedule for Room 003 is correct as RT-1, see specification 09 65 00 - Rubber Tile Flooring.

22. ***Question:*** *Specification Section 096623 (Resinous Matrix Terrazzo Flooring) references terrazzo stair treads and risers in Section 1.2.A. However, no terrazzo stair treads or risers are indicated on the drawings. Please confirm that this stair tread / riser part of this specification section is not applicable to this project.*
    Response: Correct, the reference to terrazzo stairs, treads and base are not applicable, please see attached revised specification 096623.

23. ***Question:*** *A-603: Door 02A, Door 03 on the door schedule is calling for ballistic glass. Do the door and frame also need to be ballistic? Please verify*
Response: *Yes, the door and frame also need to be Ballistic. See 08 43 33.13. BOD: Insulgard HP500.*

24. ***Question:*** *A-603: Please confirm the following- Door C09A shows an insulated metal door and frame on the schedule, but header details H7 state that it is an aluminum storefront. Detail J12 is missing as well. Elevations show this as an aluminum, and the door is called out for ballistic glass, so the door and frame would also need to be ballistic.*
Response: *See attached revised A-603 showing C09A as Aluminum Door and Frame and revised Head and Jamb Details. The Head and Jamb Details are included on revised A-607.*

25. ***Question:*** *A-603: Please clarify - Door 03 on the door schedule is being shown in elevation E-E aluminum storefront. On the door schedule its showing a hollow metal type N doors, and details H12 and J12 are not on the detail page. It shows Frame type FR-10 not shown on the page either.*
Response: *See attached revised A-603 showing Door Type N2 for Door 03 and the revised Head and Jamb Details. The Head and Jamb Details are included on revised A-607.*

26. ***Question:*** *Provide the location for the installation of LVT-2. The specification book calls out LVT-2, but it's missing on the drawings.*
Response: LVT-2 is not in the project and has been deleted in the revised specification 09 65 19 - Resilient Tile Flooring, attached.

27. ***Question:*** *A-201, A-204, A-400: The floor plans call out much of the Storefront as Level 5 Ballistic, whereas the elevations and some details call all of it Level 3. Add alternate level 5. Is any of the storefront Level 5 the base bid? For example, A-400 calls the Exterior vestibule Level 5, A-201& A-204 call the Exterior Vestibule Level 3, Alt upgrade to Level 5.*
Response: *There is no Level 5 ballistics in the base bid and would only be part of Add Alternate 1. See attached drawing A-400 for keynote revisions related to the ballistic glazing.*

28. ***Question:*** *On sheet A-402, detail 2, the backsplash is noted as CT-3 (12" x 24"), and I wanted to confirm that this is the correct tile for that backsplash. I noticed that CT-2 (4" x 12") and CT-1 (3" x 6") are also listed elsewhere, so I just want to ensure CT-3 is intended for this location. Please confirm if CT-3 is correct for the backsplash.*
Response: Provide CT-1 in this area. See revised 2/A-402 attached.

29. ***Question:*** *09 67 26-4: The specification book indicates two different specs for PE-1, PE-2 & PE-3. Please confirm which one to bid Duraflex or Sikafloor System?*
Response: The basis of design is Sikafloor systems. Specification 096726 is revised and attached.

30. ***Question:*** *Will the lockers in the Locker Rooms in the Basement Level have an epoxy base going around the locker bases? If they do have an epoxy base, what would be the height of the locker base?*
Response: *The Lockers do not have an epoxy base.* The entire perimeter of the locker rooms shall have 4" epoxy base. The GC shall coordinate the layout of critical walls with locker shop drawings to accommodate locker MFG. tolerance plus the thickness of the epoxy base. The base will NOT wrap around the lockers. The integral epoxy base is scheduled on A-600. See clarification in revised sheets A-418, A-419, & A-420, attached.

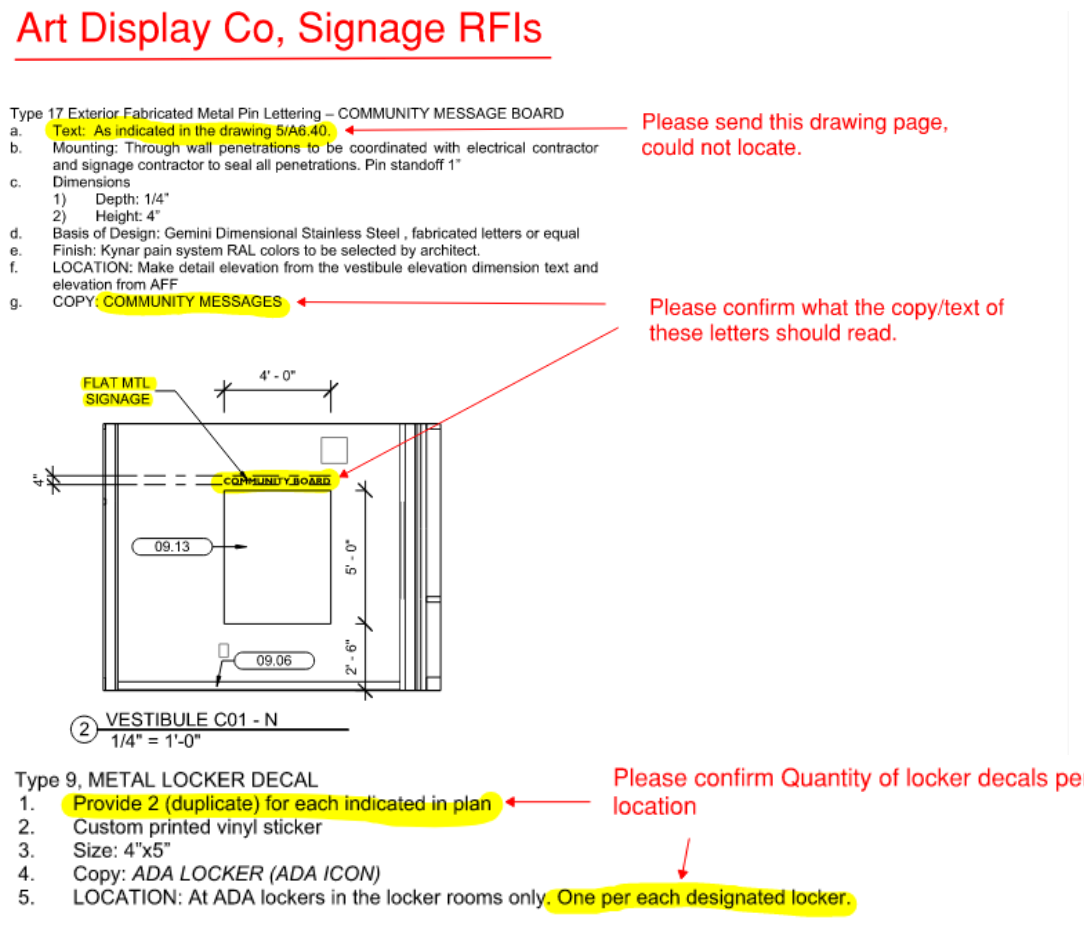
31. ***Question:*** *The floor plans call out much of the Storefront as Level 5 Ballistic, where as the elevations and some details call all of it Level 3, Add alternate level 5. Is any of the storefront Level 5 as base bid? A-400 calls the Exterior vestibule Level 5, A-201 & A-204 calls the Exterior Vestibule Level 3, Alt upgrade to Level 5.*
Response: *There is no Level 5 ballistics in the base bid and would only be part of Add Alternate 1. See attached drawing A-400 for keynote revisions related to the ballistic glazing.*

32. Question: *REF: Demo Note #D46 on AD-102. Note #D46 says, "In Phase 1, excavate hatch area to B.O. Mat Slab. Determine condition of the existing drain tile & waterproofing membrane. GC shall hold an allowance to replace the entire perimeter of the existing building's drain tile and waterproofing membrane at below grade walls." What allowance amount is the GC to include for this scope of work? There is no allowance amount stated in the Allowances spec section 012100. Please clarify what Allowance amount the GC is to carry for this scope of work.*

Response:

Keynote D46 has been revised along with the plan showing the area of demolition around the existing basement. The project shall include excavation, photo documentation of condition of the basement waterproofing, selective demolition of waterproofing membrane, the demolition of the drainage mat and drain tile for the entire perimeter of the basement. New waterproofing membrane, drainage mat, insulation, and a drain tile shall be provided around the entire perimeter. Intent is to lap a portion of the existing to remain membrane with the new membrane. See attached, revised AD-102 & A-501.

33. Question: *Please confirm what the copy/text of the "Community Board" letters should read as shown on 2/A4.00. It does not state in the signage specs what the copy/text should be. (I have attached a file for reference for the signage questions).*



Response: Regarding the "Community Message Board" please provide a cost per the number of letters per the copy in the spec. Final copy is to be confirmed by owner in submittal.

Regarding question about quantities and location of ADA lockers see A-517, keynote 10.18. The lockers noted as ADA lockers will each require one decal. The duplicates are to be provided to owner. Regarding the quantities of type 10, 11A & 11B, provide for the quantities in the specification. Final locations for these items will be TBD prior to installation. User will provide artwork/photos for the prints; files will be provided.

34. ***Question:*** *There are references to drawing A6.40 in the Signage Spec 101400. I did not see a drawing A6.40 in the set of plans. Please provide the missing drawing A6.40.*
Response: The specification has been revised with the correct reference. See 2 & 3 on A-204 for the location of sign Type 16. See attached revised specification 101400 – SIGNAGE.

35. ***Question:*** *REF: Type 18 Cast Metal Signage @ Monument Entry Sign. Please confirm the exact copy/message of the monument lettering per detail 2/A609.*
Response: Type 18 has been added to the specification to match the drawing. Note the signage is to have a duplicate on the opposing side of the monument wall. See attached revised specification 101400 – SIGNAGE.

36. ***Question:*** *There are quantities of signs shown for the different sign types in spec section 101400. Are we to use the quantity listed under the sign type or base the quantity of signs off of the drawings? The quantities listed in the spec for sign types 10, 11A & 11B may not match what is shown on the plans.*
Response: Regarding the quantities of type 10, 11A & 11B, provide for the quantities in the specification. Final locations for these items will be TBD prior to installation. User will provide artwork/photos for the prints; files will be provided.

37. ***Question:*** *Are both supply and return smoke duct detectors required?*
Response: *Supply and return smoke detectors are required. This is also shown on the controls drawing on M602.*

38. ***Question:*** *What is the height of the epoxy base? Is it 4" or 6"?*
Response: Provide 4" epoxy base.

39. ***Question:*** *The drawings list two different flake systems and a granite system for PE-2. Then PE-2 is listed as a flake system here, I'm assuming the PE-2 locations above as "holding " are accurate vs the listing below, as drawing has PE-2 in holding areas. I just need to know where flake is vs quartz for bidding*.
Response: The specification has been revised to clarify that the intent for PE-3, in the holding areas are NOT have the flake and the basis of design is the decodur granite color. See revised in attached 09 67 26 - Decorative High-Performance Flooring System.

40. ***Question:*** *Can a portion of the existing parking lot be used for staging dumpsters during the razing of the Annex Building and the selective demolition of the existing precinct building?*
Response: *No, police parking is very limited and must remain for use of the Police Department only.*

41. ***Question:*** *Provide an inventory of the fitness exercise equipment that is to be stored and relocated.*
Response: *Refer to specification 024116, Structure Demolition, section 1.8 for list of fitness equipment to be stored and relocated.*

42. ***Question:*** *Can we get a complete list of add alternates and unit cost items to submit with our bid?*
Response: *Refer to spec section 012300 for a complete list of Alternates. Also see revised spec 012200 for Unit Prices, attached.*

43. ***Question:*** *How wide and how thick is the existing building footing that we are removing to install underpinning? Also, what is the elevation of the existing building footing to the slab on grade?*

Response: *The existing building is founded on a mat slab foundation which varies in thickness from 12" to 15". Top of mat slab foundation is 10'-4" below top of existing first floor slab, see structural drawing S-101 and S-111. Also refer to the Existing Building Drawings that are attached as part of this Addendum.*

44. ***Question:*** *Please advise us on how we are to waterproof under the existing slab to the underpinning.*
    Response: *See attached revised drawing sheet A-502.*

45. ***Question:*** *Where can we set up our Office trailers, Your Office Trailer, Storage Trailers & Parking?*
    Response: *Only one office trailer is required, which should be able to house progress meetings of approximately 8-10 Baltimore County representatives. Location should be within LOD.*

46. ***Question:*** *Do we need a P.E. Stamp on our formwork for the walls at the elevator location*
    Response: *See specification section 03 10 00.C.1 – shop drawings shall be signed and sealed by an engineer registered in the local jurisdiction.*

47. ***Question:*** *Do we need to have all the steel AISC Certificated? Fabricated & Erected*
    Response: *See specification section 05 12 00. Fabricators and erectors who are not AISC certified must meet the requirements of the specifications.*

48. ***Question:*** *Can we make all Mock Up Panels part of the work?*
    Response: *Please bid as stated in Contract Documents.*

49. ***Question:*** *Do we need to have all hangers & bracing approved by a P.E. for sprinkler, mechanical, hvac, electrical work?*
    Response: *Sprinkler system hangers to be designed per NFPA 13. It is a specification requirement to have the sprinkler shop drawings stamper by a fire protection engineer who is a PE in the State of Maryland. See specification 210000 Section 1.13.A and Specification 210529 Section 2.1.A. Per sheet S-002, submittal note 6 item j, mechanical/electrical/plumbing hanger connections require delegated design by an engineer.*

50. ***Question:*** *Do we need to include cost for the BIM system?*
    Response: Per various specification sections, BIM is required for coordination, but not for recording As-Builts.

51. ***Question:*** *Under Division 31 Calls for Unit Pricing for 500 Cubic Yards of Rock Removal for open excavation and trench excavation?*
    Response: *See attached revised spec 312000 Earth Moving and spec 012200 Unit Prices.*

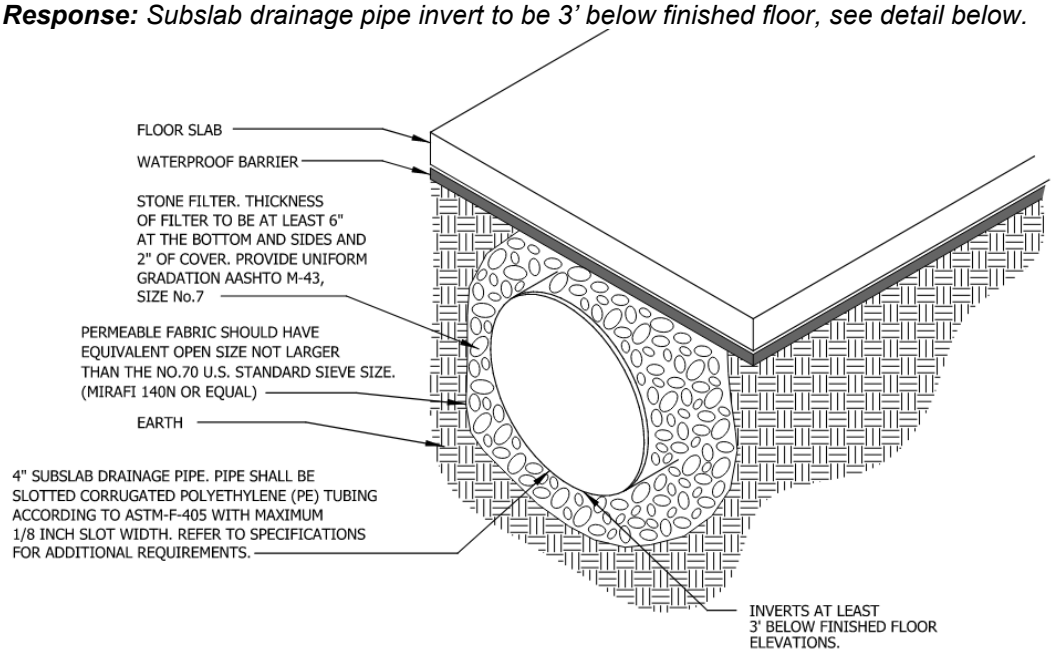
52. ***Question:*** *Do we need shop drawings for dewatering purposes by a Qualified Professional Engineer?*
    Response: *Yes, per spec section 212319.*

53. ***Question:*** *Calls for in the specifications for a dewatering system? Can you show us on a drawing where you want these wells.*
    Response: *It is up to the means and methods of the contractor to determine the locations. Per spec section 312319, the shop drawings must identify the locations.*

54. ***Question:*** *Do you have a location for all your equipment to be stored and relocated back?*
    Response: *Equipment is to be stored by contractor.*

55. ***Question:*** *What is the elevation of all the underdrain system below finish floor in the new part of the building?*

Response: *Subslab drainage pipe invert to be 3' below finished floor, see detail below.*



DETAIL - SUBDRAINAGE SYSTEM

SCALE: NONE

56. ***Question:*** *Plumbing Drawing P-203 show drain lines under slab on grade with no details?*
    Response: *Please see detail included in response to Question above.*

57. ***Question:*** *Plumbing Drawing # P-201, looks to show added underground sanitary lines that the floor needs to be demo. for. Can you please give us a detail on what you want?*
    Response: *Requirements for demolition and replacement of existing mat slab foundation are shown on structural drawing S-101 and S-306.*

58. ***Question:*** *Drawings and Specifications call for GC to have a PE look at the demolition of existing building and give a report on how to complete the demolition. Is this required?*
    Response: *Confirmed, coordinate with requirements of the specifications and drawings.*

59. ***Question:*** *Please confirm that the county will assume the power and gas utilization charges when the new building addition is completed and occupied by the tenant*
    Response: *Baltimore County will assume power and gas charges for the addition, and only the addition, when it is available for occupancy and use by Baltimore County. The contractor will assume responsibility of the power and gas associated with the existing precinct during the renovation. Baltimore County will assume responsibility of all power and gas charges for both the existing precinct and addition at the time both phases are available for use and occupancy by the Police Department.*

60. ***Question:*** *Is there an Epoxy Base around the locker bases located on the basement level? What is the height of the epoxy base, if so?*
    Response: *The Lockers do not have an epoxy base.* The entire perimeter of the locker rooms shall have 4" epoxy base. The GC shall coordinate the layout of critical walls with locker shop drawings to accommodate locker MFG. tolerance plus the thickness of the epoxy base. The base will NOT wrap around the lockers. The integral epoxy base is scheduled on A-600. See clarification in revised sheets A-418, A-419, & A-420, attached.

61. ***Question:*** *Please provide the spec for the Epoxy Floor*

Response: See attached revised specification 09 67 26 – DECORATIVE HIGH-PERFORMANCE FLOORING SYSTEM.

62. ***Question:*** *Packaged Rooftop Air Conditioning Units – May Petra be added to the list of acceptable manufacturers for equipment for spec section 23 81 06?*
Response: *No, this manufacturer is not approved.*

63. ***Question:*** *Split System Air Conditioning Units – May Samsung be added to the list of acceptable manufacturers for equipment for spec section 23 81 26?*
Response: *No, this manufacturer is not approved.*

64. ***Question:*** *Variable Refrigerant Flow Split System Air Conditioners – Samsung be added to the list of acceptable manufacturers for equipment for spec section 23 81 29?*
Response: *No, this manufacturer is not approved.*

65. ***Question:*** *Terminal Heating and Cooling Units – May Raywall be added to the list of acceptable manufacturers for equipment for spec section 23 82 00?*
Response: *No, this manufacturer is not approved.*

66. ***Question:*** *The following fixtures are shown on drawings E201, E202 & E203 but are not on the fixture schedule. Fixture types P1, AV & D2? Please advise.*
Response: *The fixture schedule was revised as part of Addendum 3.*

67. ***Question:*** *The floor plans call out much of the Storefront as Level 5 Ballistic, where as the elevations and some details call all of it Level 3, Add alternate level 5. Is any of the storefront Level 5 as base bid? EG. A-400 calls the Exterior vestibule Level 5, A-201 & A-204 calls the Exterior Vestibule Level 3, Alt upgrade to Level 5.*
Response: *There is no Level 5 ballistics in the base bid and would only be part of Add Alternate 1. See attached drawing A-400 for keynote revisions related to the ballistic glazing.*

68. ***Question:*** *The contract documents indicate that the General Contractor is responsible for the cost of hazardous materials testing, which is acceptable. However, the documents also require the General Contractor to bear the cost of abating any hazardous materials identified through that testing. Because the scope and cost of abatement cannot be determined until testing is performed in the field, this cost is not quantifiable at bid time. To address this uncertainty, the most practical approach would be to include an allowance for hazardous materials abatement. For consistency and fairness among bidders, we respectfully request that the County provide a uniform allowance amount for all General Contractors to carry for this work.*
Response: *Refer to Hazmat reports included as Appendix to Specifications as well as unit prices specification.*

69. ***Question:*** *This specification (12 49 40) is primarily for motorized shades. Motorized shades do not appear on the drawings. Please provide a project specific specification for manual roller shades. The spec includes several room numbers that do not exist on this project.*
Response: There are no longer motorize shades in the project. See revised attached specification, 124940 Roller Shades, deleting RS-2 and mention to motorized shades.

70. ***Question:*** *Specification (12 49 40) Section 1.7 A. indicates 5% attic stock for shades. May we exclude attic stock? Most shades carry a 10-25 year warranty.*
Response: *Attic stock should be included.*

71. ***Question:*** *Specification (12 49 40) Section 2.1 C. Indicates a MechoShade's Thermoveil 1300 5% fabric for RS-1 Shades. This fabric is specific to MechoShade and is not available from other*

approved manufacturers. Please confirm that 5% fabric from other manufacturers, such as Mermet E-Screen 5% or SheerWeave Basic 5% fabric is acceptable. Is MechoShade's Soho 1900 5% fabric acceptable?
Response: *MechoShade is the basis of design manufacturer, substitutions are not being reviewed during bidding.*

72. ***Question:*** *Specification (12 49 40) Section 2.1 D. Indicates a blackout fabric, however RS-2 is not indicated anywhere on the drawings. Confirm no blackout shades are required on the project.*
Response: There are no longer motorize shades in the project. See revised attached specification, 124940 Roller Shades, deleting RS-2 and mention to motorized shades.

73. ***Question:*** *Sheets 2025-0979 and 2025-0980 indicate shades at exterior windows with Keynote "12.03". Keynote "12.03" is designated as a manual recessed shade. This description of "recessed" conflicts with Details 5&31/2025-1056 which indicate surface-mounted shades which would typically receive fascia. Please confirm mounting conditions for manual shades.*
Response: The roller shades are intended to be surface mounted with a fascia. The keynote 12.03 is revised in the attached A-111 and A112.

74. ***Question:*** *What is the status of permits? Please confirm what permits are the Contractor responsible for.*
Response: *Baltimore County has obtained the demo and shell permits, Contractor to obtain trade permits. The contractor will be responsible for preparing, filing and completing the MDE NOI/NPDES. Only information regarding the civil design work will be provided for use in the application for the 20 CP permit.*

75. ***Question:*** *Please provide an approximate date for contract award and Notice to Proceed.*
Response: *Notice of award and Notice to Proceed dates are subject to conditions encountered following bid opening.*

76. ***Question:*** *In light of the cost increases caused by the current and potential future tariffs, we would like to request that the Owner include a tariff-related cost adjustment clause in the contract, which would allow for compensation based on any price increases directly tied to tariffs. This adjustment could be documented through material cost reports or supplier invoices to ensure transparency.*
Response: *Cost adjustment clauses and contingencies are not being considered.*

77. ***Question:*** *Alternatively, the owner could establish a contingency allowance for all bidders to carry in their bids specifically to address cost fluctuations stemming from tariffs.*
Response: *Cost adjustment clauses and contingencies are not being considered.*

78. ***Question:*** *In regard to AHU-1&2, the maximum incoming airflow at the RA damper & OA economizer damper cannot be determined per AHU schedule & detail 9/M504. Additionally, should the RA inlet & RA damper maximum airflow match the total RA (19,365 CFM) during economizing mode? The airflow/size of both dampers within the electrical section at the service vestibule also cannot be determined.*
Response: *There are no AHU's on the project and there is no drawing M504.*

79. ***Question:*** *Specification 122413: 2.2 A. 2. Indicates products by other manufactures that meet requirements set forth in spec are acceptable. Please confirm Inpro CF300 Shades are acceptable. These shades are cordless, available with fascia or pocket and have 3% fabric.*

Response: *Substitutions are not being reviewed during bidding.*

80. ***Question:*** *Specification 122413: 2.4 A. 1. Indicates: fabric is to be indicated on drawings. Material Identification A012 only indicates a 3% fabric as TBD. As large as these shades are, only a lightweight 3% fabric will work, such as Crosshatch S300, R300 or A300. S300 currently has the wider range of colors and is the more cost-effective option. Confirm Crosshatch S300 by SWF is acceptable fabric.*
Response: *Substitutions are not being reviewed during bidding.*

81. ***Question:*** *Specification 122413: **During the initial round of pricing in October, it was discovered that SWF is unable to fabricate the majority of shade sizes required for this project. The required heights are mostly between 130" - 144" which is the maximum height for this product, and many widths are simply incompatible with the height. Another potential problem is that the majority of these shades span the distance from the floor to ceiling. This requires a user to reach down to the floor to raise the shade or to close it. The shades are unable to be raised to their full height because users cannot reach to 144". We ask the design team to consider conventional chain+clutch shades or motorized shades ILO of this product. We will provide pricing for these shades as an option.*
Response: The first part of this question is not understood. There are no shades in this project of that height. This may be a question for a different project as there is no floor to ceiling window conditions with shades.

82. ***Question:*** *Details 6, 9 and 12 on Sheet A480 and 2/A481 all indicate manual shades with specified fascia and a 1 7/8" gap between the fascia and the ceiling return. This is just enough room to install the shade and mount the fascia. Confirm all manual shades, regardless of corresponding detail are to be provided with fascia and that there will be no less than 6" of space between end of ceiling and exterior wall for the shade to mounted in. We need at least this much to install shade and then install fascia.*
Response: This may be a question for a different project as there is no sheet A480 in this project.

83. ***Question:*** *Is BIM coordination required on this project?*
Response: Per various specification sections, BIM is required for coordination drawings. BIM is not required for as-built drawings.

84. ***Question:*** *In reference to RFQ, Page 23, Based on the duration of the project, how will material cost increases be handled?*
Response: *Cost adjustment clauses and contingencies are not being considered.*

85. ***Question:*** *Drawing TN601 Detail 3 indicates copper and fiber backbone to the Security Server Room 1E110. No details are provided on sheets TN401 or TN402. Please indicate who's responsible for the build out of the Security Server Room (rack or cabinets/cable tray, etc.)*
Response: *These sheets do not exist in this project.*

86. ***Question:*** *In reference to TN-201/202/203, Please confirm that the selected Electrical Contractor will install all hallway mounted cable tray as depicted on the Telecom Reflected Ceiling Plans and that the selected Telecom Contractor will install cable trays in the Telecom Spaces as shown on drawings TN-401, and TN-402*
Response: *These sheets do not exist in this project.*

87. ***Question:*** *Please confirm that Loudoun County DIT personnel will be installing the Outdoor Wireless Access Points (and any required enclosure) as indicated by Key Note 1 on sheets TN201A and TN201B*
Response: *These sheets do not exist in this project.*

88. ***Question:*** *In Reference to Civil Drawing E1 - Conduit Exhibit Plan, who is to be considered the customer to furnish and install the power, telecom, and segra conduits and ductbanks as indicated?*
Response: *These sheets do not exist in this project.*

89. ***Question:*** *In Reference to Civil Drawing E1 - Conduit Exhibit Plan, please confirm all electrical, telecom, and security indicated on this drawing is to be provided in Phase 1 and included in this bid.*
Response: *These sheets do not exist in this project.*

90. ***Question:*** *In Reference to Civil Drawing E1 - Conduit Exhibit Plan, please confirm all items on this drawing supersede the electrical site drawing (E040).*
Response: *These sheets do not exist in this project.*

91. ***Question:*** *In Reference to E040 - Electrical Site Plan, please confirm all EV Chargers indicated on this drawing are to be furnished and installed by others in the future? If not, please provide specifications and details for requirements.*
Response: *These sheets do not exist in this project.*

92. ***Question:*** *In Reference to Civil Drawing E1 - Conduit Exhibit Plan, please confirm all Segra system cabling and equipment is to be provided by the Segra installers?*
Response: *These sheets do not exist in this project.*

93. ***Question:*** *Can you please confirm what, if any, scope on Civil drawings 99-103 is not to be completed with Phase 1?*
Response: *These sheets do not exist in this project.*

94. ***Question:*** *Please confirm all Landscape drawings marked Phase 2 not in this contract.*
Response: *All Landscape drawings are to be included in this contract.*

95. ***Question:*** *Is there an overall utility, grading, or fire lane plan that shows only Phase 1 work?*
Response: *The phasing work is shown in the sediment control sheets.*

96. ***Question:*** *Is 105626 high density mobile storage in contract? If so, please provide spec section.*
Response: *No, there is no high density mobile storage in this contract.*

97. ***Question:*** *Can the AISC fabricator or installer certification requirement be waived or adjusted for inspections?*
Response: *See specification section 051200. Fabricators and erectors who are not AISC certified must meet the requirements of the specifications.*

98. ***Question:*** *Please confirm Furniture Vendor/Installer to by contracted directly by Owner.*
Response: *Confirmed, all furniture is by Owner.*

99. ***Question:*** *Furniture General Note I – please confirm trash and recycle receptacles by Furniture Vendor.*
Response: There is no Furniture General Note 1 in this set; all trash and recycling receptacles are by GC. Interior waste receptacles are scheduled on A-426 and are tag through out the A-400s series. Exterior waste receptacles are to be found in the Landscape L1.02

100. ***Question:*** *Please confirm what, if any, work in Phase 1 is contracted directly by Owner/OFOI.*
Response: *Refer to Summary of Work specification 011000 for any Owner Furnished/ Owner Installed work.*

101. ***Question:*** *REF Spec 124940. This specification is primarily for motorized shades. Motorized shades do not appear on the drawings. Please provide a project specific specification for manual roller shades. The spec includes several room numbers that do not exist on this project.*
Response: There are no longer motorize shades in the project. See revised attached specification, 124940 Roller Shades, deleting RS-2 and mention to motorized shades.

102. ***Question:*** *REF Spec 124940. Section 1.7 A. indicates 5% attic stock for shades. May we exclude attic stock? Most shades carry a 10-25 year warranty.*
Response: Attic stock should be included.

103. ***Question:*** *REF Spec 124940. Section 2.1 C. Indicates a MechoShade's Thermoveil 1300 5% fabric for RS-1 Shades. This fabric is specific to MechoShade and is not available from other approved manufacturers. Please confirm that 5% fabric from other manufacturers, such as Mermet E-Screen 5% or SheerWeave Basic 5% fabric is acceptable. Is MechoShade's Soho 1900 5% fabric acceptable?*
Response: *MechoShade is the basis of design manufacturer, six other manufactures are listed. If the product is equal in shade percentage and similar to the series, then the substitutions will be considered during construction following the Subsitutions Procedure specifications.*

104. ***Question:*** *Spec 124940. Section 2.1 D. Indicates a blackout fabric, however RS-2 is not indicated anywhere on the drawings. Confirm no blackout shades are required on the project.*
Response: There are no longer motorize shades in the project. See revised attached specification, 124940 Roller Shades, deleting RS-2 and mention to motorized shades.

105. ***Question:*** *Sheets 2025-0979 and 2025-0980 indicate shades at exterior windows with Keynote "12.03". Keynote "12.03" is designated as a manual recessed shade. This description of "recessed" conflicts with Details 5&31/2025-1056 which indicate surface-mounted shades which would typically receive fascia. Please confirm mounting conditions for manual shades.*
Response: The roller shades are intended to be surface mounted with a fascia. The keynote 12.03 is revised in the attached A-111 and A112.

106. ***Question:*** *Specification 124940 indicates motorized shades. No motorized shades on drawings. Please confirm no motorized shades are required on the project.*
Response: There are no longer motorize shades in the project. See revised attached specification, 124940 Roller Shades, deleting RS-2 and mention to motorized shades.

107. ***Question:*** *Shall exterior sign Type 19 be provided by the cast stone provider?*

Response: Yes, exterior sign Type 19 is to be provided by the cast stone contractor. See paragraph 2.5.D.4 and cross reference with 034500 PRECAST ARCHITECTURAL CONCRETE specification.

CHANGES TO THE PROJECT MANUAL, attached as complete Sections

Total number of revised specifications: 11

PROJECT MANUAL	SPEC #	SPECIFICATION NAME & DESCRIPTION	REVISED WITH
	00 01 00	TABLE OF CONTENTS. Deleted spec section 08 43 33 – BULLET RESISTANT ALUMINUM STOREFRONT	Addendum #4
	01 21 00	ALLOWANCES. Added allowance for dewatering.	Addendum #4
	01 22 00	UNIT PRICES. Revised to add unit prices for rock excavation and unsuitable soils.	Addendum #4
	08 43 33.13	SECURITY STOREFRONT BULLET RESISTANT ALUMINUM FRAMING & DOORS. Remove paragraph 2.1.B.	Addendum #4
	09 62 00	RUBBER TILE FLOORING. Clarifies product basis of design for the stair tread.	Addendum #4
	09 65 19	RESILIENT TILE FLOORING. Revised to remove LVT-2 from specification.	Addendum #4
	09 66 23	Resinous Matrix Terrazzo Flooring. Revised to remove all mention of base and treads.	Addendum #4
	09 67 26	Decorative High-Performance Flooring System. Revises materials and schedule of poured epoxy resin flooring.	Addendum #4
	10 14 00	INTERIOR & EXTERIOR SIGNAGE. Revises drawing reference for Type 16. Revises copy & typeface on Type 18.	Addendum #4
	12 49 40	ROLLER SHADES. Revised to deleteRS-2 and all mention of motorized shade provisions.	Addendum #4
	31 20 00	EARTH MOVING. Revised Payment section to be by Unit Price.	Addendum #4

CHANGES TO THE CONSTRUCTION DRAWINGS, attached

Total number of revised drawings: 13

DWG. NUMBER	SHEET DESIG.	SHEET NAME & DESCRIPTION	REVISED WITH
2025-0967	AD-102	DEMOLITION FLOOR PLANS	Addendum #4
		Revise demo plan hatch area of excavation for new water proofing membrane, drainage board and drain tile. Revises keynote 46. See also A-501 Typical detail that provides new waterproofing membrane, drainage mat, and drain tile.	
2025-0979	A-111	ENLARGED FIRST FLOOR RCP - PART A	Addendum #4
		Revises keynote for roller shade, RS-1.	
2025-0980	A-112	ENLARGED FIRST FLOOR RCP - PART B	Addendum #4
		Revises keynote for roller shade, RS-1.	

2025-0996	A-400	ENLARGED PLAN - 1ST FL - LOBBY & PUBLIC SPACES	Addendum #4
		Revises keynote to clarify LVL 3 ballistic glazing and Add Alt #1	
2025-0998	A-402	ENLARGED PLANS & ELEVATIONS - 1ST FL - BREAK RM, IT RMS & MECH. RMS	Addendum #4
		Revises keynote for correct ceramic tile designation.	
2025-1014	A-418	ENLARGED PLANS & ELEVS- - BSMT - MEN'S LOCKER ROOM	Addendum #4
		Revises and clarifies critical dimensions of wall layouts that must be coordinated with locker shop drawings.	
2025-1015	A-419	ENLARGED PLANS & ELEVS- - BSMT - WOMEN'S LOCKER ROOM	Addendum #4
		Revises and clarifies critical dimensions of wall layouts that must be coordinated with locker shop drawings.	
2025-1016	A-420	ENLARGED PLANS & ELEVS- - BSMT - GEN- NEUT- LOCKER ROOM, JC & WELLNESS	Addendum #4
		Revises and clarifies critical dimensions of wall layouts that must be coordinated with locker shop drawings.	
2025-1026	A-501	EXTERIOR SECTION DETAILS - PART A	Addendum #4
		Revised to show intent of lapping new waterproofing membrane over existing membrane.	
2025-1027	A-502	EXTERIOR SECTION DETAILS – PART B	Addendum #4
		Revised detail 3 to show underpinning waterproofing.	
2025-1038	A-513	PLAN & SECTION DETAILS - STAIRS	Addendum #4
		Revises sheet to add detail 7 Typical Interior Stair Detail. Revises sheet name.	
2025-1052	A-603	DOOR SCHEDULE	Addendum #4
		Revises door panel type, frame type, and detail references for doors 02A, 03, & C09A.	
2025-1138	E304	ROOF PLAN – POWER – WING A	Addendum #4
		Revised to show PVs at Sally Port roof.	

END OF ADDENDUM NO. #4

THIS PROPOSAL FORM INCLUDES AND INCORPORATES ALL DOCUMENTS AND INFORMATION REFLECTED, LISTED, AND/OR REFERENCED IN THIS TABLE OF CONTENTS, AND ALL SUCH DOCUMENTS AND INFORMATION ARE PART OF AND INCORPORATED INTO THE CONTRACT DOCUMENTS.

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FOR

ESSEX POLICE PRECINCT

216 and 222 N. Marlyn Ave.
Essex, Maryland 21221

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SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements governing allowances.

B. Types of allowances include the following:

1. Lump-sum allowances.
2. Unit-cost allowances.
3. Quantity allowances.
4. Contingency allowances.

C. Related Requirements:

1. Section 012200 "Unit Prices" for procedures for using unit prices, including adjustment of quantity allowances when applicable.

2. Section 013300 "Submittal Procedures.

1.2 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.

B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.3 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.4 INFORMATIONAL SUBMITTALS

A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.

C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 LUMP-SUM ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes**,** freight**,** and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. See Schedule of Allowances.

1.6 UNIT-COST ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. See Schedule of Allowances.

1.7 QUANTITY ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include taxes, freight and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

C. See Schedule of Allowances.

1.8 CONTINGENCY ALLOWANCES

A. Use the contingency allowance only as directed by Architect for Owner’s purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's overhead and profit related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of

the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.

D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.9 ADJUSTMENT OF ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place where applicable. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: Lump-Sum Allowance: Include the sum of $50,000.00 for Memorial Garden.

1. This allowance includes material, receiving, handling, and installation costs, and Contractor overhead and profit.

B. Allowance No. 2: Lump-Sum Allowance: GC is to provide a lump sum allowance for the abatement of hazardous materials as listed within the Hazardous Materials Survey Reports in Appendices C and D and in accordance with spec Section 02 81 00 – Transportation and Disposal of Hazardous Materials.

1. This allowance includes the proper removal of materials, handling, transportation, and disposal costs by a certified abatement specialist, and Contractor overhead and profit.

C. Allowance No. 3: Contingency Allowance: Contractor shall provide a Dewatering Allowance not to exceed value to be utilized to control hydrostatic pressures and to control ground water as described in spec section 31 23 19 only when normal daily pumping procedures and techniques are not effective. Rainwater and standing water shall be diverted or removed with traditional daily pumping and draining as part of the base bid.

Removal, diverting and pumping of water with normal pumping techniques is included in the base bid.

The contingency allowance will be used when Dewatering techniques described in 31 23 19 become necessary.

END OF SECTION 012100

SECTION 01 22 00 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section includes administrative and procedural requirements for unit prices.

B. Related Requirements:

1. Section 012100 “Allowances” for procedures related to providing an allowance for hazardous materials noted in the Hazardous Material Survey Reports.

2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.3 DEFINITIONS

A. Unit price is an amount incorporated in the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit, unless otherwise indicated.

B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

C. List of Unit Prices: A schedule of unit prices is included in the Bid Form. Specification Sections referenced in the schedule contain requirements for materials described under each unit price. Unit prices are fixed.

1.5 SCHEDULE OF UNIT PRICES

A. Unit Price No. 1: Provide unit cost per cubic yard (cu. yd.) of Class III soil excavation and disposal off-site and replacement with materials from contract export, as specified in Section 31 20 00 "Earth Moving".

B. Unit Price No. 2: Provide unit cost per cubic yard (cu. yd.) of Class III soil excavation and disposal off-site and replacement with select backfill material from off-site, as specified in Section 31 20 00 "Earth Moving".

C. Unit Price No. 3: Provide unit cost per cubic yard (cu. yd.) of rock excavation in open excavation, as specified in Section 31 20 00 "Earth Moving".

D. Unit Price No. 4: Provide unit cost per cubic yard (cu. yd.) of rock excavation in trench excavation and pits, as specified in Section 31 20 00 "Earth Moving".

E. Provide Unit Prices related to removal of Hazardous Materials per the table under PART 4; refer to Hazardous Materials Survey Reports in Appendix A.

1. The Unit Prices table in PART 4, in conjunction with the Hazardous Materials Survey Reports in Appendix A, is to be used to determine an allowance for known hazardous materials abatement. Refer to spec Section 01 21 00 – Allowances.
2. The Unit Prices provided are to be utilized, where applicable, for additional hazardous materials found above and beyond what is listed within the Hazardous Materials Survey Reports in Appendix A.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - HAZMAT MATERIALS UNIT PRICE SCHEDULE

A. To be included with Bid Submission.

Item	Description	Unit	Rate
1.0 Asbestos			
1.1	Tile and Mastic	SF	
1.2	Fire Door Insulation	EA	
1.3	Wall Plaster	SF	
1.4	Linoleum Sheet Flooring	SF	
2.0 Lead Based Paint Evaluation			
2.1	Per Room	SF	
3.0 Dust-Lead Hazards			
3.1	Per Room	SF	
4.0 Hazardous Materials Survey			
4.1	Fluorescent Light Fixtures (Ballasts)	EA	
4.2	4’ Fluorescent Light Tubes	EA	
4.3	U-Shared Fluorescent Lights	EA	
4.4	Batteries	EA	
4.5	Fire Extinguishers	EA	
4.6	Mercury Switch	EA	
4.7	Smoke Detector	EA	
4.8	Computer Equipment	EA	
4.9	Water Fountains	EA	
4.10	Exit Signs	EA	
4.11	Refrigerator	EA	
4.12	Microwave	EA	
4.13	A/C Unit	EA	
5.0 PCB			
5.1	Door & Window Caulk	EA	
6.0 Additional Items – Not Inspected during Hazardous Materials Survey			
6.1	Roofing Materials	SF	
6.3	Ceiling Tiles	SF	
7.0 Additional Hazardous Materials			
7.1	Car Batteries	EA	
7.2	Refrigerants	EA	
7.4	Antifreeze, Cleaners, Chemicals, Oil, Gasoline	EA	
7.5	Tires	EA	
15.0	Labor Rate for Certified Asbestos Worker (Straight time)	HR	
16.0	Labor Rate for Certified Asbestos Worker (Over time)	HR	

END OF SECTION

SECTION 08 43 33 - BULLET-RESISTANT ALUMINUM STOREFRONTS

PART 1GENERAL

1.01 RELATED DOCUMENTS

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

B. Baltimore County Property Management's general requirements included in each bid package shall also apply to this Section. In case of conflict the more stringent document shall take precedence.

1.1 SUMMARY

A. Section Includes:
1. Bullet-resistant aluminum storefront assemblies.
2. See 08 43 33.13 SECURITY STOREFRONT BULLET RESISTANT ALUMINUM FRAMING AND DOORS for ballistic door and frame system.

B. Related Sections:
1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 REFERENCES

DELETED

A. American Architectural Manufacturers Association (AAMA):
1. 611 - Voluntary Specification for Anodized Architectural Aluminum.
2. [illegible] - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Architectural Extrusions and Panels.

B. American Society of Civil Engineers (ASCE) 7 - Minimum Design Loads for Buildings and Other Structures.

C. American Welding Society (AWS) D1.2/D1.2M - Structural Welding Code - Aluminum.

D. ASTM International (ASTM) (www.astm.org):
1. B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
2. C509 - Standard Specification for Elastomeric Cellular Preformed Gasket and Sealing Material.
3. C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.
4. E283 - Standard Test Method for Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors.
5. E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors under the Influence of Wind Loads.
6. E331 - Standard Test Method for Water Penetration of Exterior Windows, Doors, and Curtain Walls by Uniform Static Air Pressure Differential.

E. Federal Emergency Management Agency (FEMA) 361 - Safe Rooms for Tornadoes and Hurricanes: Guidance for Community and Residential Safe Rooms.

F. Underwriters Laboratories (UL) 752 - Bullet Resisting Equipment.

G. US General Services Administration (GSA) P-100 - Facilities Standards for the Public Buildings Service.

1.3 SYSTEM DESCRIPTION

A. Design Requirements: Design Exterior & Interior systems to withstand:
1. Design wind pressure in accordance with IBC 2018 with maximum allowable deflection of L/175, tested in accordance with ASTM E330.
2. Movement caused by an ambient temperature range of 120 degrees F and a surface temperature range of 160 degrees F.

B. Performance Requirements:
1. Air infiltration: Maximum 0.06 CFM per square foot of fixed area at static pressure differential of 6.24 PSF tested to ASTM E283.
2. Water infiltration: No uncontrolled water leakage, tested to ASTM E331 at minimum test pressure of 12.0 PSF.
3. Uniform structural loading: No glass breakage or permanent damage to fasteners or system components, tested to ASTM E330 at 1.5 times design pressure.

1.4 SUBMITTALS

DELETED

A. Submittals for Review:
1. Shop Drawings: Include frame profiles and sizes, type and spacing of frame anchors, reinforcement size and locations, details of joints and connections and welding details.
2. Product Data: Include product description for storefront assemblies including bullet-resistant rating.
3. Samples: [2 x 2]] inch coating samples in specified color.

B. Closeout Submittals:
1. Maintenance Data: Include instructions for cleaning of glazed panels.

1.5 QUALITY ASSURANCE

A. Storefront Assemblies:
1. Ballistic Level 3, & 5, tested to UL 75, see drawings and glazing types
2. GSA P-100, Classifications C Blast Resistant.
3. Rated to FEMA 361.

1.6 DELIVERY, STORAGE AND HANDLING

A. Do not cover with non vented coverings that create excessive humidity.

B. Remove wet coverings immediately.

1.7 ALTERNATES

A. Add Alternate No. 1: The Amount to be added to the total contract sum in connection with increasing the base bid level 3 ballistic ratings at the first-floor exterior storefront system and glazing to level 5 ballistic rating, as shown on the architectural drawings.

B Deduct Alternate No. 2: The Amount to be deducted from the total contract sum to delete the base bid area of ballistic 3 exterior storefront at the south wall of the lobby and provide patterned brick in lieu, where shown in the architectural drawings.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Contract Documents are based on Model TH600 by ARMORTEX, 5926 Corridor Parkway, Schertz, Texas, 800-880-8306, www.armortex.com.

B. Substitutions: [Under provisions of Division 01.] [Not permitted.]

2.2 MATERIALS

A. Aluminum Extrusions:
1. ASTM B221, 6061-T6 alloy and temper; minimum 38.0 KSI ultimate tensile strength and minimum 35.0 KSI yield strength.

2.3 ACCESSORIES

A. Internal Fasteners: Type 18-8 stainless steel.

B. Interior Glazing Gaskets: ASTM C509, Type II, Option 1 and ASTM C864; closed cellular neoprene, [60] to 50 Shore A durometer.

C. Exterior Glazing Gaskets: ASTM C864; [solid] neoprene, 60 to 75 Shore A durometer.

D. Glazing Accessories: 1-1/4 to 2-1/2 inch thick glazing materials.

DELETED

2.4 FABRICATION

A. Fabricate frames from extruded aluminum with 2-1/2 inch face width x 6 inch overall depth.

B. Fabricate with tight joints and connections providing hairline joints and true alignment of adjacent members.

C. Glazing not removable from threat side of assembly.

D. Welding: In accordance with AWS D1.2/D1.2M. Grind exposed welds flush and smooth.

2.5 FINISHES

A. Aluminum: AAMA 611, Architectural Class I anodized, clear.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install door and frame assemblies in accordance with manufacturer's instructions and approved Shop Drawings.

B. Set plumb, square, and level.

C. Secure to adjacent construction using fastener type best suited to application.

D. Field alterations to door and frame assemblies other than drilling and tapping for surface-mounted hardware not permitted unless approved in advance by manufacturer and Architect.

3.2 ADJUSTING

A. Touch up minor scratches and abrasions to match factory finish.

END OF SECTION

DELETED

SECTION 08 43 33.13 – SECURITY STOREFRONT BULLET RESISTANT ALUMINUM FRAMING AND DOORS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

B. Baltimore County Property Management's general requirements included in each bid package shall also apply to this Section. In case of conflict the more stringent document shall take precedence.

1.1 SECTION INCLUDES

A. Bullet Resistant Aluminum Storefront Framing and Entrance Doors.

B. Bullet Resistant Glazing (insulated & non-insulated).

1.2 ACTION SUBMITTALS

A. Refer to Section 01 33 00 Submittal Procedures.

B. Product Data: For each type of framing and glazing including manufacturer recommended installation instructions.

C. Shop Drawings: Include plans, elevations, sections, details, attachment to other work and glazing details for field-glazed units.

D. Samples: For each exposed finish.

1.3 INFORMATIONAL SUBMITTALS

A. Product Test Reports: Indicating compliance with requirements.

B. Warranty: Sample of finish warranty

1.4 CLOSEOUT SUBMITTALS

A. Refer to 01 77 00 - Closeout Procedures.

B. Maintenance data.

1.5 QUALITY ASSURANCE

A. Mock-up: Install framing assembly at project site. Obtain Architect's approval prior to proceeding with installation of remaining storefront. Accepted mock-up may remain as portion of final work.

1.6 DELIVERY, STORAGE AND HANDLING

A. Refer to Section 01 60 00 Product Requirements.

1.7 WARRANTY

A. Finish Warranty: Manufacturer's warranty against deterioration of factory finishes for the period of 5 years from the date of Substantial Completion.

B. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.

1. Warranty Period: 5 years from date of Substantial Completion.

C. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1. Warranty Period: 5 years from date of Substantial Completion.

D. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

1. Warranty Period: 5 years from date of Substantial Completion.

1.8 ALTERNATES

A. Add Alternate No. 1: The Amount to be added to the total contract sum in connection with increasing the base bid level 3 ballistic ratings at the exterior storefront system and glazing to level 5 ballistic rating, where shown on the architectural drawings.

B Deduct Alternate No. 2: The Amount to be deducted from the total contract sum to delete the base bid area of ballistic 3 exterior storefront at the south wall of the lobby and provide patterned brick in lieu, where shown in the architectural drawings.

PART 2 - PRODUCTS

2.1 MANUFACTURED UNITS

A. Basis of Design: Insulgard HP600/ HP500 Bullet and Resistant Architectural Aluminum Framing and Doors by Insulgard Security Products; Phone 800.624.6315; website www.insulgard.com,

B. ~~Basis of Design: McGrory BallisticDefend Unico Bullet Resistant Framing and Doors by McGrory Glass; Phone 800.220.3749; website www.mcgrory.com~~

1. Subject to compliance with requirements, manufacturers of products of equivalent design may be acceptable if approved in accordance with Section 01 25 00 Substitution Procedures.

C. Description

1. Factory fabricated framing constructed from either 6105-T5 or 6005-T5 extruded aluminum with integral weep design to allow water to vent to the exterior along horizontal members.
2. Dimensions:

a. Head, Jamb, Sill, Mullion and Intermediate Horizontal Members: 2-1/2 inches by 6 inches.
b. Doors: Bottoms - 10”x3 5/8”, stiles and top rail – 5”x3 5/8”.

2.2 PERFORMANCE CRITERIA

A. Ballistic Resistant: Level 3 & Level 5 in accordance with UL 752 – Testing for Ballistic Resistance for the complete assembly including framing, glazing and panels.

2.3 FABRICATION

A. Tolerances: All joints and connections shall be tight, providing hairline joints and true alignment of adjacent members

2.4 ALUMINUM FRAME FINISHES

A. Clear Anodic Finish: AAMA 611, AA-M12C22A41, Class I, 0.018 mm or thicker.

B. Anodized Finishing: Prepare aluminum surfaces for specified finish; apply shop finish in accordance with the following:

1. Anodic Coating: Electrolytic color coating followed by an organic seal applied in accordance with the requirements of AAMA 612. Aluminum extrusions shall be produced from quality controlled billets meeting AA-6063-T5.
2. Exposed Surfaces shall be free of scratches and other serious blemishes.
3. Extrusions shall be given a caustic etch followed by an anodic oxide treatment and then sealed with an organic coating applied with an electrodeposition process.
4. The anodized coating shall comply with all of the requirements of AAMA 612: Voluntary Specifications, Performance Requirements and Test Procedures for Combined Coatings of Anodic Oxide and Transparent Organic Coatings on Architectural Aluminum. Testing shall demonstrate the ability of the finish to resist damage from mortar, salt spray, and chemicals commonly found on construction sites, and to resist the loss of color and gloss
5. Overall coating thickness for finishes shall be a minimum of 0.7 mils

C. Finishes Testing:
1. Apply 0.5% solution NaOh, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOh; Do not clean area further.
2. Submit samples with test area noted on each sample.

2.5 ALUMINUM DOOR FINISHES

A. Fluoropolymer Three Coat Coating System: Manufacturer's standard three coat, thermo-cured system composed of specially formulated inhibitive primer, fluorocarbon color coat, and a clear fluorocarbon topcoat (applicable with three coat system). Both color coat and clear topcoat shall contain not less than 70% polyvinylidene resin by weight in compliance with AAMA 2605 for testing, performance, and application procedures.

1. Panels shall be chemically etched by an appropriate cleaner in accordance with manufacturer's written instructions.

2. Apply acid resistant primer to cleaned aluminum. Thickness range; 0.20 to 0.30 mils.

3. Apply polyvinylidene fluoride (PVF2) resinated color coat. Thickness range; 0.8 to 1.2 mils.
   a. Kynar 500. Must be applied by certified Kynar coater.

4. Apply clear top coat finish as extra protection, no less then 0.8 mils thick. Comply with AAMA standards.
5. Color: Custom color to match architect's sample, or if none, from manufacturer's standard selection

2.6 Ballistic Glazing

1. GL-3 1.717" Nom. Thickness Insulated Level 3 ballistic UL 752SEE 08 43 44.13

   a. Basis of Design: Baluln25 IG, by Insulgard Security products
   b. Thickness: 1.742" Nom.
   c. Light Transmittance: 69%
   d. U-Value: .43
   e. SHGC: .62
   f. Shading Coefficient: .71

2. GL-4 Add Alternate #2 2.010” Nom. Thickness Insulated Level 5 ballistic glazing SEE 08 43 44.13
   a. Basis of Design: Baluln32 IG, by Insulgard Security products
   b. Thickness: 2.010” Nom.
   c. Light Transmittance: 68%
   d. U-Value: .42
   e. SHGC: .62
   f. Shading Coefficient: .71

3. GL-8
   a. Basis of Design: Baluln25, by Insulgard Security products
   b. Thickness: 1.01” Nom.
   c. Light Transmittance: 77%
   d. U-Value: .84
   e. SHGC: .63
   f. Shading Coefficient: .72

4. Allowable Tolerances: Plus or minus 1/4 inch for frame opening width, height, diagonal dimensions, and overall width and height (outside to outside).

2.7 ACCESSORIES

A. Anchors: Fully concealed in accordance with requirements of delegated design requirements

PART 3 - EXECUTION

3.1 PREPARATION

A. Verify field dimensions of opening prior to fabrication of windows.

B. Coordinate structural requirements to ensure proper attachment and support.

3.2 INSTALLATION

A. Install windows in accordance with manufacturer's recommendations and approved shop drawings.

B. Provide required support and securely fasten and set windows plumb, square, and level without twist or bow.

C. Apply sealant in accordance with window and sealant manufacturer's recommendations as indicated in installation instructions. Wipe off excess, and leave exposed sealant surfaces clean and smooth.

3.3 PROTECTION

A. Clean and protect windows from damage during construction operations. If damage occurs, remove and replace as required to provide windows in their original, undamaged condition.

END OF SECTION 08 43 33.13

SECTION 09 65 00 - RUBBER TILE FLOORING

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. Athletic Rubber floor tile for the fitness room
   a. 15.2mm Fitness Vulcanized Composition Rubber Molded Interlocking Tiles

2. Stair tread & landings.

B. Related Sections:

1. Division 09 Section “Resilient Tile Flooring”.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product including but not limited to the following information as applicable:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.
4. Maintenance recommendations.

B. Sustainable Design Submittals: Comply with Division 01 Section “Sustainable Design Requirements – LEED”.

1. MR Credit 2: Environmental Product Declarations

   a. Resilient flooring, if available.

2. MR Credit 3: Sourcing of Raw Materials

   a. Recycled content: Resilient flooring.
   b. Bio-based: Resilient flooring.

3. MR Credit 4: Material Ingredients

   a. Report: Resilient flooring, if available.

4. EQ Credit 2: Low-Emitting Materials

a. Products installed in building interior: Certificate stating compliance with California Department of Public Health (CDPH) Standard Method including TVOC range.

1) Paints and Coatings: Include product data stating VOC content in grams per Liter (g/L).
2) Flooring: Resilient flooring.

C. Samples: Full-size units of each color, texture, and pattern of floor tile required.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of floor tile to include in maintenance manuals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Minimum two years' experience and completed at least three projects of similar magnitude, material and complexity.

1.7 MOCKUPS

A. In-situ Mockup: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects and to set quality standards for materials, fabrication, and installation.

1. Size: 100 sq. ft.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged wrapping and/or containers with identification labels intact clearly marking edge type, thickness, percentage of speckle and shade of color(s).

B. Inspection: Inspect all deliveries to ensure undamaged goods, and for accurate product type for thickness, edge type, color and speckle. Contact manufacturer immediately if product is damaged or inconsistent with order specifications.

C. Storage and Protection: Carefully handle all materials and store protected from exposure to harmful weather and at temperature conditions recommended by the manufacturer. Remove

pallet banding if long term storage is required, but leave other packaging intact until acclimation is to be started.

D. Flooring material and adhesive shall be acclimated to the installation area for a minimum of 24 hours prior to installation. See manufacturer's installation guidelines for details on proper acclimation process.

1.9 FIELD CONDITIONS

A. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. Areas to receive flooring shall be clean, level, dry, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of at least 68 deg. F degrees and less than 85 deg. F continuously prior to, during and after installation, but for not less than 48 hours prior to and during, and for not less than 48 hours after installation. The flooring material shall be conditioned in the same manner prior to installation.

B. Close spaces to traffic during rubber flooring installation and for a period of time after installation as recommended in writing by the manufacturer.

C. Install rubber flooring materials and accessories after all other finishing operations, including painting, have been completed.

D. Concrete substrates should not exceed 80 percent RH and/or 5 lbs. X 24 hrs. X 1000 sf. moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869.

1.10 WARRANTY

A. Warranty Period: Manufacturer's standard (10) Year Warranty against manufacturing defects.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide ECOfit Plus Interlocking Tile rubber flooring by Ecosurfaces or comparable products by one of the following manufacturers, but not limited to.

1. Armstrong Flooring Inc.
2. Tarkett North America.
3. Dinoflex Group LP

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: For floor tile, as determined by testing identical products according to ASTM E648 or NFPA 253 by a qualified testing agency.

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

2.3 ATHLETIC RECYCLED RUBBER FLOORING TILES

A. Material shall be manufactured from a composition of recycled truck tire crumb rubber encapsulated in a urethane binder.

B. All tiles shall be square edge tile. 15.2 mm thick; 23" x 23" (58 cm x 58 cm), Approximately 2.0 lbs /ft2 (.907 kg/ft2) Thickness tolerance is a maximum of +/- 0.5mm.

C. Edge finish and product size: Square (23” x 23”).

D. Thickness: 15.2mm.

E. Color: To be selected by Architect from standard color range.

2.4 HOMOGENEOUS PERFORMANCE COMPOUND RUBBER TILE FLOORING

A. Material shall be a non-vulcanized, non-laminated tile product with homogeneous color, composed of post-consumer recycled SBR (styrene butadiene rubber) combined with low odour EPDM (ethylene propylene diene monomer) rubber granules, bound with a proprietary slow-cured MDI water-based polymer.

B. All tiles shall be produced in block form (not cut from rolled material) sliced and precision cut using computerized numerically controlled (CNC) water-based equipment. Thickness tolerance is a maximum of +/- 0.5mm.

C. All Recycled Rubber Tiles shall be FloorScore(R) certified under the criteria developed by the Resilient Floor Covering Institute (RFCI) and certified by Scientific Certification Systems (SCS), Inc. Registration # SCS-FS-02144.

2.5 SCHEDULE OF RUBBER TILES

RT-1

Manufacturer:	Ecosurfaces
Style:	ECOfitPlus
Color:	Take One 1214
Size:	15mm (0.60") x 48" (1.22m) x 25 LF (7.62m)
Installation:	Roll
Location:	Fitness Room

RT-2 **Landings**

Manufacturer:	Roppe
Style:	ReNew
Color:	R123 Charcoal
Finish:	Smooth
Size:	50cm x 50cm
Location:	Stair Landings

RT-2 Treads

Manufacturer:	**Roppe Rubber Treads**
Profile:	**98 Vantage Raised Circular design with insert and without riser**
Abrasive strip:	**Black**
Style:	**ReNew**

Color: **R123 Charcoal**
Finish: **Raise Circles and abrasive strip**
Size: **36”-108” in 6” increments VIF dim in field**
Location: **B03, S02 Stair treads**
Installation: **Install per MFG details and preparation requirements.**

2.6 ACCESSORIES

A. Provide adhesives according to manufacturer’ recommendations and installation guidelines for specific substrate, and use only one of the following adhesives approved by the manufacturer:

1. Chemrex CX-941, one-component urethane, volatile organic compound (VOC) compliant. Chemrex Sealer/Primer to reduce vapor emissions over allowable levels
2. Bostik Green Fusion, one-component urethane, volatile organic compound (VOC) compliant
3. Or equal.

B. Portland based cementitious base leveler. Gypsum based not acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

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

3.2 PREPARATION

A. Ensure that substrate is dry and clean, and shall be free of depressions, raised areas or other defects that might telegraph through installed flooring.

B. Ensure that substrate is flat and uniformly sloped. Allowable variations in substrate levels are +/- 1/8” in 10’-0” and 1/4” total maximum variation from levels shown.

C. Concrete Substrates: Prepare according to ASTM F710.

1. Verify a minimum of 30 days prior to the scheduled resilient flooring installation the following substrate conditions. All substrate testing shall be documented and submitted to the Architect and Owner before commencement of the flooring installation.

a. Verify that substrates are dry, free of debris, and that all curing compounds, sealers, and hardeners have properly cured.

b. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
c. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
d. Moisture Testing: Perform tests recommended by manufacturer and as follows. Proceed with installation only after substrates pass testing

3.3 FLOOR TILE INSTALLATION

A. Comply with manufacturer's written instructions for installing floor tile.

B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.

C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.

D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.

E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.

G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in installation areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.

H. Adhere floor tiles to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.

B. Perform the following operations immediately after completing floor tile installation:

1. Remove adhesive and other blemishes from surfaces.
2. Sweep and vacuum surfaces thoroughly.
3. Damp-mop surfaces to remove marks and soil.

C. Protect floor tile from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

D. Cover floor tile until Substantial Completion.

END OF SECTION 09 62 00

SECTION 096519 - RESILIENT TILE FLOORING

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. Luxury Vinyl Tile (LVT)

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Sustainable Design Submittals: Comply with Division 01 Section “Sustainable Design Requirements – LEED”.

1. MR Credit 2: Environmental Product Declarations

a. Resilient flooring, if available.

2. MR Credit 3: Sourcing of Raw Materials

a. Recycled content: Resilient flooring.
b. Bio-based: Resilient flooring.

3. MR Credit 4: Material Ingredients

a. Report: Resilient flooring, if available.

4. EQ Credit 2: Low-Emitting Materials

a. Products installed in building interior: Certificate stating compliance with California Department of Public Health (CDPH) Standard Method including TVOC range.

1) Paints and Coatings: Include product data stating VOC content in grams per Liter (g/L).
2) Flooring: Resilient flooring.

C. Samples: Full-size units of each color, texture, and pattern of floor tile required.

1. For heat-welding bead, manufacturer's standard-size Samples, but not less than 12 inches long, of each color required.

D. Product Schedule: For floor tile.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of floor tile to include in maintenance manuals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Floor Tile: Furnish one box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.6 MOCKUPS

A. In-situ Mockup: Build mockups of each LVT and VCT color and style to demonstrate aesthetic effects and to set quality standards for materials, fabrication, and installation.

1. Size: (1) room of each type.
2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store floor tiles on flat surfaces.

1.8 FIELD CONDITIONS

A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following periods:

1. 48 hours before installation.
2. During installation.
3. 48 hours after installation.

B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.

C. Close spaces to traffic during floor tile installation.

D. Close spaces to traffic for 48 hours after floor tile installation.

E. Install floor tile after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products listed elsewhere in Part 2 by ShawContract or comparable products by one of the following manufacturers, but not limited to

1. Armstrong Flooring Inc.
2. Tarkett North America.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: For resilient floor tile, as determined by testing identical products according to ASTM E648 or NFPA 253 by a qualified testing agency.

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

2.3 MATERIALS, GENERAL

A. Resilient flooring installed within the building interior: Comply with emissions requirements of CDPH Standard Test Method in Division 01 Section “Sustainable Design Requirements – LEED”.

B. Bio-based Materials: Base with bio-based material per ASTM Test Method D6866 that is legally harvested and meeting the Sustainable Agriculture Network’s Sustainable Agriculture Standard.

C. Recycled Content: Provide products with recycled content.

2.4 LUXURY VINYL TILE (LVT)

A. Basis-of-Design Manufacturer: Subject to compliance with requirements, provide products listed below by ShawContract or comparable products by one of the following manufacturers, but not limited to

1. Armstrong Flooring Inc.
2. Tarkett North America.

LVT-1
Manufacturer: Shaw Contract
Collection: Dialogue
Pattern: Coded 4143V
Color: Engage 43595
Size: 6 in x 48 in
Location: Typical, see plan and schedule

~~LVT-2~~
~~Manufacturer: Shaw Contract~~
~~Collection: Compound + Cast~~
~~Pattern: Compound 5.0 4077V~~
~~Color: Granite 77585~~

~~Size: 24 in x 24 in~~
~~Location: Accent in corridors~~

2.5 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland-cement-based or blended hydraulic-cement-based formulation provided or approved by floor tile manufacturer for applications indicated.

B. Adhesives: Water-resistant type recommended by floor tile and adhesive manufacturers to suit floor tile and substrate conditions indicated.

C. Floor Polish: Provide protective, liquid floor-polish products recommended by floor tile manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.

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

3.2 PREPARATION

A. Prepare substrates according to floor tile manufacturer's written instructions to ensure adhesion of resilient products.

B. Concrete Substrates: Prepare according to ASTM F710.

1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by floor tile manufacturer. Do not use solvents.
3. Alkalinity and Adhesion Testing: Perform tests recommended by floor tile manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing.
4. Moisture Testing: Perform tests so that each test area does not 1000 sq. ft. and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.

a. Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.

C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

D. Do not install floor tiles until materials are the same temperature as space where they are to be installed.

1. At least 48 hours in advance of installation, move resilient floor tile and installation materials into spaces where they will be installed.

E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient floor tile.

3.3 FLOOR TILE INSTALLATION

A. Comply with manufacturer's written instructions for installing floor tile.

B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.

1. Lay tiles in pattern indicated.

C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.

1. Lay tiles in pattern of colors and sizes indicated.

D. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.

E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.

F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.

G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in installation areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.

H. Adhere floor tiles to substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting floor tile.

B. Perform the following operations immediately after completing floor tile installation:

1. Remove adhesive and other blemishes from surfaces.
2. Sweep and vacuum surfaces thoroughly.
3. Damp-mop surfaces to remove marks and soil.

C. Protect floor tile from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

D. Floor Polish: Remove soil, adhesive, and blemishes from floor tile surfaces before applying liquid floor polish.

1. Apply manufacturer's recommended number of coats.

E. Cover floor tile until Substantial Completion.

END OF SECTION 09 65 19

SECTION 09 66 23 - RESINOUS MATRIX TERRAZZO FLOORING

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. Thin-set, epoxy-resin terrazzo flooring.
2. ~~Thin-set, integral epoxy terrazzo base.~~
3. ~~Thick-set, precast epoxy terrazzo stair tread and riser units.~~

B. Related Requirements:

1. Division 07 Section "Joint Sealants" for sealants installed with terrazzo.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to terrazzo including, but not limited to, the following:

a. Inspect and discuss condition of substrate and other preparatory work performed by other trades.
b. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
c. Review special terrazzo designs and patterns.
d. Review dust-control procedures.
e. Review detail conditions at all penetrations, terminations, and perimeter conditions.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Sustainable Design Submittals: Comply with Division 01 Section “Sustainable Design Requirements – LEED”.

1. EQ Credit 2: Low- Emitting Materials

a. Paints and Coatings applied in building interior: Certificate stating compliance with California Department of Public Health (CDPH) Standard Method including TVOC range and product data stating VOC content in grams per Liter (g/L).

C. Shop Drawings: Include terrazzo installation requirements. Include plans, sections, component details, and relationship to other work. Show layout of the following:

1. Divider strips.
2. Control-joint strips.
3. Accessory strips.
4. Abrasive strips.
5. ~~Stair treads, risers, and landings.~~
6. Precast terrazzo jointing and edge configurations.
7. Terrazzo patterns.

D. Samples: For each type, material, color, and pattern of terrazzo and accessory required showing the full range of color, texture, and pattern variations expected. Label each terrazzo Sample to identify manufacturer's matrix color and aggregate types, sizes, and proportions. Prepare Samples of same thickness and from same material to be used for the Work, in sizes indicated below:

1. Terrazzo: 6-inch-square Samples.
2. ~~Precast Terrazzo Base: 6-inch-long Samples.~~
3. ~~Precast Terrazzo Stair Treads and Risers: 12-inch-long Samples.~~
4. Accessories: 6-inch-long Samples of each exposed strip item required.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Material Certificates: For each type of terrazzo material or product.

C. Installer Certificates: Signed by manufacturers certifying that installers comply with requirements.

D. Preinstallation moisture-testing reports.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For terrazzo to include in maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications:

1. Engage an installer who is a contractor member of NTMA.
2. Engage an installer who is certified in writing by terrazzo manufacturer as qualified to install manufacturer's products.
3. Engage an installer who has not less than ten years satisfactory experience in the application of resinous terrazzo flooring and continuous membership in the NTMA for the same period of time.
4. Engage an installer who has satisfactorily completed not less than three projects of similar complexity and scope to that specified for this project.

B. Manufacturer Qualifications: Manufacturer shall have not less than ten years satisfactory experience in the manufacture of resinous terrazzo flooring and continuous membership in the NTMA for the same period of time.

1.8 MOCKUPS

A. In-situ Mockup: Build mockups of each terrazzo application to demonstrate aesthetic effects and to set quality standards for materials, fabrication, and installation.

1. Size:

a. Minimum 100 sq. ft. of typical poured-in-place flooring ~~and base condition~~ for each color and pattern in locations directed by Architect.
~~b. Include minimum (3) stair treads and risers plus (1) intermediate landing.~~

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in supplier's original wrappings and containers, labeled with source's or manufacturer's name, material or product brand name, and lot number if any.

B. Store materials in their original, undamaged packages and containers, inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

1.10 FIELD CONDITIONS

A. Environmental Limitations: Comply with manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting terrazzo installation.

B. Field Measurements: Verify actual dimensions of construction contiguous with precast terrazzo by field measurements before fabrication.

C. Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during terrazzo installation.

D. Close spaces to traffic during terrazzo application and for not less than 24 hours after application unless manufacturer recommends a longer period.

E. Control and collect water and dust produced by grinding operations. Protect adjacent construction from detrimental effects of grinding operations.

1.11 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace terrazzo that fails in materials or workmanship within specified warranty period.

1. Warranty Period: (2) years from date of Substantial Completion.
2. Includes loss of bond and damage due to normal wear and tear.

B. Installer's Warranty: Installer agrees to repair or replace terrazzo that fails in materials or workmanship within specified warranty period.

1. Warranty Period: (2) years from date of Substantial Completion.
2. Includes loss of bond and damage due to normal wear and tear.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain primary terrazzo materials from single source from single manufacturer. Provide secondary materials including patching and fill material, joint sealant, and repair materials of type and from source recommended by manufacturer of primary materials.

B. Source Limitations for Aggregates: Obtain each color, grade, type, and variety of granular materials from single source with resources to provide materials of consistent quality in appearance and physical properties.

C. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the Work include, but are not limited to, the following:

1. Master Terrazzo Technologies, LLC.
2. Polymerica Incorporated.
3. Sherwin-Williams High Performance Flooring.

2.2 PERFORMANCE REQUIREMENTS

A. NTMA Standards: Comply with NTMA's written recommendations for terrazzo type indicated unless more stringent requirements are specified.

1. Comply with NTMA Technical Bulletin No. 36, Terrazzo Coefficient of Friction.

2.3 MATERIALS, GENERAL

A. Interior wet-applied primers, sealers, and coatings: Comply with emissions requirements of CDPH Standard Test Method and VOC content limits in Division 01 Section “Sustainable Design Requirements – LEED”.

2.4 EPOXY-RESIN TERRAZZO

A. Epoxy-Resin Terrazzo: Comply with manufacturer's written instructions for matrix and aggregate proportions and mixing.

B. Thickness: 3/8 inch.

C. Mix Color and Pattern: Comply with NTMA's "Guide Specification for Epoxy Terrazzo" and manufacturer's written instructions for component proportions and mixing. Adjust mixes as required to match Architect's samples. The trial mix designs are based on the following:

1. TZ-1
   Manufacturer: Wausau Tile
   Collection: Terrazzo Tile
   Pattern: Reflections
   Color: TZ301 Frost
   Size: See plans
   Location: Lobby

D. Materials:

1. Moisture-Vapor-Emission-Control Membrane: Two-component, high-solids, high-density, low-odor, epoxy-based membrane-forming product produced by epoxy terrazzo manufacturer that reduces moisture emission from concrete substrate to not more than 3 lb of water/1000 sq. ft. in 24 hours.
2. Substrate-Crack-Suppression Membrane: Product of terrazzo-resin manufacturer, having minimum 120 percent elongation potential according to ASTM D412.

   a. Reinforcement: Fiberglass scrim.

3. Primer: Manufacturer's product recommended for substrate and use indicated.
4. Epoxy-Resin Matrix: Manufacturer's standard recommended for use indicated and in color required for mix indicated.

   a. Physical Properties without Aggregates:

      1) Hardness: 60 to 85 per ASTM D2240, Shore D.
      2) Minimum Tensile Strength: 3000 psi per ASTM D638 for a 2-inch specimen made using a "C" die per ASTM D412.
      3) Minimum Compressive Strength: 10,000 psi per ASTM D695, Specimen B cylinder.
      4) Chemical Resistance: No deleterious effects by contaminants listed below after seven-day immersion at room temperature per ASTM D1308.

         a) Distilled water.
         b) Mineral water.
         c) Isopropanol.
         d) Ethanol.
         e) 0.025 percent detergent solution.
         f) 1.0 percent soap solution.
         g) 5 percent acetic acid.
         h) 10 percent sodium hydroxide.
         i) 10 percent hydrochloric acid.
         j) 30 percent sulfuric acid.

   b. Physical Properties with Aggregates: For terrazzo blended according to manufacturer's recommendations with one part epoxy resin with three parts marble aggregate consisting of 60 percent No. 1 chips and 40 percent No. 0 chips that is ground and grouted to a 1/4-inch nominal thickness, and cured for 7 days at 75 deg F plus or minus 2 deg F and at 50 percent plus or minus 2 percent relative humidity.

1) Flammability: Self-extinguishing, maximum extent of burning 1/4 inch according to ASTM D635.
2) Thermal Coefficient of Linear Expansion: 0.0025 inch/inch per deg F according to ASTM C531.

5. Aggregates: Comply with NTMA gradation standards for mix indicated and contain no deleterious or foreign matter.

   a. Abrasion and Impact Resistance: Less than 40 percent loss per ASTM C131/C131M.
   b. 24-Hour Absorption Rate: Less than 0.75 percent.
   c. Dust Content: Less than 1.0 percent by weight.

6. Finishing Grout: Resin based.

~~2.5 PRECAST EPOXY-RESIN TERRAZZO~~

~~A. Precast Terrazzo Base: Minimum 3/8-inch-thick, epoxy terrazzo units cast in maximum lengths possible, but not less than 36 inches. Comply with manufacturer's written instructions for fabricating precast terrazzo base units in sizes and profiles indicated.~~

~~1. Type: Coved with minimum 3/4-inch radius.~~
~~2. Top Edge: Radius edge with polished top surface.~~
~~3. Outside Corner Units: With finished returned edges at outside corner.~~
~~4. Color, Pattern, and Finish: Match adjacent poured-in-place terrazzo flooring.~~

2.6 STRIP MATERIALS

A. Thin-Set Divider Strips: L-type angle in depth required for topping thickness indicated.

1. Material: Brass.
2. Top Width: 1/8 inch.

B. Control-Joint Strips: Separate, double L-type angles, positioned back to back, that match material and color of divider strips and in depth required for topping thickness indicated.

C. Accessory Strips: Match divider-strip width, material, and color unless otherwise indicated. Use the following types of accessory strips as required to provide a complete installation:

1. Edge-bead strips for exposed edges of terrazzo.

2.7 MORTAR MATERIALS

A. General: Comply with referenced standards and with manufacturers' written instructions for mix proportions, mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures needed to produce mortar of uniform quality and with optimum performance characteristics.

B. Latex-Portland Cement Slurry Bond Coat: Latex additive (water emulsion), serving as replacement for any gauging water, combined at job site with prepackaged dry mortar mix supplied or specified by latex additive manufacturer.

1. Products: Provide the following:

    a. Liquid Component: Laticrete 4237 Thin-set Mortar Additive; Latecrete International. Inc.
    b. Prepackaged Dry Mortar Mix: Laticrete 211 Crete Filler Powder; Laticrete International, Inc.

C. Latex-Portland Cement Mortar Bed: Latex additive (water emulsion), serving as replacement for any gauging water, combined at job site with prepackaged dry mortar mix supplied or specified by latex additive manufacturer.

2.8 MISCELLANEOUS ACCESSORIES

A. Strip Adhesive: Epoxy-resin adhesive recommended by adhesive manufacturer for this use.

1. Adhesives shall have a VOC content of 70 g/L or less.

B. Anchoring Devices:

1. Strips: Provide mechanical anchoring devices or adhesives for strip materials as recommended by manufacturer and as required for secure attachment to substrate.
2. Precast Terrazzo: Provide mechanical anchoring devices as recommended by fabricator for proper anchorage and support of units for conditions of installation and support.

C. Patching and Fill Material: Terrazzo manufacturer's resinous product approved and recommended by manufacturer for application indicated.

D. Joint Compound: Terrazzo manufacturer's resinous product approved and recommended by manufacturer for application indicated.

E. Resinous Matrix Terrazzo Cleaner: Chemically neutral cleaner with pH factor between 7 and 10 that is biodegradable, phosphate free, and recommended by sealer manufacturer for use on terrazzo type indicated.

F. Sealer: Slip- and stain-resistant, penetrating-type sealer that is chemically neutral; does not affect terrazzo color or physical properties; and is recommended by sealer manufacturer.

1. Surface Friction: Not less than 0.6 according to ASTM D2047.
2. Acid-Base Properties: With pH factor between 7 and 10.
3. Products shall comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," CDPH standard method version 1.2.

G. Joint Sealants: Recommended by terrazzo and sealant manufacturers and complying with requirements in Division 07 Section "Joint Sealants."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and areas, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions, including levelness tolerances, have been corrected.

3.2 PREPARATION

A. Clean substrates of substances, including oil, grease, and curing compounds, that might impair terrazzo bond. Provide clean, dry, and neutral substrate for terrazzo application.

B. Concrete Slabs:

1. Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, and other contaminants incompatible with terrazzo.

    a. Shot-blast surfaces with an apparatus that abrades the concrete surface, contains the dispensed shot within the apparatus, and recirculates the shot by vacuum pickup.
    b. Repair damaged and deteriorated concrete according to terrazzo manufacturer's written instructions.
    c. Use patching and fill material to fill holes and depressions in substrates according to terrazzo manufacturer's written instructions.

C. Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to manufacturer's written instructions.

D. Preinstallation Moisture Testing:

1. Testing Agency: Engage a qualified testing agency to perform tests.
2. Moisture Testing: Perform tests so that each test area does not exceed 200 sq. ft. and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.

    a. Moisture-Vapor-Emission Test: Maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours when tested according to ASTM F1869 using anhydrous calcium chloride.
    b. Relative Humidity Test: Maximum 75 percent relative humidity measurement when tested according to ASTM F2170 using in-situ probes.

3. Proceed with terrazzo installation only after concrete substrates pass moisture testing or after installation of moisture-vapor-emission-control membrane on substrate areas that fail testing.

E. Moisture-Vapor-Emission-Control Membrane: Install according to manufacturer's written instructions.

1. Install concrete substrates that fail preinstallation moisture testing.

F. Substrate-Crack-Suppression Membrane: Install to isolate and suppress substrate cracks according to manufacturer's written instructions.

1. Prepare and prefill substrate cracks with membrane material.
2. Install membrane at substrate cracks in areas to receive terrazzo.
3. Reinforce membrane with fiberglass scrim.

G. Protect other work from water and dust generated by grinding operations. Control water and dust to comply with environmental protection regulations.

1. Erect and maintain temporary enclosures and other suitable methods to limit water damage and dust migration and to ensure adequate ambient temperatures and ventilation conditions during installation.

3.3 EPOXY-RESIN TERRAZZO INSTALLATION

A. Comply with NTMA's written recommendations for terrazzo and accessory installation.

B. Strip Materials:

1. Divider and Control-Joint Strips:

a. Locate divider strips in locations indicated and as recommend by manufacturer.
b. Install control-joint strips back to back and directly above concrete-slab control joints.
c. Install control-joint strips with 1/4-inch gap between strips, and install sealant in gap.
d. Install strips in adhesive setting bed without voids below strips, or mechanically anchor strips as required to attach strips to substrate, as recommended by strip manufacturer.

2. Accessory Strips: Install as required to provide a complete installation.

C. Apply primer to terrazzo substrates according to manufacturer's written instructions.

D. Broadcast aggregate evenly throughout topping mix to assure even distribution of aggregate in finished floor surface. Remove and reinstall panels of terrazzo exhibiting uneven distribution of aggregate upon direction of Architect.

E. Place, rough grind, grout, cure grout, fine grind, and finish terrazzo according to manufacturer's written instructions.

1. Installed Thickness: 3/8 inch nominal.
2. Terrazzo Finishing: Ensure that matrix components and fluids from grinding operations do not stain terrazzo by reacting with divider and control-joint strips.

a. Rough Grinding: Grind with 24-grit or finer stones or with comparable diamond abrasives. Follow initial grind with 60/80-grit stones or with comparable diamond abrasives.
b. Grouting: Before grouting, clean terrazzo with water, rinse, and allow to dry. Apply and cure epoxy grout.

c. Fine Grinding: Grind with 120 or finer grit stones until all grout is removed from surface. Repeat rough grinding, grout coat, and fine grinding if large voids exist after initial fine grinding. Produce surface with a minimum of 70 percent aggregate exposure.
d. Repeat rough grinding, grout coat, and fine grinding if large voids exist after initial fine grinding. Produce surface with a minimum of 70 percent aggregate exposure.
e. Contractor shall be solely responsible for repairing any during the terrazzo finishing process.

3. Installation Tolerance: Limit variation in terrazzo surface from level to 1/4 inch in 10 feet; noncumulative.

3.4 PRECAST TERRAZZO INSTALLATION

A. Install precast terrazzo units using method recommended in writing by NTMA and manufacturer unless otherwise indicated.

B. Do not install units that are chipped, cracked, discolored, or improperly finished.

C. Seal joints between units with joint sealant.

3.5 REPAIR

A. Cut out and replace terrazzo areas that evidence lack of bond with substrate. Cut out terrazzo areas in panels defined by strips and replace to match adjacent terrazzo, or repair panels according to NTMA's written recommendations, as approved by Architect.

3.6 CLEANING AND PROTECTION

A. Cleaning:

1. Remove grinding dust from installation and adjacent areas.
2. Wash surfaces with cleaner according to NTMA's written recommendations and manufacturer's written instructions; rinse surfaces with water and allow them to dry thoroughly.

B. Sealing:

1. Seal surfaces according to NTMA's written recommendations.
2. Apply sealer according to sealer manufacturer's written instructions.

C. Protection: Provide final protection and maintain conditions, in a manner acceptable to Installer, that ensure that terrazzo is without damage or deterioration at time of Substantial Completion.

END OF SECTION 09 66 23

SECTION 09 67 26 – DECORATIVE HIGH-PERFORMANCE FLOORING SYSTEM

PART 1 GENERAL

1.1 SECTION INCLUDES
Poured Epoxy Resin Flooring

A. Epoxy primer

B. Epoxy resin binder

C. Urethane finish coat

1.2 RELATED SECTIONS

A. Section 03 30 00 - Cast-in-Place Concrete.

1.3 REFERENCES

A. ASTM C 307 - Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacings.

B. ASTM C 413 - Absorption of Chemical-Resistant Mortars, Grouts, and Monolithic Surfacings.

C. ASTM C 579 - Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes.

D. ASTM D 696 - Coefficient of Linear Thermal Expansion of Plastics.

E. ASTM D-790 – Flexural Strength/Flexural Modulus of Elasticity

F. ASTM D-1644 – Determination of Solids Content

G. ASTM D-1044 – Abrasion Resistance by Tabor Abrasor

H. ASTM D 2240 - Rubber Property - Durometer Hardness.

I. ASTM D 4258 - Surface Cleaning Concrete for Coating.

J. ASTM D 4259 - Abrading Concrete.

K. ASTM C-413 - Water Absorption

L. ICRI Guideline 03732 – Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings and Polymer Overlays

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data, including physical properties and colors available.

B. Manufacturer: Submit Manufacturer’s current ISO 9001 Certificate of Registration.

B. Sustainable Design Submittals:

1. Submit sustainable design certificate for recycled content.
2. Submit sustainable design certificate for products manufactured within 500 miles of the building site location.
3. Submit sustainable design certificate for low-emitting sealers.

C. Product Samples: Submit Architectural Standard samples representative of the final finish, as applied. The Standard shall be approved in writing by the Architect and shall be the final standard of acceptance of the finish.

D. Maintenance Instructions: Submit manufacturer's maintenance instructions, including maintenance procedures and materials, procedures for stain removal and surface repair, and recommended schedule for cleaning.

1.5 QUALITY ASSURANCE

A. Qualifications:
   1. Applicator: Use applicator experienced in application of specified materials for a minimum of [5] [Five] years on projects of similar size and complexity. Provide list of completed projects including project name and location, name of architect, name of material manufacturer, and approximate quantity of materials applied.
   2. Applicator's Personnel: Employ only persons trained for application of specified materials.

B. Pre-application Meeting: Convene a pre-application meeting [2] [Two] weeks before start of application of floor coating. Require attendance of parties directly affecting work of this section, including Contractor, Architect, applicator, and manufacturer's representative. Review surface preparation, priming, application, curing, protection, and coordination with other work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name, manufacturer, batch or lot number, and date of manufacture. Do not store in direct sunlight or high heat conditions.

B. Storage:
   1. Store materials in accordance with manufacturer’s instructions.
   2. Keep containers sealed until ready for use.
   3. Do not subject material to excessive heat or freezing; do not apply material that has been subjected to excessive heat or freezing. Material subjected to excessive heat or freezing shall be separated from inventory and destroyed by mixing all three components. The solid reacted product shall be disposed of in environmentally sound and regulatory compliant manner.
   4. Shelf life: 1 [one] year after date of manufacture, in unopened containers, under normal conditions.

C. Handling: Protect materials during handling and application to prevent damage or contamination.

D. Condition materials for use to 60º – 85ºF (15º - 30ºC) for 24 hours prior to application.

1.7 SITE CONDITIONS

A. Do not apply materials if floor or air temperature is below 60ºF (15ºC).

B. Do not apply materials if relative humidity is above 85 percent or within 5º of dew point at time of application [Omit if not applicable]

C. Utilities, including electric, water, heat and finished lighting shall be supplied by General Contractor

D. Maintain room temperature between 60º – 85ºF (15º - 30ºC) for 48 hours before, during and 48 hours after installation, or until cured.

E. At the time of application ensure the minimum substrate temperature is above 60°F (15°C) and the substrate temperature is 5°F (3°C) above the measured dew point at the time of application. [Omit if not applicable]

F. Erect suitable barriers and post legible signs at points of entry to prevent traffic and trades from entering the work area during application and cure period of the floor.

G. Protection of finished floor from damage by subsequent trades shall be the responsibility of the General Contractor.

1.8 WARRANTY

A. Provide a warranty covering materials and workmanship for a period of two (2) years after date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Manufacturers: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturer shall be certified under ISO 9001: All liquid materials, including primers, resins, curing agents, finish coats, and sealants are manufactured and tested under an ISO 9001 registered quality system.

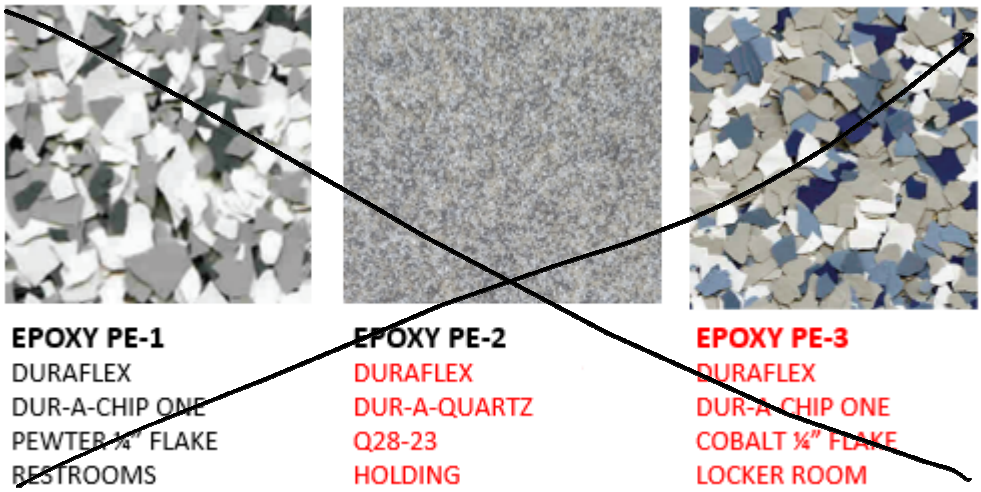
C. Basis of Design ~~Approved~~ Manufacturer shall be Sika Corp., Industrial Flooring, 201 Polito Avenue, Lyndhurst, NJ 07071
Phone 201.933.8800
Fax 201.933.6225
usa.sika.com

D. Or approved equal.

2.2 SYSTEM

A. Description: Decodur Granite is a component based granite effect, flooring system that is designed to be installed between 80 – 100 mils/112 - 118 mils total system (primer/finish) thickness.

2.3 MATERIALS



A. Sikafloor® 161 Epoxy Primer CHANGE TO DURAFLEX
   1. 100% solids, Low modulus, low viscosity, penetrating epoxy primer for concrete.
   2. Apply in accordance with the Manufacturer's published technical data.
   3. Optional Primers: Sikafloor 160 (low VOC), Sikafloor 1610 (high moisture concrete, Sikafloor 2570WB (water based). Consult Manufacturer's published technical data for applicable uses.

B. Sikafloor® 218DF/Decodur Granite Body Coat

   1. Description: Two component, high solids epoxy for use as aggregate binder for Sikafloor Decodur Granite. Material shall only be applied in conjunction with Sikafloor DecoDur Granite specification aggregate, no other aggregates shall be used.
   2. Apply in strict accordance with the Manufacturer's published technical data and instruction. Apply in one [1] application/coat at 80 – 100 mils (2.03 – 25.0mm)
   3. Hardness: ASTM D-2240 80 (Shore D)
   4. Bond Strength: ASTM D-4541 >400 psi (2.76 MPa) (100% concrete failure)
   5. Tensile Strength: ASTM D-638 5,728 psi (27.4 MPa)
   6. Compressive Strength: ASTM D-579 7,250 psi (34.7 MPa)
   7. Impact Resistance: ASTM D-2794 160 in-lbs. (18.1 N-m)
   8. Flexural Strength: ASTM D790 9,384 psi (44.9 MPa)
   9. Abrasion Resistance: ASTM D-4060 76 mg loss (CS-17 wheel,1000 cycles)
   10. Flammability (Base with any finish coat) ASTM E-648 Class I
   11. Slip Resistance, Sikafloor 304W finish coat: ANSI A137.1 0.58 Wet/Dynamic

   a. Engineered Resin Flooring (PE-1)

1. Color: to be selected by Architect

b. Engineered Resin Flooring (PE-2)
1. Color: to be selected by Architect

.

C. Sikafloor® 304W

1. Description: Clear, low VOC, clear, two-part, water based polyurethane, matte finish coat for use with Sikafloor Decodur Granite seamless flooring system.
2. Apply in accordance with the Manufacturer's published technical data.
3. Apply in one coat at 5 mils WFT.

C. Schedule of Poured Epoxy Resin Flooring

PE-1
Manufacturer: Sika Flooring
Collection: DecoDur Flake FX
Pattern: Contemporary Blends
Sheen: **Glossy**
Color: Pumicite
Size: 1/8" Flake
Location: 125/126 Public Restrooms, 215.1 Captain's Restroom

PE-2
Manufacturer: Sika Flooring
Collection: DecoFlake
Pattern: Understated Style
Sheen: **Glossy**
Color: Sublime
Size: 1/8" Flake
Location: Staff Restrooms

PE-3
Manufacturer: Sika Flooring
Collection: DecoDur **Granite**
~~Pattern: Contemporary Blends~~
Sheen: **Matte**
Color: ~~Pebble~~ **Hierro**
Size: ~~1/8" Flake~~ **sand texture**
Location: Holding

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine surfaces to receive Sikafloor® Decodur Granite system. Notify Architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions are corrected. Do not apply to substrate treatments for moisture, repair, or leveling not of the same Manufacturer.

B. Conduct quantitative moisture testing in accordance with ASTM-F2659-10 utilizing Tramex type impedance moisture meter. Maximum acceptable test result is 4%. If in excess of stated value, utilize

Sikafloor® 1610 moisture tolerant epoxy primer, or PurCem® 24NA to produce acceptable coating surface. Adhere to Manufacturer's published technical data and instruction.

C. Do not apply Sikafloor® Decodur Granite system to concrete less than 60 days old. Consult Technical Service prior to application when concrete has not cured for 60 days.

D. Do not apply Sikafloor® Decodur Granite system to sand-cement setting beds, regardless of condition. Sand-cement beds shall be removed to structural concrete substrate and re-leveled/sloped as necessary to achieve grade and/or adequate drainage.

E. Do not apply to asphaltic or bitumen membranes, soft wood, aluminum, copper or fiberglass reinforced polyester/vinyl ester composites.

F. Application to glazed or vitrified brick and tile, structural wood, or steel shall be approved only with the Manufacturer's written recommendation.

3.2 UNDERLAYMENT TO CARPET BUILD-UP AREA

A. Sika Level-125, a one-component, durable and versatile cementitious underlayment for interior concrete and cementitious substrates, applied manually or by pump to produce a self-smoothing, rapid-set- ting, flat and economical substrate prior to the application of a final floor finish. Typical application thickness is 1/25 to 2 inches* (1 to 50 mm).

a. Underlayment installed per manufacturer's recommendations.

3.3 SURFACE PREPARATION

A. Prepare concrete surfaces in accordance with manufacturer's instructions and ASTM D 4258.

B. Remove dirt, oil, grease, wax, laitance, curing compounds, water-soluble concrete hardeners, and other surface contaminants.

C. Remove sealers, finishes, and paints.

D. Remove unsound concrete by scarifying, sand blasting, shot blasting, or high pressure water blasting.

E. Chemical Surface Preparation:

1. Chemical surface preparation (acid etching) is unacceptable and will void Manufacturer's warranty.

F. Mechanical Surface Preparation:

1. Mechanically abrade concrete surface in accordance with manufacturer's instructions.
2. Leave concrete surface with an aggressive texture.
3. Remove concrete dust.
4. Conform to ASTM D-4259.
5. Surface profile shall conform to IRCI Guideline 03732 CSP 4, minimum.

3.3 CONTROL JOINTS, CRACKS

A. Provide repair and treatment of control joints and surface cracks utilizing manufacturer's standard materials and installation details.

3.4 APPLICATION

A. Repair concrete substrate as required using SikaQuick® 1000 cementious repair/resurfacer in accordance with Manufacturer's instructions.

B. Do not add thinners to materials. No thinners shall be approved.

C. For coverage rates, consult data sheet for Sikafloor® Decodur Granite system

D. Finish surface to be smooth, with uniform texture, free of surface defects, and without porous areas.

E. Follow Manufacturer's recommendations on terminations and connections to walls, drains, doorways, columns and floor-to-floor transitions.

3.4 CLEANUP

A. Remove masking, draping, and other protection from adjacent surfaces.

B. Remove remaining materials and debris from job site and dispose of them in according with local rules and regulations. Leave area in clean condition free of debris.

3.6 PROTECTION

A. Protect Sikafloor® Decodur Granite system from damage after installation.

1. Foot Traffic: 12 to 16 hours.
2. Medium Wheeled Load 24 hours.
3. Full Cure: 72 hours

END OF SECTION 09 67 26

SECTION 10 14 00 - SIGNAGE

PART 1 - GENERAL

1.1 STIPULATIONS

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. This Section includes the following:

1. Interior panel signs.
2. Vinyl adhered decals and signs
3. Dimensional characters (letters and numbers) for exterior use including backlit and unlit.
4. Signage accessories.
5. Cast Stone Corner Stone

B. Related Sections include the following:

1. Division 23 Section "Mechanical Identification" for labels, tags, and nameplates for mechanical equipment.
2. Division 26 Section "Electrical Identification" for labels, tags, and nameplates for electrical equipment.
3. Division 26 Section "Lighting" for illuminated exit signs.
4. Division 4 Section "Cast Stone Masonry" for Corner stone

1.3 SUBMITTALS

A. Product Data: profiles and construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of sign.

B. Shop Drawings: Include plans, elevations, and large-scale sections of typical members and other components. Show mounting methods, grounds, mounting heights, layout, spacing, reinforcement, accessories, and installation details.

1. Provide message list for each sign, including large-scale details of wording, lettering, artwork, and braille layout.

C. Samples for Initial Selection: For each type of sign material indicated that involves color selection.

D. Samples for Verification: For each type of sign, include the following Samples to verify color selected:

1. Panel Signs: Full-size Samples of each type of sign required.

E. Qualification Data: For Installer.

F. Maintenance Data: For signage cleaning and maintenance requirements to include in maintenance manuals.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative of the signage manufacturer for installation and maintenance of units required for this Project.

B. Source Limitations: Obtain each sign type through one source from a single manufacturer.

C. Regulatory Requirements: Comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.

1. Interior Code Signage: Provide signage as required by accessibility regulations and requirements of authorities having jurisdiction.

1.5 PROJECT CONDITIONS

A. Field Measurements: Where sizes of signs are determined by dimensions of surfaces on which they are installed, verify dimensions by field measurement before fabrication and indicate measurements on Shop Drawings.

1.6 COORDINATION

A. For signs supported by or anchored to permanent construction, advise installers of anchorage devices about specific requirements for placement of anchorage devices and similar items to be used for attaching signs.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:

1. Interior Panel Signs, Basis-of-Design Product:
   a. Mohawk Sign System MP 200 A Format or equal. The design for each sign is based on the product type named.
   b. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.
2. Exterior Dimensional Lettering, Basis-of-Design Product:
   a. Gemini

2.2 INTERIOR PANEL SIGNS

A. General: Provide panel signs that comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.

1. Produce smooth panel sign surfaces constructed to remain flat under installed conditions within tolerance of plus or minus 1/16 inch measured diagonally.

2.

B. Manufacturers:

1. Basis of Design, Mohawk Sign Systems, Inc.
2. Apco Signs
3. ASI Modulex, Architectural Signage Solutions
4. Best Sign Systems. Inc.
5. InPro Corporation
6. Signature Signs
7. InVision Signs

C. Laminated Sheet Sign. Sandblasted polymer face sheet with raised graphic laminated over subsurface graphics laminated over subsurface graphics to acrylic backing sheet to produce composite. Styles and types shall be as indicated in sketches and shall match Owner's interior signage standard prototype.

D. 'Paper Grabber' at bottom of signs shall be as indicated Type 2 signs in sketches/schedules.

E. 'Finger Hole' access for view panels to allow users to insert and extract paper inserts shall be as indicated in sketches/schedules.

F. Mounting for each sign style and type shall be as indicated in sketches/schedules.

G. Cast-Acrylic Sheet: Manufacturer's standard and as follows:

1. Color: As selected by Architect from manufacturer's full range.
2. 1/16" Horizontal V Groove
3. Thickness:

a. Static Signs: 1/4" Acrylic
b. Signs with Acrylic Window: milled edge creating a continuous U-shape frame to engage the acrylic Window.

H. Before specifying, verify availability of plastic-laminate materials in color combinations required.

I. Delete paragraph and subparagraphs below if no unframed panel signs.

J. Perimeter: Fabricate edges to profile indicated; comply with the following requirements for materials and corner conditions:

1. Material: Romark or Equivalent.
2. Corner Condition: sharp corners

K. Graphic Content and Style: Provide sign copy that complies with requirements indicated in the Sign Schedule for size, style, spacing, content, mounting height and location, material, finishes, and colors of signage.

L. Graphic Symbols:

1. Owner Provided Graphic for raised pattern header. EPS file available upon request after bidding phase. See Interior Signage drawings.

2. Color: As selected by Architect from Manufacturer's full range

M. Acrylic Sheet Plastic Window: Plexiglass II by Rohm & Hass Co. or equal.

N. Text Fonts: Sans Serif: Gill Sans, ¾ » high

O. Blank Aluminum Sign Panels: To be used as a backer for mounting signs on window areas other than sidelights. At Doors with sidelights, sidelights are considered to be part of the door; sign to be mounted beside sidelight.

P. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with ADA Accessibility Guidelines and ICC/ANSI A117.1. Text shall be accompanied by Grade 2 Braille. Produce precisely formed characters with square cut edges free from burrs and cut marks.

1. Panel Material: Opaque acrylic sheet
2. Ball Pointed Braille.
3. Raised-Copy Thickness: Not less than 1/32 inch.

Q. Accessories:

1. Mounting Methods: Use concealed fasteners or double-sided vinyl tape fabricated from materials that are not corrosive to sign material and mounting surface.

R. Adhesives: VOC Content of 70 g/L or less.
1. For adhesives, indicating compliance with requirements for low-emitting materials.
2. Verify adhesive complies with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

S. Copy & Schedule:
1. If there are any inconsistencies between the drawings and schedule
2. Room names shall be changed through the shop drawings. Room number is for drawings and installation scheduling purpose and may not be included in the room signage or be changed.
3. Provide Microsoft excel formatted spreadsheet, organized based on the signage schedule and modified per the mfg. means and methods for their production. This document is to be used to finalize copy with the user group in submittal process.

2.3 VINYL DECAL

A. Type 20: "11" Super Graphic. See Transparent Unit Panel Glazing. Install on Layer 3 of the glazing system. Split graphic to fit onto polycarbonate panels. GC to furnish panels to signage contractor, or coordinate to install in the field in clean conditions.
   1. Size: 7' x 9'-2"
   2. Mounting: exterior glazing on layer 3.
   3. COPY: 11
   4. Color: BLACK
   5. Font: Arial

B. Type 21: Address Exterior Vinyl
   1. Size: 5" x 5'-4"
   2. Mounting: exterior glazing.
   3. COPY: 216 N MARLYN AVE
   4. Color: BLACK
   5. Font: Gill Sans MT

2.4 INTERIOR PANEL SIGN TYPES (Types are as designated on the Drawings)

A. Type 1: GENERAL ROOM SIGN
   1. Provide two signs per location indicated in the plan
   2. Custom Raised Header
   3. Text: As indicated in the Sign Schedule.
   4. Message: Fixed.
   5. Size: 6" x 6"
   6. Mounting: Wall.

B. Type 2: INTERIOR PRIVATE OFFICE SIGN with Clear Acrylic Insert Window w/ finger hole and paper grabber.

   1. Provide two signs per location indicated in the plan
   2. Custom Raised Header : ROOM NAME (no number).
   3. Text: As indicated in the Sign Schedule. Provide laser printed inserts on cardstock.
   4. Message: Changeable.
   5. Accessory: Satin Silver color paper display gripper 8.5" long.
   6. Size: 8.5" x 8.5"
   7. Mounting: Wall.

C. Type 3 EGRESS STAIR SIGN –
   1. Custom Raised Header
   2. Text: As indicated in the Sign Schedule.
   3. Message: Fixed.
   4. Size: 9.75" x 8.5"
   5. Mounting: Wall.
   6. Stair Symbol, human figure and fire symbols

D. Type 4, ELEVATOR SIGN (IN CASE OF FIRE…) Elevator Signs in accordance with NFPA
   1. Custom Raised Header
   2. Text: As indicated in the Sign Schedule.
   3. Message: Fixed.
   4. Size: 9.75" x 6.75"
   5. Mounting: Wall.
   6. Universal Pictogram Symbol and Instructional Text.

E. Type 5, EVACUATION PLAN SIGN

1. Text: As indicated in the Sign Schedule.
2. Message: Fixed.
3. Size: 12” x 12”
4. Acrylic Insert Slot, Arch. to provide plan.
5. Mounting: Wall.

F. Type 6, WAYFINDING BLADE SIGN (wall blade or ceiling blade)

1. Custom Raised Header
2. Text: As indicated in the Sign Schedule.
3. Message: Fixed.
4. Size: 9.75” x 6.75”
5. Mounting: Wall.
6. Universal Pictogram Symbol for restrooms
7. Size: 12” x 16” wide.
8. Mounting: Wall.
9. Locate under lobby bulkhead near entry to the public restroom

G. Type 7A, NO SMOKING SIGN

1. Universal Pictogram Symbol and Instructional Text.
2. Size: 9.75” x 8.5”
3. Mounting: Wall.
4. Copy: No Smoking within 25 feet of building entrance

H. Type 7B, NO SMOKING SIGN – GLASS DECAL

1. Universal Pictogram Symbol and Instructional Text.
2. Size: 9.75” x 8.5”
3. Mounting: Wall.
4. Copy: No Smoking within 25 feet of building entrance

I. Type 8A: ADA STAFF RESTROOM SIGNS

1. Universal Pictogram Symbol and Instructional Text.
2. Size: 9.75” x 8.5”
3. Mounting: Wall.
4. Pictogram to include Men / Women and ADA
5. COPY: ADA RESTROOM

J. Type 8B: ADA RESTROOM w/ BABY CHANGING ROOM SIGN

1. Universal Pictogram Symbol and Instructional Text.

2. Size: 9.75” x 8.5”
3. Mounting: Wall.
4. Pictogram to include BABY CHANGING STATION
5. Copy: UNISEX RESTROOM WITH BABY CHANGING STATION

K. Type 8C: ADA RESTROOM w/ ADULT CHANGING ROOM SIGN

1. Universal Pictogram Symbol and Instructional Text.
2. Size: 9.75” x 8.5”
3. Mounting: Wall.
4. Pictogram to include Men / Women and ADA
5. Copy: : UNISEX RESTROOM WITH ADULT CHANGING STATION

L. Type 9, METAL LOCKER DECAL
1. Provide 2 (duplicate) for each indicated in plan
2. Custom printed vinyl sticker
3. Size: 4”x5”
4. Copy: *ADA LOCKER (ADA ICON)*
5. LOCATION: At ADA lockers in the locker rooms only. One per each designated locker.

M. Type 10, LEED INNOVATION SIGNAGE

1. Artwork: Architect to provide artwork and copy with submittal
2. Material: Typical Romark with direct print.
3. Color: Architect to select stock Romark color
4. Size: 16”x20”
5. Mounting: Wall.
6. QTY: 12

N. Type 11A, LEED STAIR WELLNESS SIGNAGE

1. Artwork: Architect to provide artwork and copy with submittal
2. Material: Typical Romark with direct print.
3. Color: Architect to select stock Romark color
4. Size: 8”x10”
5. Mounting: Wall.
6. QTY: 4

O. Type 11B Mounted frameless glassless photographs
1. ARTWORK: Provided by owner after submittal, proof will be required in separate submittal.
2. Provide 1 full size sample for owner approval
3. Printing: Direct color and black and white printed image on 4mm aluminum dibond (or equal substrate).
4. Edge, Back bevel edges
5. Mounting: Aluminum cleat mounting kit
6. Size: 16”x20”
7. QTY: 30

P. Type, 12 Electrical Room Panel Signs

1. Universal Pictogram Symbol and Instructional Text.
2. Mounting: Wall.

Q. Type 13, Fire Extinguisher Panel Signs

1. Universal Pictogram Symbol and Instructional Text.
2. Mounting: Wall.

R. Type 14, Danger Electrical Room
1. Provide two signs (duplicates) per locations indicated in the plan.
2. Danger Sign direct print to white romark.
3. Mounting: Door.

S. Type 15, Roof Access Panel Signs -

1. Universal Pictogram Symbol and Instructional Text.
2. Mounting: Wall.

T. Type 20, County Seal and Logo Interior
1. ARTWORK: Provided by owner after submittal, proof will be required in separate submittal.
2. Provide 1 full size sample for owner approval
3. Printing: Direct color and black and white printed image on 6mm aluminum dibond (or equal substrate).
4. Edge, Back bevel edges
5. Mounting: Aluminum cleat mounting kit
6. Size: 36” diameter
7. QTY: 2
8. Location: Community Room.

U. Type 21, Restricted Area Sign
1. ARTWORK: Provided by owner after submittal, pdf. file available.
2. Printing: Direct color and black and white printed image on approx. 3mm aluminum thick.
3. Edge, ease edges round corner.
4. Mounting: bolted at corners to masonry wall for exterior and used typical adhesive for interior
5. Size: 12”x18”
6. Text to read: Restricted Area Authorized Employees Only
7. QTY: 15
8. Location: SEE PLAN. AT EACH ENTRANCE TO THE BUILDING, PUBLIC AND PRIVATE.

2.5 DIMENSIONAL CHARACTER SIGNS

A. Fabricated Channel Characters: Form exposed faces and sides of characters to produce surfaces free from warp and distortion. Include internal bracing for stability and attachment of mounting accessories. Comply with the following requirements:

1. Aluminum Sheet: Not less than 0.090 inch (2.29 mm) thick.
2. Metal Finishes: Alloy 5052 Specialty Finish
3. Standard Thickness: see types.
4. Face Style: Metal Face/ Side Lit L400
5. Mounting: Pin mounted.
6. LED color option: Warm White Halo Back Lighting where called for.
7. Finish: Anodized metallic custom color.

B. General: Provide dimensional character signage that comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.

1. Fabricated Aluminum Channel Letters – Exterior

   a. Form exposed faces and sides of characters to produce surfaces free from warp and distortion. Include internal bracing for stability and attachment of mounting accessories.
   b. Aluminum Sheet: Not less than 0.090 inch thick

C. Illuminated Backlighted Channel Characters: Manufacturer's standard LED lighting including transformers, insulators, and other components. Make provisions for servicing and concealing connections to building electrical system.

D. Types:
1. Type 16 Exterior Fabricated Metal Pin Lettering w/ Back Lighting – CANOPY ENTRANCE SIGNAGE
   a. Text: As indicated in the drawing **2&3/A-204**.
   b. Mounting: Through wall penetrations to be coordinated with electrical contractor and signage contractor to seal all penetrations. Pin standoff 1”
   c. Dimensions
      1) Depth: 2”
      2) Height: 18”
   d. Basis of Design: Gemini Dimensional Stainless Steel Halo Lit, fabricated letters or equal
   e. Finish: #4 Brushed Stainless Steel Metal finish. Warm White LED Color – Needs to be coordinated with electrical.
   f. LOCATION: Canopy elevation make call out, dim lettering, tag with type. Indicate with tag in plan outside vest.
      COPY: ESSEX POLICE PRECINCT

2. Type 17 Exterior Fabricated Metal Pin Lettering – COMMUNITY MESSAGE BOARD
   a. Text: As indicated in the drawing 5/A6.40.
   b. Mounting: Through wall penetrations to be coordinated with electrical contractor and signage contractor to seal all penetrations. Pin standoff 1”
   c. Dimensions
      1) Depth: 1/4”
      2) Height: 4”
   d. Basis of Design: Gemini Dimensional Stainless Steel , fabricated letters or equal
   e. Finish: Kynar pain system RAL colors to be selected by architect.
   f. LOCATION: Make detail elevation from the vestibule elevation dimension text and elevation from AFF
   g. COPY: COMMUNITY MESSAGES

3. Type 18 Cast Metal Signage @ Monument Entry Sign

a. Provided & Coordinated with 03 45 00 PRECAST ARCHITECTURAL CONCRETE and precast installer.
b. Dimensions
   1) Depth: 1/2" beveled
   2) Height: see elevations
c. FINISH: Architect to select from full range of Aluminum Specialty Finishes.
d. LOCATION: Type 18, Two-sided Monument sign, is located on Landscape Architecture drawings. Provide signage on both sides.
e. Type Face: Gills Sans Nova (particularly for the numbers)
f. COPY: BALTIMORE COUNTY POLICE PRECINCT 11
216 N. MARLYN AVENUE

4. Type 19 Recessed County Seal & Lettering Cast Into Precast Panel – Cornerstone Signage **TO BE PROVIDED AND INSTALLED BY CAST STONE PROVIDER AND NOT SIGNAGE PROVIDER**
   a. Text: BALTIMORE COUNTY SEAL – POLICE DEPARTMENT - 2025.
   b. Provided & Coordinated with 03 45 00 PRECAST ARCHITECTURAL CONCRETE and precast installer.
   c. Dimensions: see elevations
      1) Depth: 1/2" beveled lettering
      2) Height: see elevations
   d. LOCATION: See elevations
   e. ARTWORK: To be provided in a vector file from owner, approximately
   f.



E. Manufacturers:
   1. Basis of Design: Gemini Incorporated.
   2. Advance Corporation; Braille-Tac Division.
   3. A. R. K. Ramos.
   4. ASI-Modulex, Inc.
   5. Bunting Graphics, Inc.
   6. Charleston Industries, Inc.
   7. Grimco, Inc.
   8. Innerface Sign Systems, Inc.
   9. Metal Arts; Div. of L&H Mfg. Co.
   10. Mills Manufacturing Company.
   11. Mohawk Sign Systems.

12. Nelson-Harkins Industries.
13. Signature Signs, Incorporated.
14. Southwell Company (The).

2.6 FINISHES, GENERAL

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

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

C. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

2.7 ALUMINUM FINISHES

A. Clear Anodic Finish: Manufacturer's standard clear anodic coating, 0.018 mm or thicker, over a satin directionally textured mechanical finish.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.

B. Verify that items provided under other sections of Work are sized and located to accommodate signs.

C. Examine supporting members to ensure that surfaces are at elevations indicated or required to comply with authorities having jurisdiction and are free from dirt and other deleterious matter.

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

3.2 INSTALLATION

A. General: Locate signs and accessories where indicated, using mounting methods of types described and in compliance with manufacturer's written instructions.

1. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.
2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent

walls. Locate to allow approach within 3 inches (75 mm) of sign without encountering protruding objects or standing within swing of door.

B. Wall-Mounted Panel Signs: Attach panel signs to wall surfaces using methods indicated below:

1. All room numbers, nameplates, and room identification signs will be adhered to 1/8” thick finish PVC material (Sintra, Celtec, Komacel, Komatex, or equivalent) with 3M VHB Very High Bond Joining Systems #9473 double-sided tape (or equivalent). All signs to be mounted on block wall shall have the entire perimeter of the sign taped with 3M double sided tape #4432 (or equivalent).

C. Dimensional Characters: Attach individual characters to wall surfaces using methods indicated below:
1. Mount characters using standard fastening methods recommended in writing by manufacturer for character form, type of mounting, wall construction, and condition of exposure indicated. Provide heavy paper template to establish character spacing and to locate holes for fasteners.

3.3 CLEANING AND PROTECTION

A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

END OF SECTION 10 14 00

SECTION 12 49 40 - ROLLER SHADES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes manual ~~and motorized~~ roller shades.

~~B. Motorized roller shades linked to Daylight Harvesting.~~

C. Related Sections include the following:
1. Section 06100-- Rough Carpentry; blocking for support of window shade brackets or pocket assemblies.
2. Section 092950-- Substrate for window shade systems and installation of shade pockets, pocket closure, and/ or accessories supplied only under this section.
3. Section 09513-- Acoustical Ceilings; installations of shade pockets, pocket closure, and/or accessories supplied only under this section.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.

1. Manual Shade Operators: Include operating instructions and mounting arrangements.

B. Shop Drawings: Show location and extent of roller shades. Show installation details, mountings, attachments to other work, operational clearances, and relationship to adjoining work. Indicate structural mounting requirements and installation methods as well as relevant dimensions for each product type and mounting condition.

C. Coordination Drawings:
1. Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
a. Ceiling suspension system members and attachment to building structure.
b. Ceiling-mounted or penetrating items including light fixtures, air outlets and inlets, speakers, sprinklers, recessed shades, and special moldings at walls, column penetrations, and other junctures of acoustical ceilings with adjoining construction.
c. Shade mounting assembly and attachment.
d. Minimum Drawing Scale: 1/8 inch = 1 foot (1:96).

2. Provide shade schedule coordinating room number, opening size(s), quantities and key to details.

D. Samples for Initial Selection: For each colored component of each type of shade indicated.

1. Include similar Samples of accessories involving color selection.

E. Samples for Verification:
1. For the following products:

a. Material samples for initial color & finish selection of controls and full range of fabrics available.

b. Shade Material: Not less than 8” x 10” (200mm x 252mm) for specific color samples requested by Architect. Mark face of material.

F. Window Treatment Schedule: For roller shades. Use same designations indicated on Drawings.

G. Product Certificates: For each type of roller shade, signed by product manufacturer.

H. Qualification Data: For Installer.

I. Product Test Reports: For each type of roller shade based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency for each type of roller shade.

J. Maintenance Data: For roller shades to include in maintenance manuals. Include the following:

1. Methods for maintaining roller shades and finishes.
2. Precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance.
3. Operating hardware.

K. Manufacturer’s Instructions.
1. Installation, Programming, and Maintenance instructions to be included in product packaging.
2. Installation, Programming, and Maintenance instructions to be included on Manufacturer’s website
3. 24-Hour / 7 Day Technical support shall be available to aid with unforeseen installation difficulties.

L. LEED Submittals: Comply with Section 018113.

1. MR Credit 4: Material Ingredients

a. Report: Shades, if available

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Source Limitations: Obtain roller shades through one source from a single manufacturer.

C. Installer shall be qualified to install the specified products by prior experience, demonstrated performance and acceptance of any requirement of the manufacturer, subsidiary of the manufacturer, or licensed agent.

D. Fire-Test-Response Characteristics: Provide roller shade band materials with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:

1. Flame-Resistance Ratings: Passes NFPA 701.

E. Product Standard: Provide roller shades complying with WCMA A 100.1.

F. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver shades in factory packages, marked with manufacturer and product name and location of installation using same designations indicated on Drawings and in a window treatment schedule.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Do not install roller shades until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.7 EXTRA MATERIALS

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

1. Rollers Shades: Before installation begins, for each size, color, texture, and pattern indicated, full-size units equal to 5 percent of amount installed but enough for no fewer than two units.

1.8 WARRANTY

A. Manufacturer to provide written limited warranty of not less than 8 years non-depreciating.

1. Warranty coverage shall begin on the date of Substantial Completion.

2. In the event of a warranted product failure, the shade contractor will facilitate acquisition and delivery of all necessary components and services to the owner.

PART 2 - PRODUCTS

2.1 ROLLER SHADES

A. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:

B. Products: Subject to compliance with requirements, provide one of the following:
1. MechoShade Systems, Inc. Basis of Design
2. RollEase Inc. 200 Harvard Ave.; Stamford, CT 06902-6320; Toll Free Tel: 800-552-5100
3. Draper Inc.
4. Hunter Douglas, Inc.; Hunter Douglas Window Fashions Division
5. Levolor; Levolor-Kirsch Window Fashions; a Newell Rubbermaid Company
6. Lutron Shading Solutions by VIMCO,
7. Somfy Electric

C. RS-1: 25 percent Polyester, 75 percent Vinyl on Polyester.
1. Collection: ThermoVeil
2. Series: 1300 Dense Basket Weave (5% open/Tv 5%)
3. Color: TBD
4. Hardware: Manual
Location: All other locations

~~D. RS-2: Automatic - 50 percent Polyester, 50 percent Vinyl on Polyester.~~
~~1. Manufacturer: Mecho~~
~~2. Collection: DoubleShades Blackout Shade Cloth~~
~~3. Series:~~
~~a. 0250/0270 Series Chelsea Blackout~~
~~1) Content: 50% Acrylic Coating and 50% Polyester~~
~~2) Fabric Thickness: 0.018 in~~
~~3) Backing Color: TBD~~
~~b. ThermoVeil 5% 1300 Dense Basket Weave (5% open)~~
~~1) Content: 50% Acrylic Coating and 50% Polyester~~
~~2) Fabric Thickness: 0.018 in~~
~~4. Color: TBDLocation: See RCPs, Conference Rooms, Community Rm & Rooms:~~
~~5. Electrical: Wire to lock down switch in security system. Coordinate with OIT.~~

2.2 MANUAL ROLLER SHADES RS-1

A. Metal Pocket Enclosure
1. General
a. Recessed single manual installation without pocket, installed with closure and closure mount, refer to detail.

B. Clutch Brake Manual Shade System
1. General
a. Basis of Design: MechoShade Systems, Inc. clutch brake system.
b. Clutch Roller Shades shall be a ball chain-operated system utilizing a bidirectional wrap spring clutch.
c. The system must be capable of smoothly raising and lowering the shade to any desired height and maintaining that position without slippage.
d. The shade cannot be operable by any other means other than the chain. Pulling on the hem bar will not disengage the clutch.
e. The system will provide a maximum fabric gap of 0.75” per side.

2. Clutch and Tube Specifications
a. System shall incorporate a bi-directional wrap spring clutch and never require any adjustment of the shade.
b. Shade shall stop upon release of clutch. Systems that slide to a stop are not acceptable.
c. Clutch may be mounted on either the right or left end of the roller tube and fabric may be forward or reverse rolled.
d. The clutch shall be made of high-strength fiberglass reinforced polyester with high carbon steel springs.
e. Manufacturer shall identify appropriate shade tube and clutch size based on shade size, fabric type, and application requirements.
1) Shades using a V8 Clutch can lift up to 8 lbs of fabric using a 1” diameter, .03” enameled, roll-formed steel tube.
2) Shades using a V16 clutch will be used with a 1.375” or 1.75” diameter, .03” enameled, roll-formed steel tube or a 2” diameter, 0.62” extruded aluminum tube. The appropriate tube will be used to prevent excessive deflection along its length.
3) Shades using a V24 clutch will be used with a 1.375” or 1.75” diameter, .03” enameled, roll-formed steel tube or a 2” or 2.5” diameter, 0.62” extruded aluminum tube. The appropriate tube will be used to prevent excessive deflection along its length.
f. Fabric shall be connected to tube with double-sided adhesive strip applied for exact and firm mounting of the fabric and for easy adjustment of fabric to prevent telescoping.
1) A minimum of one turn of fabric will be placed on the roller before the working section of fabric starts to protect the fabric and smooth out the starting seam.

3. Clutch Control Loop
a. Chain will be made of #10 stainless steel 90-pound test ball chain.
b. Chain will be provided with connector and upper and lower ball stops.

4. Clutch Idle End Cap
a. Two-piece unit consisting of an outside sleeve and center bearing shaft made of high-strength fiberglass reinforced polyester.

1) The outside sleeve shall be free to rotate on the shaft, providing the bearing surfaces on which the roller rides in order to provide a smooth and quiet rotation without wearing on the system.

5. Clutch Mounting Brackets
   a. Shall be .072" galvanized steel
   b. Shall be universally applicable for mounting inside, outside or to the ceiling, with the clutch on either the right or left side of the roller.
   c. The clutch mounts flush to the face of the bracket resulting in the smallest possible light gap between fabric and window frame.

6. Lift Assist Spring
   a. General
      1) Depending upon shade weight and size, manufacturer may require a lift assist spring to prevent excessive deflection along the length of the tube.
      2) Spring shall be a torsion roller spring with a polymer injection molded tube fitting and ball bearing stops used to maintain shade position.
   b. Lift Assist Spring Mounting Brackets
      1) Shall be .060" galvanized steel.
      2) Shall be universally applicable for mounting inside, outside or to the ceiling.
      3) Shall have a locking device that provides safe retention of the spring end in its bracket.
   c. Lift Assist Spring Idle End Cap
      1) Shall be a polymer injection molded insert.
      2) Shall have a protruding galvanized steel roller pin that engages the bracket.

C. Direction of Roll: Regular, from back of roller.

D. Fascia: Shall be installed to conceal the roller tube and mounting hardware. Fascia shall hook onto the top of the bracket and snap in place, remaining firmly attached. Four inch high fascia panel shall be made of .075” extruded aluminum and shall be painted with a high quality baked enamel finish. Brackets are designed to snap into the Top/Back Cover.

E. Top/Back Cover: Shall be .085” extruded aluminum with baked enamel finish that fits over fascia brackets and completely covers the top and back sides of the roller shade. 4” Top / Back cover has a channel, which allows the fascia interlock.

F. Bottom Bar: Standard Hem Bar shall be a 1” wide by .1875” thick extruded aluminum bar enclosed in a thermally-sealed pocket across the bottom of the shading fabric.

G. Mounting: Inside, unless otherwise noted on the window treatment schedule, mounting permitting easy removal and replacement without damaging roller shade or adjacent surfaces and finishes.

H. Hold-Down Brackets and Hooks or Pins: Manufacturer's standard for anchoring roller shade bottom in place and keeping shade band material taut.

I. Shade Operation: Manual; with continuous-loop bead-chain, clutch, and cord tensioner and bracket lift operator.
   1. Position of Clutch Operator: Right side of roller, as determined by hand of user facing shade from inside, unless otherwise indicated on Drawings or in a window treatment schedule.
   2. Clutch: Capacity to lift size and weight of shade; sized to fit roller or provide adaptor.

3. Lift-Assist Mechanism: Manufacturer's standard spring assist for balancing roller shade weight and lifting heavy roller shades.
4. Loop Length: Length required to make operation convenient from floor level
5. Bead Chain: #10 Stainless steel 90-pound test ball chain.
6. Cord Tensioner Mounting: As indicated on the window treatment schedule.
7. Operating Function: Stop and hold shade at any position in ascending or descending travel.

~~2.3 MOTORIZED ROLLER SHADES~~

~~A. Description: Electrically operated motorized roller screen window shading system.~~
~~B. Standard Bracket/Pocket: Extruded aluminum (smooth) pocket to be recessed into drywall bulkhead with pocket closure with baked enamel finish.~~

~~1. Recessed double motorized installation without pocket, installed with closure and closure mount, refer to detail.~~

~~C. Motor:~~

~~1. Shall be tubular asynchronous and concealed inside an extruded aluminum tube.~~
~~2. Roller shades with 24-volt AC microprocessor intelligent motor system.~~
~~3. The electronic drive unit to operate without exceeding a 44dBA (SPL) measured 3 feet from motor.~~
~~4. System to make no audible clicks when motor starts or stops.~~
~~5. System controls to have a 10-year power failure memory for preset positions, open and cloe limits, shade grouping and system configuration.~~
~~6. Electronic Drive Unit will position the shade fabric to 1/16" of preset positions.~~

~~D. Control System: Manufacturers standard system customized to project requirements as follows:~~

~~1. Shades shall be zoned in groups for each room.~~
~~2. Power Panel equivalent to Lutron SVQ10PNL or equal. Provide 1 per every 10 shades.~~
~~3. One low voltage switch per room with low voltage momentary contacts.~~
~~4. Motor controller shall have low voltage control port for AV control system contact closure to operate in parallel with low voltage wall switch.~~
~~5. Shades shall be tied back to the Smart Lectern in each space. Shade controls from touch screen at smart lectern shall include the following: Open/Close and Raise/Lower.~~
~~6. Shades shall be coordinated to operate the Daylight Harvesting controls.~~
~~7. Control system shall integrate with Crestron or Lutron control systems.~~

~~E. Locations: 201 Conference Room, 301 Conference Room, 362 Training Room~~

2.4 ROLLER SHADE FABRICATION

A. Product Description: Roller shade consisting of a roller, a means of supporting the roller, a flexible sheet or band of material carried by the roller, a means of attaching the material to the roller, a bottom bar, and an operating mechanism that lifts and lowers the shade.

B. Concealed Components: Noncorrodible or corrosion-resistant-coated materials.

1. Lifting Mechanism: With permanently lubricated moving parts.

C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74 deg F (23 deg C):

1. Shade Units Installed between (Inside) Jambs: Edge of shade not more than 1/4 inch (6 mm) from face of jamb. Length equal to head to sill dimension of opening in which each shade is installed.
2. Shade Units Installed Outside Jambs: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.

D. Installation Brackets: Designed for easy removal and reinstallation of shade, for supporting fascia, roller, and operating hardware and for hardware position and shade mounting method indicated.

E. Installation Fasteners: No fewer than two fasteners per bracket, fabricated from metal noncorrosive to shade hardware and adjoining construction; type designed for securing to supporting substrate; and supporting shades and accessories under conditions of normal use.

F. Color-Coated Finish: For metal components exposed to view, apply manufacturer's standard baked finish complying with manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.

G. Colors of Metal and Plastic Components Exposed to View: As selected by Architect from manufacturer's full range unless otherwise indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance.

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

3.2 ROLLER SHADE INSTALLATION

A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions, and located so shade band is not closer than 2 inches (50 mm) to interior face of glass. Allow clearances for window operation hardware.

~~B. Connections: Connect motorized operators to building electrical system.~~

3.3 ADJUSTING

A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

A. Clean roller shade surfaces after installation, according to manufacturer's written instructions.

B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.

C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain roller shades. Refer to Division 1 Section Demonstration and Training."

END OF SECTION 12 49 40

SECTION 31 20 00 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. Baltimore County Department of Public Works Standard Details for Construction dated September 2024 and as amended.

C. Maryland Department of Transportation State Highway Administration Standard Specifications for Construction and Materials dated July, 2025 and as amended.

D. Manual on Uniform Traffic Control Devices for Streets and Highways, 2012 Edition and as amended.

E. Throughout the specifications, types of materials may be specified by manufacturer's name and catalogue number in order to establish standards of quality and performance and not for the purpose of limiting competition. Alternate methods and/or materials may be submitted to the Architect for consideration. Those judged to be equal to that specified will receive written approval.

1.2 SUMMARY

A. Section Includes:

1. Excavating and filling for rough grading the Site.

2. Preparing subgrades for slabs-on-grade, walks, pavements, turf and grasses, and plants.

3. Excavating and backfilling for buildings and structures.

4. Drainage and moisture control fill course for concrete slabs-on-grade.

5. Subbase course for concrete walks and pavements.

6. Subsurface drainage backfill for walls and trenches.

7. Excavating and backfilling trenches for utilities and pits for buried utility structures.

8. Excavating and backfilling trenches within building lines.

9. Excavating well hole to accommodate elevator-cylinder assembly.

B. Related Requirements:

1. Section 31 10 00 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.

2. Section 31 50 00 "Excavation Support and Protection" for shoring, bracing, and sheet piling of excavations.

3. Section 32 92 00 "Turf and Grasses" for finish grading in turf and grass areas, including preparing and placing planting soil for turf areas.

4. Section 32 93 00 "Plants" for finish grading in planting areas and tree and shrub pit excavation and planting.

5. Section 01 77 00 “Closeout Procedures”

6. Section 01 32 00 "Construction Progress Documentation" for recording pre-excavation and earth-moving progress.

1.3 SOIL INVESTIGATION DATA

A. Investigation:

1. Soil and subsurface investigations were conducted at the site, the results of which are to be found in the boring logs report prepared by Findling Inc. dated August 30, 2024.

B. Subsurface Soil Data:

1. Data concerning subsurface materials or conditions, which is based upon test pits, or test borings, has been obtained by Owner, the Architect, and the Engineers for their own use in designing the project. Its accuracy or completeness is not guaranteed by the Owner, the Architect or the Engineers, and Contractor must assume all responsibility in excavating for this project and shall not rely on subsurface information obtained from Architect, or Engineers, or indirectly from the Owner. Bidders shall make their own investigation of existing subsurface conditions. Neither the Owner, the Architect, or the Engineers will be responsible in any way for additional compensation for excavation work performed under the Contract, due to Contractor's assumptions based on subsoil data prepared solely for the Owner, the Architects, and the Engineers, use.

C. A copy of the results of the subsurface investigation is available for informational purposes only.

1.4 UNIT PRICES

A. Work of this Section is affected by unit prices for earth moving specified in Section 01 22 00 "Unit Prices."

~~B. Quantity allowances for earth moving are included in Section 01 21 00 "Allowances."~~

C. Rock Measurement: Volume of rock actually removed, measured in original position, but not to exceed the following. Unit prices for rock excavation include replacement with approved materials.

1. 24 inches (610 mm) outside of concrete forms other than at footings.

2. 12 inches (305 mm) outside of concrete forms at footings.

3. 6 inches (152 mm) outside of minimum required dimensions of concrete cast against grade.

4. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.

5. 6 inches (152 mm) beneath bottom of concrete slabs-on-grade.

6. 6 inches (152 mm) beneath pipe in trenches, and the greater of 24 inches (610 mm) wider than pipe or 42 inches (1067 mm) wide.

1.5 DEFINITIONS

A. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.

2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Additional excavation: When excavation has reached required subgrade elevations, notify the Inspection Agency, who will make an inspection of conditions. The Contractor is responsible for scheduling the inspections such that there is no delay in the Project. If the Inspection Agency determines that bearing material at required subgrade elevations are unsuitable, continue excavation until suitable bearing materials are encountered and replace excavated material as directed by them.

2. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices.

3. Bulk Excavation: Excavation more than 10 feet (3 m) in width and more than 30 feet (9.1 m) in length.

4. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material that exceed 1 cu. yd. (0.76 cu. m) for bulk excavation or 1/2 cu. yd. (0.38 cu. m) for footing, trench, and pit excavation that cannot be removed by rock-excavating equipment

equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:

1. Equipment for Footing, Trench, and Pit Excavation: Late-model, track-mounted hydraulic excavator, equivalent to Caterpillar Model No. 215-LC; equipped with a 42-inch- (1067-mm-) maximum-width, short-tip-radius rock bucket; rated at not less than 138-hp (103-kW) flywheel power with bucket-curling force of not less than 28,700 lbf (127.7 kN) and stick-crowd force of not less than 18,400 lbf (81.8 kN) with extra-long reach boom.

2. Equipment for Bulk Excavation: Late-model, track-mounted loader, Caterpillar Model No. D-8N; rated at not less than 285-hp (212.5-kW) flywheel power and developing a minimum of 45,000-lbf (200.2-kN) breakout force with a general-purpose bare bucket.

I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

J. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

K. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

L. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.6 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct pre-excavation conference at Project site.

1. Review methods and procedures related to earthmoving, including, but not limited to, the following:

a. Personnel and equipment needed to make progress and avoid delays.

b. Coordination of Work with utility locator service.

c. Coordination of Work and equipment movement with the locations of tree- and plant-protection zones.

d. Extent of trenching by hand or with air spade.

e. Field quality control.

f. Confirmation that the contractor will provide required equipment for Bulk and Trench rock removal.

1.7 ACTION SUBMITTALS

A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.

B. Test Reports: In addition to test reports required under field quality control, submit the following:

1. Laboratory analysis of each soil material proposed for fill and backfill from on-site and borrow sources.

2. One moisture density curve for each soil material.

3. Reports of actual unconfined compressive strength and/or results of bearing tests of each stratum tested.

C. Product Data: For each type of the following manufactured products required:

1. Geotextiles.

2. Warning tapes.

D. Samples for Verification: For the following products, in sizes indicated below:

1. Geotextile: 12 by 12 inches (304.8 by 304.8 mm).

2. Warning Tape: 12 inches (304.8 mm) long; of each color.

E. LEED Submittals: Comply with Section 01 81 13

1. SS Credit 2: Protect or Restore Habitat

a. Provide documentation that confirms all criteria listed in Part 2 of this Section is met for all imported soils.

1.8 QUALITY ASSURANCE

A. Codes and Standards: Perform earthwork complying with requirements of Baltimore County.

B. Testing and Inspection Service: The Contractor will employ a qualified independent geotechnical engineering testing agency to classify proposed on-site and borrow soils to verify that soils comply with specified requirements and to perform required field and laboratory testing during earthwork operations. Check bearing capacities of excavated footings to confirm bearing capacity prior to installation of reinforcing steel and concrete.

1. The Agency's responsibilities shall include:

a. Having an Inspector present on-site during all earthwork operations and as a minimum from 7:00 a.m. to 5:00 p.m. during all earthwork and trenching operations.

b. Testing and approving all materials used for fill and/or backfill and borrow.

c. Testing and approving on-site and borrow topsoil for compliance with this specification.

d. Maintaining accurate records in regard to excavation and fill or backfill for approved undercutting or over-excavation.

e. Maintain accurate records in regards to rock excavation in open excavations and in trench excavations.

f. Approving all backfilling procedures and mechanical compaction equipment.

g. Verifying compaction by in-place density tests. Tests to be submitted to the Architect for review. A minimum of one (1) density test shall be performed for each 2,500 square feet of lift area or pavement area, or more often if directed by the Architect.

h. Inspect exposed subgrade after clearing and grubbing prior to preparation of site.

i. Observe and inspect all proofrolling operations and determine whether additional excavation and backfilling is required.

j. Inspect and test that no loose or soft pockets exist beneath the bearing surface. Approve the bearing surfaces or recommend undercutting and structural fills, as necessary.

k. Submitting weekly written reports as to the status of the fill. Submit a final report indicating that the fill meets the requirements of the Specifications.

l. Determine all earthwork quantities for which unit price payments apply.

m. Verify in-place compacted depth of topsoil.

n. Monitor the movement of settlement plates.

2. It shall be the responsibility of the Contractor to notify the Inspection Agency three days prior to the beginning of work so that the Inspection Agency can have a soils engineer and/or soils technician on the site during the work. All costs of this Inspection service incurred due to lack of coordination by the Contractor of the earthwork, causing unnecessary visits by the Inspection Agency, shall be paid for by the Contractor.

C. In the event of a discrepancy between the Project Specifications, Construction Documents, Baltimore County requirements, or other guidelines set forth by the authorities having jurisdiction, the more stringent will apply.

D. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E329 and ASTM D3740 for testing indicated.

1.9 AS-BUILTS

A. The Contractor shall provide, and pay for, an as-built survey to verify that proposed elevations have been achieved. A 50-foot grid shall be staked on all areas to verify finish grade elevations. In addition to the grid, all swales shall have top and bottom located, grade breaks located, top and bottom of retaining walls, shall be surveyed. Building finished floor elevation shall be surveyed at a minimum of one opening per building side, where possible.

B. A final as-built survey drawing shall be submitted to the Engineer and Owner for their review and verification.

C. Provide As-Built information as required for site and SWM per Section 01 71 23.

1.10 FIELD CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

B. Utility Locator Service: Notify "Miss Utility" for area where Project is located before beginning earth-moving operations.

C. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in Section 01 50 00 "Temporary Facilities and Controls" and Section 31 10 00 "Site Clearing" are in place.

D. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.

2. Parking vehicles or equipment.

3. Foot traffic.

4. Erection of sheds or structures.

5. Impoundment of water.

6. Excavation or other digging unless otherwise indicated.

7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

E. Do not direct vehicle or equipment exhaust towards protection zones.

F. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

G. Backfilling below-grade areas: The backfilling operation required to bring actual grades to the grade elevations shown on the drawings as proposed grades.

1. The borrow material shall be removed and then either stored or disposed. If the testing agency verifies that the borrow material complies with these specifications for backfill material, then the Contractor may use it to backfill this area to grade.

2. Note that high or low moisture contents do not render a soil as "unsuitable" as the contractor is wholly responsible for moisture conditioning of the soils (i.e., scarifying/loosening and wetting or drying). Undercuts will only be authorized if the soils remain unsuitable when the soil in question is at optimal moisture content.

3. All suitable materials removed in excavation shall be used in accordance with the provisions of this section. It shall be the obligation of the Contractor to utilize all suitable materials from excavation in the construction of fills throughout the entire area of the Contract.

4. Any additional backfill material necessary to complete this operation shall comply with these specifications.

5. This backfilling operation shall be the first earthwork operation performed on site after establishment of the sediment control devices.

6. All backfilling operations must be performed in accordance with the Geotechnical Engineer's report, including undercut and all protective measures.

H. Site Information: Data in subsurface investigation reports was used for the basis of the design. The data in the subsurface investigation report is not a part of the Contract. Conditions are not intended as representations or warranties of accuracy or continuity between soil borings. The Owner, Architect or Engineers will not be responsible for interpretations or conclusions drawn from this data by the Contractor.

1. Additional test borings and other exploratory operations may be performed by the Contractor, at the Contractor's option; however, no change in the Contract Sum will be authorized for such additional exploration. The contractor shall, at the request of the Owner and/or Architect, provide subsurface assumptions, cut & fill analysis and/or computer models used in generation of base bid earthwork quantities.

I. Existing Utilities: Do not interrupt existing utilities serving facilities occupied by the Owner or others except when permitted in writing by the Architect and then only after acceptable temporary utility services have been provided. If existing utilities are indicated to be abandoned, the Contractor shall remove such utility, if necessary, at no additional cost to the Owner.

1. Provide a minimum 48 hours notice to the Architect and receive written notice to proceed before interrupting any utility.

J. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies to shutoff services if lines are active.

K. Should uncharted or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.

L. Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights. Open trench excavations within the limits of the State right-of-way shall be protected in accordance with the requirements of applicable permits. Open excavation within the roadways shall be plated and shall be posted with warning devices in accordance with the Manual of Uniform Traffic Control Devices 2009 Version and as amended.

1. Perform excavation by hand within dripline of large trees to remain. Protect root systems from damage or dryout to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with moistened burlap.

M. Moisture Sensitive Soils:

1. The on-site founding materials are moisture sensitive and will be easily disturbed by excessive construction activity.

2. The exposed founding materials shall be protected against detrimental changes in engineering qualities as a result of disturbance from rain or frost.

3. Surface runoff shall be drained away from the excavations and not allowed to pond.

4. If possible, concrete shall be placed in the footings the same day the excavations are made, or the founding materials may be covered by mud mats in order to protect the founding soil from becoming saturated due to forecasted precipitation and/or disturbed due to excessive construction activity during the placement of steel reinforcement.

5. The presence of moisture sensitive fine-grained soils poses the potential for high moisture content. Soils may be found to be at or near their plastic limit; consequently, the on-site soils may require dicing, aeration, and/or manipulation to achieve efficient compaction.

6. Any regions exhibiting poor drainage characteristics, and low lying areas, shall be expected to display moisture contents, which are excessively high for normal earthwork operations.

7. Note that high or low moisture contents do not render a soil as "unsuitable" as the contractor is wholly responsible for moisture conditioning of the soils (i.e., scarifying/loosening and wetting or drying). Undercuts will only be authorized if the soils remain unsuitable when the soil in question is at optimal moisture content.

8. All suitable materials removed in excavation shall be used in accordance with the provisions of this section. It shall be the obligation of the Contractor to utilize all suitable materials from excavation in the construction of fills throughout the entire area of the Contract.

9. Any standing water shall be drained or pumped into approved sediment control facilities prior to commencement of earthwork

10. Excavations near to subgrade and all fills should be protected from traffic of heavy equipment, including heavy compaction equipment, when on-site soils exhibit high moisture contents, in order to minimize pumping and a generalized deterioration of these materials.

N. The Contractor is solely responsible for the protection of the sub-grade until it receives final surface treatment and shall maintain the sub-grade as suitable and acceptable to the Owner or Owner’s Representative at all times. He shall be completely responsible for restoration or replacement of the sub-grade due to moisture damage, construction traffic, or any other cause. Repair or replacement of the sub-grade shall be performed at no additional cost to the Owner.

O. Rock Excavation: The Contractor shall provide the Owner with rock surface elevations that have been confirmed by the onsite geotechnical engineer for quantity verification prior to any rock removal. Upon completing the necessary rock removal, volume measurements must be quantified and confirmed by geotechnical engineer. Failure to provide required quantity confirmation will result in the material being classified as standard excavation.

1.11 PROTECTION OF PROPERTY

A. The Contractor shall be responsible for all damages caused by his work to adjoining property and/or buildings. Care shall also be exercised to prevent a nuisance to neighboring properties by uncontrolled drainage of water or airborne dust.

B. The Contractor is cautioned to avoid the disturbance of existing settlement plates installed. Highly visible protective measures should be taken to prevent disturbances. Any costs associated with corrective measures for a disturbed settlement plate will the responsibility of the contractor.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations Classification of materials shall be made by the Contractor's independent testing agency.

B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, or a combination of these groups; free of rock or gravel larger than 3 inches (76.2 mm) in any dimension and 1.5 inches within the top 18 inches of fill, debris, waste, frozen materials, vegetation and other deleterious matter. The proposed fill soil should have a maximum dry density of no less than 120 pcf. GC and SC materials may be utilized as compacted structural fill if they contain less than 35% passing the No. 200 sieve and a Plasticity Index of less than 15.

C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, or a combination of these groups. The soils classified as GC, SC, CL, ML; and CH/MH with a maximum Liquid Limit of 60% and Plasticity Index of 30% can be used as structural fills at depths greater than 4 ft below pavement subgrades and within non-structural areas. In addition, these soils can be used as a fill for site grading with a maximum dry density greater than 105 pcf.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with graded aggregate for subbase courses shall meet the requirements for G A S/B as shown in Table 312300-1. RC-6 is not acceptable.

Table 31 23 00-1

SIEVES		**MASS PERCENT PASSING**	
mm	Standard	BRG S/B	G A S/B
100	4 in.		
90	3 ½ in.		
63	2 ½ in.	100	
50	2 in.		100, ± 3
37.5	1 ½ in.		90 - 100, ± 5
25	1 in.	90 – 100	
19	¾ in.		
12.5	½ in.	60 - 100	

Table 31 23 00-1			
SIEVES		**MASS PERCENT PASSING**	
9.5	3/8 in.		
4.75	#4		30 - 60, ± 10
2.36	#8		
2.0	#10	35 - 90	
0.60	#30		
0.425	#40	20 - 55	
0.075	#200	5 - 25	0 - 12, ± 5

E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch (38.1-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

F. Engineered Fill: Subbase or base materials. Soils used for compacted fill should be free of unsuitable materials such as topsoil, debris and other organics, rubble and rocks larger than 4 inches in diameter. Open-graded materials, such as Gravels (GW and GP), which contain void space in their mass should not be used in structural fill unless properly encapsulated with filter fabric. Lean concrete can also be used as a select fill under the foundation.

G. Bank Run Gravel for subbases: Bank Run Gravel for subbase courses shall meet the requirements for BRG S/B as shown in Table 31 23 00-1.

H. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch (25.4-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

I. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (38.1-mm) sieve and zero to 5 percent passing a No. 8 (2.36-mm) sieve.

J. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch (25.4-mm) sieve and zero to 5 percent passing a No. 4 (4.75-mm) sieve.

K. Sand: ASTM C33/C33M; fine aggregate.

L. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

M. Imported Soils: Comply with the following criteria:

1. Original function is comparable to reuse function

2. Not classified as prime farmland, unique farmland or farmland of statewide or local importance.

3. Not extracted from a greenfield site.

4. Does not include sphagnum peat moss.

2.2 GEOTEXTILES

A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: As follows:

a. Grab Tensile Strength: 157 lbf (698.4 N); ASTM D4632.

b. Sewn Seam Strength: 142 lbf (631.6 N); ASTM D4632.

c. Tear Strength: 56 lbf (249.1 N); ASTM D4533.

d. Puncture Strength: 56 lbf (249.1 N); ASTM D4833.

2. Apparent Opening Size: No. 40 (0.425-mm) sieve, maximum; ASTM D4751.

3. Permittivity: 0.5 per second, minimum; ASTM D4491.

4. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.

B. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: As follows:

a. Grab Tensile Strength: 247 lbf (1098.7 N); ASTM D4632.

b. Sewn Seam Strength: 222 lbf (987.5 N); ASTM D4632.

c. Tear Strength: 90 lbf (400.3 N); ASTM D4533.

d. Puncture Strength: 90 lbf (400.3 N); ASTM D4833.

2. Apparent Opening Size: No. 60 (0.250-mm) sieve, maximum; ASTM D4751.

3. Permittivity: 0.02 per second, minimum; ASTM D4491.

4. UV Stability: 50 percent after 500 hours' exposure; ASTM D4355.

2.3 ACCESSORIES

A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches (152.4 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility, with

metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches (762 mm) deep; colored as follows:

1. Red: Electric.
2. Yellow: Gas, oil, steam, and dangerous materials.
3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.

B. Protect and maintain erosion and sedimentation controls during earth-moving operations.

C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

D. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, and sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

1. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water to be removed from excavation to collecting or runoff areas. Do not use foundation or pipeline excavations as temporary drainage ditches.

E. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

F. During Construction, the grading operations shall be performed in a manner such that the excavation will be well drained at all times. When necessary, excavations shall be drained to sumps, which shall be pumped continuously, if required, to an approved sediment control device. The Contractor shall maintain and keep all ditches open and free from soil and debris while in service or until final acceptance of the work, and all grading shall be done on neat, regular lines conforming to the sections and contours shown on the plans. All work done in proper sequence with all other associated operations. Before slab or surfacing is placed, all drainage facilities shall be installed which are required to permit free and uninterrupted flow of the surface and underground water from the site or to pumping sumps, etc.

3.3 EXPLOSIVES

A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

A. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Architect. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation. Excavation, including undercut, shall be performed in accordance with the Geotechnical Engineer's report.

1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.

    a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.

2. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:

    a. 24 inches (609.6 mm) outside of concrete forms other than at footings.

    b. 12 inches (304.8 mm) outside of concrete forms at footings.

    c. 6 inches (152.4 mm) outside of minimum required dimensions of concrete cast against grade.

    d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.

    e. 6 inches (152.4 mm) beneath bottom of concrete slabs-on-grade.

    f. 6 inches (152.4 mm) beneath pipe in trenches and the greater of 24 inches (609.6 mm) wider than pipe or 42 inches (1066.8 mm) wide.

3.5 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch (25.4 mm). If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

B. Excavations at Edges of Tree- and Plant-Protection Zones:

1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

2. Cut and protect roots according to requirements in Section 01 56 39 "Temporary Tree and Plant Protection."

3.6 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.7 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (304.8 mm) higher than top of pipe or conduit unless otherwise indicated.

1. Clearance: 12 inches (304.8 mm) each side of pipe or conduit.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. For pipes and conduit less than 6 inches (152.4 mm) in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.

2. For pipes and conduit 6 inches (152.4 mm) or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.

3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.

4. Excavate trenches 6 inches (152.4 mm) deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

D. Trenches in Tree- and Plant-Protection Zones:

1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

3. Cut and protect roots according to requirements in Section 01 56 39 "Temporary Tree and Plant Protection."

3.8 SUBGRADE INSPECTION

A. Notify Testing Agent when excavations have reached required subgrade.

B. When Testing Agent determines that unforeseen unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed by the Testing Agent.

1. Unforeseen additional excavation and replacement material will be paid according to the Contract provisions for changes in Work.

C. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons (13.6 tonnes) to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph (4.8 km/h).

2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.

D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices.

E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.9 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi (17.2 MPa), may be used when approved by Architect.

B. In locations other than those above, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by the Architect.

3.10 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.11 BACKFILL

A. Place and compact backfill in excavations promptly, but not before completing the following:

1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.

2. Surveying locations of underground utilities for Record Documents.

3. Testing and inspecting underground utilities.

4. Removing concrete formwork.

5. Removing trash and debris.

6. Removing temporary shoring, bracing, and sheeting.

7. Installing permanent or temporary horizontal bracing on horizontally supported walls.

B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.12 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches (457.2 mm) of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Section 03 30 00 "Cast-in-Place Concrete."

D. Trenches under Roadways: Provide 4 inch (101.6 mm) thick, concrete-base slab support for piping or conduit less than 30 inches (762 mm) below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches (101.6 mm) of concrete before backfilling or placing roadway subbase course. Concrete is specified in Section 03 30 00 "Cast-in-Place Concrete."

E. Backfill voids with satisfactory soil while removing shoring and bracing.

F. Initial Backfill:

1. Soil Backfill: Place and compact initial backfill of subbase material, free of particles larger than 1 inch (25.4 mm) in any dimension, to a height of 12 inches (304.8 mm) over the pipe or conduit.

a. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

G. Final Backfill:

1. Soil Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.

2. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation.

H. Warning Tape: Install warning tape directly above utilities, 12 inches (304.8 mm) below finished grade, except 6 inches (152.4 mm) below subgrade under pavements and slabs.

3.13 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.

2. Under walks and pavements, use satisfactory soil material.

3. Under steps and ramps, use engineered fill.

4. Under building slabs, use engineered fill.

5. Under footings and foundations, use engineered fill.

C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.14 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry density.

3.15 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches (203.2 mm) in loose depth for material compacted by heavy compaction equipment and not more than 4 inches (101.6 mm) in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure. Compacted structural fill should be placed at least 5 ft beyond the edge of the building.

C. Compact soil materials to not less than the following percentages of maximum dry density according to ASTM D1557:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches (304.8 mm) of existing subgrade and each layer of backfill or fill soil material at 95 percent.

2. Under turf or unpaved areas, scarify and recompact top 6 inches (152.4 mm) below subgrade and compact each layer of backfill or fill soil material at 85 percent.

3. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.16 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

1. Provide a smooth transition between adjacent existing grades and new grades.

2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:

1. Turf or Unpaved Areas: Plus or minus 2 inches (50.8 mm).

2. Walks: Plus or minus 2 inches (50.8 mm).

3. Pavements: Plus or minus 1 inch (25.4 mm).

C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch (12.7 mm) when tested with a 10-foot (3-m) straightedge.

3.17 SUBSURFACE DRAINAGE

A. Subsurface Drain: Place subsurface drainage geotextile around perimeter of subdrainage trench. Place a 6 inch (152.4 mm) course of filter material on subsurface drainage geotextile to support subdrainage pipe. Encase subdrainage pipe in a minimum of 12 inches (304.8 mm) of filter material, placed in compacted layers 6 inches (152.4 mm) thick, and wrap in subsurface drainage geotextile, overlapping sides and ends at least 6 inches (152.4 mm).

1. Compact each filter material layer to 85 percent of maximum dry density according to ASTM D698.

B. Drainage Backfill: Place and compact filter material over subsurface drain, in width indicated, to within 12 inches (304.8 mm) of final subgrade, in compacted layers 6 inches (152.4 mm) thick. Overlay drainage backfill with one layer of subsurface drainage geotextile, overlapping sides and ends at least 6 inches (152.4 mm).

1. Compact each filter material layer to 85 percent of maximum dry density according to ASTM D698 with a minimum of two passes of a plate-type vibratory compactor.

3.18 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.

2. Place base course material over subbase course under hot-mix asphalt pavement.

3. Shape subbase course and base course to required crown elevations and cross-slope grades.

4. Place subbase course and base course 6 inches (152.4 mm) or less in compacted thickness in a single layer.

5. Place subbase course and base course that exceeds 6 inches (152.4 mm) in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches (152.4 mm) thick or less than 3 inches (76.2 mm) thick.

6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness. The aggregate base course should meet the specifications of MSHA GA Base or CR-6, and be compacted to at least 97% of the maximum dry density per AASHTO T180. The moisture content of the material shall be maintained within 2% of the material’s optimum moisture content. Approved subgrade consists of a firm and unyielding proof rolled soil subgrade or compacted select fill. For the compacted select fill, the top 1 ft of select fill material shall be compacted to a minimum of 97% of the maximum dry density and the material below the top 1 ft shall be compacted to a minimum of 92% of the maximum dry density as per AASHTO T180, with a moisture content within 2% of optimum.

3.19 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

A. Place drainage course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:

1. Install subdrainage geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.

2. Place drainage course 6 inches (152.4 mm) or less in compacted thickness in a single layer.

3. Place drainage course that exceeds 6 inches (152.4 mm) in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches (152.4 mm) thick or less than 3 inches (76.2 mm) thick.

4. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D698.

3.20 FIELD QUALITY CONTROL

A. Special Inspections: Contractor will engage a qualified special inspector to perform the following special inspections:

1. Determine prior to placement of fill that site has been prepared in compliance with requirements.

2. Determine that fill material classification and maximum lift thickness comply with requirements.

3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.

B. Testing Agency: Contractor will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

C. The Inspection Agency shall inspect the site after it has been stripped and excavated. Determine if undercutting or in-place densification is necessary to prepare the subgrade for fill placement or for footing, slab or pavement support.

D. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

E. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.

F. Testing agency will test compaction of soils in place according to ASTM D1556, ASTM D2167, ASTM D2937, and ASTM D6938, as applicable. Tests will be performed at the following locations and frequencies:

1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. (0.005 ac.) or less of paved area or building slab but in no case fewer than three tests.

2. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet (30.5 m) or less of wall length but no fewer than two tests.

3. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet (45.7 m) or less of trench length but no fewer than two tests.

G. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

H. Tests for Displacement of Drains: Drains will be checked by the Inspection Agency Architect to determine whether any displacement of pipe has occurred after trench has been backfilled to about two feet above pipe and compacted as specified. These will be as follows: A light will be flashed

between manholes, or, if manholes have not yet been constructed between locations of manholes, by means of flashlight or by reflecting sunlight with a mirror. If illuminated interior of pipe lines shows poor alignment, displaced pipe, or any other defects designated by Architect, it shall be corrected by the Contractor at no additional cost to the Owner.

3.21 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.22 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Architect.

1. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

PART 4 - MEASUREMENT AND PAYMENT

4.1 MEASUREMENT

A. There will be no measurement of the following:

1. Excavation for site grading to accommodate proposed grades and for all materials above the indicated undercut elevation.

2. Excavation to rough grading required by indicated elevations within neat lines of building footings.

3. Excavation to bottoms of utility trenches.

4. Excavation to rough grades of miscellaneous structures.

5. Over-excavation.

6. Unauthorized excavation.

7. Borrow material.

8. Rehandling, and drying and/or wetting of on-site soils.

9. Select backfill material as indicated on plans.

10. Stripping of all organic material.

B. Measurement will be made of the following:

1. Authorized over-excavation or undercutting required to remove unsatisfactory subgrade material which occurs below indicated subgrade elevations, miscellaneous structures, except where noted to be removed as part of the drawings.

2. Measurement of Rock Excavation in Open Excavation as defined herein and approved by the Inspection Agency, including excavation; disposal; filling and/or backfilling, if required; and compaction shall be on a Cubic Yard basis.

3. Measurement of Rock Excavation in Excavation Trenches and Pits defined herein and approved by the Inspection Agency, including excavation; disposal; filling and/or backfilling, if required; and compaction shall be on a Cubic Yard basis.

4.2 PAYMENT

A. For items not measured: All work shall be paid for under the Base Bid Price.

B. Authorized over-excavation or undercutting, including excavation, backfilling, compacting, and disposal of unsatisfactory material shall be paid for at the unit price per cubic yard as submitted on the Bid Form.

C. Rock Excavation in Open Excavation as defined herein and approved by the Inspection Agency. ~~Excavations for this contract is to include 500 cubic yards of Rock Excavation in Open Excavations under the Base Bid Price.~~ Final Payment will be made as follows: **Per Unit Price as outlined in Section 012200**

D.

~~1. If the final quantity of Rock Excavation in Open Excavations is more than 500 cubic yards, Payment will be made for the cubic yards exceeding 500 cubic yards at the unit price per cubic yard indicated in the Proposal Form.~~

~~2. If the final quantity of Rock Excavation in Open Excavation is less than 500 cubic yards, the Contractor's Base Bid price will be reduced as determined by the difference between 500 cubic yards and the actual measured quantity times the unit price per cubic yards, indicated in the proposal Price.~~

E. Rock Excavation in Trench Excavations and Pits, as defined herein and approved by the Inspection Agency ~~in this Contract, is to include 500 cubic yards of Rock excavation in Trench Excavation and Pits under the Basic Bid Price.~~ Final Payment will be made as follows: **Per Unit Price as outlined in Section 012200**

~~1. If the final quantity of Rock Excavation in Trench Excavation and Pits is more than 500 cubic yards, Payment will be made for the cubic yards exceeding 500 cubic yards at the unit price per cubic yard, indicated in the Proposal Form.~~

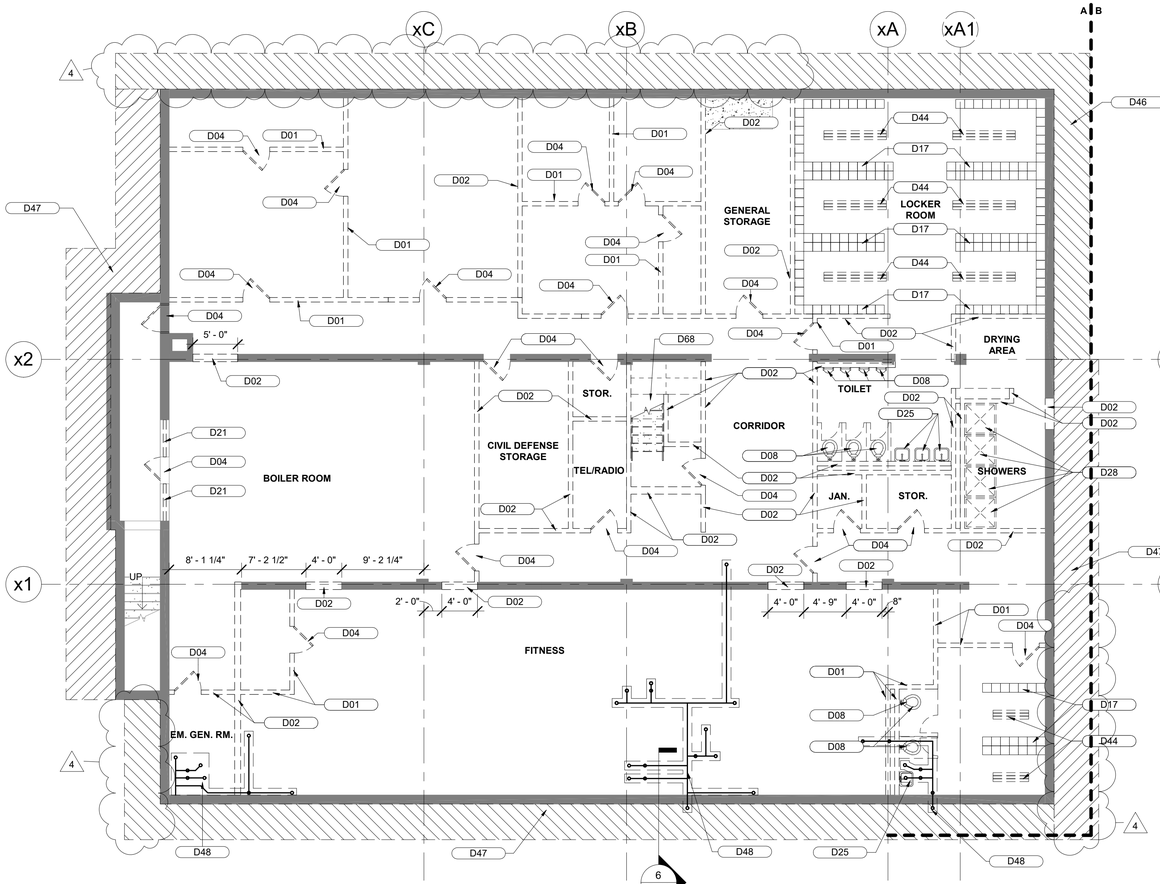
~~2. If the final quantity of Rock Excavation in Trench Excavations and Pits is less than 500 cubic yards, the Contractor's Base Bid Price will be reduced as determined by the difference between 500 cubic yards and the actual measured quantity times the unit price per cubic yards, indicated in the Proposal Form.~~

END OF SECTION 31 20 00

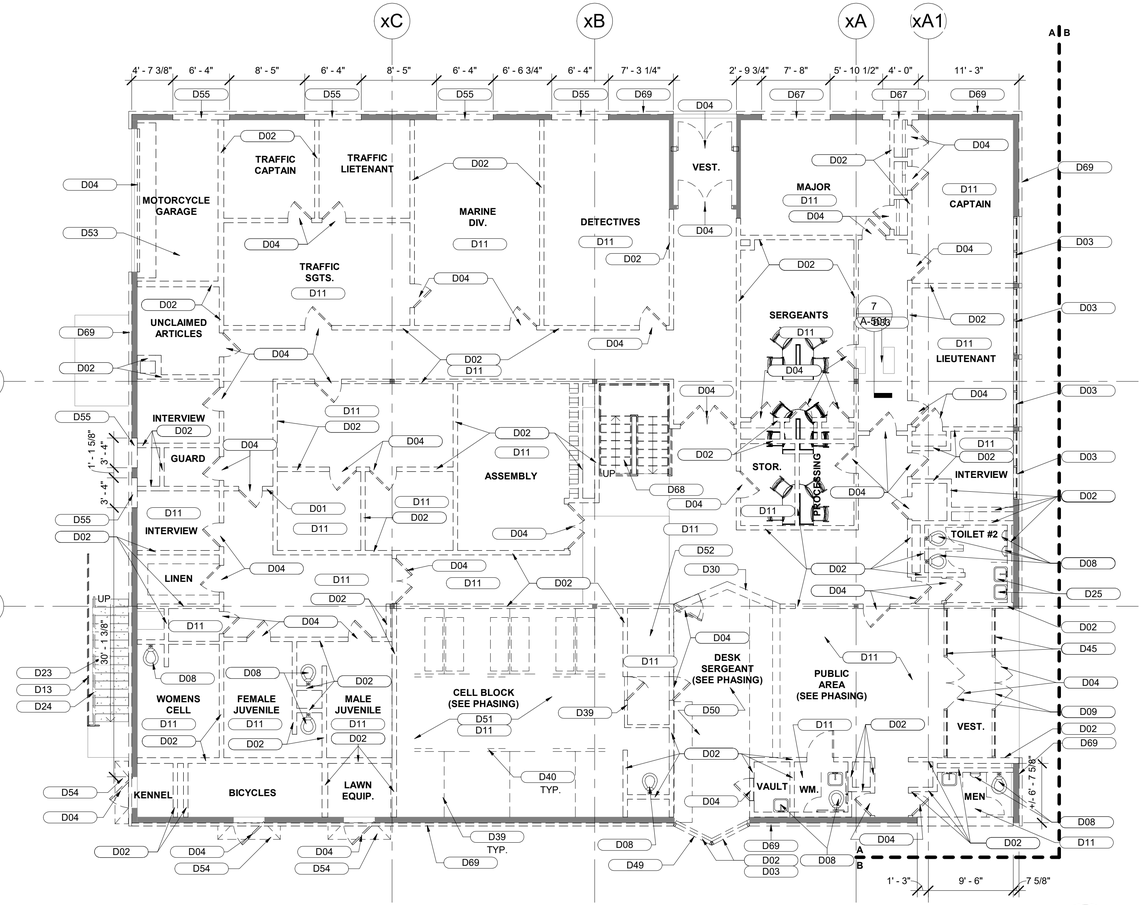
UNIT & ALLOWANCE PRICING SCHEDULE (Spec Section 012100 & 31 20 00):

Furnish the requested unit price(s), which will be used for Project, where applicable:

LINE NO.	COMMODITY/SERVICE DESCRIPTION	QUANTITY	UNIT	UNIT RATE
1	ALLOWANCE 3- C – DEWATERING TO CONTROL HYDRASTIC PRESSURES & CONTROL GROND WATER - CONTINGENT	LS	0	$
2	UNIT PRICE 1 – CL. 3 SOIL EXCAV. & DISPOSAL OFF-SITE & REPLACE W/ MATERIALS FROM CONTRACT EXPORT - CONTINGENT	CY		$
3	UNIT PRICE 2 – CL. 3 SOIL EXCAV. & DISPOSAL OFF-SITE & REPLACE W/ SELECT BACKFILL MATERIAL FROM OFFSITE – CONTINGENT	CY		$
4	UNIT PRICE 3 – ROCK EXCAVATION IN OPEN EXCAVATION – CONTINGENT	CY		$
5	UNIT PRICE 4 – ROCK EXCAVATION IN TRENCH EXCAVATION & PITS – CONTINGENT	CY		$
6				$
7				$
8				$



2 DEMOLITION FLOOR PLAN - BASEMENT
1/8" = 1'-0"



1 DEMOLITION FLOOR PLAN - FIRST FLOOR
1/8" = 1'-0"

0 4'-0" 8'-0" 16'-0"

DEMOLITION LEGEND

- EXISTING WALL CONSTRUCTION TO REMAIN
- EXISTING WALL CONSTRUCTION TO BE REMOVED
- EXISTING DOOR TO REMAIN
- EXISTING DOOR AND FRAME TO BE REMOVED

NOTE: FLOR DRAINS AND CLEANOUTS
- COORDINATE WITH PLUMBING

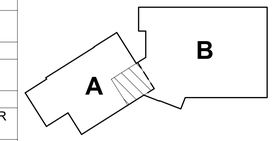
GENERAL DEMOLITION NOTES

1. REFERENCE AND FOLLOW 01 10 00 - SUMMARY OF WORK FOR PHASING CRITERIA.
2. CONTRACTOR TO NOTIFY ARCHITECT AND OWNER IF MATERIALS CONTAINING HAZARDOUS MATERIAL ENCOUNTERED. SEE HAZARDOUS MATERIAL REPORT.
3. CONFORM TO APPLICABLE REGULATORY PROCEDURES WHEN DISCOVERING HAZARDOUS OR CONTAMINATED MATERIALS
4. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURE, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL AND DISPOSAL OF MATERIALS
5. WHERE EXISTING DUCT THAT ARE ABANDONED FLOOR REGISTER OPENINGS ARE LOCATED, GC IS TO HAVE THESE FILLED WITH PLYWOOD, THE SLAB PINED WITH REBAR EPOXY TO EXISTING AND NEW CONCRETE FILLED TO LEVEL OF EXISTING TO BE FINISHED PER SCHEDULE.
6. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS
7. DEMOLISH EXISTING WORK IN AN ORDERLY AND CAREFUL MANNER AS REQ'D TO ACCOMMODATE NEW WORK, PREVENT MOVEMENT OR SETTLEMENT OF STRUT. PROVIDE BRACING AND / OR SHORING AS REQUIRED TO MAINTAIN SAFETY
8. COORDINATE ALL DEMOTION WORK WITH OWNER AS NECESSARY
9. GC TO NOTIFY OWNER REPRESENTATIVE AND ARCHITECT OF ANY DISCREPANCIES OR IRREGULARITIES DISCOVERED DURING CONSTRUCTION
10. GENERAL CONTRACTOR TO COORDINATE WITH OWNER SCHEDULE AND TIMING OF DEMOLITION WORK. CONTRACTOR TO PROVIDE AND INSTALL ALL TEMPORARY MEANS OF EGRESS, TEMPORARY LIGHTING AND SAFETY DEVICES IN ACCORDANCE WITH STATE AND LOCAL CODES.
11. CONTRACTOR IS RESPONSIBLE PATCHING AND REPAIRING FLOOR SLAB AND WALLS AFTER COMPLETION OF DEMOLITION AND PRIOR TO THE COMMENCEMENT OF NEW CONSTRUCTION.
12. DEMOLITION CONTRACTOR SHALL COORDINATE ALL MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION WORK WITH PLANS PRIOR TO THE COMMENCEMENT OF ANY WORK AND COORDINATE THEIR WORK WITH THE GC AND OTHER SUB-CONTRACTORS AS NECESSARY.

KEYNOTE LEGEND	
TAG	DESCRIPTION
D01	REMOVE EXIST. STUD WALL TO EXTENT SHOWN. REMOVE FULL HEIGHT OF EXIST. PARTITION.
D02	REMOVE EXIST. MASONRY WALL TO EXTENT SHOWN. PREPARE FOR NEW WORK.
D03	REMOVE EXIST. WINDOW IN ITS ENTIRETY INCLUDING WOOD BLOCKING, FLASHING, ETC. PREPARE FOR NEW WORK.
D04	REMOVE EXIST. DOOR, FRAME, AND HARDWARE IN ITS ENTIRETY. PREPARE FOR NEW WORK.
D08	REMOVE EXIST. PLUMBING FIXTURES AND TOILET ACCESSORIES. PREPARE FOR NEW WORK.
D09	REMOVE EXIST. TOILET PARTITIONS, URINAL SCREENS, AND RELATED ITEMS. PREPARE FOR NEW WORK.
D11	REMOVE EXIST. FLOOR FINISH, WALL BASE, AND ALL MASTICS / GLUE. PREPARE FLOOR SLAB FOR NEW WORK.
D13	REMOVE EXIST. GUARDRAIL IN ITS ENTIRETY. PREPARE FOR NEW WORK.
D17	REMOVE EXIST. LOCKERS.
D21	REMOVE EXIST. LOUVER IN ITS ENTIRETY. PREPARE FOR NEW WORK.
D23	REMOVE EXIST. TREAD FINISH. PREPARE FOR NEW WORK.
D24	REMOVE EXIST. HANDRAIL IN ITS ENTIRETY. PREPARE FOR NEW WORK.

KEYNOTE LEGEND	
TAG	DESCRIPTION
D25	REMOVE EXIST. SINK. PREPARE FOR NEW WORK. COORDINATE WITH MEP.
D28	REMOVE EXIST. SHOWER BASE, SHOWER HEAD, CONTROLS, AND ACCESSORIES. CAP & FILL ABONDON IN PLACE PIPING. COORDINATE WITH MEP.
D30	REMOVE EXIST. HALF-WALL.
D33	REMOVE EXIST. FLOOR SLAB AS NEEDED FOR NEW MECHANICAL SHAFT. COORDINATE WITH STRUCTURAL DRAWINGS. PREPARE FOR NEW WORK.
D39	REMOVE EXIST. BARRED CELL WALLS IN THEIR ENTIRETY. PREPARE FOR NEW WORK.
D40	REMOVE EXIST. BARRED CELL DOOR. SWINGING OR SLIDING, REMOVE IN ITS ENTIRETY.
D44	REMOVE EXIST. WOOD BENCH.
D45	REMOVE EXIST. STOREFRONT IN ITS ENTIRETY.
D46	IN APPROPRIATE PHASE, EXCAVATE HATCH AREA TO B.O. MAT SLAB. DOCUMENT THE CONDITION OF THE EXISTING DRAIN TILE & WATERPROOFING MEMBRANE. PROVIDE NEW WATERPROOFING MEMBRANE TO THE VERTICAL FACE LAPING PORTION OF EXISTING TO REMAIN, NEW DRAINAGE BOARD AND DRAIN TILE, TO THE ENTIRE PERIMETER OF THE EXISTING BUILDING'S BELOW GRADE WALLS.
4	

KEYNOTE LEGEND	
TAG	DESCRIPTION
D47	EXCAVATE AREA FOR NEW FOOTINGS AND FOR NEW UTILITY WORK.
D48	DEMO SLAB AREAS TO BE TRENCHED FOR NEW PLUMBING WORK. APPOX 12" WIDE AROUND A PIPE. SEE STRUCTURAL DETAILS.
D49	REMOVE EXIST. FLOOR SLAB. COORDINATE WITH STRUCTURAL.
D50	REMOVE EXIST. RAISED PLYWOOD FLOOR. PREPARE SLAB UNDERNEATH FOR NEW FINISH.
D51	DEMO 3" CONCRETE TOPPING, TO ITS ENTIRETY, & DRAIN. PREPARE FOR NEW FINISH.
D52	REMOVE EXIST. CONCRETE RAMP.
D53	DEMO CONCRETE TOPPING, TO ITS ENTIRETY. PREPARE FOR NEW FINISH.
D54	REMOVE EXIST. CONCRETE STEP.
D55	REMOVE EXIST. WALL TO EXTENTS SHOWN AND PREPARE FOR NEW WORK. SEE DOOR SCHEDULE.
D67	REMOVE EXIST. WALL TO EXTENTS SHOWN AND PREPARE FOR NEW WORK. SEE WINDOW SCHEDULE.
D68	REMOVE EXIST. STAIRCASE IN ITS ENTIRETY. SURFACE CUTS TO SLAB FINISH PREPARE FOR NEW WORK.
D69	REMOVE EXIST. BRICK FACADE IN ITS ENTIRETY.



Murphy & Dittenhafer ARCHITECTS
805 North Charles Street, Baltimore, Maryland 21201 410-625-4823 voice 410-625-4674 fax
229 West Market Street, York, Pennsylvania 17401 717-848-4827 voice 717-845-3448 fax

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SEAL: ARCHITECTURAL REGISTRATION BOARD — FRANK ELWOOD DITTENHAFER II — 6607-A — STATE OF MARYLAND — 7/14/2025
DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 6607, EXPIRATION DATE 06/13/2027
ARCHITECT: Frank Elwood Dittenhafer, II
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY: JAT
DWN BY: DWG/AWU
CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	ISW	7NE28, 7NE29, 8NE28, 8NE29

DRAWING SCALE
PLAN SCALE: As indicated.
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

DEMOLITION FLOOR PLANS

RENOVATION & ADDITION

216 & 222 North Marlyn Ave, Essex, MD 21221

SUBDIVISION: ESSEX

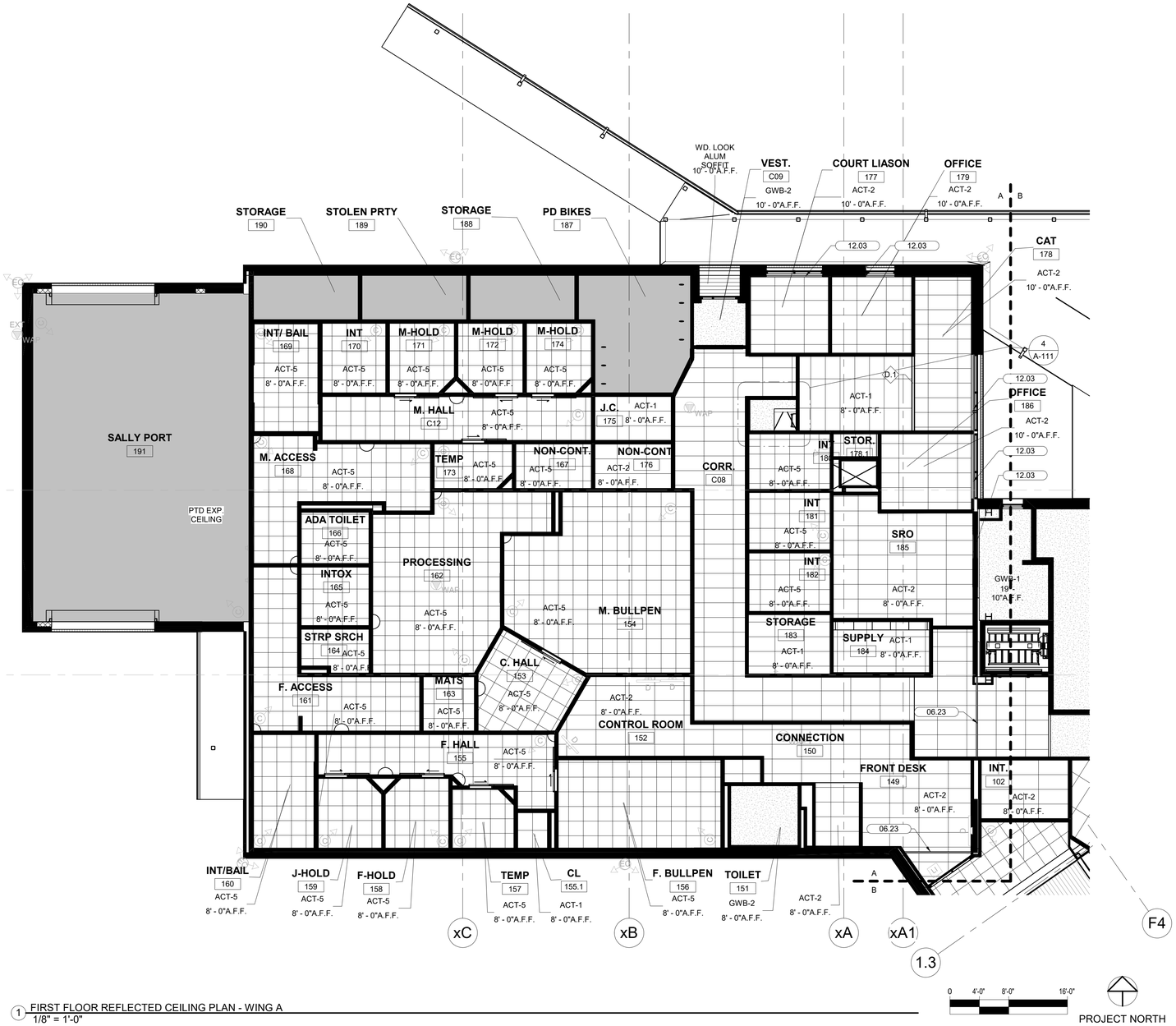
ELECTION DIST. NO.: 15C7

SHEET DESIGNATION	CONTRACT NUMBER
AD-102	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 76 OF 295
	DRAWING NUMBER
	2025-0967
	FILE NO.: 8 REV. 03/22

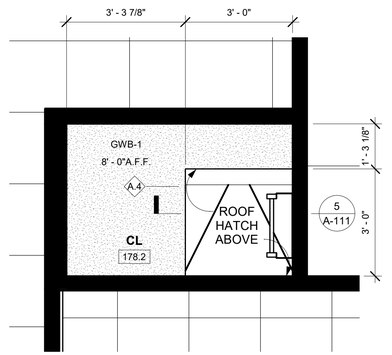
BALTIMORE COUNTY MARYLAND

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

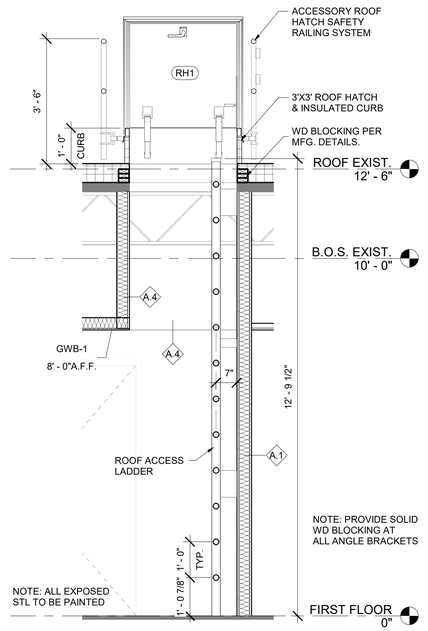
KEYNOTE LEGEND	
TAG	DESCRIPTION
06.23	2" CEILING EXPANSION JOINT COVER PLATE.
12.03	TYP. MANUAL ROLLER SHADE (RS-1) ALL EXTERIOR WINDOWS OF THE ROOM.



1 FIRST FLOOR REFLECTED CEILING PLAN - WING A
1/8" = 1'-0"



4 ROOF HATCH - CL. 178.2 - WING A
1/2" = 1'-0"



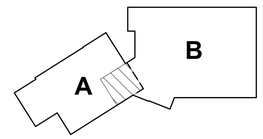
5 ROOF HATCH & LADDER - WING A - DETAIL
1/2" = 1'-0"

CEILING TYPES

REFER TO SPECIFICATION FOR ALL ACT TYPES



- 2' X 4' - ACT
- GYPSUM WALL BOARD
- PAINTED EXPOSED CEILING
- STAINED EXPOSED SOLID WD DECKING
- ALUM. WD LOOK SOFFIT OR CEILING



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SEAL
ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025
DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 6607, EXPIRATION DATE 06/13/2027

ARCHITECT: Frank Elwood Dittenhafer, II

AS-BUILT PER RECORD PRINT

BY:
DATE:

DGN BY: JAT
DWN BY: DWG/AWU
CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	ISW	7NE28 7NE29 8NE28 8NE29

DRAWING SCALE
PLAN SCALE: As indicated
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED FIRST FLOOR RCP - PART A

RENOVATION & ADDITION

216 & 222 North Marlyn Ave, Essex, MD 21221

SUBDIVISION: ESSEX

ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201 410-625-4623 voice 410-625-4674 fax
226 West Market Street, York, Pennsylvania 17401 717-848-6827 voice 717-845-2446 fax

DWG. FILENAME:

SHEET DESIGNATION	CONTRACT NUMBER
A-111	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 88 OF 295
	DRAWING NUMBER
	2025-0979
	FILE NO.: 8 REV: 03/03

BALTIMORE COUNTY MARYLAND

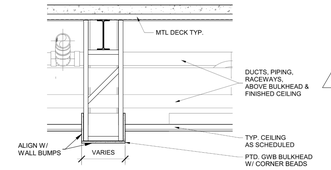
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



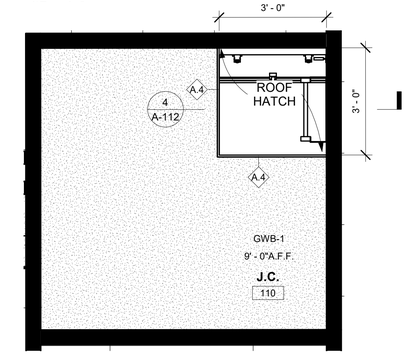
1 FIRST FLOOR REFLECTED CEILING PLAN - WING B
1/8" = 1'-0"

0 4'-0" 8'-0" 16'-0"

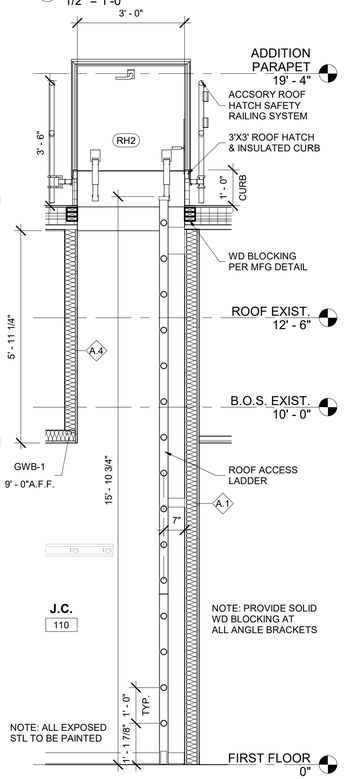
PROJECT NORTH



2 TYPICAL CEILING DETAIL - CORRIDOR BULKHEAD
1/2" = 1'-0"



3 ROOF HATCH - WING B
1/2" = 1'-0"

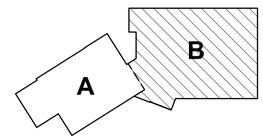


4 ROOF HATCH & LADDER - WING B - DETAIL
1/2" = 1'-0"

CEILING TYPES

- 2' X 2' - ACT
- 2' X 4' - ACT
- 2' X 5' - ACT
- GYPSUM WALL BOARD
- PAINTED EXPOSED CEILING
- STAINED EXPOSED SOLID WD DECKING
- ALUM. WD LOOK SOFFIT OR CEILING

KEYNOTE LEGEND	
TAG	DESCRIPTION
06.23	2" CEILING EXPANSION JOINT COVER PLATE.
12.03	TYP. MANUAL ROLLER SHADE (RS-1) ALL EXTERIOR WINDOWS OF THE ROOM.
22.22	ACCESS PANEL, DRYWALL FLANGE 12"x12" COORDINATE LOCATION W/WATER SHUT OFF



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SEAL
REGISTERED ARCHITECT 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025
DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 6607, EXPIRATION DATE 06/13/2027
ARCHITECT: Frank Elwood Dittenhafer, II
AS-BUILT PER RECORD PRINT
BY: DATE:
DGN BY: JAT
DWN BY: DWG/AWU
CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	ISW	7NE28 7NE29 8NE28 8NE29

DRAWING SCALE: PLAN SCALE: As indicated; PROFILE SCALE:

PROPERTY MANAGEMENT: APPROVED BY: PROPERTY MANAGER; DATE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED FIRST FLOOR RCP - PART B

RENOVATION & ADDITION

216 & 222 North Marlyn Ave, Essex, MD 21221

SUBDIVISION: ESSEX

ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201 410-625-4623 voice 410-625-4674 fax
226 West Market Street, York, Pennsylvania 17401 717-848-8827 voice 717-845-2446 fax

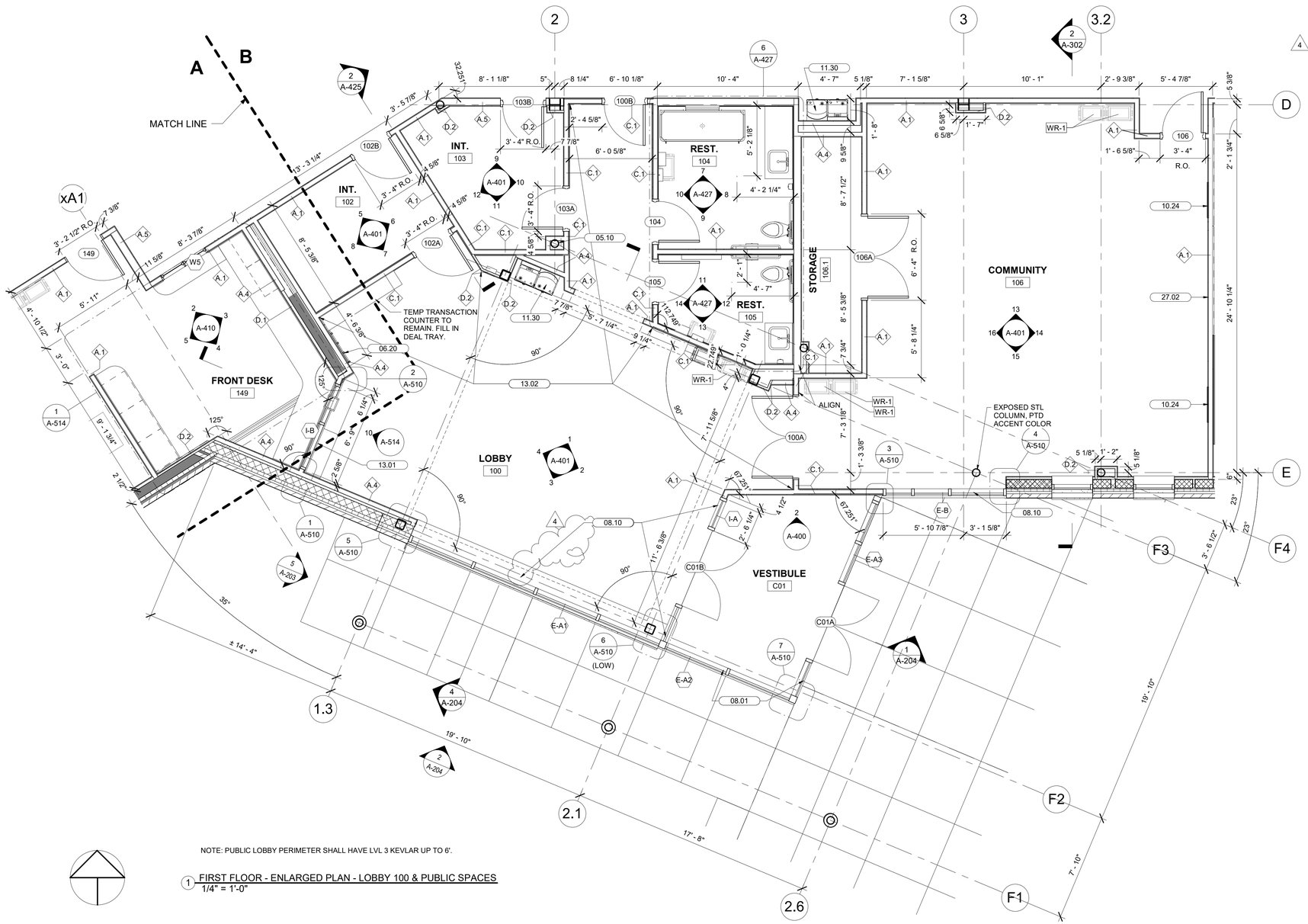
SHEET DESIGNATION	CONTRACT NUMBER
A-112	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 89 OF 295
	DRAWING NUMBER
	2025-0980
	FILE NO.: 8 REV. 03/03

DWG. FILENAME:

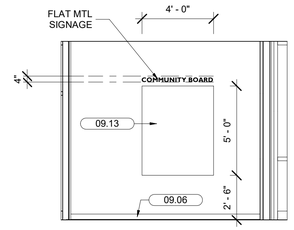
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

KEYNOTE LEGEND	
TAG	DESCRIPTION
05.10	STEEL COLUMN. SEE STRUCTURE.
06.20	WOOD AND ACRYLIC BROCHURE DISPLAY.
08.01	TYP. ALUMINUM SF SYSTEM.
08.10	LVL 3A BALISTIC ALUM. STOREFRONT SYSTEM, SEE ADD ALT #1.
09.06	WALL BASE PER RM FINISH SCHEDULE.
09.13	AWP-1, ACOUSTICAL WALL PANEL, 1" TECTUM DIRECT.ATTACHED.
10.24	INTERIOR SIGNAGE, SEE SIGNAGE PLAN.
11.30	ELECTRIC WATER COOLER.
13.01	LVL 3 KEVLAR PANELS WITHIN WALL PARTITION UNDER COUNTER AND SSM WALL COVERINGS UNDER COUNTER. REFER TO PARTITION TYPES FOR DETAILS.
13.02	LVL 3 KEVLAR PANELS UP TO 6' WITHIN WALL PARTITION. REFER TO PARTITION TYPES FOR DETAILS.
27.02	AV MONITOR, SEE TA DRAWINGS.

NOTE: SEE DWG A-426 FOR TOILET ACCESSORY SCHEDULE.



1 FIRST FLOOR - ENLARGED PLAN - LOBBY 100 & PUBLIC SPACES
1/4" = 1'-0"



2 VESTIBULE C01 - N
1/4" = 1'-0"

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Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201 410-625-4623 voice 410-625-4574 fax
226 West Market Street, York, Pennsylvania 17401 717-848-6827 voice 717-845-2449 fax

DWG. FILENAME:

SEAL: ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025
DATE: JULY 14, 2025

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DGN BY: JAT
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CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.
ADDENDUM #4	JAT	1/9/26	
			R.O.W NO.
CONTRACT COMPLETION BOX			

KEY SHEET: ISW
POSITION SHT: 7NE28, 7NE29, 8NE28, 8NE29

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE: PLAN SCALE: 1/4" = 1'-0"; PROFILE SCALE:

PROPERTY MANAGEMENT: APPROVED BY: _____ PROPERTY MANAGER; DATE: _____

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED PLAN - 1ST FL - LOBBY & PUBLIC SPACES

RENOVATION & ADDITION

SUBDIVISION: ESSEX

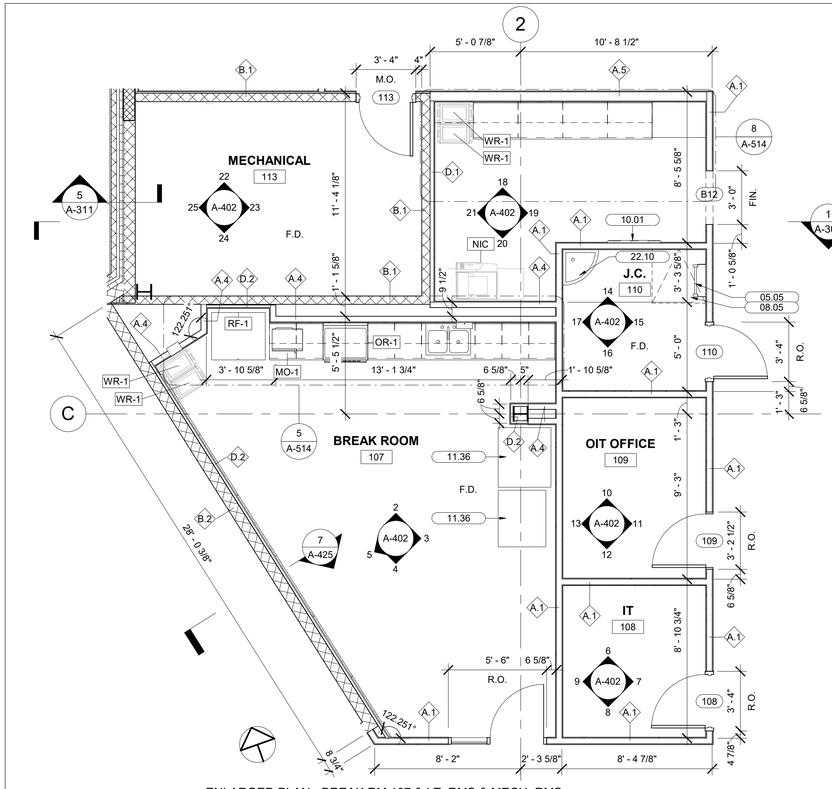
216 & 222 North Marlyn Ave, Essex, MD 21221

ELECTION DIST. NO.: 15C7

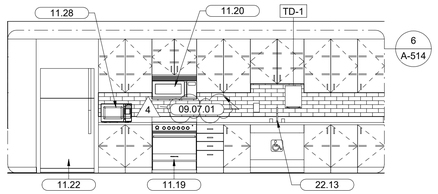
SHEET DESIGNATION	CONTRACT NUMBER
A-400	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 105 OF 295
	DRAWING NUMBER
	2025-0996
	FILE NO.: 8 REV: 03/22

BALTIMORE COUNTY MARYLAND

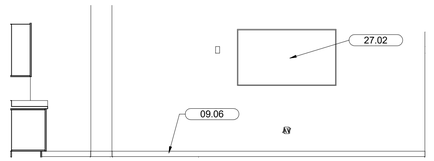
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



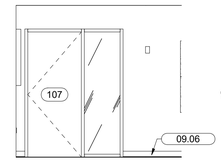
1 ENLARGED PLAN - BREAK RM 107 & I.T. RMS & MECH. RMS.
1/4" = 1'-0"



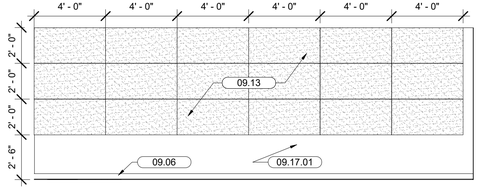
2 BREAK ROOM 107 - N
1/4" = 1'-0"



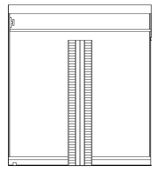
3 BREAK ROOM 107 - E
1/4" = 1'-0"



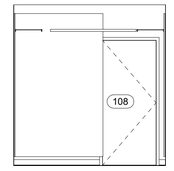
4 BREAK ROOM 107 - S
1/4" = 1'-0"



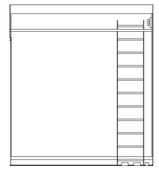
5 BREAK ROOM 107 - W
1/4" = 1'-0"



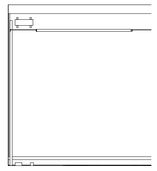
6 IT RM 108 - N
1/4" = 1'-0"



7 IT RM 108 - E
1/4" = 1'-0"



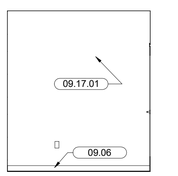
8 IT RM 108 - S
1/4" = 1'-0"



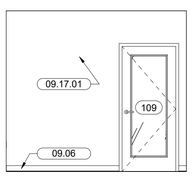
9 IT RM 108 - W
1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
05.05	ALUM. ACCESS LADDER, ROOF HATCH
08.05	ROOF ACCESS HATCH & ALUM LADDER.
09.06	WALL BASE PER RM FINISH SCHEDULE.
09.07.01	CT-1
09.13	AWP-1, ACOUSTICAL WALL PANEL, 1" TECTUM DIRECT.ATTACHED.
09.17.01	PT-1.
10.01	ALUM. FRAMED TACKBOARD. REFER TO ELEVATIONS FOR DETAILS.
10.04	MOP AND BROOM HOLDER.
11.19	COMMERCIAL 6-BURNER ELECTRIC RANGES/ OVENS.
11.20	COMMERCIAL MICROWAVE/RANGE HOOD COMBO.
11.22	COMMERCIAL COMBO REFRIGERATOR/ FREEZER.
11.28	MICROWAVE (RESIDENTIAL).
11.34	FLOOR PRINTER, NIC.
11.36	SALVAGED VENDING MACHINE.
22.10	MOP SINK.
22.13	STAINLESS STEEL DOUBLE BASIN KITCHEN SINK.
23.01	MECHANICAL EQUIPMENT - REFER TO MECHANICAL DRAWINGS FOR DETAILS.
26.01	ELECTRICAL EQUIPMENT - REFER TO ELECTRICAL DRAWINGS FOR DETAILS.
27.02	AV MONITOR, SEE TA DRAWINGS.

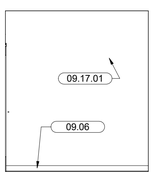
NOTE: SEE DWG A-426 FOR TOILET ACCESSORY SCHEDULE.



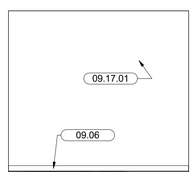
10 OIT OFFICE 109 - N
1/4" = 1'-0"



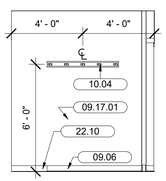
11 OIT OFFICE 109 - E
1/4" = 1'-0"



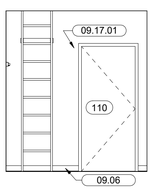
12 OIT OFFICE 109 - S
1/4" = 1'-0"



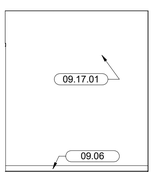
13 OIT OFFICE 109 - W
1/4" = 1'-0"



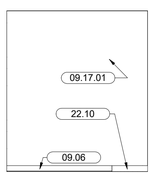
14 J.C. 110 - N
1/4" = 1'-0"



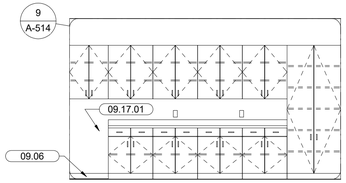
15 J.C. 110 - E
1/4" = 1'-0"



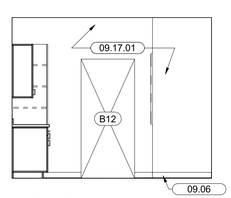
16 J.C. 110 - S
1/4" = 1'-0"



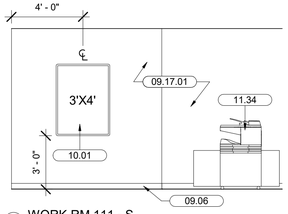
17 J.C. 110 - W
1/4" = 1'-0"



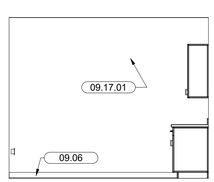
18 WORK RM 111 - N
1/4" = 1'-0"



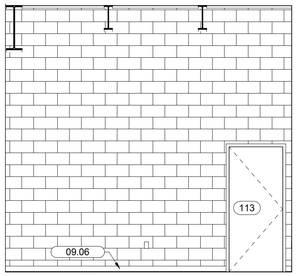
19 WORK RM 111 - E
1/4" = 1'-0"



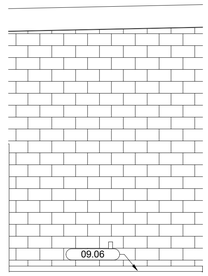
20 WORK RM 111 - S
1/4" = 1'-0"



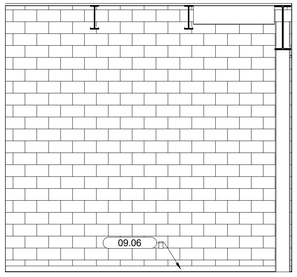
21 WORK RM 111 - W
1/4" = 1'-0"



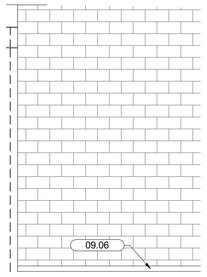
22 MECHANICAL ROOM 113 - N
1/4" = 1'-0"



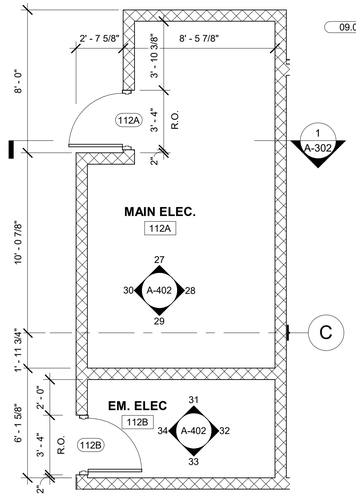
23 MECHANICAL ROOM 113 - E
1/4" = 1'-0"



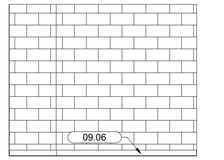
24 MECHANICAL ROOM 113 - S
1/4" = 1'-0"



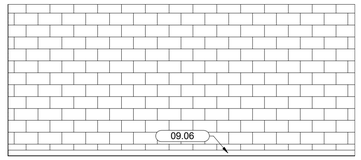
25 MECHANICAL ROOM 113 - W
1/4" = 1'-0"



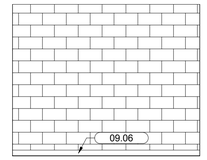
26 ENLARGED PLAN - ELECTRIC ROOMS
1/4" = 1'-0"



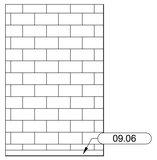
27 MAIN ELECTRIC 112A - N
1/4" = 1'-0"



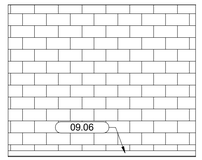
28 MAIN ELECTRIC 112A - E
1/4" = 1'-0"



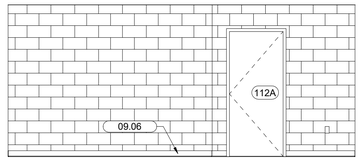
31 EMERGENCY. ELEC. 112B - N
1/4" = 1'-0"



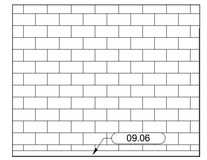
32 EM. ELEC. 112B - E
1/4" = 1'-0"



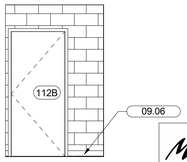
29 MAIN ELECTRIC 112A - S
1/4" = 1'-0"



30 MAIN ELECTRIC 112A - W
1/4" = 1'-0"



33 EMERGENCY. ELEC. 112B - S
1/4" = 1'-0"



34 EM. ELEC. 112B - W
1/4" = 1'-0"

C:\Users\jat\Documents\22139A1 - BC OC Essex Police Station DD_jatDGZVG.rvt

Murphy & Dittenhafer ARCHITECTS
805 North Charles Street, Baltimore, Maryland 21201 410-625-4623 voice 410-625-4674 fax
228 West Market Street, York, Pennsylvania 17401 717-846-8627 voice 717-843-2446 fax

SHEET DESIGNATION	CONTRACT NUMBER
A-402	25022 PP0

JOB ORDER NUMBER: PROJ-10000636
SHEET 107 OF 295
DRAWING NUMBER: 2025-0998
FILE NO.: 8 REV. 05/22

SEAL: ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER, II STATE OF MARYLAND 7/14/2025
DATE: JULY 14, 2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 6607, EXPIRATION DATE 06/13/2027
ARCHITECT: Frank Elwood Dittenhafer, II
AS-BUILT PER RECORD PRINT
BY: DATE:
DGN BY: JAT
DWN BY: DWG/AWU
CHKD BY: RLM

AS-BUILT / REVISION

ADDENDUM #4	BY: JAT	DATE: 1/9/26	P.W.A. NO.	KEY SHEET	POSITION SHT
			R.O.W NO.	ISW	7NE28 7NE29 8NE28 8NE29
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE: PLAN SCALE: 1/4" = 1'-0" PROFILE SCALE:

PROPERTY MANAGEMENT: APPROVED BY: PROPERTY MANAGER DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED PLANS & ELEVS. - 1ST FL - BREAK RM, IT RMS & MECH. RMS

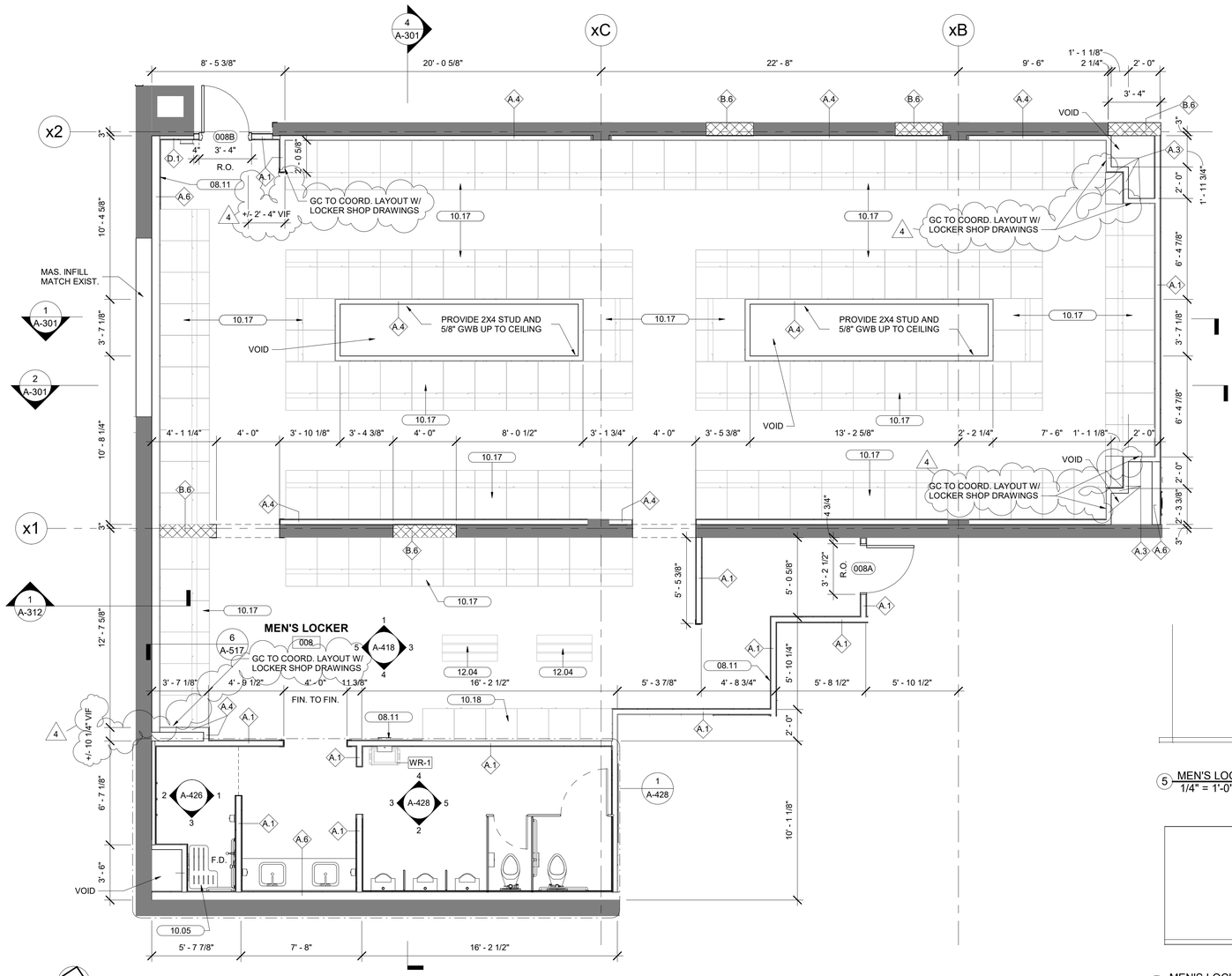
RENOVATION & ADDITION

SUBDIVISION: ESSEX — 216 & 222 North Marlyn Ave, Essex, MD 21221 — ELECTION DIST. NO.: 15C7

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

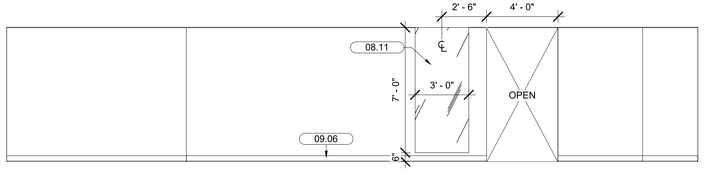
KEYNOTE LEGEND	
TAG	DESCRIPTION
08.11	FRAMELESS MIRROR
09.06	WALL BASE PER RM FINISH SCHEDULE.
10.05	FOLDING ADA SHOWER SEAT.
10.17	WELDED METAL PERSONAL STORAGE LOCKER W/ BUILT-IN BENCH DRAWER.
10.18	WELDED METAL PERSONAL STORAGE LOCKER.
12.04	FIXED IN PLACE ADA BENCH.
22.02	FLOOR DRAIN - REFER TO PLUMBING DRAWINGS.

NOTE: SEE DWG A-426 FOR TOILET ACCESSORY SCHEDULE.



2 ENLARGED PLAN - MEN'S LOCKER ROOM 008
1/4" = 1'-0"

5 MEN'S LOCKER ROOM 008 - W
1/4" = 1'-0"



4 MEN'S LOCKER ROOM 008 - S
1/4" = 1'-0"

1 MEN'S LOCKER ROOM 008 - N
1/4" = 1'-0"

3 MEN'S LOCKER ROOM 008 - E
1/4" = 1'-0"

SEAL

ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025

DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.		ADDENDUM #4	JAT	1/9/26		ISW	7NE28 7NE29 8NE28 8NE29	PLAN SCALE:	1/4" = 1'-0"	APPROVED BY: PROPERTY MANAGER
LICENSE NO. 6607, EXPIRATION DATE 06/13/2027		CONTRACT COMPLETION BOX			R.O.W NO.			PROFILE SCALE:		DATE:
ARCHITECT: Frank Elwood Dittenhafer, II	DGN BY: JAT	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
AS-BUILT PER RECORD PRINT	DWN BY: DWG/AWU	REVIEWED BY:								
BY:	CHKD BY: RLM	DATE REVIEWED:								
DATE:										

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED PLANS & ELEVS. - BSMT - MEN'S LOCKER ROOM

RENOVATION & ADDITION

SUBDIVISION: ESSEX

216 & 222 North Marlyn Ave, Essex, MD 21221

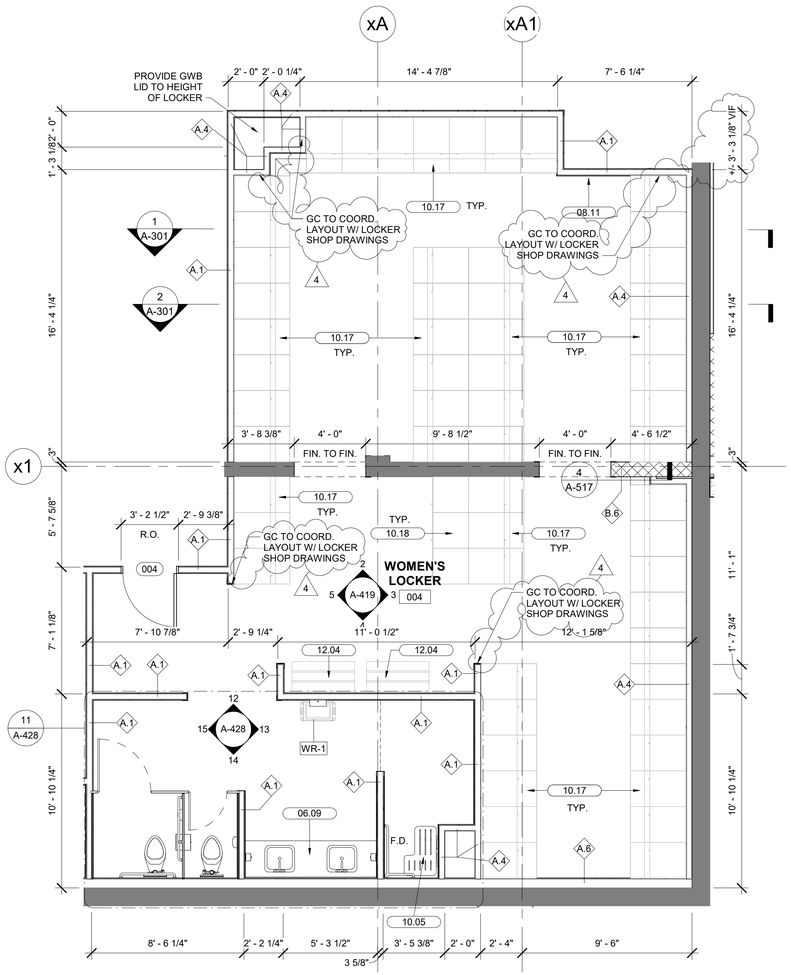
ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
805 North Charles Street, Baltimore, Maryland 21201 410-625-4823 voice 410-625-4674 fax
226 West Market Street, York, Pennsylvania 17401 717-846-9827 voice 717-843-2449 fax

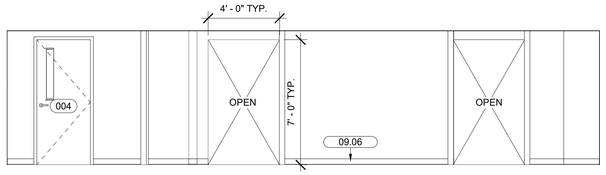
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SHEET DESIGNATION	CONTRACT NUMBER
A-418	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 123 OF 295
	DRAWING NUMBER
	2025-1014
	FILE NO.: 8 REV. 10/22

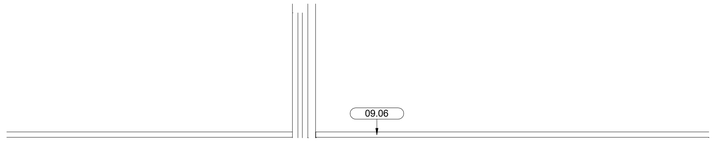
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



1 ENLARGED PLAN - WOMEN'S LOCKER ROOM 004
1/4" = 1'-0"



2 WOMEN'S LOCKER ROOM 004 - N
1/4" = 1'-0"



3 WOMEN'S LOCKER ROOM 004 - E
1/4" = 1'-0"



4 WOMEN'S LOCKER ROOM 004 - S
1/4" = 1'-0"



5 WOMEN'S LOCKER ROOM 004 - W
1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
06.09	SSM C. TOP w/ SINK. REFER TO INTERIOR ELEVATIONS FOR DETAILS.
08.11	FRAMELESS MIRROR
09.06	WALL BASE PER RM FINISH SCHEDULE.
10.05	FOLDING ADA SHOWER SEAT.
10.17	WELDED METAL PERSONAL STORAGE LOCKER W/ BUILT-IN BENCH DRAWER.
10.18	WELDED METAL PERSONAL STORAGE LOCKER.
12.04	FIXED IN PLACE ADA BENCH.
22.02	FLOOR DRAIN - REFER TO PLUMBING DRAWINGS.

NOTE: SEE DWG A-426 FOR TOILET ACCESSORY SCHEDULE.

C:\Users\jat\Documents\22139A1 - BC OC Essex Police Station DD_jatDKZXVC.rvt

SEAL

ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025

DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 6607, EXPIRATION DATE 06/13/2027

ARCHITECT: Frank Elwood Dittenhafer, II

AS-BUILT PER RECORD PRINT

BY:

DATE:

DGN BY: JAT

DWN BY: DWG/AWU

CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.: R.O.W NO.

KEY SHEET: ISW

POSITION SHT: 7NE28, 7NE29, 8NE28, 8NE29

DRAWING SCALE: PLAN SCALE: 1/4" = 1'-0"; PROFILE SCALE:

PROPERTY MANAGEMENT: APPROVED BY: PROPERTY MANAGER; DATE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED PLANS & ELEVS. - BSMT - WOMEN'S LOCKER ROOM

RENOVATION & ADDITION

SUBDIVISION: ESSEX

216 & 222 North Marlyn Ave, Essex, MD 21221

ELECTION DIST. NO.: 15C7

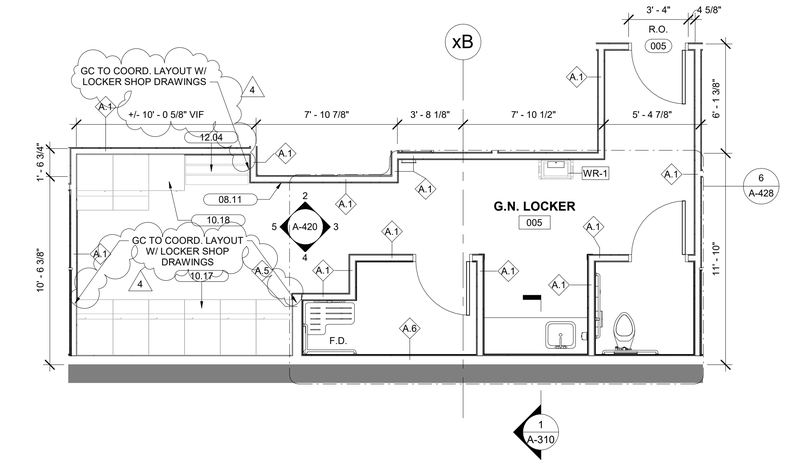
Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4674 fax
226 West Market Street, York, Pennsylvania 17401
717-848-8827 voice 717-843-2449 fax

DWG. FILENAME:

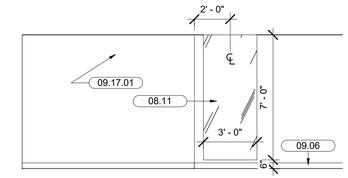
SHEET DESIGNATION	CONTRACT NUMBER
A-419	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 124 OF 295
	DRAWING NUMBER
	2025-1015
	FILE NO.: 8 REV. 03/22

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

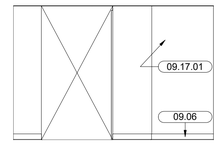
KEYNOTE LEGEND	
TAG	DESCRIPTION
08.11	FRAMELESS MIRROR
09.06	WALL BASE PER RM FINISH SCHEDULE.
09.17.01	PT-1.
10.04	MOP AND BROOM HOLDER.
10.17	WELDED METAL PERSONAL STORAGE LOCKER W/ BUILT-IN BENCH DRAWER.
10.18	WELDED METAL PERSONAL STORAGE LOCKER.
12.04	FIXED IN PLACE ADA BENCH.
22.02	FLOOR DRAIN - REFER TO PLUMBING DRAWINGS.
22.10	MOP SINK.



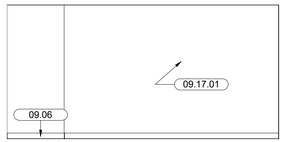
1 ENLARGED PLAN - G.N. LOCKER ROOM 005
1/4" = 1'-0"



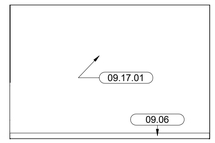
2 G.N. LOCKER ROOM 005 - N
1/4" = 1'-0"



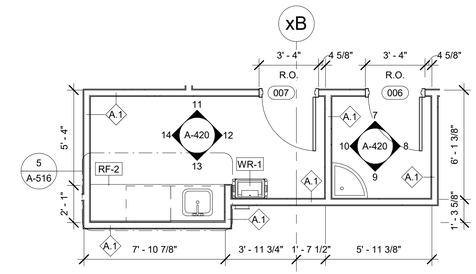
3 G.N. LOCKER ROOM 005 - E
1/4" = 1'-0"



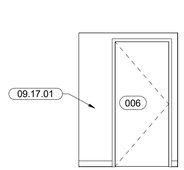
4 G.N. LOCKER ROOM 005 - S
1/4" = 1'-0"



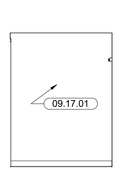
5 G.N. LOCKER ROOM 005 - W
1/4" = 1'-0"



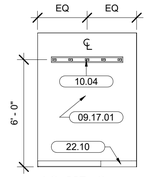
6 ENLARGED PLAN - J.C. 007 & WELLNESS RM 006
1/4" = 1'-0"



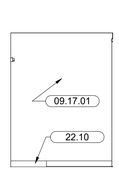
7 J.C. 007 - N
1/4" = 1'-0"



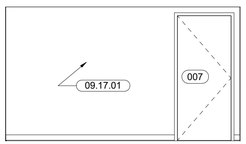
8 J.C. 007 - E
1/4" = 1'-0"



9 J.C. 007 - S
1/4" = 1'-0"



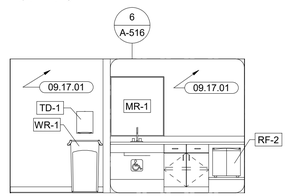
10 J.C. 007 - W
1/4" = 1'-0"



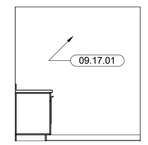
11 WELLNESS RM 006 - N
1/4" = 1'-0"



12 WELLNESS RM 006 - E
1/4" = 1'-0"



13 WELLNESS RM 006 - S
1/4" = 1'-0"



14 WELLNESS RM 006 - W
1/4" = 1'-0"

C:\Users\jat\Documents\23139A1 - BC OC Essex Police Station D3_jatDG2GVC.rvt

SEAL
ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025
DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 6607 EXPIRATION DATE 06/13/2027
ARCHITECT: Frank Elwood Dittenhafer, II
AS-BUILT PER RECORD PRINT
BY:
DATE:

DGN BY: JAT
DWN BY: DWG/AWU
CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.: R.O.W NO.
KEY SHEET: ISW
POSITION SHT: 7NE28, 7NE29, 8NE28, 8NE29

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: 1/4" = 1'-0"
PROFILE SCALE:

PROPERTY MANAGEMENT
APPROVED BY: PROPERTY MANAGER
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ENLARGED PLANS & ELEVS. - BSMT - GEN. NEUT. LOCKER ROOM, JC & WELLNESS

RENOVATION & ADDITION

SUBDIVISION: ESSEX

216 & 222 North Marlyn Ave, Essex, MD 21221

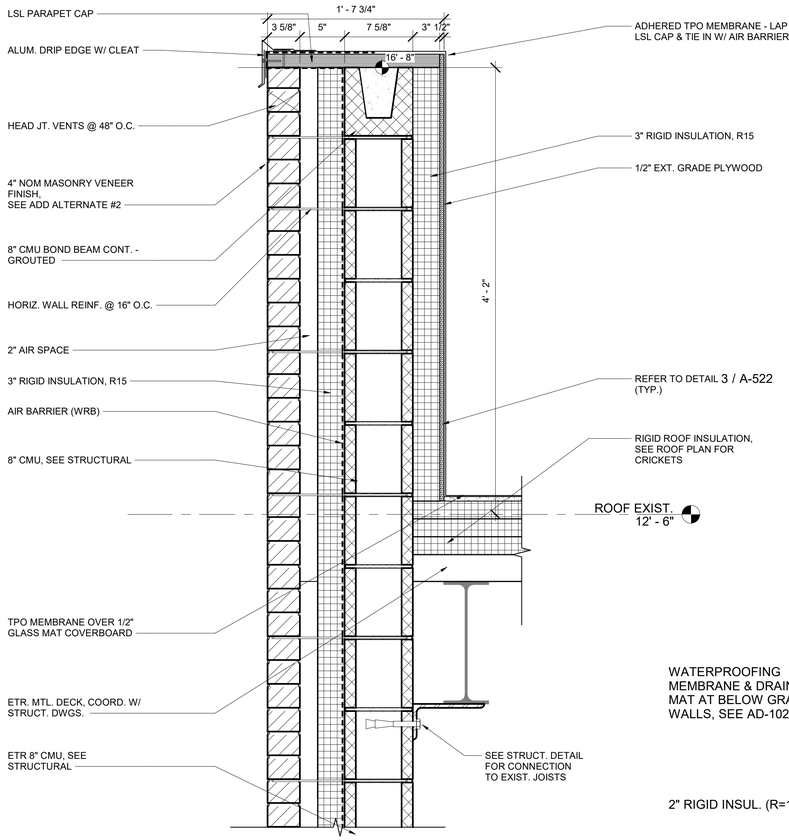
ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
805 North Charles Street, Baltimore, Maryland 21201 410-625-4833 voice 410-625-4514 fax
228 West Market Street, York, Pennsylvania 17401 717-848-4827 voice 717-845-3488 fax

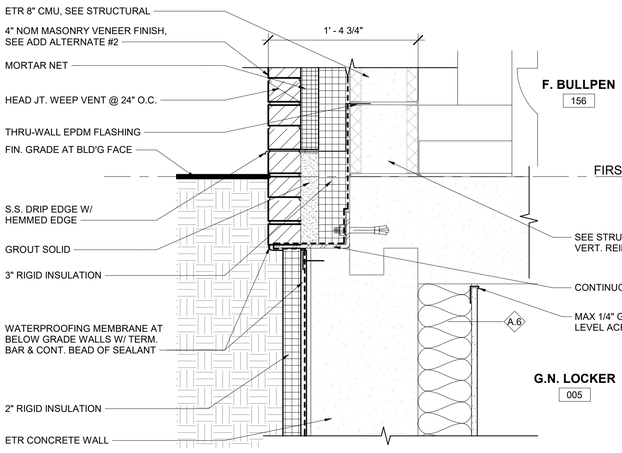
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SHEET DESIGNATION	CONTRACT NUMBER
A-420	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 125 OF 295
	DRAWING NUMBER
	2025-1016
	FILE NO.: 8 REV. 03/22

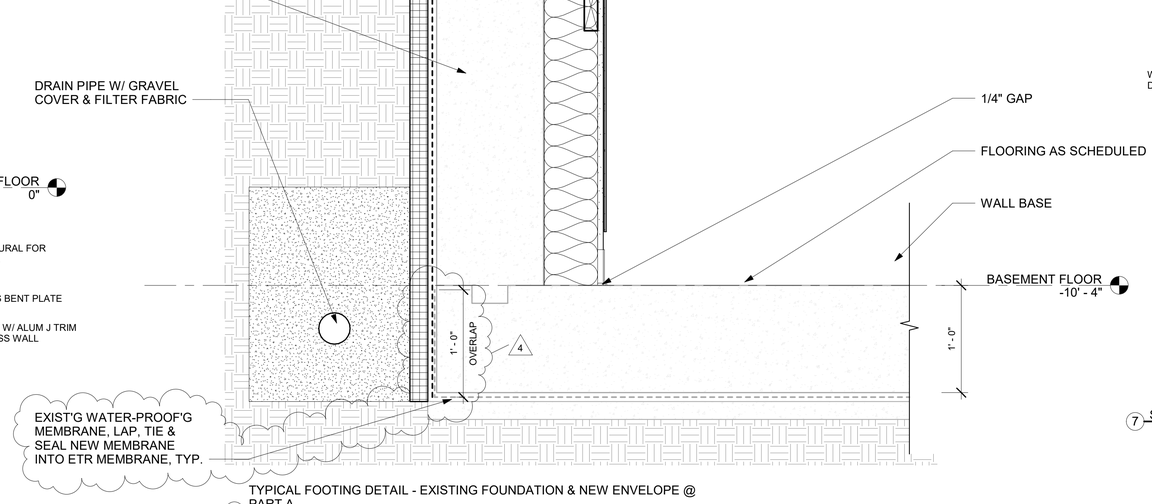
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



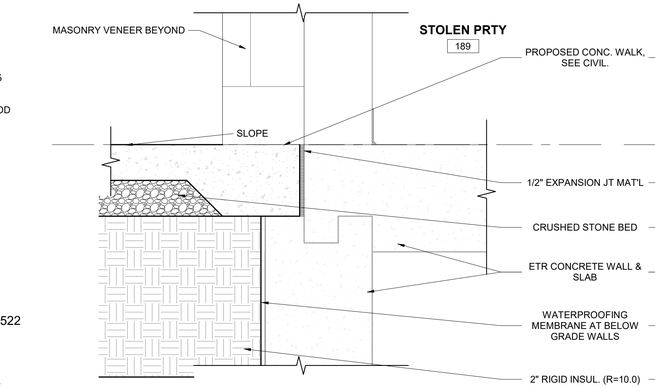
1 TYPICAL PARAPET DETAIL @ PART A
1 1/2" = 1'-0"



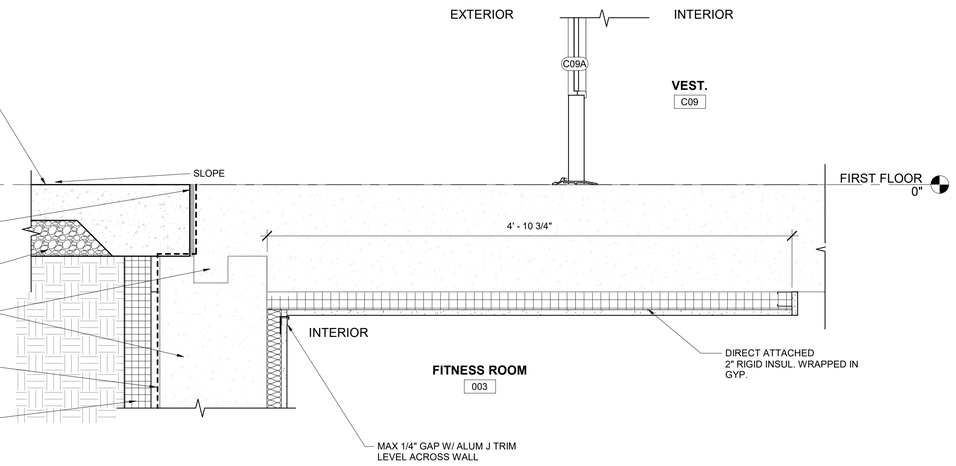
2 TYPICAL DETAIL - NEW ENVELOPE @ PART A
1 1/2" = 1'-0"



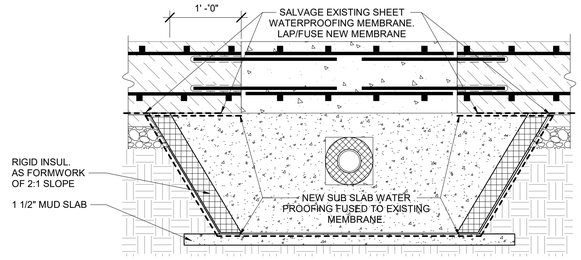
3 TYPICAL FOOTING DETAIL - EXISTING FOUNDATION & NEW ENVELOPE @ PART A
1 1/2" = 1'-0"



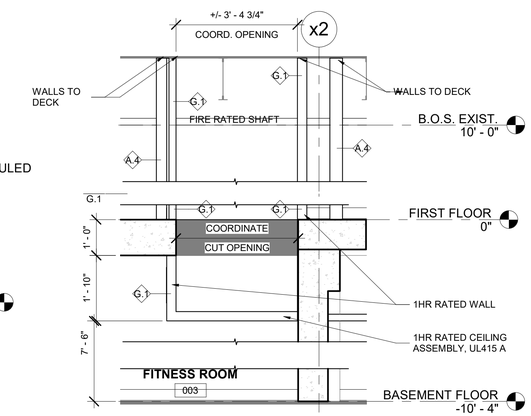
4 TYPICAL DETAIL - BREEZEWAY @ STORAGE
1 1/2" = 1'-0"



5 TYPICAL DETAIL - BREEZEWAY @ VESTIBULE
1 1/2" = 1'-0"



NEW PIPE UNDER EXISTING MAT SLAB - REPAIR - SEE STRUCTURAL DETAIL D/S-305



7 SECTION DETAIL - PART A - FIRE RATED SHAFT & BULKHEAD
1/2" = 1'-0"

SEAL
ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND
DATE: JULY 14, 2025

PROFESSIONAL CERTIFICATION										
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.										
LICENSE NO. 6607, EXPIRATION DATE 06/13/2027										
ARCHITECT: Frank Elwood Dittenhafer, II	DGN BY: JAT									
AS-BUILT PER RECORD PRINT	DWN BY: DWG/AWU									
BY:	CHKD BY: RLM									
DATE:										

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	ISW	7NE28 7NE29 8NE28 8NE29

DRAWING SCALE	
PLAN SCALE:	As indicated
PROFILE SCALE:	

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

PROPERTY MANAGEMENT
APPROVED BY: _____ PROPERTY MANAGER
DATE: _____

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

EXTERIOR SECTION DETAILS - PART A

RENOVATION & ADDITION

SUBDIVISION: ESSEX

216 & 222 North Marlyn Ave, Essex, MD 21221

ELECTION DIST. NO.: 15C7

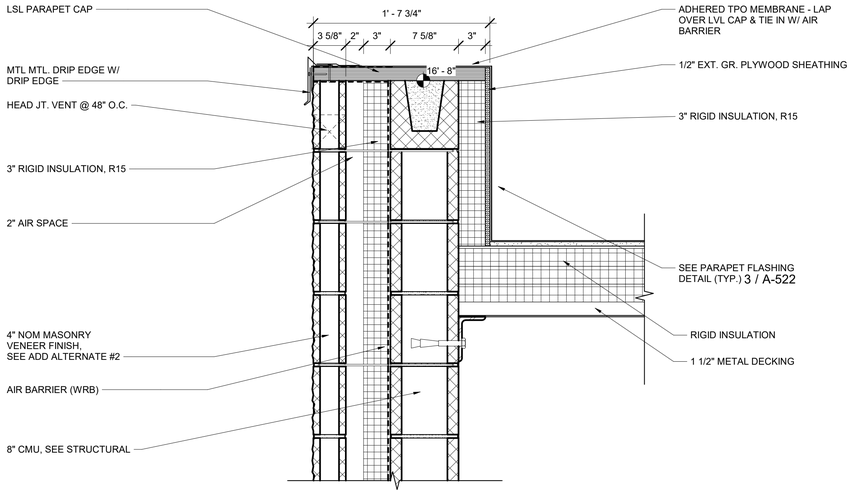
Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201
410-625-4823 voice 410-625-4874 fax
228 West Market Street, York, Pennsylvania, 17401
717-846-8827 voice 717-843-2448 fax

DWG FILENAME: C:\Users\jat\Documents\22159A1 - BC OC Essex Police Station DD_jatDGZVC.rvt

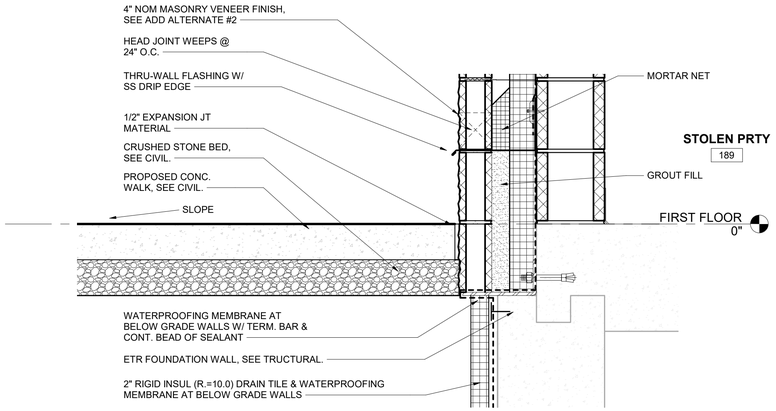
SHEET DESIGNATION	CONTRACT NUMBER
A-501	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 135 OF 295
	DRAWING NUMBER
	2025-1026
	FILE NO.: 8 REV 25/22

BALTIMORE COUNTY MARYLAND

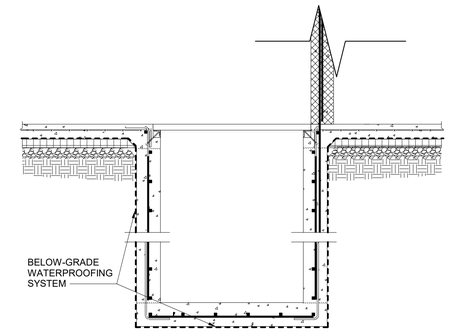
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



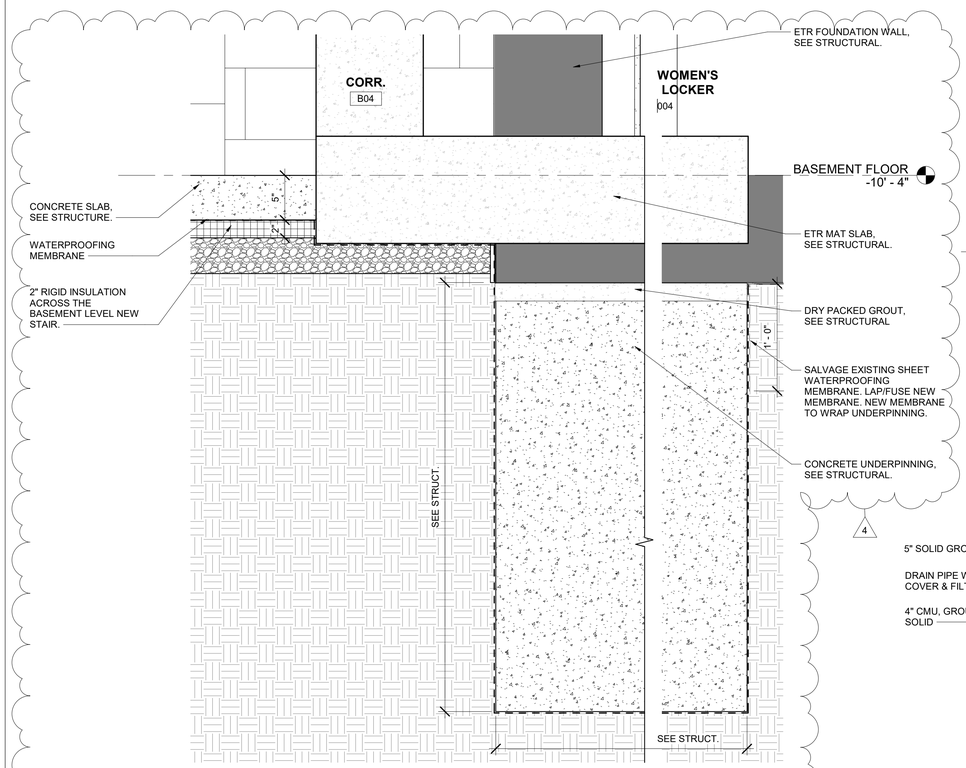
1 TYPICAL PARAPET DETAIL @ SALLYPORT
1 1/2" = 1'-0"



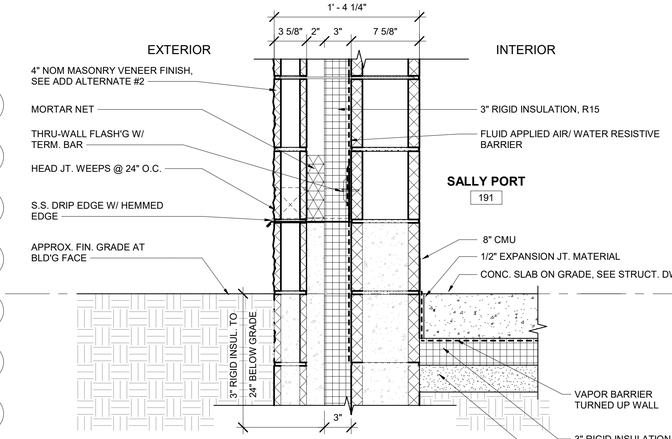
2 SECTION DETAIL - EXISTING FOUNDATION AND CMU WALL @ NEW ENVELOPE - PART A
1 1/2" = 1'-0"

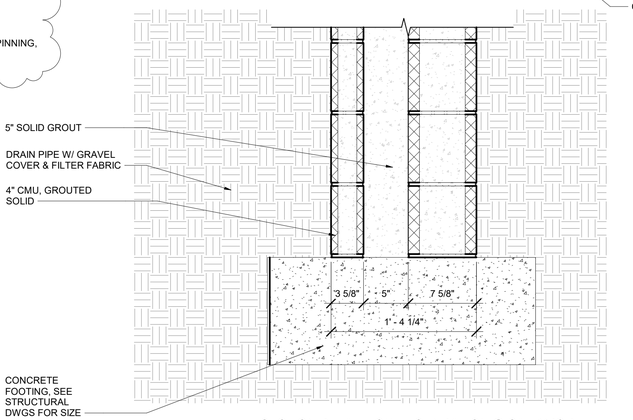


ELEVATOR PIT WATERPROOFING SECTION DETAIL - SEE STRUCTURAL A/S-402

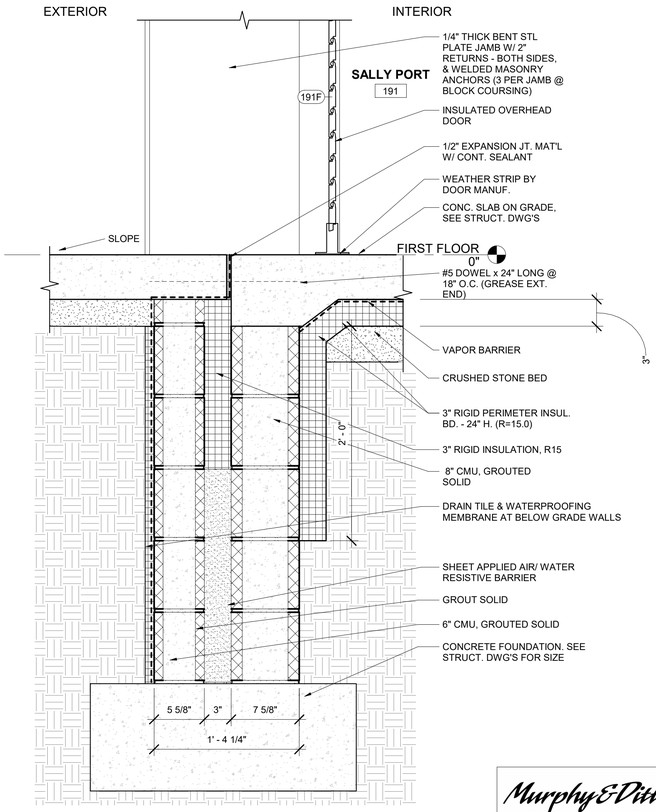


3 SECTION DETAIL - UNDERPIN. & STAIR SLAB BELOW GRADE
1 1/2" = 1'-0"





5 SECTION DETAIL - CMU FOUNDATION @ SALLYPORT
1 1/2" = 1'-0"



6 SECTION DETAIL - TYPICAL CMU FOUNDATION DETAIL @ SALLYPORT OVERHEAD DOOR
1 1/2" = 1'-0"

C:\Users\jat\Documents\22139A1 - BC OC Essex Police Station D3_jatDGZAVC.rvt

SEAL

ARCHITECTURAL REGISTRATION BOARD 6607-A FRANK ELWOOD DITTENHAFER II STATE OF MARYLAND 7/14/2025

DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 6607, EXPIRATION DATE 06/13/2027

ARCHITECT: Frank Elwood Dittenhafer, II

AS-BUILT PER RECORD PRINT

BY: DATE:

DGN BY: JAT

DWN BY: DWG/AWU

CHKD BY: RLM

AS-BUILT / REVISION	BY	DATE
ADDENDUM #4	JAT	1/9/26
CONTRACT COMPLETION BOX		

P.W.A. NO.	KEY SHEET	POSITION SHT
R.O.W NO.	ISW	7NE28 7NE29 8NE28 8NE29

DRAWING SCALE	
PLAN SCALE:	As indicated
PROFILE SCALE:	

PROPERTY MANAGEMENT

APPROVED BY: PROPERTY MANAGER

DATE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

EXTERIOR SECTION DETAILS - PART B

RENOVATION & ADDITION

216 & 222 North Marlyn Ave, Essex, MD 21221

SUBDIVISION: ESSEX

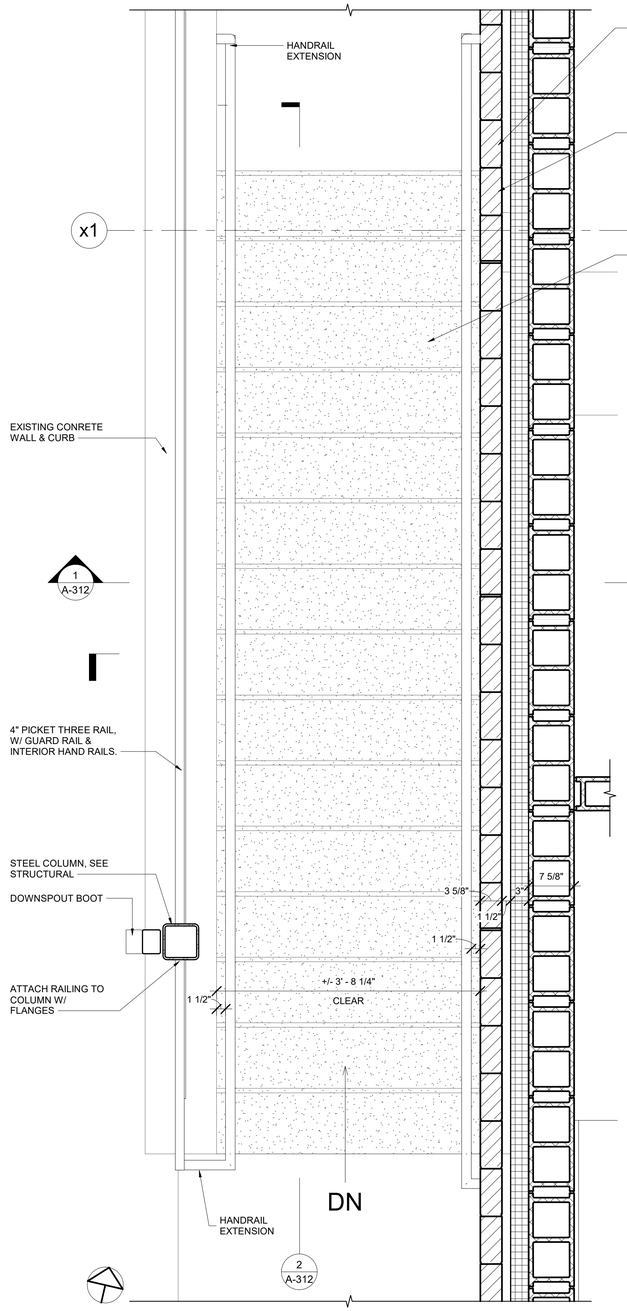
ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201 410-625-4603 voice 410-625-4614 fax
229 West Market Street, York, Pennsylvania 17401 717-848-8627 voice 717-845-2448 fax

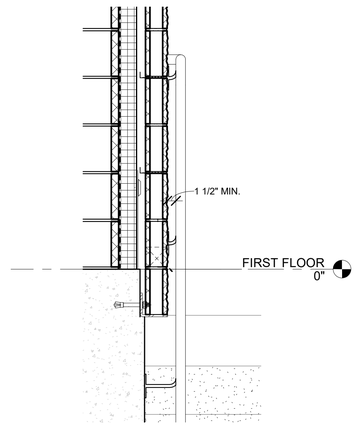
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SHEET DESIGNATION	CONTRACT NUMBER
A-502	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 136 OF 295
	DRAWING NUMBER
	2025-1027
	FILE NO.: 8 REV. 03/03

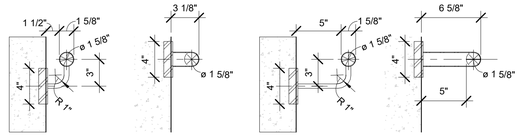
Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026



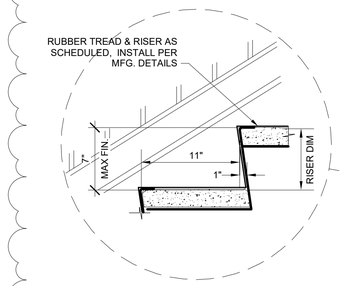
1 PARTIAL FLOOR PLAN - PART A - EXTERIOR STAIR
1" = 1'-0"

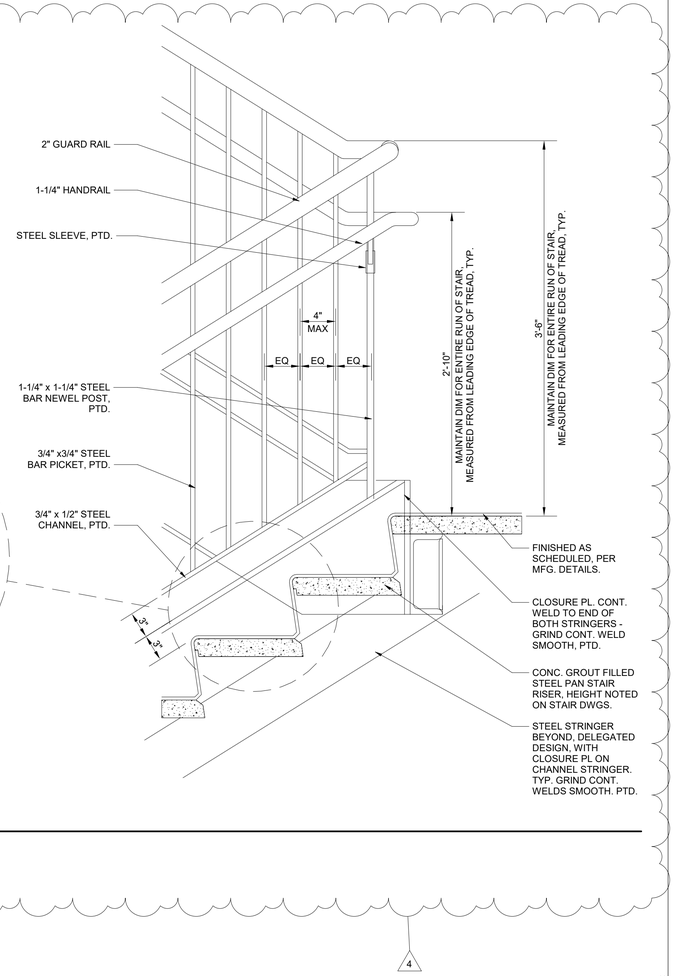


2 SECTION @ STAIR RAILING MOUNTING CHANGE
1" = 1'-0"

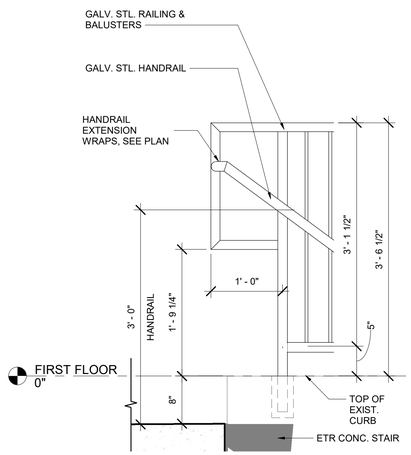


5 TYPICAL RAILING MOUNT DETAIL
1 1/2" = 1'-0"

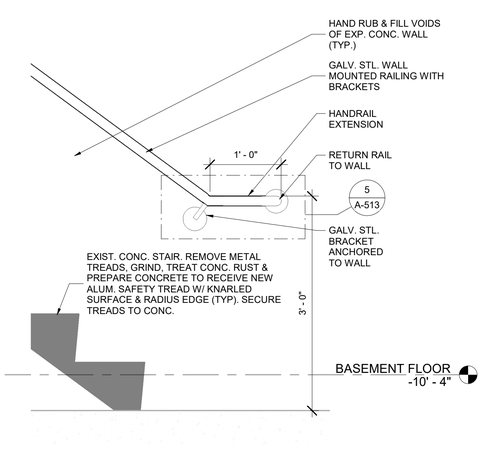




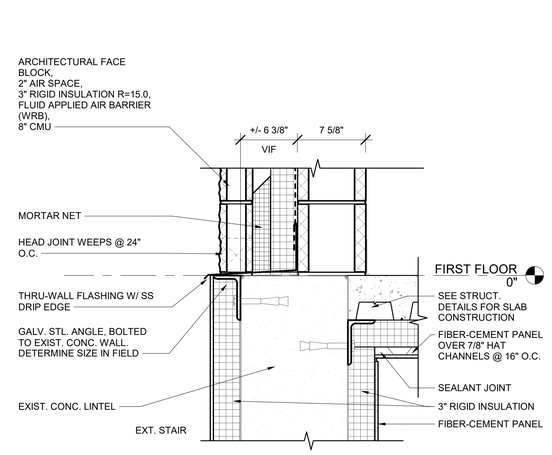
7 TYPICAL INTERIOR STAIR DETAIL
1 1/2" = 1'-0"



6 SECTION @ STAIR RAILING 2
1" = 1'-0"



3 SECTION @ CANOPY EXISTING STAIRWELL
1" = 1'-0"



4 WALL SECTION @ STAIRWELL
1 1/2" = 1'-0"

SEAL

ARCHITECTURAL REGISTRATION BOARD — 6607-A — FRANK ELWOOD DITTENHAFER II — STATE OF MARYLAND — 7/14/2025

DATE : JULY 14, 2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 6607 EXPIRATION DATE 06/13/2027

ARCHITECT: Frank Elwood Dittenhafer, II

AS-BUILT PER RECORD PRINT

BY:

DATE:

DGN BY: JAT

DWN BY: DWG/AWU

CHKD BY: RLM

AS-BUILT / REVISION

ADDENDUM #	BY	DATE
	JAT	1/9/26
CONTRACT COMPLETION BOX		

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

P.W.A. NO.: R.O.W NO.

KEY SHEET: ISW

POSITION SHT: 7NE28, 7NE29, 8NE28, 8NE29

DRAWING SCALE

PLAN SCALE: As indicated

PROFILE SCALE:

PROPERTY MANAGEMENT

APPROVED BY: PROPERTY MANAGER

DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

PLAN & SECTION DETAILS - STAIRS

RENOVATION & ADDITION

216 & 222 North Marlyn Ave, Essex, MD 21221

SUBDIVISION: ESSEX

ELECTION DIST. NO.: 15C7

Murphy & Dittenhafer ARCHITECTS
805 North Charles Street, Baltimore, Maryland 21201
410-625-4833 voice 410-625-4914 fax
229 West Market Street, York, Pennsylvania 17401
717-848-4827 voice 717-845-2448 fax

DWG FILENAME: C:\Users\jat\Documents\22139A1 - BC OC Essex Police Station D3 _jatDG2VC.rvt

SHEET DESIGNATION	CONTRACT NUMBER
A-513	25022 PP0
	JOB ORDER NUMBER
	PROJ-10000636
	SHEET 147 OF 295
	DRAWING NUMBER
	2025-1038
	FILE NO.: 8 REV. 0002

BALTIMORE COUNTY MARYLAND

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

FINISHES:
FF1 FACTORY STAIN

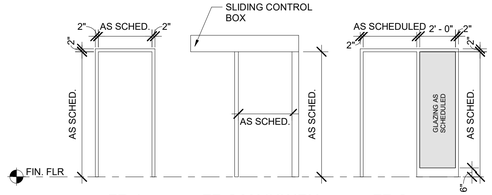
ABBREVIATIONS LEGEND

DOOR MATERIAL:
HM: HOLLOW METAL(INSUL ON EXT)
DHM: DETENTION GRADE HOLLOW METAL (INSUL ON EXT)
IM INSULATED METAL
ALUM: ALUMINUM (INSUL GLASS ON EXT)
WD-1: STAIN-GRADE WOOD

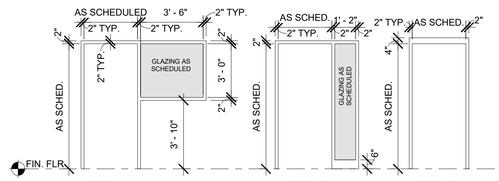
GLASS:
FSG: FIRE RATED SAFETY GLAZING
SG: SPECIAL GLAZING
PF: PRIVACY FILM
BG#: BALLISTIC GLAZING & LEVEL # (VARIES)
TG: 1/4" THK. CLEAR TEMPERED GLASS

SECURITY:
CR: CARD READER
DC: DOOR CONTACT
AL: ALARMED DOOR
VI: VIDEO INTERCOM

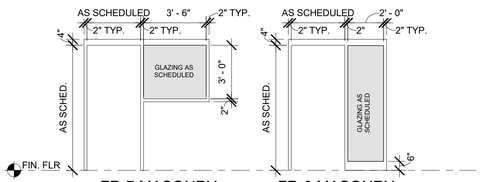
FRAME MATERIAL:
HM: HOLLOW METAL
BHM: BALLISTIC LVL 3 HOLLOW METAL
DHM: DETENTION GRADE HOLLOW METAL(INSUL ON EXT)
IM INS. : (INSULATED) METAL/ THERMAL BREAK
SF: STOREFRONT (INSUL GLASS ON EXT)
FL: FRAMELESS (GWB)



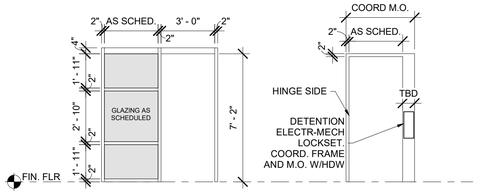
FR-1 FR-2 MASONRY FR-3



FR-4 FR-5 FR-6



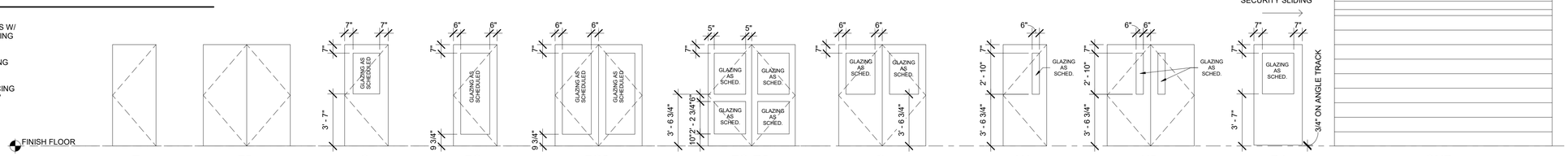
FR-7 MASONRY FR-8 MASONRY



FR-9 MASONRY FR-10 DETENTION JAMB 3

DOOR FRAME
1/4" = 1'-0"

NOTE: COORDINATE FRAMES W/ INTERIOR & EXTERIOR GLAZING TYPES
ON A-605 THRU A-606 FOR UNDERSTANDING OF GLAZING LOCATIONS &
TYPES WITHIN FRAMES.
WRAP FR-1 HM FRAMES FACING THE CORRIDORS WITH 1 3/4" CONT. TR-15.



F F2 G FG FG2 FG-R2 G N1 N2 D1 OHD

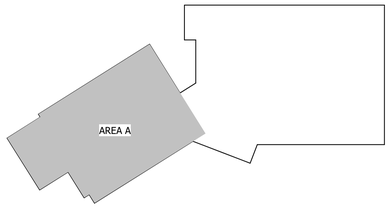
DOOR PANEL TYPES
1/4" = 1'-0"

DOOR SCHEDULE

MARK	ROOM NAME	DIMENSIONS WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATL.	FINISH	DOOR FRAME TYPE	MATL.	FINISH	CONSTR. DETAILS HEAD	JAMB	SIL	FIRE RATED	HDW SET	FUNC.	COMMENTS & GLAZING. IF NOT NOTED GLAZING TO BE GL-6
001	CORR.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S3		7	CL	
002	GEAR STORAGE	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S3		7	CL	
02A	VEST.	6' - 0"	7' - 0"	1 3/4"	FG-R2	AL	MFR.	FR-6	AL	MFR. 4	REF	1/A508	S1		1.4	EN	CR from entrance side. Level 3 Ballistic Glazing. Removable mullion.
02B	VEST.	6' - 0"	7' - 0"	1 3/4"	FG-R2	AL	MFR.	FR-1	AL	MFR. 4	H6	J9	S1		1.6	EN	Removable mullion.
03	CORR.	6' - 0"	7' - 0"	1 3/4"	N2 4	AL	MFR.	FR-10	AL	MFR. 4	REF	3/A508	S1		1.5	EO	Removable mullion. Level 3 Ballistic Glazing.
003	CORR.	6' - 0"	7' - 0"	1 3/4"	J	HM	PTD HM	FR-1	HM	PTD HM	H2	J2	S3		7	PA	No mullion,
004	WOMEN'S LOCKER	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		7	PA	
005	G.N. LOCKER	3' - 0"	7' - 0"	2"	L	WD	WD - 1	FR-1	HM	PTD HM		J1	S3		7	PA	Sound Gasketing.
005A	G.N.-WC	3' - 0"	7' - 0"	2"	L	WD	WD-1	FR-1	HM	PTD HM	H3	J4	S4		2	PR	Occupancy Indicator. Kickplate.
005B	G.N. SHOWER	3' - 0"	7' - 0"	2"	L	WD	WD-1	FR-1	HM	PTD HM	H3	J4	S4		2	PR	Occupancy Indicator. Kickplate.
006	J.C.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		8	ST	Sound Gasketing, Kick Plate. OVHD Holder
007	WELLNESS	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		2	PR	Sound Gasketing. Occupancy Indicator.
07A	STAIR	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H1	J1	S3	1 HR	7	PA	Sound Gasketing.
07B	STAIR	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-6	IM	PTD HM	H12	J12	S3	1 HR	1.2	EN	CR from exterior side. Closer & exit device.
008A	CORR.	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		7	PA	Sound Gasketing.
008B	CORR.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S3		7	PA	Sound Gasketing.
100A	LOBBY	6' - 0"	7' - 0"	1 3/4"	FG2	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		11.4	OF	CR from Lobby. Controlled by Front Desk. Level 3 Ballistic Glazing and Panels. Locked from Lobby. Mag lock. CR on exterior side controlled by Front Desk. GL-8.
100B	LOBBY	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S3		1.4	EN	CR from Lobby. Level 3 Ballistic Panel. Sound gasketing.
102A	INT.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		11.3	TBD	CR on Lobby side. Level 3 Ballistic Panel. Sound Gasketing.
102B	INT.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		11	TBD	CR from Interview Rm side. Sound Gasketing.
103A	INT.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		11.3	TBD	CR on ext. side. Level 3 Ballistic Panel. Sound Gasketing.
103B	INT.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		11	PR	CR from Interview Rm side.
104	LOBBY	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	BHM	PTD HM	H3	J4	S3		2.1	PR	Level 3 Ballistic Panel. Sound Gasketing. Kickplate. Occupant indicator.
105	REST.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	BHM	PTD HM	H3	J4	S3		2.1	PR	Level 3 Ballistic Panel. Sound Gasketing. Kickplate. Occupant indicator.
106	CORR.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		11.2	ST	Access Control. CR from Community Rm.
106A	COMMUNITY	6' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	Furniture storage
107	BREAK ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4	S4		6.1	OF	OVHD Holder
108	IT	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		3	OF	CR from corridor. OVHD Holder
109	OIT OFFICE	3' - 0"	7' - 0"	1 3/4"	FG	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing.OVHD Holder
110	CORR.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S3		8	ST	Sound Gasketing.OVHD Holder. Kick plate on both sides.
112A	MAIN ELEC.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM		J1	S3	1 HR	9	ST	Sound Gasketing. Kick plate on both sides. OVHD Holder
112B	EM. ELEC	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	HM	PTD HM		J1	S3	2 HR	9	ST	Sound Gasketing. Kick plate on both sides.
113	MECHANICAL	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S3		11.1	ST	CR from corridor. Sound Gasketing. Kick plate on both sides. OVHD Holder
114A	DETECTIVES	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
114B	FILES	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	OVHD Holder
115	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
116	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
117	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
118	SHIFT LEADERS	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
119	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
120	SHIFT LEADERS	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
121	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-5	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
122	ARMORY	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM		J1	S3		11.1	ST	CR from corridor. Sound Gasketing. OVHD Holder. Heavy Duty DR/FR - Level 2/B; ANSI/SDI A250.8 & 4
123	SHIFT LEADERS	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
124	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
125A	BPI & TRAFFIC	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
125B	BPI & TRAFFIC	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
126	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
127	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
128	DVC	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
129A	ROLL CALL	3' - 0"	7' - 0"	1 3/4"	G	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	PA	Sound Gasketing. OVHD Holder
129B	ROLL CALL	3' - 0"	7' - 0"	1 3/4"	G	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	PA	Sound Gasketing. OVHD Holder
130	FILES	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	Sound Gasketing. OVHD Holder
131	EVIDENCE	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		4	ST	CR from corridor. Sound Gasketing. OVHD Holder
132	REPORT	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	PA	Sound Gasketing. OVHD Holder
133	RECEPT.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4	S4		5	OF	Sound Gasketing. OVHD Holder
135	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing. OVHD Holder
136	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing. OVHD Holder
137	FILES	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	OVHD Holder
138	LT. OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing. OVHD Holder
139	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing. OVHD Holder
140A	CAPT. OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		6.1	OF	Sound Gasketing. OVHD Holder
140B	CL	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	PA	OVHD Holder
141	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		2	PR	Sound Gasketing. No indicator REQ'D.
142	COMM. OUTREACH	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S4		5	OF	Sound Gasketing. OVHD Holder
143	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound Gasketing. OVHD Holder
144A	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	FG	WD	PTD HM	S-1	HM	PTD HM	H6	J5	S3		6.1	OF	See interior storefront for frame. Sound gasketing. OVHD Holder. GL-6
144B	CONFERENCE	3' - 0"	7' - 0"	1 3/4"	FG	WD	PTD HM	S-1	HM	PTD HM	H6	J5	S3		6.1	OF	See interior storefront for frame. Sound gasketing. OVHD Holder. GL-6
145	G.C.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H1	J1	S3		8	ST	Sound Gasketing. Closer. OVHD Holder
146	REST.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		2	PR	Sound Gasketing. Occupancy Indicator.OVHD Closer
147	REST.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		2	PR	Sound Gasketing. Occupancy Indicator.OVHD Closer
148	REST.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		2	PR	Sound Gasketing. Occupancy Indicator.OVHD Closer
149	FRONT DESK	3' - 0"	7' - 0"	1 3/4"	G	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S4		5	OF	CR on corridor side.
150A	CORR.	3' - 0"	7' - 0"	1 3/4"	N1	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		5	OF	CR on corridor side. Security Glazing.
150B	CL	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		1.3	ST	
151	TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S3		2	PR	Sound Gasketing. Occupancy Indicator.

DOOR SCHEDULE

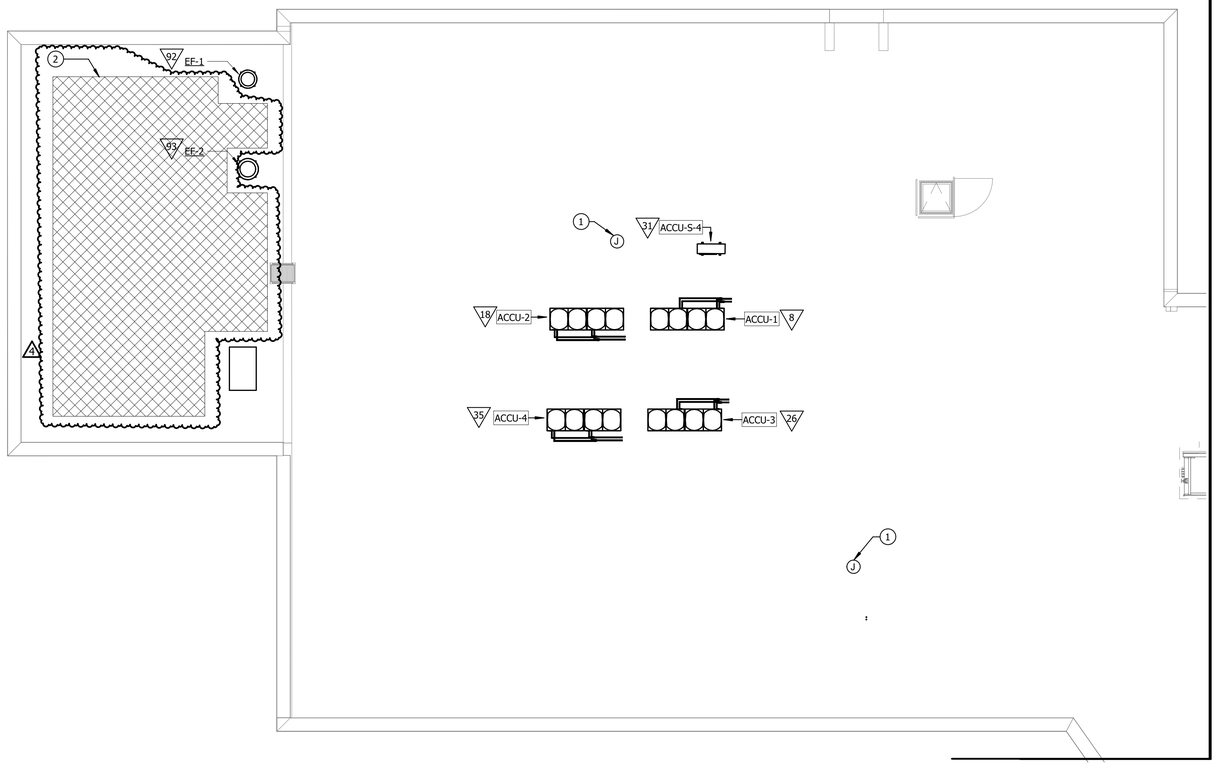
MARK	ROOM NAME	DIMENSIONS WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATL.	FINISH	DOOR FRAME TYPE	MATL.	FINISH	CONSTR. DETAILS HEAD	JAMB	SIL	FIRE RATED	HDW SET	FUNC.	COMMENTS & GLAZING. IF NOT NOTED GLAZING TO BE GL-6
152	CONTROL ROOM	3' - 0"	7' - 0"	2"	FG	DHM	PTD HM	FR-7	DHM	PTD HM	H2	J2, J5	S3		10.4	IS	Detention HM Storefront. Access Control. CR on both sides. Security Glazing. GL-9 Sound Gasketing.
153	C. HALL	3' - 0"	7' - 0"	1 3/4"	F	DHM	PTD HM	FR-1	DHM	PTD HM	H2	J2	S4		10.4	IS	CR on both sides. GL-7
154	M. BULLPEN	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
155	CL	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S4		8	ST	Louvered. Mech keyed for Facilitities. Sound Gasketing.
156	F. HALL	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
157	TEMP	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
158	F. HALL	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
159	J-HOLD	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
160	INT/BAIL	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.4	IS	Detention grade HDW. CR on both sides. Sound Gasketing. GL-10. Remote release.
161A	F. HALL	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.3	IS	Detention grade HDW. Sound Gasketing. GL-7
161B	PROCESSING	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.3	IS	Detention grade HDW. Sound Gasketing. GL-7
162A	PROCESSING	3' - 0"	7' - 0"	2"	FG	DHM	PTD HM	FR-7	DHM	PTD HM	H2	J2, J5	S4		10.4	IS	Closer. Detention HM storefront. Access control. CR on both sides. Security glazing. Sound Gasketing.
163	MATS	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S4		8	ST	Sound gasketing. OVHD Holder
164	STRP SRCH	3' - 0"	7' - 0"	1 3/4"	F	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.1	OF	Trim on outside only. Keyed. Sound Gasketing. OVHD Holder
165	INTOX	3' - 0"	7' - 0"	1 3/4"	F	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.1	OF	Trim on outside only. Keyed. Sound Gasketing. OVHD Holder
166	ADA TOILET	3' - 0"	7' - 0"	1 3/4"	F	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.1	OF	Trim on outside only. Requires further discussion whether
167	NON-CONT.	3' - 0"	7' - 0"	1 3/4"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.1	OF	Keyed Hardware. Sound Gasketing. Security Glass. Lock from outside. No trim on inside.
168A	M. ACCESS	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.3	IS	Detention grade HDW. Sound Gasketing. GL-7
168B	M. HALL	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.3	IS	Detention grade HDW. Sound Gasketing. GL-7
169	INT/ BAIL	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.4	IS	Detention grade HDW. CR on both sides. Sound Gasketing. GL-10
170	INT	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-6	DHM	PTD HM	H2	J2	S4		10.4	OF	Detention grade HDW. Sound Gasketing. GL-10
171	M. HALL	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Grade HDW. GL-10. Remote Release.
172	M-HOLD	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
173	M. HALL	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. Security Glazing
174	M-HOLD	3' - 2 3/8"	7' - 1 1/8"	2"	D1	DHM	PTD HM	FR-2	DHM	PTD HM	H9	J8	S2		10	DT	Detention Sliding Door. Detention Grade HDW. GL-10. Remote Release.
175	J.C.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S3		8	ST	Sound Gasketing. Closer. Kickplate.
176	NON-CONT.	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S4		6	OF	Keyed Hardware. Sound Gasketing.
177	COURT LIAISON	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-3	HM	PTD HM	H3	J4, J5	S3		6.1	OF	Sound gasketing. OVHD Holder
178A	CAT	3' - 0"	7' - 0"	1 3/4"	FG	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		5	OF	Sound gasketing. OVHD Holder
178B	STOR.	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	Sound gasketing. OVHD Holder
178C	CL	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	Sound gasketing. OVHD Holder
179	CAT	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4	S3		6.1	OF	Sound gasketing. OVHD Holder
180	INT	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S4		6	OF	Sound Gasketing. OVHD Holder. Locks from corridor side. One way film on narrow lite looking in.
181	INT	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S4		6	OF	Sound Gasketing. OVHD Holder. Locks from corridor side. One way film on narrow lite looking in.
182	INT	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-1	HM	PTD HM	H3	J4	S4		6	OF	Sound Gasketing.OVHD Holder. Locks from corridor side. One way film on narrow lite looking in.
183	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		7	ST	Sound gasketing. OVHD Holder
185	SRO	3' - 0"	7' - 0"	1 3/4"	FG	WD	WD - 1	FR-1	HM	PTD HM	H3	J4	S4		5	OF	Sound gasketing. OVHD Holder
186	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-4	HM	PTD HM	H3	J4	S3		6.1	OF	Sound gasketing. OVHD Holder
187A	PD BIKES	6' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	IM	PTD HM	H1	J1	S3		8	ST	Keyed for exterior side.Weather gasketing. Closer with dogging, flush bolt and lever lock on exterior side. No mullion REQ'D
187B	PD BIKES	3' - 0"	7' - 0"	1 3/4"	N1	HM	PTD HM	FR-6	HM	PTD HM	H2	J2	S3		6	OF	Sound gasketing. OVHD Holder
188	STORAGE	6' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	IM	PTD HM	H1	J1	S3		8	ST	Keyed for exterior side.Weather gasketing. Closer with dogging, flush bolt and lever lock on exterior side. No mullion REQ'D
189	STOLEN PRTY	6' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	IM	PTD HM	H1	J1	S3		8	ST	Keyed for exterior side.Weather gasketing. Closer with dogging, flush bolt and lever lock on exterior side. No mullion REQ'D
190	STORAGE	6' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-6	IM	PTD HM	H1	J1	S3		8	ST	Keyed for exterior side.Weather gasketing. Closer with dogging, flush bolt and lever lock on exterior side. No mullion REQ'D
191A	SALLY PORT	3' - 0"	7' - 0"	2"	F	DHM	PTD HM	FR-6	IM	PTD HM	H8	J7	S3	3	10.6	EN	VI from Ext. Remote release from Control Room. CR on both sides.
191B	SALLY PORT	3' - 0"	7' - 0"	2"	F	DHM	PTD HM	FR-6	IM	PTD HM	H8	J7	S3		10.6	EN	VI from Ext. Remote release from Control Room. CR on both sides.
191C	F. ACCESS	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-1	DHM	PTD HM	H1	J1	S3		10.2	EN	CR on both sides. VI from Sally Port. Remote release from Control Room. Closer. GL-7
191D	M. ACCESS	3' - 0"	7' - 0"	2"	N1	DHM	PTD HM	FR-1	DHM	PTD HM	H1	J1	S3		10.2	EN	CR on both sides. VI from Sally Port. Remote release from Control Room. Closer. GL-7
191E	SALLY PORT	14' - 0"	12' - 0"	0"	OHD	STL	MFR.	-	STL	PTD STL	H10	J10	H10		1.3	EN	Remote open from control room. Insulated Coiling Door. Provide geared chain for fast manual opening; Electronically operated.
191F	SALLY PORT	14' - 0"	12' - 0"	0"	OHD	STL	MFR.	-	STL	PTD STL	H10	J10	H10		1.3	EN	Remote open from control room. Insulated Coiling Door. Provide geared chain for fast manual opening; Electronically operated.
B01	CORR.	3' - 0"	7' - 0"	1 3/4"	F	HM	PTD HM	FR-1	HM	PTD HM	H1	J1	S3 S2		1.2	EN	CR on ext. side.
B02	STAIR	3' - 0"	7' - 0"	1 3/4"	F	WD	WD - 1	FR-1	HM	PTD HM	H3	J1	S3	1 HR	7.1	PA	HM Storefront. Sound Gasketing. Panic Bar.
C01A	VESTIBULE	5' - 11 1/2"



KEY PLAN
SCALE: NONE

DRAWING NOTES

1. FOR CONNECTION OF FUTURE RADON FAN. PROVIDE 1" CONDUIT WITH PULL STRING ROUTED TO PANEL RP2.
2. AREA OF PHOTOVOLTAICS. APPROXIMATELY 207KW TOTAL POWER. PROVIDE ALL COMPONENTS OF A PHOTOVOLTAICS SYSTEMS FOR A COMPLETE AND OPERABLE SYSTEM. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.



ROOF - POWER -WING A
SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
8 0 8 16

Bowman
300 East Joppa Road, Suite 501
Towson, MD 21286
410.494.1111
bowman.com
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Murphy & Dittenhafer ARCHITECTS
305 North Charles Street, Baltimore, Maryland 21201 410-625-4623 voice 410-625-4674 fax
226 West Market Street, York, Pennsylvania 17401 717-848-6627 voice 717-843-2448 fax

DWG. FILENAME: C:\Users\kcallison\Documents\Essex Police Station - Central File - Rvt 2021_kevincallison.rvt

SEAL	PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51627, EXPIRATION DATE 12-06-26		Addendum #4	KEC	01-07-26		ISW	7NE28 7NE29 8NE28 8NE29	PLAN SCALE: 1/8" = 1'-0"		APPROVED BY: PROPERTY MANAGER
						R.O.W. NO.			PROFILE SCALE:		DATE:
	ENGINEER: BOWMAN CONSULTING ENGINEERS	DGN BY: Designer	CONTRACT COMPLETION BOX								
		DWN BY: Author	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
	AS-BUILT PER RECORD PRINT	CHKD BY: Checker	REVIEWED BY:								
DATE: JULY 14, 2025	BY: DATE:		DATE REVIEWED:								

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ESSEX POLICE PRECINCT - 11

ROOF PLAN - POWER - WING A

RENOVATION & ADDITION

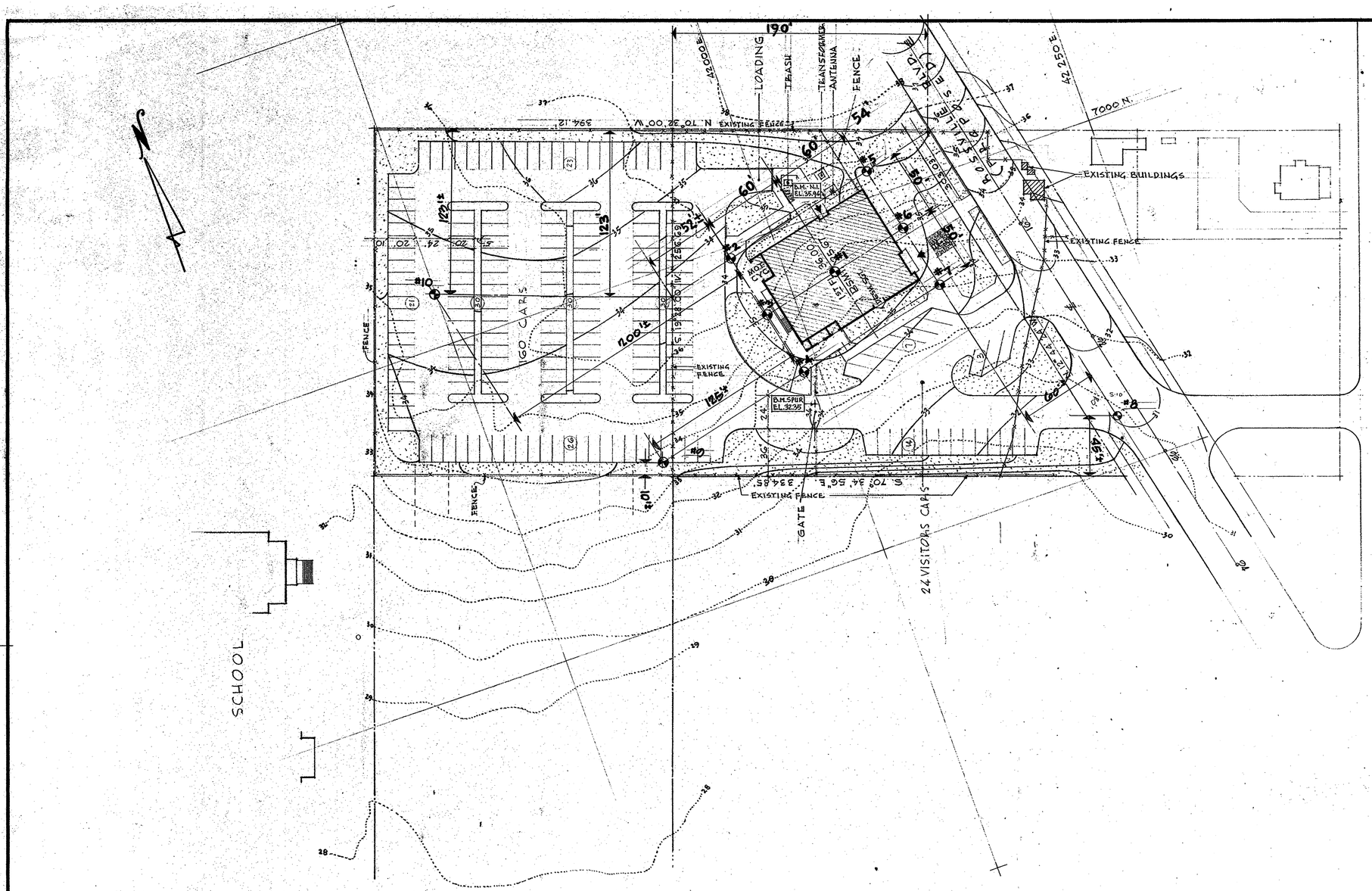
216 & 222 North Marlyn Ave, Essex, MD 21221

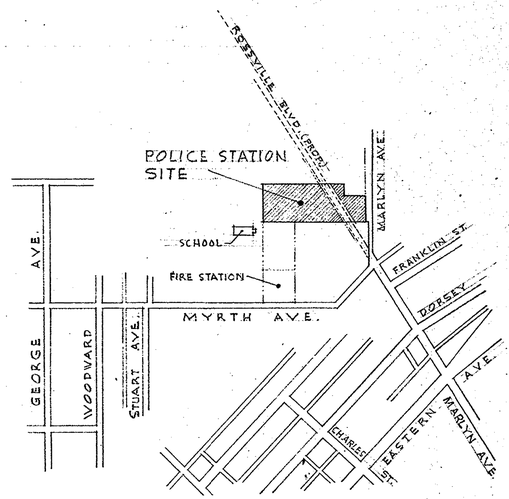
SUBDIVISION: ESSEX

ELECTION DIST. NO.: 15C7

SHEET DESIGNATION	CONTRACT NUMBER
E304	25022 PP0
JOB ORDER NUMBER	PROJ-10000636
SHEET 247 OF 295	
DRAWING NUMBER	2025 - 1138
FILE NO.: 8	REV. 0

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026





LOCATION PLAN 1" = 500'

BUILDING LOCATION SOIL TEST BORING REQUIREMENTS

BORING №	PROPOSED LENGTH
#1	40'
#2	30'
#3	30'
#4	26'
#5	30'
#6	30'
#7	26'
	212' TOTAL

MAKE BORINGS IN SEQUENCE OF NUMBERS

PAVING SECTION SOIL TEST BORING REQUIREMENTS

BORING №	PROPOSED LENGTH
#8	5'-10'
#9	5'-10'
#10	5'-10'

NOTE: BORINGS MAY ALSO BE LOCATED FROM PROPOSED ℄ OF ROSSVILLE BLVD.

1970-1573

SOIL TEST BORING LOCATIONS

ESSEX POLICE STATION

ROSSVILLE BOULEVARD AT MARLYN AVENUE

BALTIMORE COUNTY · MARYLAND

FOR THE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS

DRAWN	
CHKD	
DATE	24 · MAR · 1970
SCALE	1" = 40'
REV..	26 · MAR · 70
BORINGS	APRIL 10, 1970

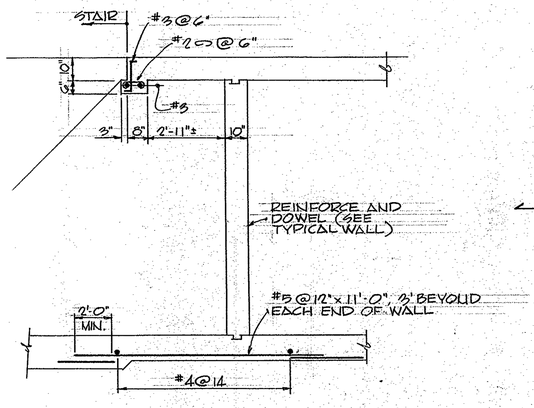
REGISTRATION

LOEWER & ASSOCIATES
ARCHITECTS - ENGINEERS
BALTIMORE
WASHINGTON, D.C.
1800 N. CHARLES STREET BALTIMORE, MARYLAND
220 FARRAGUT AVENUE KENSINGTON, MARYLAND

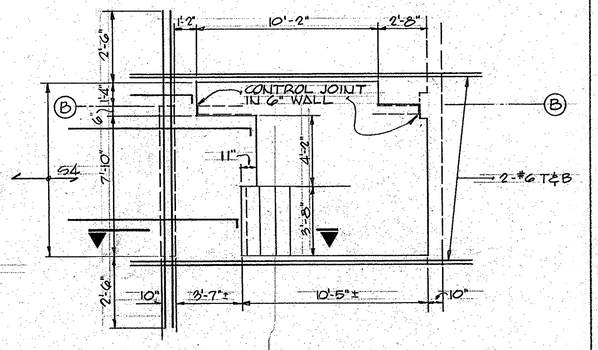
SHEET 1 OF
JOB ORDER 20-5-1
JOB NO. 488

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

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SECTION



PLAN

CLARIFICATION OF STAIRWELL FRAMING

NOTES:

1. SEE CONTRACT DRAWINGS FOR STEEL NOT SHOWN ON THIS SHEET.
2. REVISE DRAWING S-1 AS FOLLOWS
   a. DELETE B5 AND B6.
   b. ROTATE DIRECTION OF SPAN OF SLAB S-4 90°.
   c. IN SCHEDULE FOR SLAB S-4 DELETE TOP BARS AT EACH END AND INSERT NO. 4 BARS AT 11" FULL LENGTH TOP.
3. PROVIDE CORNER BARS AS PER TYPICAL DETAIL.

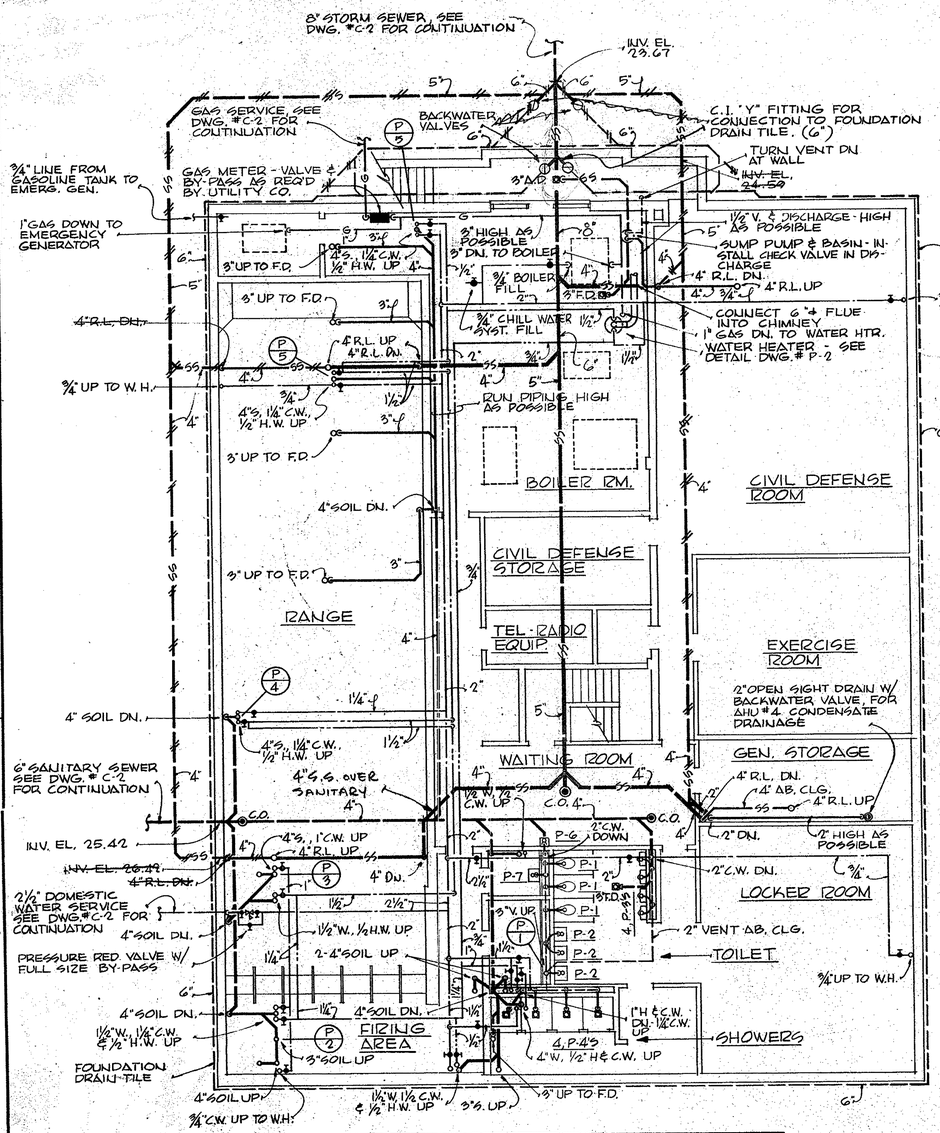
1970-1572

ESSEX POLICE STATION Nº 714881
LOEWER AND ASSOCIATES
CLARIFICATION DRAWING 3-27-72

MICROFILMED

1 SW 07 NE 29 ~~76 0993~~ 09

clarinbold Oct 26, 2022 7:48:51 AM



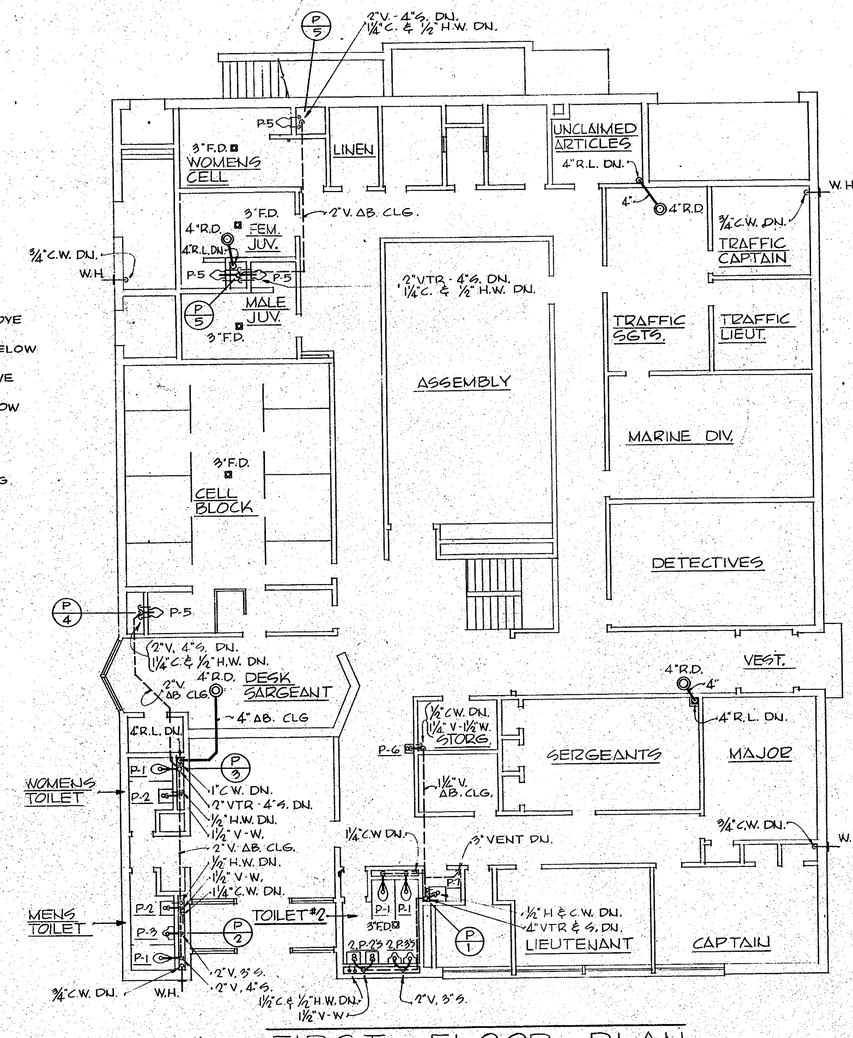
BASEMENT FLOOR PLAN

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

SUBMERSIBLE SUMP PUMP SHALL HAVE CAPACITY TO PUMP 30 GPM @ 70 FT. HD. PROTOTYPE, WEIL SS 805. HD. BASIN SHALL BE C.I. 18" ϕ x 3'-6" DEEP WITH GAS TIGHT COVER

SYMBOLS

- SOIL &/OR WASTE PIPING ABOVE GRADE
- SOIL &/OR WASTE PIPING BELOW GRADE
- SS - STORM SEWER PIPING ABOVE GRADE
- SS - STORM SEWER PIPING BELOW GRADE
- VENT PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- H.W. RE-CIRCULATING PIPING
- ELBOW LOOKING UP
- ELBOW LOOKING DOWN
- GATE VALVE
- R.D. - ROOF DRAIN
- F.D. - FLOOR DRAIN
- C.O. - CLEAN OUT
- W.H. - WALL HYDRANT
- C.W. H.W. - COLD - HOT WATER
- R.L. - RAIN LEADER
- V-W. - VENT - WASTE
- AB. CLG. - ABOVE CEILING
- S. - SOIL



FIRST FLOOR PLAN

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

NOTES:

1. FOR PIPE SIZES NOT SHOWN, SEE RISER DIAGRAMS ON DWG. # P-2.
2. WATER PIPE SIZES BASED ON 80 PSI @ STEET MAIN.
3. TOTAL CONNECTED GAS LOAD 1,405,000 BTU/HR.
4. ALL FLOOR DRAINS SHALL HAVE A TRAP PRIMER CONNECTED TO THE NEAREST PLUMBING FIXTURE C.W. SUPPLY.

1976-1574

P.U. 1

3-29-72

DATE	REVISION	BY

COUNTY EXECUTIVE

ADMINISTRATIVE OFFICER

DIRECTOR OF PUBLIC WORKS

AGENCY

CHIEF - BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES

MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | PLUMBING | SEAL

STATE OF MARYLAND — JOHN CONRAD LOEWER — No. 2390 — REGISTERED PROFESSIONAL ENGINEER

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: PEN | DRAWING NO.: P-1

DATE | CONTRACT NO.: H 2059 | 15 OF 20

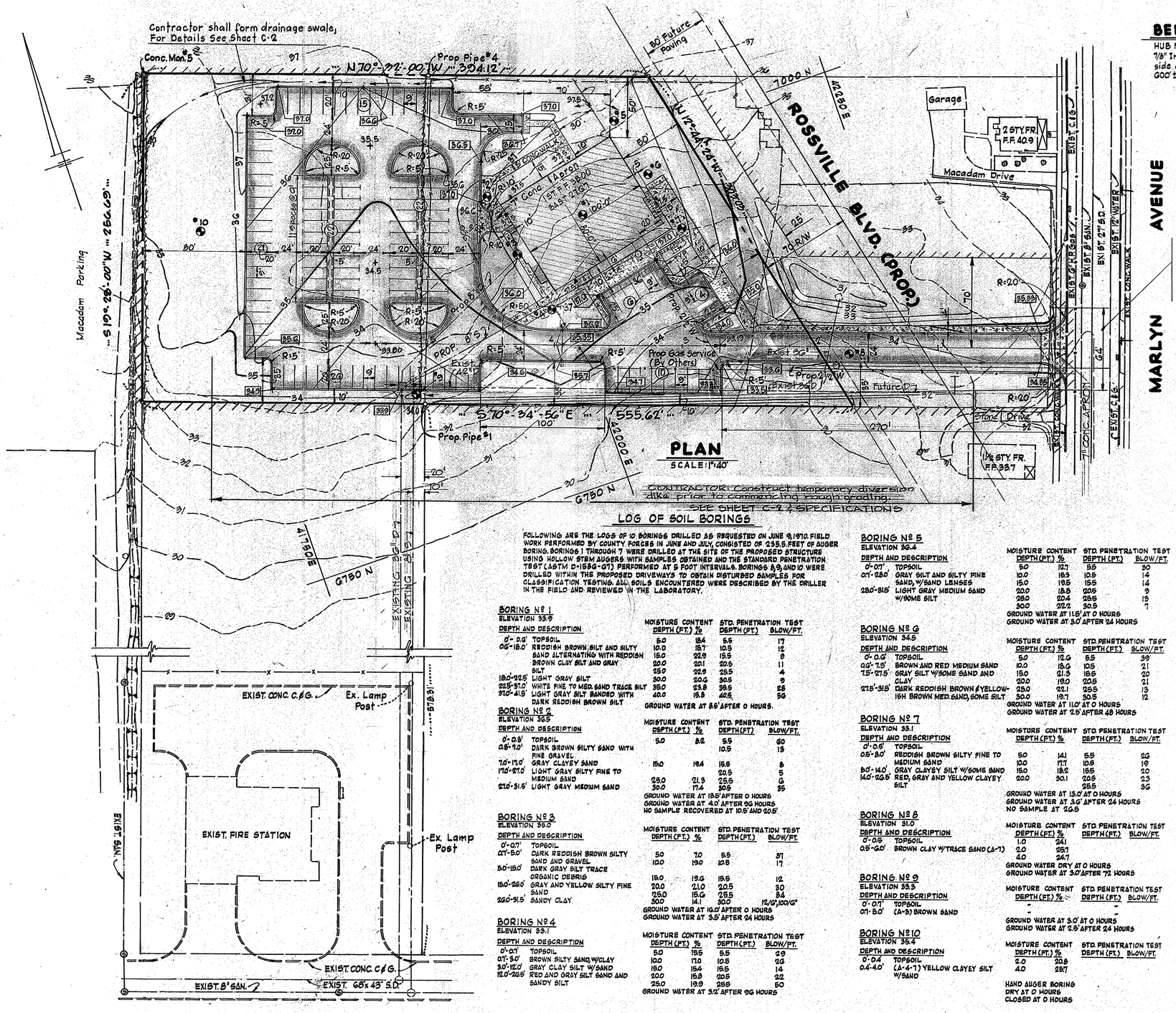
SHEET TITLE: BASEMENT & FIRST FLOOR PLUMBING PLANS

JOB ORDER: 30-5-1 | SCALE: AS NOTED

FILMED I SW 07NE29 70-0993

DIST 15

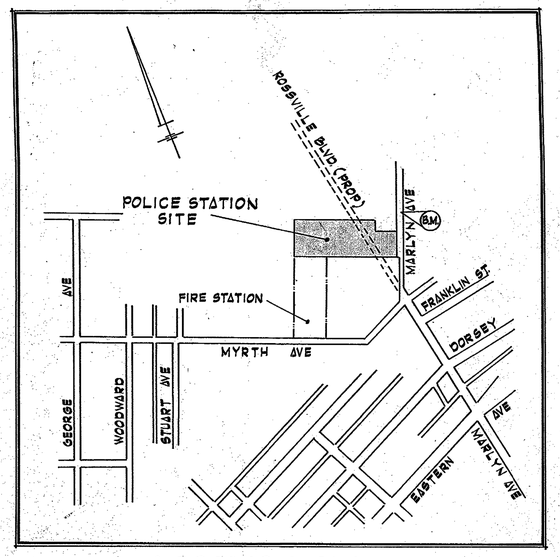
Contract No. 25022 PP0
Addendum No.4
Revised, January 12, 2026



PLAN
SCALE: 1"=40'

CONTRACTOR: Construct temporary diversion dike prior to commencing rough grading. SEE SHEET C-2 & SPECIFICATIONS

BENCH MARK:
HUB No. X-7029; ELEV. 40.091
7/8" Iron bar in paving, east side of Marlyn Avenue. 600'± N. of Myrth Avenue



LOCATION PLAN
SCALE: 1"=500'

NOTE: For General Notes Applicable For Both Sheets See Sheet C-2

LEGEND

34.6	TOP OF CURB ELEVATION
+34.6	PAVING SPOT ELEVATION
▲34.6	SIDEWALK SPOT ELEVATION
—35—	EXISTING CONTOUR
—35—	PROPOSED FINISHED CONTOUR
B-6	BORING LOCATION
	CONCRETE PAVING
	ASPHALT PAVING
	CONTRACT LIMIT LINE
	EXISTING FENCE
	LIGHT FIXTURE

LOG OF SOIL BORINGS

FOLLOWING ARE THE LOGS OF 10 BORINGS DRILLED AS REQUESTED ON JUNE 8, 1970. FIELD WORK PERFORMED BY COUNTY FORCES IN JUNE AND JULY, CONSISTED OF 235.5 FEET OF AUGER BORING. BORINGS 1 THROUGH 7 WERE DRILLED AT THE SITE OF THE PROPOSED STRUCTURE USING HOLLOW STEM AUGERS WITH SAMPLES OBTAINED AND THE STANDARD PENETRATION TEST (ASTM D-1586-67) PERFORMED AT 5 FOOT INTERVALS. BORINGS 8, 9, AND 10 WERE DRILLED WITHIN THE PROPOSED DRIVEWAYS TO OBTAIN DISTURBED SAMPLES FOR CLASSIFICATION TESTING. ALL SOILS ENCOUNTERED WERE DESCRIBED BY THE DRILLER IN THE FIELD AND REVIEWED IN THE LABORATORY.

BORING No. 1
ELEVATION 33.9

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.6'	TOPSOIL	5.0	18.4	5.5	17
0.6'-18.0'	REDDISH BROWN SILT AND SILTY SAND ALTERNATING WITH REDDISH BROWN CLAY SILT AND GRAY SILT	10.0	18.7	10.5	12
		15.0	22.9	15.5	9
		20.0	20.1	20.5	11
		25.0	22.8	25.5	4
18.0'-22.5'	LIGHT GRAY SILT	30.0	20.6	30.5	9
22.5'-27.0'	WHITE FINE TO MED. SAND TRACE SILT	35.0	23.8	35.5	28
27.0'-41.5'	LIGHT GRAY SILT BANDED WITH DARK REDDISH BROWN SILT	40.0	15.8	40.5	50

GROUND WATER AT 8.5' AFTER 0 HOURS.

BORING No. 2
ELEVATION 36.5

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT)	BLOW/FT.
0'-0.8'	TOPSOIL	5.0	8.2	5.5	60
0.8'-7.0'	DARK BROWN SILTY SAND WITH FINE GRAVEL			10.5	13
7.0'-17.0'	GRAY CLAYEY SAND	15.0	19.4	15.6	8
17.0'-27.0'	LIGHT GRAY SILTY FINE TO MEDIUM SAND			20.5	5
		25.0	21.3	25.5	6
27.0'-31.5'	LIGHT GRAY MEDIUM SAND	30.0	17.4	30.5	35

GROUND WATER AT 13.5' AFTER 0 HOURS
GROUND WATER AT 4.0' AFTER 96 HOURS
NO SAMPLE RECOVERED AT 10.5' AND 20.5'

BORING No. 3
ELEVATION 35.0

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.7'	TOPSOIL				
0.7'-5.0'	DARK REDDISH BROWN SILTY SAND AND GRAVEL	5.0	7.0	5.5	37
		10.0	19.0	10.5	17
5.0'-15.0'	DARK GRAY SILT TRACE ORGANIC DEBRIS	15.0	19.6	15.5	12
15.0'-22.0'	GRAY AND YELLOW SILTY FINE SAND	20.0	21.0	20.5	30
		25.0	15.6	25.5	54
22.0'-31.5'	SANDY CLAY	30.0	14.1	30.0	12/6", 100/6"

GROUND WATER AT 10.0' AFTER 0 HOURS
GROUND WATER AT 3.5' AFTER 24 HOURS

BORING No. 4
ELEVATION 33.1

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.7'	TOPSOIL	5.0	19.5	5.5	23
0.7'-3.0'	BROWN SILTY SAND W/CLAY	10.0	17.0	10.5	23
3.0'-12.0'	GRAY CLAY SILT W/SAND	15.0	15.4	15.5	14
12.0'-20.5'	RED AND GRAY SILT SAND AND SANDY SILT	20.0	15.8	20.5	22
		25.0	19.9	25.5	50

GROUND WATER AT 3.2' AFTER 96 HOURS

BORING No. 5
ELEVATION 36.4

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.7'	TOPSOIL.	5.0	17.1	5.5	50
0.7'-28.0'	GRAY SILT AND SILTY FINE SAND, W/SAND LENSES	10.0	18.3	10.5	14
		15.0	19.5	15.5	14
28.0'-31.5'	LIGHT GRAY MEDIUM SAND W/SOME SILT	20.0	18.3	20.5	9
		25.0	20.4	25.5	19
		30.0	22.2	30.5	7

GROUND WATER AT 11.5' AT 0 HOURS
GROUND WATER AT 3.0' AFTER 24 HOURS

BORING No. 6
ELEVATION 34.5

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.6'	TOPSOIL	5.0	12.6	5.5	39
0.6'-7.5'	BROWN AND RED MEDIUM SAND	10.0	15.6	10.5	21
7.5'-27.5'	GRAY SILT W/SOME SAND AND CLAY	15.0	21.5	15.5	20
		20.0	19.0	20.5	21
27.5'-31.5'	DARK REDDISH BROWN & YELLOW-ISH BROWN MED. SAND, SOME SILT	25.0	22.1	25.5	13
		30.0	19.7	30.5	12

GROUND WATER AT 11.0' AT 0 HOURS
GROUND WATER AT 2.5' AFTER 48 HOURS

BORING No. 7
ELEVATION 33.1

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.5'	TOPSOIL				
0.5'-8.0'	REDDISH BROWN SILTY FINE TO MEDIUM SAND	5.0	14.1	5.5	26
		10.0	17.7	10.5	19
8.0'-14.0'	GRAY CLAYEY SILT W/SOME SAND	15.0	19.2	15.5	20
14.0'-26.5'	RED, GRAY AND YELLOW CLAYEY SILT	20.0	30.1	20.5	23
				28.5	36

GROUND WATER AT 13.0' AT 0 HOURS
GROUND WATER AT 3.0' AFTER 24 HOURS
NO SAMPLE AT 26.5

BORING No. 8
ELEVATION 31.0

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.5	TOPSOIL	1.0	24.1		
0.5'-6.0'	BROWN CLAY W/TRACE SAND (A-7)	2.0	25.1		
		4.0	24.7		

GROUND WATER DRY AT 0 HOURS
GROUND WATER AT 3.0' AFTER 72 HOURS

BORING No. 9
ELEVATION 33.3

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.7'	TOPSOIL	-		-	
0.7'-5.0'	(A-3) BROWN SAND	-		-	

GROUND WATER AT 3.0' AT 0 HOURS
GROUND WATER AT 2.5' AFTER 24 HOURS

BORING No. 10
ELEVATION 36.4

DEPTH AND DESCRIPTION		MOISTURE CONTENT DEPTH (FT.)	%	STD. PENETRATION TEST DEPTH (FT.)	BLOW/FT.
0'-0.4	TOPSOIL	2.0	20.8		
0.4-4.0'	(A-4-7) YELLOW CLAYEY SILT W/SAND	4.0	28.7		

HAND AUGER BORING
DRY AT 0 HOURS
CLOSED AT 0 HOURS

LIST OF DRAWINGS

DWG. No.	SHEET TITLE
C-1	SITE GRADING & DEVELOPMENT
C-2	UTILITIES, FENCING & LIGHTING
A-1	BASEMENT & FIRST FLOOR PLAN
A-2	ELEVATIONS & SECTIONS
A-3	DOOR & INTERIOR FINISH SCHEDULE & DETAILS
A-4	~~EXT. DESK~~ & TOILET ROOM PLANS, ELEVATIONS & DETAILS
A-5	WALL SECTIONS, STAIR SECTION & DETAILS, ABBREVIATIONS
A-6	WALL SECTIONS, CELL BLOCK PLAN, ELEVATIONS, SECTIONS & DETAILS
S-1	BASEMENT & FOUNDATION PLAN & FIRST FLOOR FRAMING PLAN
S-2	ROOF FRAMING PLAN, SECTIONS & DETAILS
S-3	SECTIONS & DETAILS
M-1	BASEMENT & FIRST FLOOR MECHANICAL
M-2	MECHANICAL SCHEDULES, EQUIPMENT & FLOW DIAGRAM
M-3	MECHANICAL DETAILS
P-1	BASEMENT & FIRST FLOOR PLUMBING PLANS
P-2	PLUMBING RISER DIAGRAMS & DETAILS
E-1	BASEMENT & FIRST FLOOR LIGHTING LAYOUT
E-2	BASEMENT & FIRST FLOOR POWER
E-3	SCHEDULES, RISER DIAGRAMS, LEGEND & CONTROL PANEL
E-4	AUTOMATIC CONTROL FOR NORMAL & C.D. POWER OUTAGE

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY
CHIEF – BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT
MECHANICAL CONSULTANT

BUREAU OF ENGINEERING
STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

ALAN CONRAD LOEWER JR. No. 2398 REGISTERED PROFESSIONAL ENGINEER
SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY MARYLAND 1970-1575

ARCHITECT: LOEWER & ASSOCIATES INC.

SHEET TITLE: SITE GRADING & DEVELOPMENT

DRAWN BY: R. Hopkins
DATE:
CONTRACT NO.:
JOB ORDER:
DRAWING NO.: C-1
1 OF 22
SCALE: AS SHOWN

MICROFILMED I-5W 07NE29 70-0953-01 Dist. Medium No.
Revised January 2, 2002

Contract No. 2022 PPO

NOTE: CONTRACTOR-FORM SOD LINED DITCH TO DIRECT OVERLAND RUNOFF TO EXIST. DITCH; ALIGNMENT AS DIRECTED BY THE ENGINEER.

SEE DETAIL 'A' THIS SHEET

ROSSVILLE BLVD. (PROP.)

MARLYN AVENUE

Macadam Parking

Chain Link Fence with 3 strand barbed wire top - angled out only. See Specs

Seed & Mulch

Sod

SOD TYPICAL

50' Future Paving

40' R/W

For Continuation See Sheet P-1

Inv. 23.67

1ST. FF. 32.00 BSMT. 27.00

Inv. OUT 23.00

Inv. 22.27

1/8 Bend

40 LF 8" C.P. Drain @ 1.00%

Gas Service (By Others)

2 1/2" Water 4'-0" cover (Min.)

Exist. 42" D

Exist. 36" D

Future D

Exist. Conc. Walk

Exist. Curb & Gutter

Exist. 6" H.P. Gas

Exist. 8" San. Drwg. No. 48787 A-10

Exist. 21" S.D. Drwg. No. 6898 A-9

Exist. 12" Water Drwg. No. 627801-4

EX. T-1

EX. T-2

EX. T-3

EX. S-3

MH 4

TOP: 33.30

Ex. INV. OUT 22.20

INV. IN 21.09

EX. INV. OUT 20.99

Top: 32.70

Inv. of gas tank 4'-0" below bsmt. Floor Elevation See "Electric Generating Plant" Spec.

2 1/2" W. To be installed by Balto. County forces

Contractor to install 2 1/2" W. from meter to building.

7000 N

6750 N

42250 E

42000 E

Ex. 36" C.M.P. Drwg. No. 71-0405 (4)

Ex. 24" S.D. Drwg. No. 71-0405 (4)

Ex. 24" S.D. Drwg. No. 71-0405 (4)

Exist. 8" San.

Exist. Conc. C & G.

Ex. Lamp Post

EXIST. FIRE STATION

Exist Lamp Post

Drwg. No. 63601 A-9

Ex. 66 x 48" Storm Drain

Exist. 8" San.

EX. 8" SAN. DRWG. NO. 48857 A-10

MYRTH AVENUE

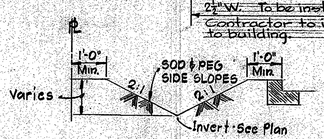
Exist. Conc. C & G.

Ex. 60" x 90" Storm Drain Drwg. No. 63601 A-9

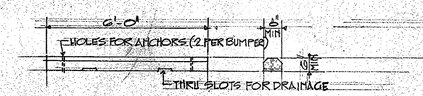
EX. 8" SAN. DRWG. NO. 48785 A-10

EX. MH 7651

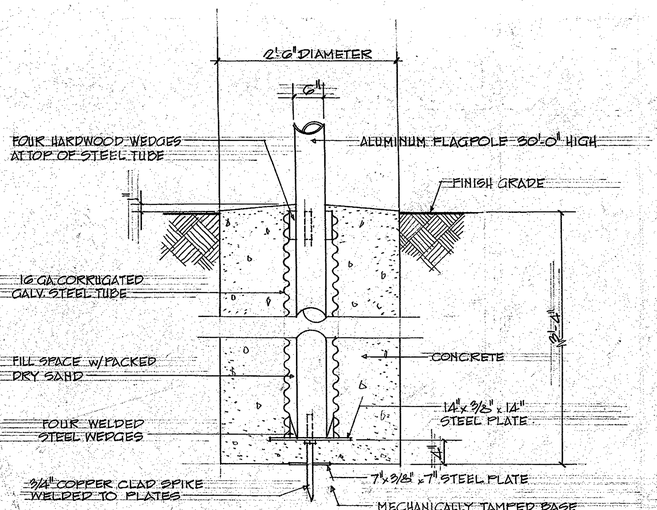
PLAN
SCALE 1" = 40'



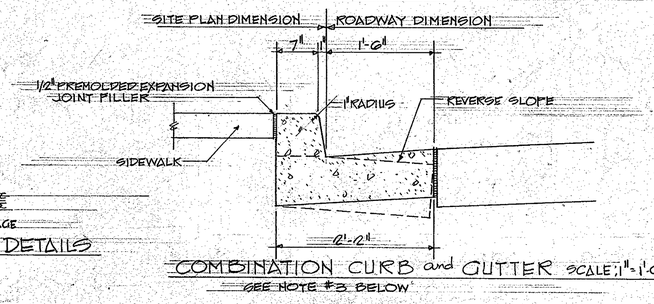
DETAIL 'A'
TYPICAL EARTH DITCH SECTION
NO SCALE



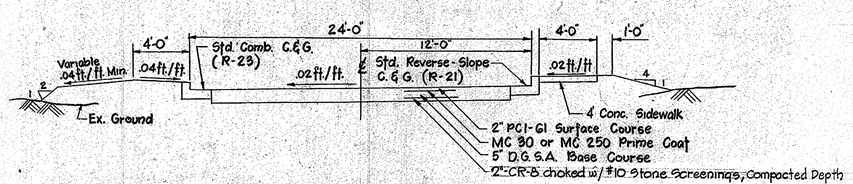
CONCRETE WHEEL BUMPER DETAILS



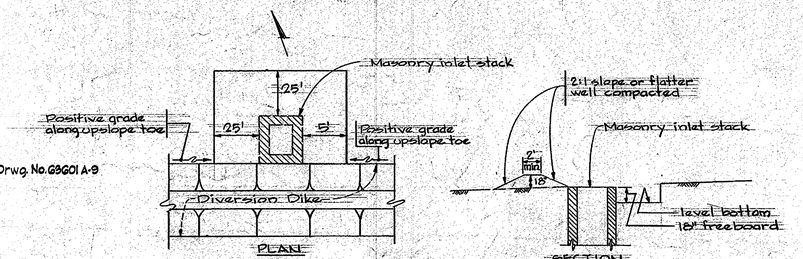
DETAIL OF FOUNDATION FOR FLAGPOLE
SCALE: 1" = 1'-0"



COMBINATION CURB and GUTTER
SCALE: 1" = 1'-0"
SEE NOTE #3 BELOW



TYPICAL SECTION - ENTRY ROAD
NO SCALE



SEDIMENT BASIN: I-1 & I-2
NO SCALE

GENERAL NOTES

1) All existing topography shown hereon has been taken from a topographic survey by County forces during June, 1970. Baltimore County does not warrant the accuracy or completeness of the data shown and the Contractor shall verify the information shown to his own satisfaction.

2) Construction shown hereon shall be in accordance with the Baltimore County Specifications for Construction and the Baltimore County Standard Details for Construction, both dated 1964.

3) All curbs shall be Baltimore County Standard "7" Combination Curb and Gutter, Detail R-23, when pavement slopes toward curb, or Detail R 22 (Reverse Slope Curb and Gutter) when paving slopes away from curb.

4) All disturbed areas within the property lines of the site shall receive 4 inches topsoil and sod; all other disturbed areas within the contract limits shall receive 4 inches of topsoil, seed and mulch.

5) Existing trees which are in good condition and are not disturbed by construction proximity are to be preserved and protected during construction as directed by the Engineer. Contractor to replace any damaged by construction and scheduled to remain.

6) Temporary construction fence shall be installed around the perimeter of the site along the "Contract Limit Line". SEE SPECS FOR DETAILS

7) See Specifications for Sediment Control Provisions.

8) Water Main Operating Pressure 80 psi - Water Main Test Pressure 120 psi.

9) Contractor shall connect to existing sanitary sewer manhole No. S-3 and to existing storm drain inlet I-1 in accordance with the directions of Engineer.

10) Contractor shall make the necessary adjustments to insure that the tops of the existing inlets and sanitary sewer manholes, within the "Limits of Construction", meet the grading shown on these plans.

11) See Drawing No. 710405 (2) for Drainage Area.

DATE	REVISION	BY

COUNTY EXECUTIVE

ADMINISTRATIVE OFFICER

DIRECTOR OF PUBLIC WORKS

AGENCY William T. Burns

CHIEF - BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT

MECHANICAL CONSULTANT

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
P.L. Mann				D.W.T.	J.A.B.	D.W.T.	

STATE OF MARYLAND — WILLIAM CONRAD LOEWER, JR. — No. 2288 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY MARYLAND 1970-1576

ARCHITECT: LOEWER & ASSOCIATES INC.

DRAWN BY: G. Hopkins
DATE:
CONTRACT NO.

DRAWING NO.: C-2
2 OF 20

SHEET TITLE: UTILITIES, FENCING, LIGHTING

JOB ORDER

SCALE: AS SHOWN

MICROFILMED I-SW 07NE29 70 0483 02 Dist. 6 Control No. 25022 PRO. 468 Added 7/1984 70

Revised, January 12, 2026

Oct 28, 2022 7:56:57 AM

BASEMENT FLOOR PLAN

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

NOTE - ALL C.M.U. PARTITIONS TO RUN TO UNDERSIDE OF CONC. SLAB.
C.M.U. UNITS TO BE BULLNOSE @ ALL EXTERIOR CORNERS

FIRST FLOOR PLAN

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

NOTE - ALL C.M.U. PARTITIONS TO RUN TO BOTTOM OF STEEL JOISTS EXCEPT ASSEMBLY, CELL BLOCK & CELL PARTITIONS TO UNDERSIDE OF ROOF DECK.
C.M.U. UNITS TO BE BULLNOSE @ ALL EXTERIOR CORNERS

SYMBOLS LEGEND

- INTERIOR FINISH NO. SEE SCHEDULE SHT 3
- CLNG. HT. OTHER THAN 8'-0"
- DOOR NO. SEE SCHEDULE SHT 3
- SECTION NO. OR DETAIL LETTER
- SHEET WHERE SECTION IS DRAWN
- SHEET WHERE SECTION CUT

1976-1577

COUNTY EXECUTIVE	AGENCY	CHIEF - BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING: STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS 2036-R STATE OF MARYLAND SEAL

BALTIMORE COUNTY - DEPARTMENT OF PUBLIC WORKS - BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY	DRAWING NO.
DATE	A-1
CONTRACT NO. H2039	3 OF 20
JOB ORDER	SCALE
30-S-1	AS NOTED

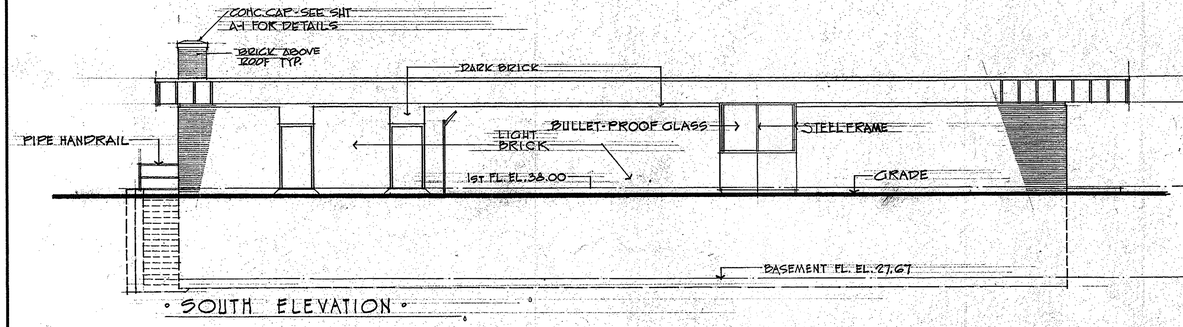
SHEET TITLE: BASEMENT and FIRST FLOOR PLAN

DATE	REVISION	BY
7-26-71	AS BUILT	R. BROWN

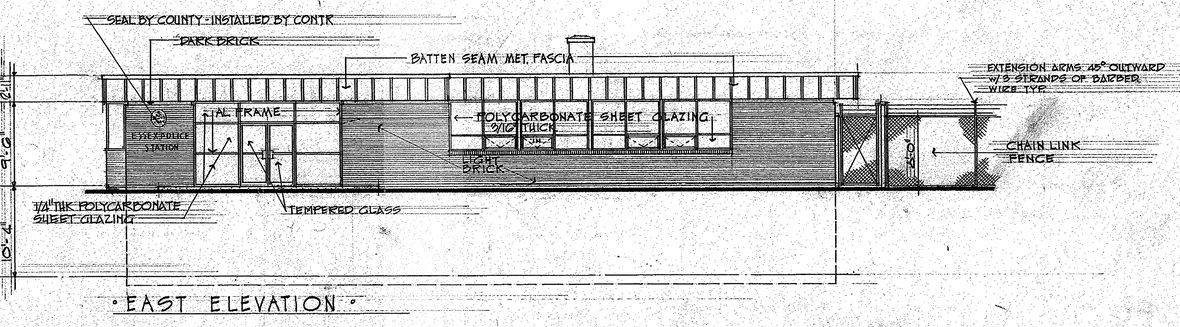
MICROFILMED

ISW 07 NE 29 70-0985-03 DIST 15

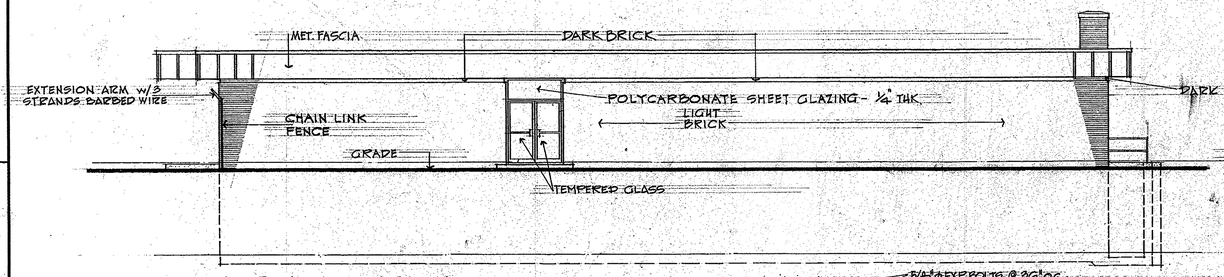
Contract No.25022 RFQ
Addendum No.4
Revised, January 12, 2026



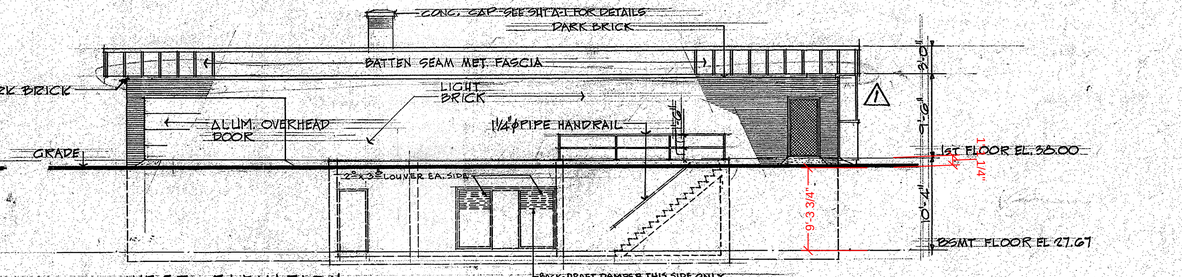
• SOUTH ELEVATION •



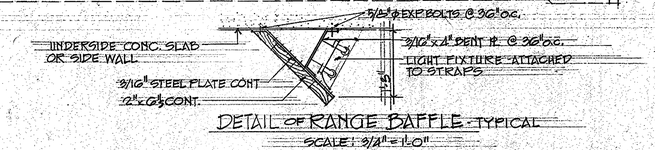
• EAST ELEVATION •



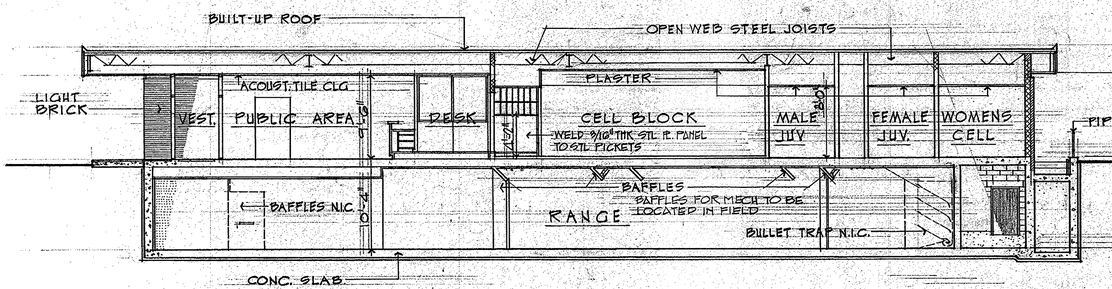
• NORTH ELEVATION •



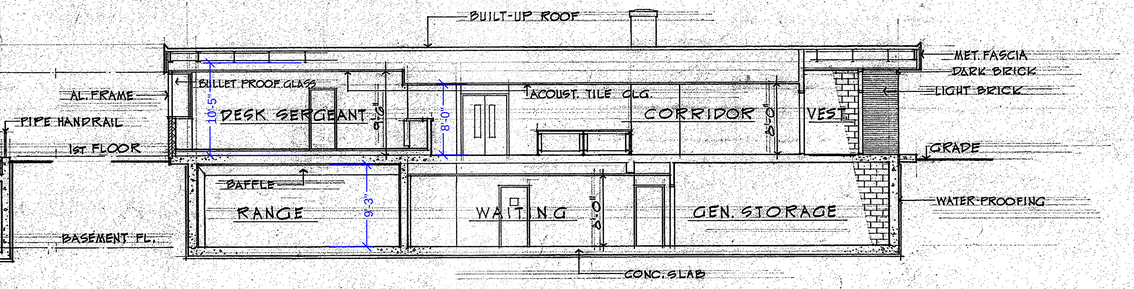
• WEST ELEVATION •



DETAIL OF RANGE BAFFLE - TYPICAL
SCALE: 3/4" = 1'-0"



• LONGITUDINAL SECTION •



• CROSS SECTION •

1970-1578

DATE	REVISION	BY
7-26-71	AS BUILT	R. Beam

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY: Ellison N. Emerson
CHIEF - BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L. Moore	J.J. Stein	V.P. Evans					

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS 2036-R STATE OF MARYLAND
SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: A.S.
DATE: 11-20-70
CONTRACT NO.: H-2058
DRAWING NO.: A-2
4 OF 20

SHEET TITLE: ELEVATIONS and SECTIONS
JOB ORDER: 30-5-1
SCALE: 1/2" = 1'-0"

MICROFILMED

1 SW 07 NE 29 20-0883 04 DIST 15

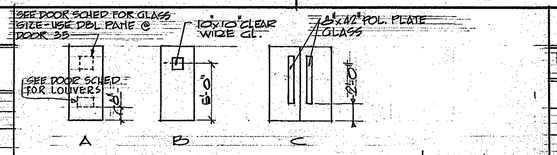
Contract No. 25022-ERR
Addendum No. 4
Revised, January 12, 2026

DOOR SCHEDULE

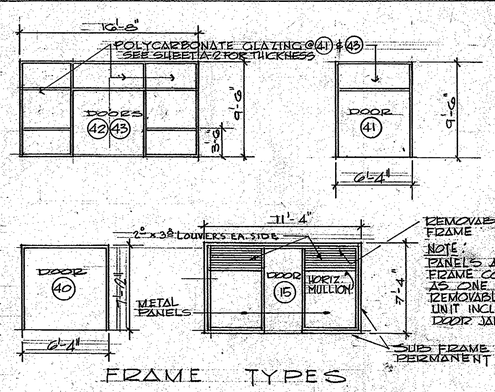
FIRST FLOOR PLAN — BASEMENT FLOOR

DOOR NO.	TYPE	DOOR SIZE (WIDTH x HT. x THICK)	MATERIALS: DOOR	MATERIALS: FRAME	DETAILS: HEAD	DETAILS: JAMB	DETAILS: SILL	HARDWARE SET NO.	REMARKS
1b	B	3'-0" x 7'-1/2" x 1 3/4"	SOLID CORE-WOOD	HOL. MET	5	6	5	7	10"x10" WIRE GLASS
2b	A	3'-0" x 7'-1/2" x 1 3/4"			1	1	+	10	UNDERCUT DOOR 1"
3b					1	1	+	10	UNDERCUT DOOR 1"
4b					1	1	+	6	
5b					1	1	4	10	
6b					1	1	4	6	10"x10" CLEAR WIRE GLASS
7b					1	1	+	7	
8b		3'-0" x 7'-1/2" x 1 3/4"	WOOD SOLID CORE		3	3	+	10	12"x6" LOUVER
9b		3'-0" x 7'-2" x 1 3/4"	HOL. MET.		1	1	4	7	U.L. CL. B FRAME & DOOR
10b		3'-0" x 5'-1/2" x 1 3/4"	HOL. MET		1	1	+	3	
11b		3'-0" x 7'-2" x 1 3/4"	WOOD SOLID CORE		1	1	4	10	UNDERCUT DOOR 1"
12b		3'-8" x 7'-1/2" x 1 3/4"	WOOD		1	1	+	8	U.L. CL. B DOOR & FRAME 10"x10" WIRE GLASS
13b		3'-0" x 7'-1/2" x 1 3/4"	WOOD SOLID CORE		3	3	+	10	UNDERCUT DOOR 1"
14b		3'-0" x 7'-0" x 1 3/4"	HOL. MET.		4	4	2	2	
15b		3'-0" x 7'-0" x 1 3/4"	HOL. MET.		*	7	2	3	* SIMILAR TO REMOVABLE FRAME SECTION
16b		3'-8" x 7'-0" x 1 3/4	HOL. MET.	HOL. MET	4	4	+	2	OMIT THRES
1	A	3'-0" x 7'-1/2" x 1 3/4"	WOOD SOLID CORE	HOL. MET	1	1	+	13	24"x24" LOUVER
2					1	1	+	13	24"x24" LOUVER
3					1	1	+	13	24"x24" LOUVER
4					1	1	3	10	12"x6" LOUVER
5					1	1	+	8	
6					1	1	3	10	UNDERCUT DOOR 1"
7					1	1	+	8	
8					1	1	+	13	20"x20" LOUVER
9					1	1	+	13	12"x12" LOUVER
10		2'-8" x 7'-1/2" x 1 3/4"			1	1	+	13	12"x12" LOUVER
11					5	6	5	9	
12					1	1	3	10	UNDERCUT DOOR 1"
13					1	1	+	12	
14					1	1	+	13	24"x12" LOUVER
15					1	1	+	13	24"x12" LOUVER
16					5	6	5	9	12"x12" LOUVER
17					1	1	3	10	UNDERCUT DOOR 1"
18					5	6	5	9	12"x12" LOUVER
19					1	1	+	10	12"x6" LOUVER
20					1	1	3	10	
21					1	1	+	10	12"x12" LOUVER
22					1	1	+	13	20"x20" LOUVER
23		2'-6" x 7'-1/2" x 1 3/4"			1	5	1	6	UNDERCUT DOOR 1"
24					1	5	1	6	UNDERCUT DOOR 1"
25	A		WOOD SOLID CORE		1	5	1	6	12"x12" LOUVER
26	DOOR DELETED								
27	A	2'-6" x 7'-1/2" x 1 3/8"	WOOD SOLID CORE		2	2	+	11	
28					2	2	+	11	
29					2	2	+	11	
30					2	2	+	11	
31					2	2	+	11	
32					2	2	+	11	
33	A	2'-1" x 7'-1/2" x 1 3/8"			2	2	+	11	
34	C	PR 2'-6" x 7'-1/2" x 1 3/4	WOOD SOLID CORE		1	5	+	5	"B" LABEL
35	A	2'-6" x 7'-1/2" x 1 3/4"	HOL. MET		1	1	6	8	U.L. CL. B DOOR & FRAME w/ DBL PANE 10"x10" WIRE GLASS
36	A				1	1	3	8	U.L. CL'B' DOOR & FRAME w/ 3"ϕ OPNG & ALUM. COVER
37	A				1		3	14	UNDERCUT 1" * SEE DOOR TYPES
38	A				1	1	3	14	UNDERCUT 1"
39	A		HOL. MET	HOL. MET	1		3	8	U.L. CL'B' DOOR & FRAME w/ 3"ϕ OPNG & ALUM. COVER
40	E	PR 3'-0" x 7'-0" x 1 3/4	ALUM. PR	ALUM.	SEE DETAILS		*	BY DOOR MFGR	* ALUM. THRES. BY DOOR MFG.
41	E						*	BY DOOR MFGR	REMOVABLE MULLION BY DOOR MFGR. THIS DOOR
42	E						*		REMOVABLE MULLION BY DOOR MFGR. THIS DOOR
43	E		ALUM. PR	ALUM.	SEE DETAILS		*	1	
44	A	3'-6" x 7'-0" x 1 3/4"	HOL. MET.	HOL. MET	6	4	2	3	
45	A	3'-0" x 7'-0" x 1 3/4"	HOL. MET.	HOL. MET	6	4	2	3	
46	F	3'-0" x 7'-0"	GATE	SEE DETAILS	7	10	*	15	SILL SIMILAR TO DET. #2 OMIT THRES & FRAME
47	OVERH'D	7'-0" x 16'-0" WIDE	ALUMINUM		*	*	*	1	* SEE SHEET A-5 (OVERHEAD DOOR)
48	—	WINDOW 20" W. x 24" H. INSIDE	—	HOL. MET	JAMB DETAIL # 11			—	TRANSPARENT MIRROR IN PART'N.
49	A	PR 2'-6" x 7'-2" x 1 3/4"	HOL. MET	HOL. MET	1	1	+	4	U.L. CL. B DOOR & FRAME
50	A	PR 3'-0" x 7'-2" x 1 3/4"	HOL. MET	HOL. MET	1	1	+	4	U.L. CL. B DOOR & FRAME

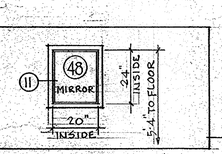
/ SYMBOL '+' IN SILL COLUMN DENOTES SAME FINISH ON BOTH SIDES OF DOOR w/NO THRESHOLD OR DIVIDER STRIP



DOOR TYPES



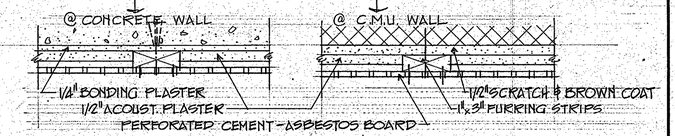
FRAME TYPES

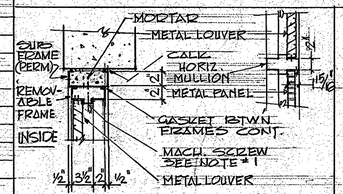


INTERIOR FINISH SCHEDULE

FINISH NO.	FLOOR	BASE	WALLS	CEILINGS	REMARKS
F1	SEAMLESS	VINYL	PAINTED C.M.U.	SUSP. ACOUS. TILE	
F2	CONCRETE (SEE REMARKS F2)	GLAZED COATING	GLAZED COATING	SUSP. CEM. PLASTER	RIGID INSUL. @ EXT. WALL OF CELL BLOCK - FLR TO BOTT. OF ROOF BOARD; OMIT DECK COATING IN CELL BLOCK & SALLY PORT)
F3	CONCRETE (SEE REMARKS)	NONE	PAINTED C.M.U.	PAINTED STEEL	SURFACE APPLIED DECK COATING - WATERPROOFING SYSTEM - SEE SPEC 9
F4	SEAMLESS	VINYL	GLAZED COATING	SUSP. ACOUS. TILE	
F5	SEAMLESS	VINYL	PLASTIC WALLCOVERING ON PLASTER	SUSP. ACOUS. TILE	VINYL ASB. TILE ON RAISED WOOD FLR. IN DESK SGTS AREA
F6	CERAMIC TILE	CER. TILE	GLAZED COATING	SUSP. ACOUS. TILE	2 COATS DAMPPROOFING UNDER CERAMIC TILE
F7	VINYL ASB. TILE	VINYL	GLAZED COATING	SUSP. ACOUS. TILE ; PLASTER UNDER LNDG	PLASTER TO BE GYPSUM W/ SAND FINISH
F8	CERAMIC TILE	CER. TILE	GLAZED COATING	SUSP. ACOUS. TILE	2 COATS DAMPPROOFING UNDER CERAMIC TILE
F9	CONCRETE	VINYL	PAINTED C.M.U. PAINTED CONC.	PAINTED CONC. SLAB	HARDENER ON FLOOR
F10	CERAMIC TILE	CER. TILE	GLAZED COATING	SUSP. KEENES CEMENT PLASTER	
F11	SEAMLESS	NONE	BRICK *	SUSP. ROOF'L AND CEMENT PLASTER	* GLAZED COATING ON C.M.U. WALLS @ SIDE VESTIBULE
F12	VINYL ASB. TILE	VINYL	PAINTED C.M.U.	SUSP. ACOUS. TILE	
F13	VINYL ASB. TILE		PAINTED C.M.U.	SUSP. ACOUST. TILE	ACOUS. TILE SOFFIT AROUND DUCT-WORK - NORTH WALL 7'-2" FROM FLR
F14	CONCRETE		ACOUS. PLASTER SPRAYED ON	ACOUS. PLASTER	HARDENER ON FLOOR
F15	VINYL ASB. TILE		SEE NOTE #1	SUSP. ACOUS. TILE & SUSP. EGG CRATE	SEE PLAN SHT A-1 FOR EXTENT OF CL'G
F16	CONCRETE	VINYL	PAINTED C.M.U.	PAINTED STEEL	HARDENER ON FLOOR

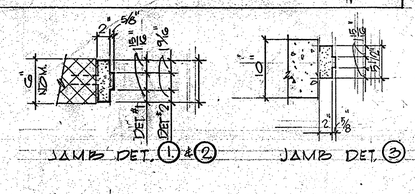
NOTE #1 - ACOUSTICAL PLASTER ON C.M.U. AND COVERED WITH PERFORATED 1/4" CEMENT-ASBESTOS BOARD ATTACHED TO 1"x3" FURRING STRIPS

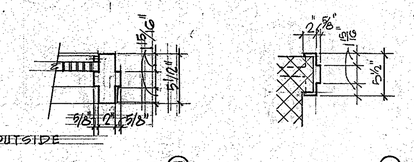


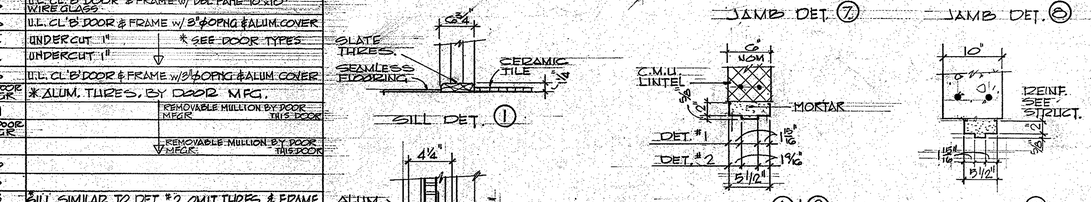


TYPICAL SECTION THRU REMOVABLE FRAME
NO SCALE

NOTE #1 - 3/8"ϕ x 3" MACH. SCREW @ 24" MAX. cc - DRILL & TAP SUB FRAME & PROVIDE CLEAR HOLES IN REMOVABLE FRAME







DETAILS OF METAL FRAME at DESK SERGEANT'S AREA 1970-1579

DATE	REVISION	BY
7-26-71	AS BUILT	R.B.Bown

COUNTY EXECUTIVE	AGENCY: Ellison D. Lewis	CHIEF – BUREAU OF ENGINEERING	STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
ADMINISTRATIVE OFFICER			MECHANICAL CONSULTANT: LOEWER & ASSOCIATES
DIRECTOR OF PUBLIC WORKS			BUREAU OF ENGINEERING: R.L. Mayo (STRUCTURAL) W.A. Stein (MECHANICAL) E.W. Lewis (ELECTRICAL) — STORM DRAINS — WATER — SEWER — HIGHWAYS — PLUMBING

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS 2036-R STATE OF MARYLAND SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSEVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY MARYLAND

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

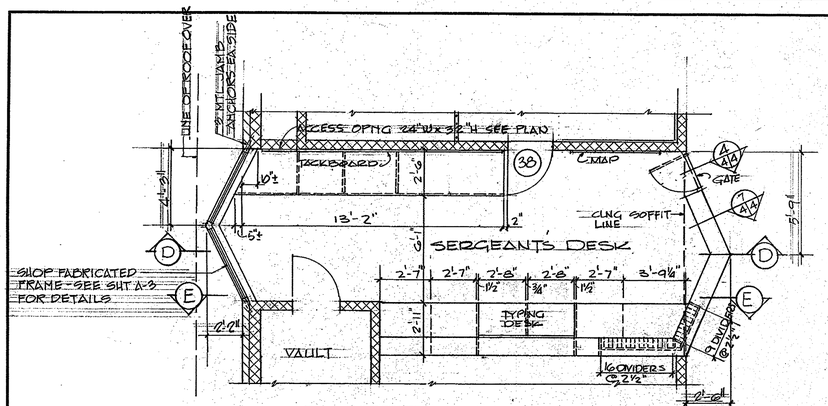
SHEET TITLE: DOOR and INTERIOR FINISH SCHEDULES & DETAILS

DRAWN BY: SR | DATE: | CONTRACT NO.: H 2039 | DRAWING NO.: A-3 | 5 OF 20 | JOB ORDER: 30-5-1 | SCALE: AS NOTED

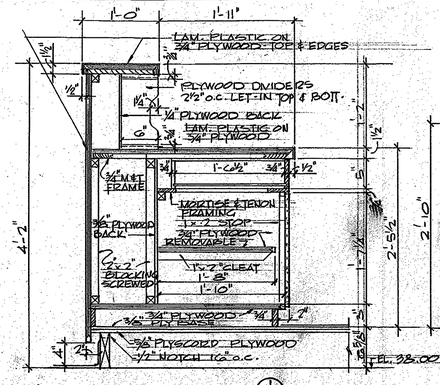
MICROFILMED

I SW 07 NE 29 70-0983 05 DIST 15

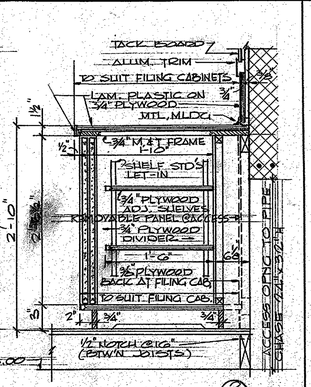
Contract No. 25022 PP9
Addendum No. 4
Revised, January 12, 2026



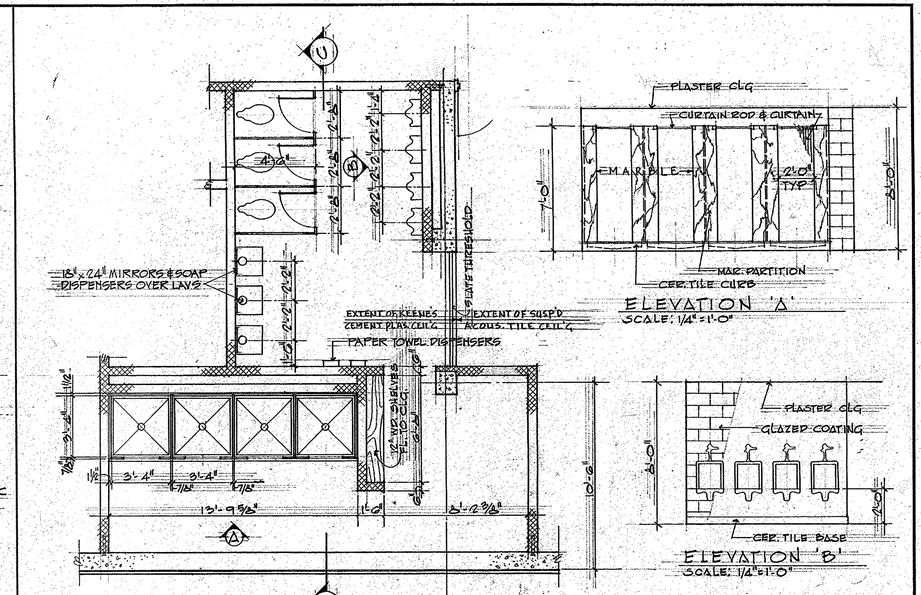
PLAN OF SERGEANTS DESK
SCALE: ¼"=1'-0"

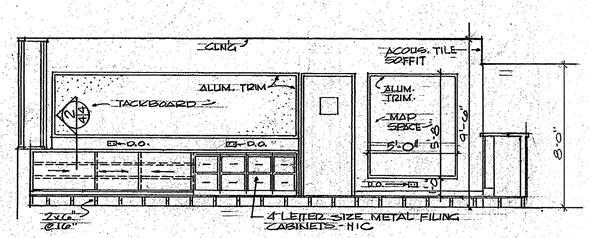


SECTION 1 4/4
SCALE: 1"=1'-0"

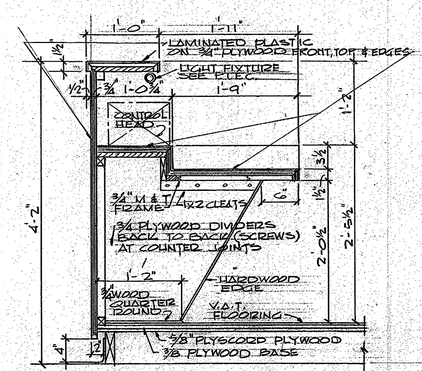


SECTION 2 4/4
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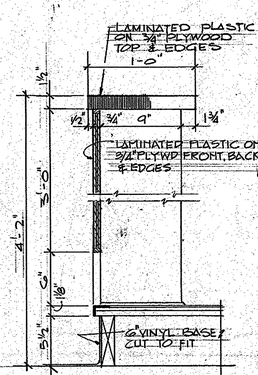




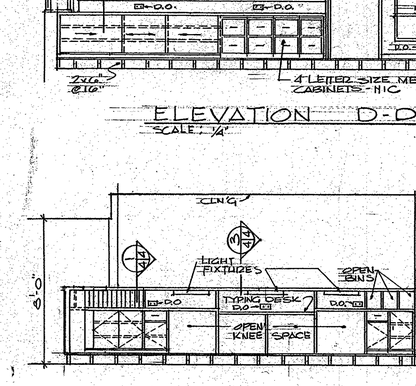
ELEVATION D-D
SCALE: ¼"



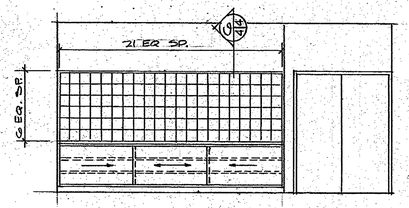
SECTION 3 4/4
SCALE: 1"=1'-0"



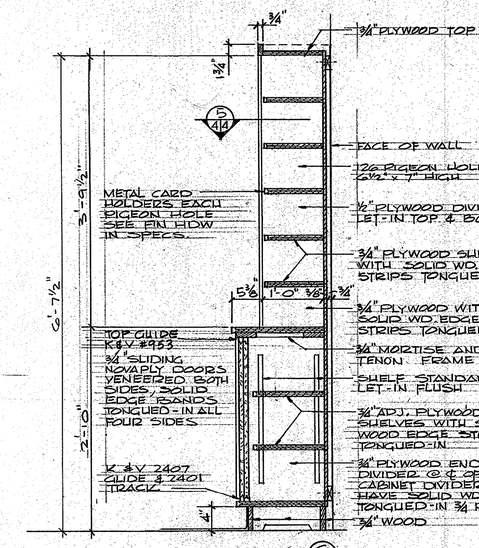
SECTION 4 4/4
SCALE: 1½"=1'-0"



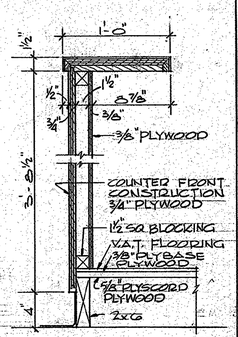
ELEVATION E-E
SCALE: ¼"=1'-0"



ELEVATION OF MAILBOXES IN ASSEMBLY RM.
SCALE: ¼"=1'-0"

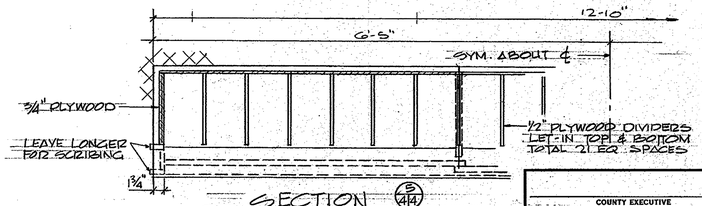


SECTION 5 4/4
SCALE: 1"=1'-0"

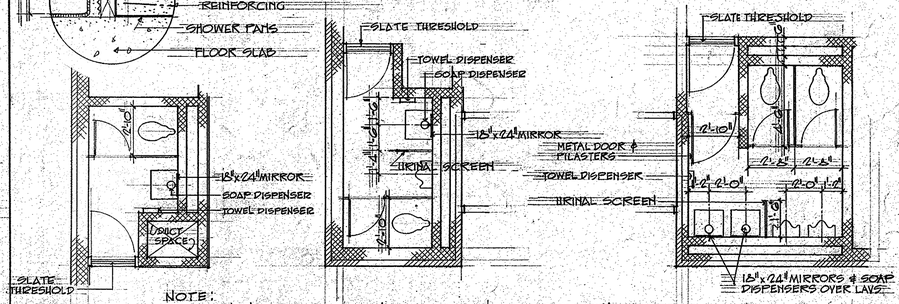


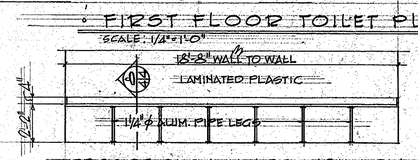
SECTION 7 4/4
SCALE: 1½"=1'-0"

NOTE: ALL WOOD CABINET DOORS FRONTS, DRAWER FRONTS & OTHER EXPOSED WOOD SHALL BE PAINTED "NATURAL FINISH" SEE SPECS

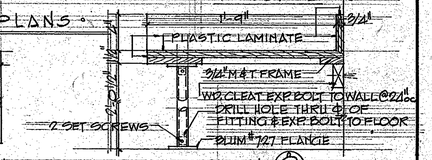


SECTION 6 4/4
SCALE: 1"=1'-0"





REPORT DESK IN ASSEMBLY RM.



SECTION 8 4/4
SCALE: 1½"=1'-0"

DATE	REVISION	BY

COUNTY EXECUTIVE	AGENCY: Allison N. Lomax	CHIEF - BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L.Mann	V.S.Mann						

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS 2036-R STATE OF MARYLAND
SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE
BALTIMORE COUNTY MARYLAND 1970-1580

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY	DRAWING NO.
DATE 11-2016	A-4
CONTRACT NO. 42039	6 OF 20
JOB ORDER	SCALE
30-5-1	AS NOTED

SHEET TITLE: 2ST. DESK & TOILET ROOM PLANS ELEVATIONS & DETAILS

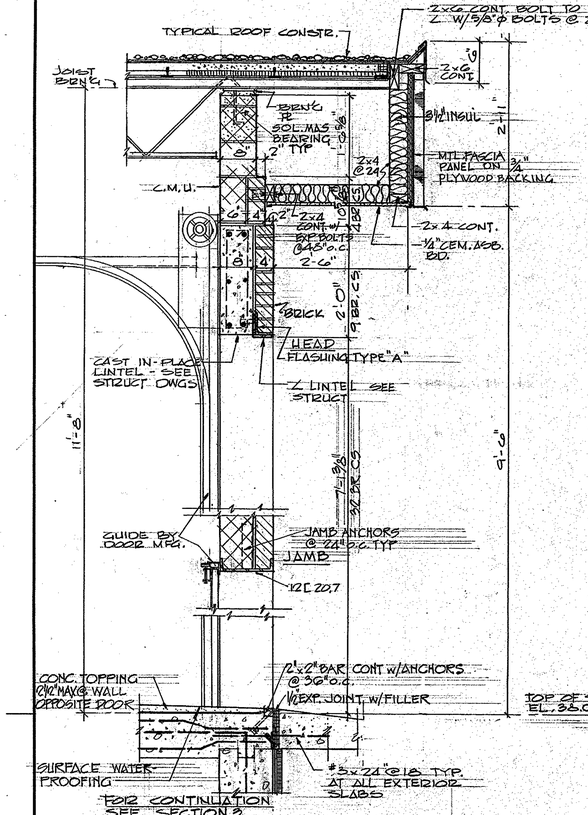
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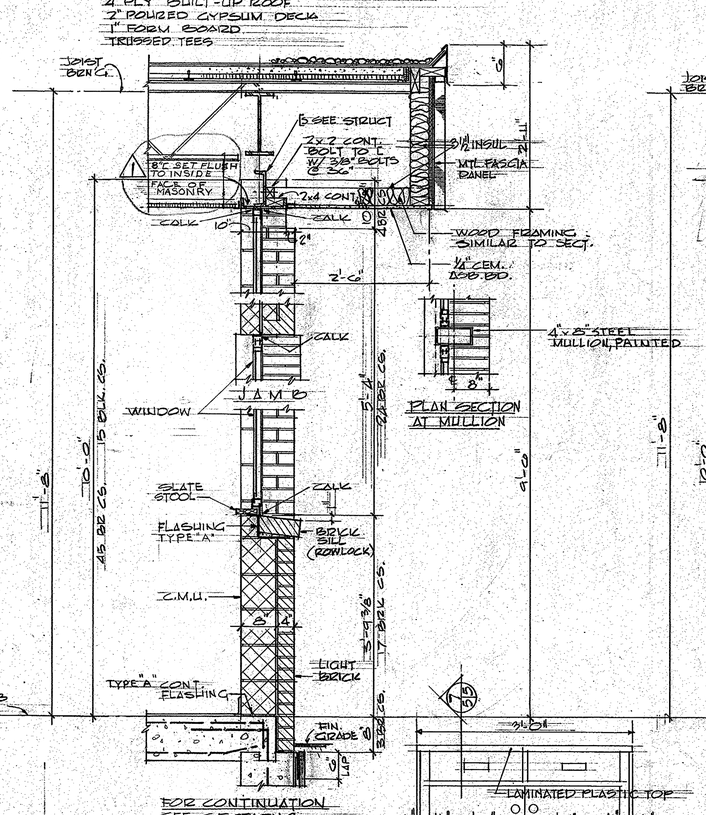
I SW 02NE 29 ~~70-0983~~ 06 DIST

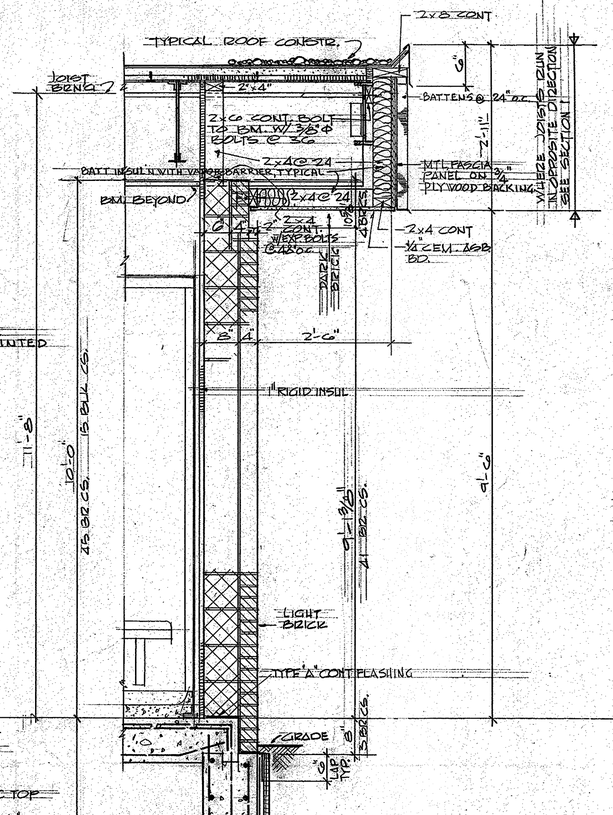
Contract No.25022 PPD
Addendum No.4
Revised, January 12, 2026

K&E PHOENIX 74-689

drawnhold Oct 26, 2012 8:06:58 AM

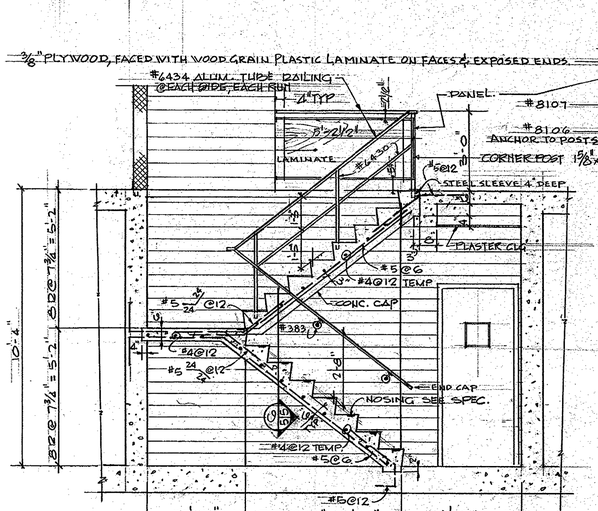


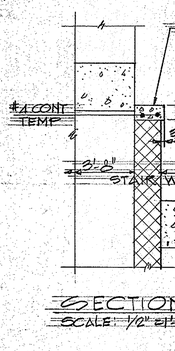


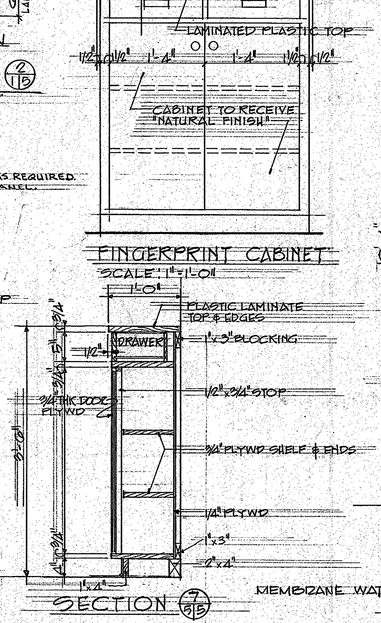


ABBREVIATIONS

AL, ALUM	=	ALUMINUM	HOL.	=	HOLLOW
@	=	AT			
ACOUS	=	ACOUSTICAL	INSUL	=	INSULATION
ASB.	=	ASBESTOS			
			JUV.	=	JUVENILE
BD	=	BOARD			
BM.	=	BEAM	LAM	=	LAMINATED
BR	=	BRICK			
BRNG	=	BEARING	MAR	=	MARBLE
BTWN	=	BETWEEN	MAX	=	MAXIMUM
			MET. MTL	=	METAL
CEM	=	CEMENT	MFG	=	MANUFACTURER
CER	=	CERAMIC			
CLG	=	CEILING	N.I.C.	=	NOT IN CONTRACT
CMU	=	CONCRETE MASONRY UNIT			
C.O.	=	CLEAN OUT	O.C.	=	ON CENTER
CONT	=	CONTINUOUS			
CS	=	COURSES	PERM	=	PERMANENT
CONC	=	CONCRETE	PL	=	PLATE
D.O.	=	DUPLEX OUTLET	PR	=	PAIR
DET	=	DETAIL			
ø	=	DIAMETER	REINF	=	REINFORCING
DIM	=	DIMENSION	REQ'D	=	REQUIRED
DN	=	DOWN			
			SCHED	=	SCHEDULE
EQPT	=	EQUIPMENT	SEC	=	SECTION
EL	=	ELEVATION	SHT	=	SHEET
ENT	=	ENTRANCE	SQ	=	SQUARE
			STL	=	STEEL
FIN	=	FINISH	SUSP	=	SUSPENDED
F.D.	=	FLOOR DRAIN	S.S.	=	SERVICE SINK
FLR	=	FLOOR			
FR	=	FRAME	TEL	=	TELEPHONE
			THRES	=	THRESHOLD
GALV	=	GALVANIZED	TYP	=	TYPICAL
GL.	=	GLASS			
			VEST	=	VESTIBULE
			W/	=	WITH
			WM	=	WOMEN
			WD	=	WOOD







7-26-91	M AS BUILT	A. BROWN
DATE	REVISION	BY

COUNTY EXECUTIVE	AGENCY	CHIEF – BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L. Mann							

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS 2036-R STATE OF MARYLAND SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE
BALTIMORE COUNTY MARYLAND

1970-158

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

SHEET TITLE: WALL SECTIONS, STAIR SECTION & DETAILS & ABBREVIATIONS

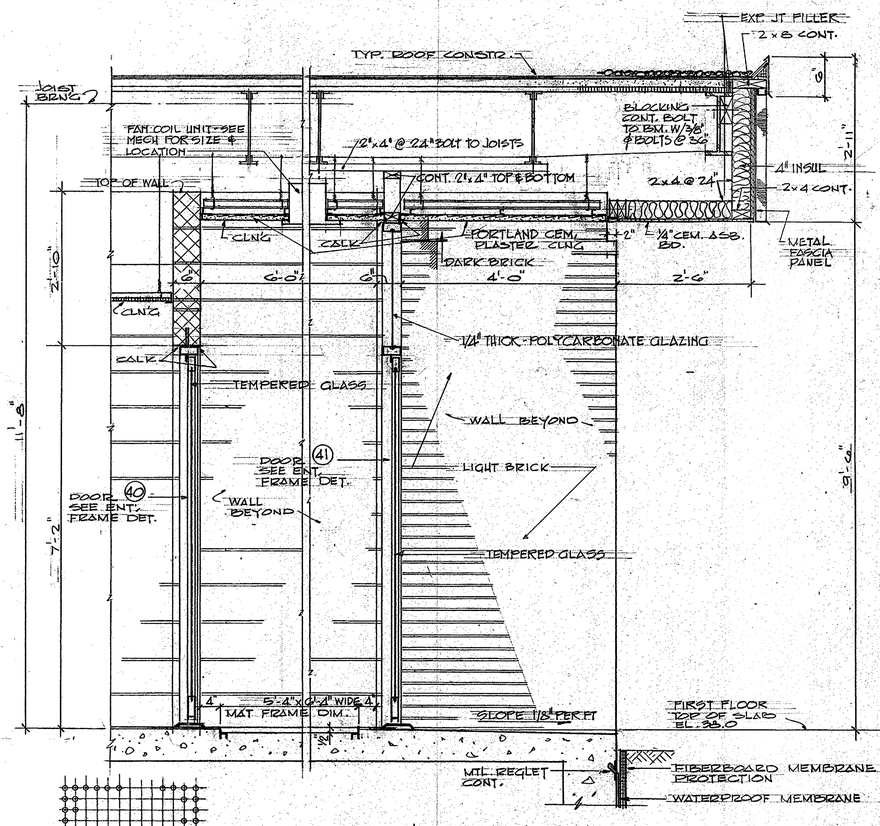
DRAWN BY	DRAWING NO.
DATE	A-5
CONTRACT NO. H 2039	7 OF 20
JOB ORDER 30-5-1	SCALE AS NOTED

MICROFILMED

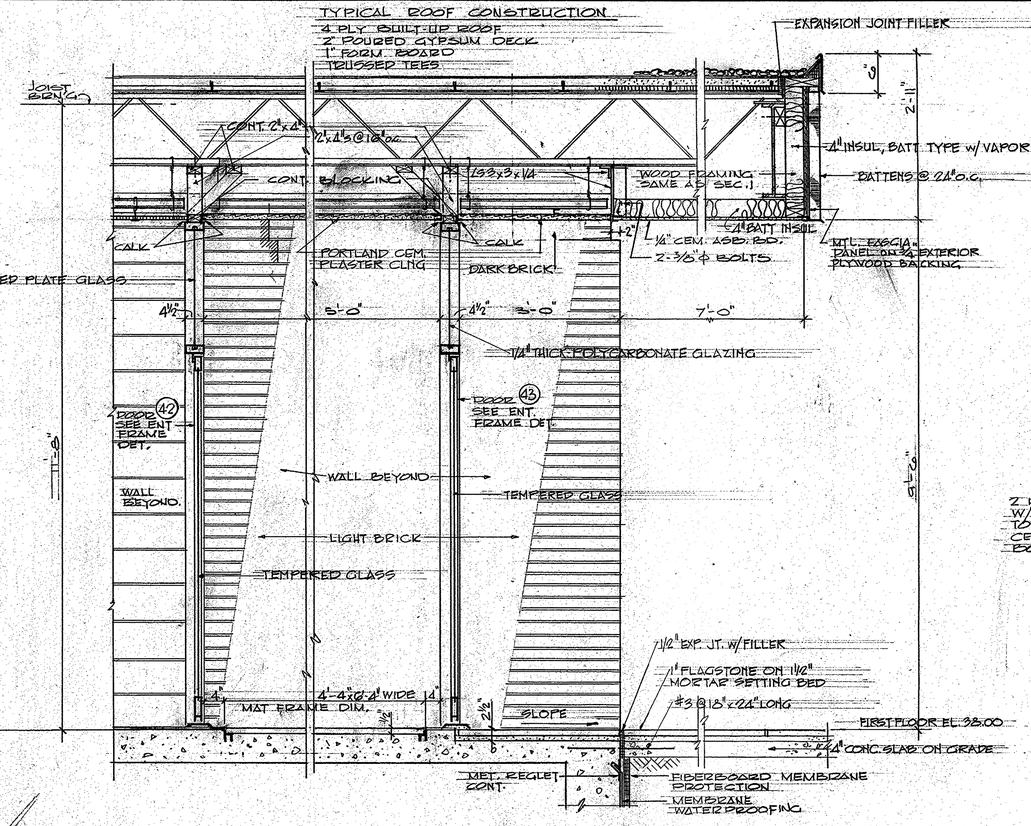
1 SW 07 NE 29 20-0983 02 Dist. 15 Contract No. 25022 PPO
Addendum No. 4
Revised, January 12, 2026.

PHOENIX TRADING CORP. 76480

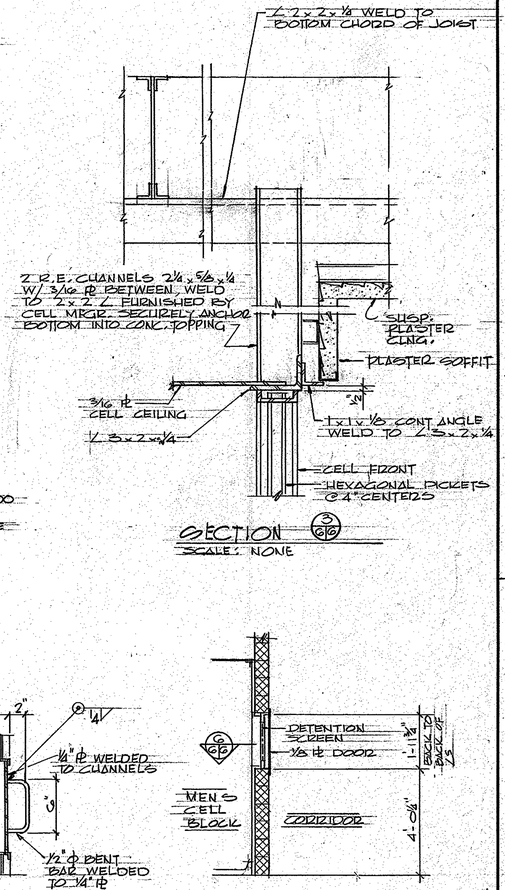
Wednesday, Oct 26, 2022 8:08:24 AM



SECTION 1/6
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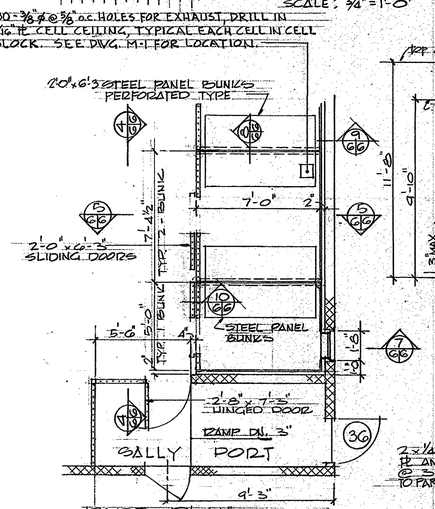


SECTION 7/1/6
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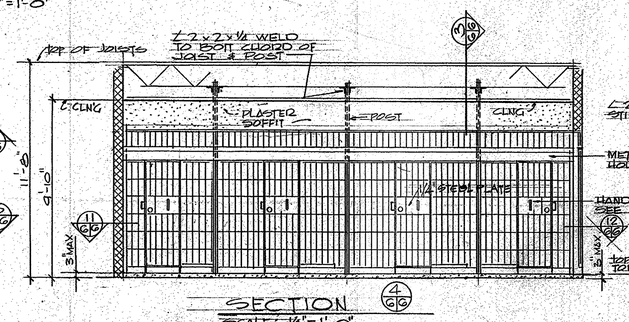


SECTION 3/6/6
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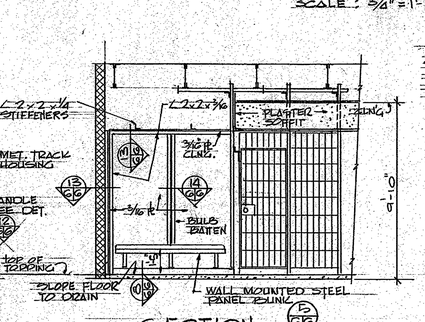
130 - 3/8" ϕ @ 3/8" o.c. HOLES FOR EXHAUST, DRILL IN 3/16" PL CELL CEILING, TYPICAL EACH CELL IN CELL BLOCK. SEE DWG. M-1 FOR LOCATION.



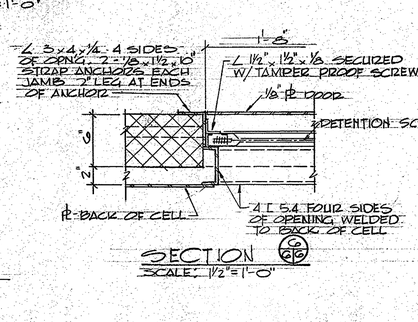
PART PLAN
MEN'S CELL BLOCK
SCALE: 1/4" = 1'-0"



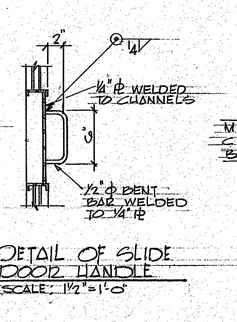
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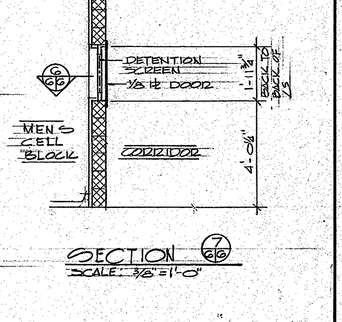
SECTION 5/6/6
SCALE: 1/4" = 1'-0"



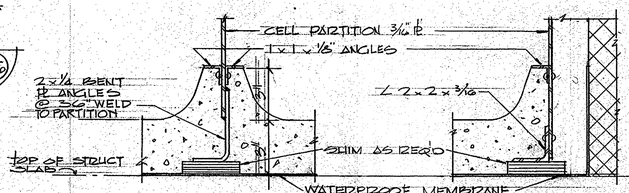
SECTION 6/6/6
SCALE: 1 1/2" = 1'-0"



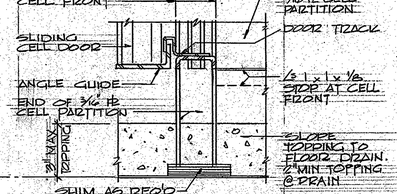
DETAIL OF SLIDE DOOR HANDLE
SCALE: 1 1/2" = 1'-0"



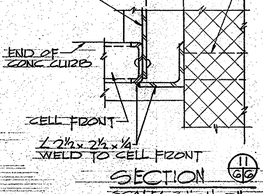
SECTION 7/6/6
SCALE: 3/8" = 1'-0"



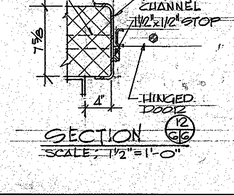
SECTION 9/6/6
SCALE: 3" = 1'-0"



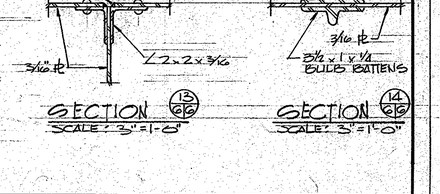
SECTION 10/6/6
SCALE: 3" = 1'-0"



SECTION 11/6/6
SCALE: 3" = 1'-0"



SECTION 12/6/6
SCALE: 1 1/2" = 1'-0"



SECTION 13/6/6
SCALE: 3" = 1'-0"

SECTION 14/6/6
SCALE: 3" = 1'-0"

DATE	REVISION	BY

COUNTY EXECUTIVE	AGENCY	CHIEF – BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT	MECHANICAL CONSULTANT
LOEWER & ASSOCIATES	LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
RJM							

BOARD OF EXAMINERS AND REGISTRATION OF ARCHITECTS — 2036-R — STATE OF MARYLAND — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSEVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND
1970 - 1582

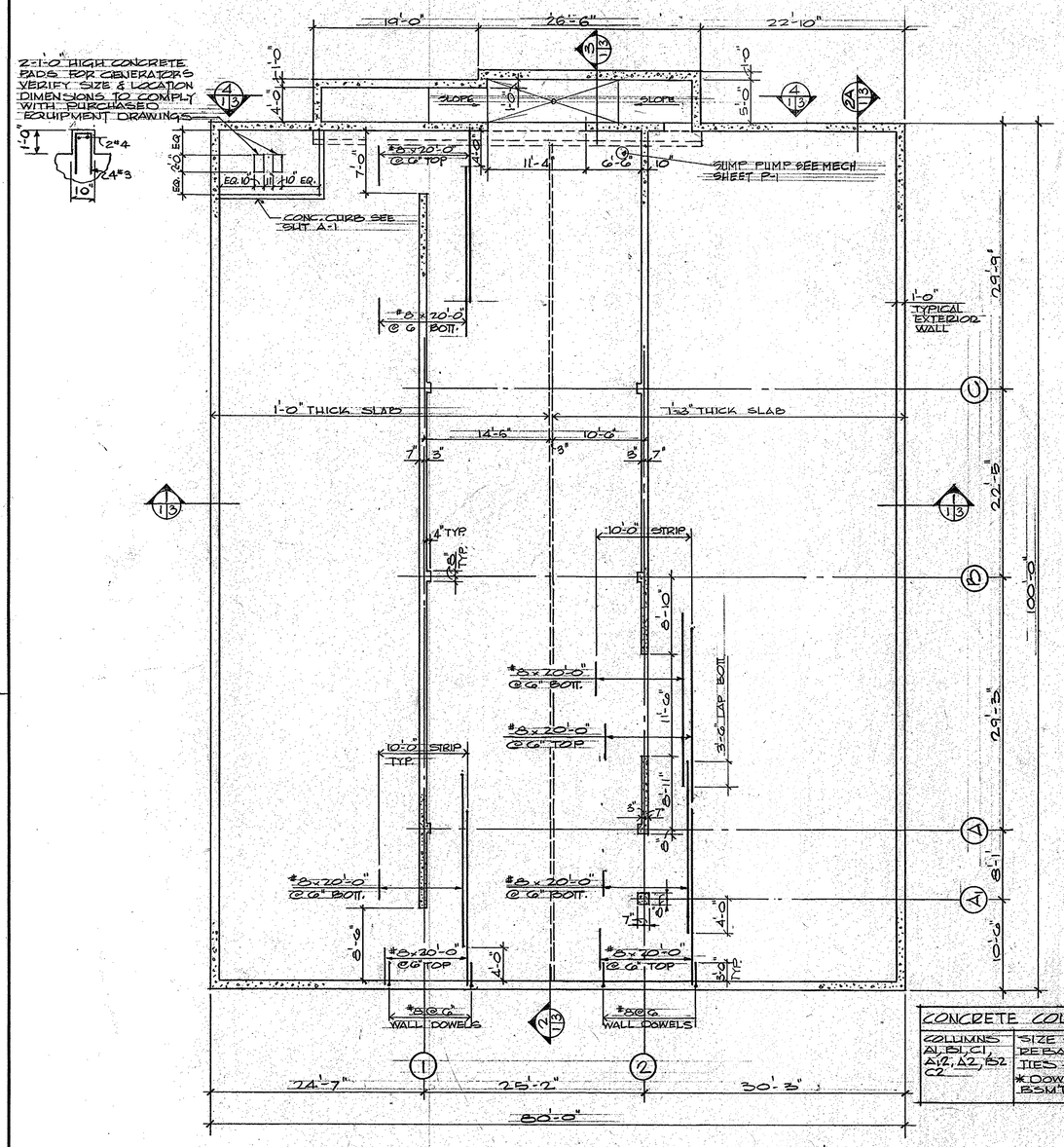
ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

SHEET TITLE: WALL SECTIONS, CELL BLOCK PLAN, ELEVATIONS, SECTIONS & DETAILS

DRAWN BY: GK
DRAWING NO.: A-6
DATE: 8 DEC 20
CONTRACT NO.: H 2039
JOB ORDER: 30-5-1
SCALE: AS NOTED

I SW 07NE 29 30-0783 08 Dist. 15 Contract No:25022 PPO
Addendum No.4
Revised, January 12, 2026

K&E PHOENIX 74480

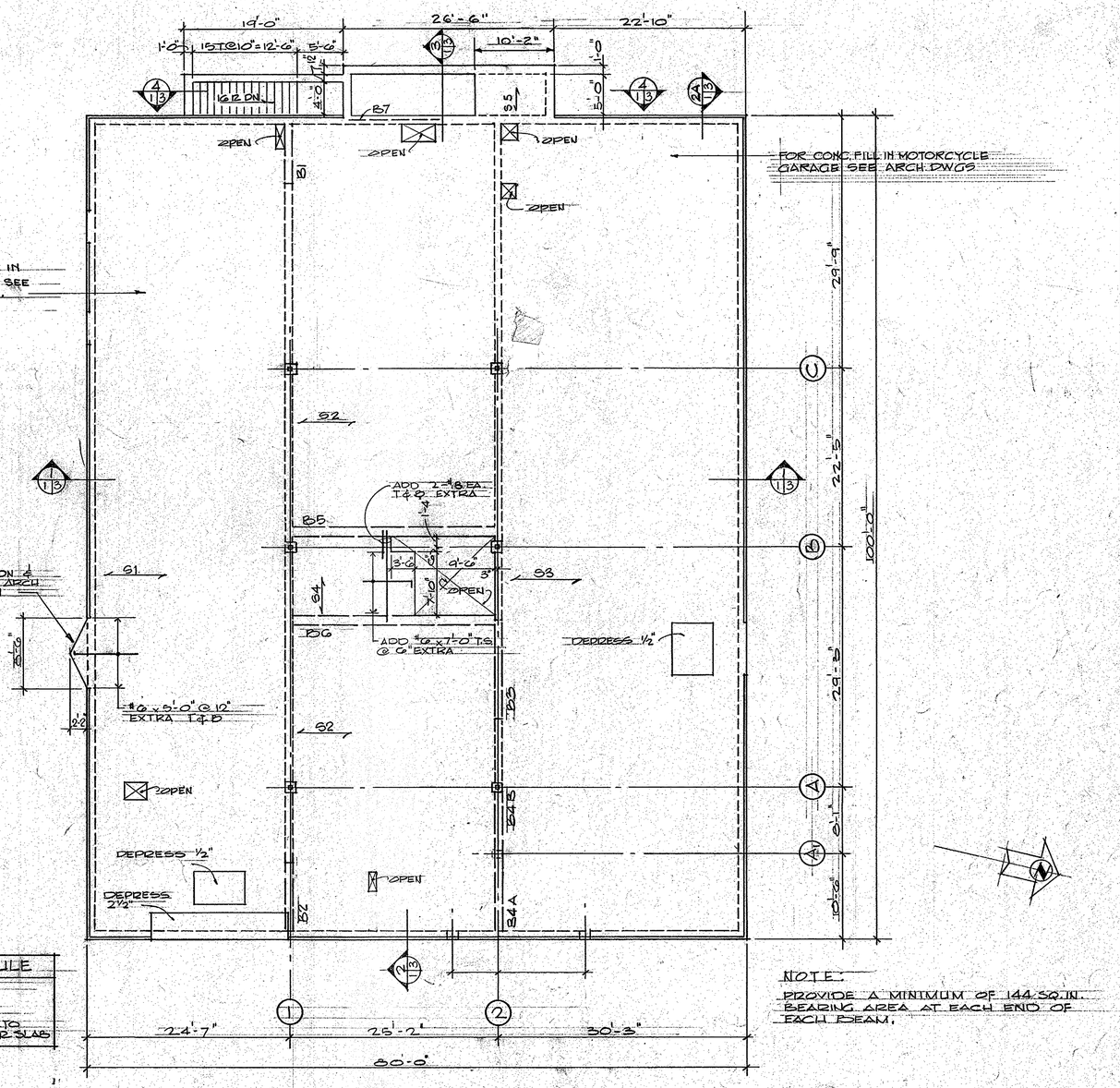


BASEMENT FLOOR & FOUNDATION PLAN

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

CONCRETE COLUMN SCHEDULE

COLUMNS A1, B1, C1, A1/2, A2, B2 C2	SIZE - 14" x 16" REBARS - 4-#7 TIES - #3@12 c/c * DOWEL ALL BARS INTO BSMT MAT & 1ST FLOOR SLAB



FIRST FLOOR FRAMING PLAN

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

NOTE:
PROVIDE A MINIMUM OF 144 SQ. IN. BEARING AREA AT EACH END OF EACH BEAM.

SLAB SCHEDULE

MARK	DEPTH	MAIN REINFORCEMENT: BOTTOM BARS	TOP BARS: L.E.*	TOP BARS: F.L.	TOP BARS: R.E.	TEMPERATURE REINFORCING	REMARKS
S1	10"	#6@6	#5@12	—	#6@6	#5@18	
S2	10"	#6@12	—	#4@11	#7@6	#5@18	
S3	12"	#7@6	—	—	#6@12	#5@12	
S4	10"	#5@12	#5@12	—	#5@12	#5@18	
S5	10"	#5@12	—	#5@12	—	#5@18	

ABBREVIATIONS
L.E. - LEFT END
R.E. - RIGHT END
F.L. - FULL LENGTH

BEAM SCHEDULE

MARK	SIZE: WIDTH	SIZE: DEPTH	REINFORCING: BOTT.	REINFORCING: TOP L.E.*	REINFORCING: TOP F.L.	REINFORCING: TOP R.E.	STIRRUPS: SIZE	STIRRUPS: TYPE	STIRRUPS: SPACING EA. END	REMARKS
B1, B2	10	24	2-#8	—	2-#8	—	#3		2@3, 3@6 E.E. R@10	CAST BEAM MONOLITHIC WITH FLOOR SLABS
B3	10	24	2-#10	—	2-#9	—	#3		4@4, 3@5, 2@6 E.E. R@10	do
B4 A&B	14	24	2-#9	1-#9	2-#9	1-#9	#3		2@3, 3@6 E.E. R@10 E.E.	do
B5, B6	14	24	4-#9	2-#9	3-#9	2-#9	#3		8@3, 4@4, 4@5, 3@6 E.E. R@10	
B7	12	30	2-#8	—	2-#8	—	#3		2@6, 2@10 E.E. R@15	ADD 2-#4 @ MID P.T.

SYMBOLS LEGEND

SECTION NO. / SHEET WHERE SECTION IS CUT — SHEET WHERE SECTION IS DRAWN

* - LOCATION OF BEAM MARK AND OR SLAB MARK DESIGNATES L.E. (LEFT END OF BEAM.)

STATE OF MARYLAND — ALAN CONRAD LOEWER — No. 2358 — REGISTERED PROFESSIONAL ENGINEER

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY — Ellison W. Brown
CHIEF - BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L. Mann		A. Loewer					

SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

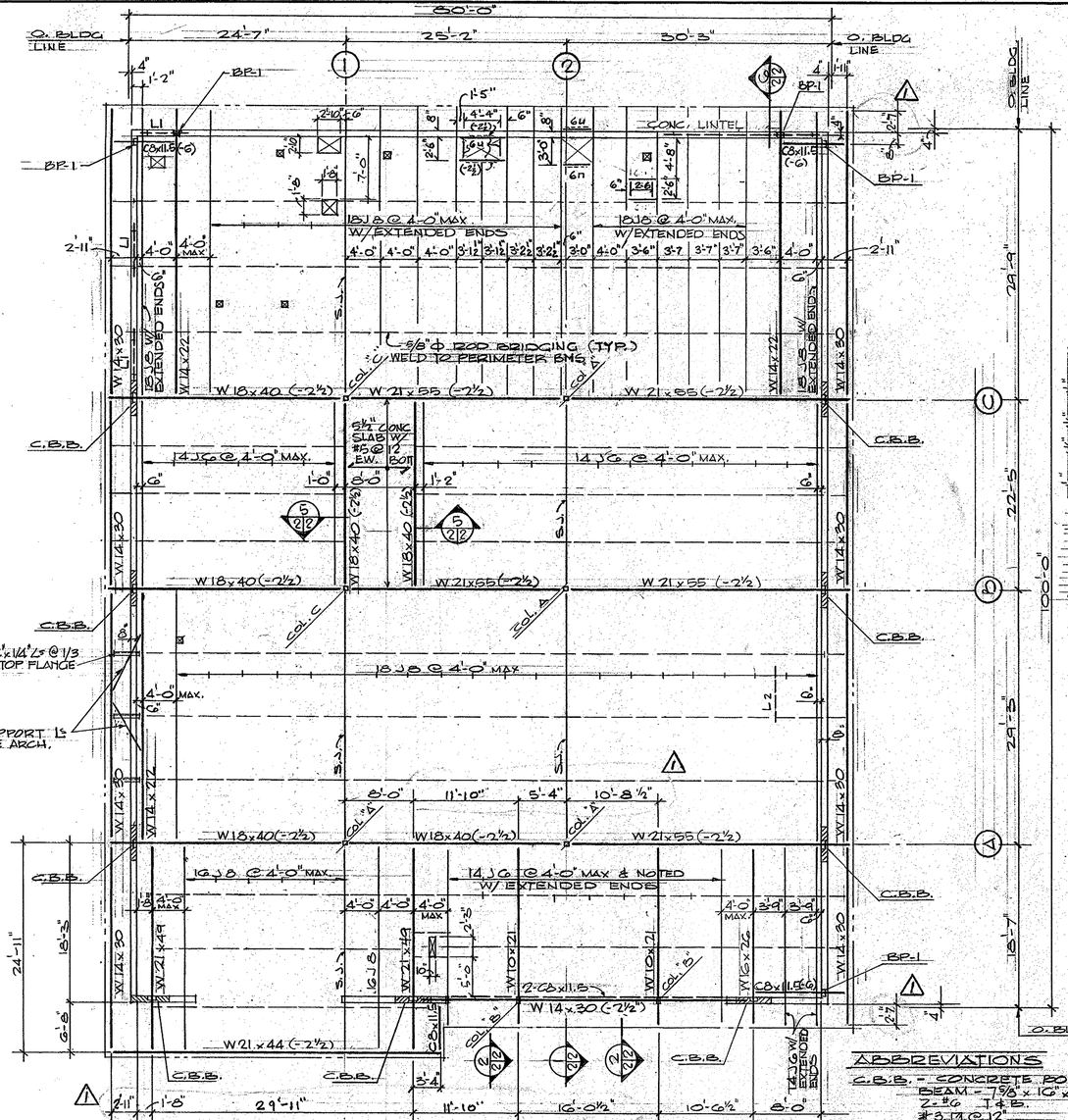
TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND
1970-1583

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND
DRAWN BY: GR
DATE:
CONTRACT NO.: H 2099
DRAWING NO.: S-1
SHEET OF 20
JOB ORDER:
SCALE: AS NOTED
SHEET TITLE: BASEMENT & FOUNDATION PLAN & 1st FL. FRAMING PLAN
90-5-1

MICROFILMED ISW 07 NE 29 20-0983 10 DIST. 15

Contract No. 25022 PPO
Addendum No. 4
Revised: January 12, 2026

PHOENIX 74480

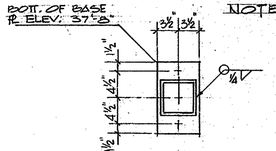


ROOF FRAMING PLAN

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

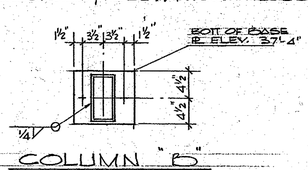
NOTES

1. TOP OF STEEL JOISTS AT ELEV. 49.88 UNLESS NOTED (-)



COLUMN "A"

1. 6x6x¼ x 18.82 TUBE
2. 7 x 1¼ x 1'-0" B.PL
3. 2-¾"ϕ x 1'-6 ANCHOR BOLTS WITH 4" PROJ.
4. 1" NON-SHRINK GROUT SETTING BED



COLUMN "B"

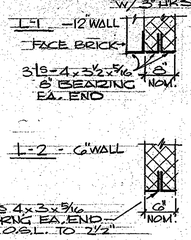
1. 8 x 4 x ¼" x 18.82 TUBE
2. 10 x ¾" x 0'-9" B.PL
3. ¾"ϕ x 1'-6" ANCHOR BOLTS WITH 4" PROJ.
4. 1" NON-SHRINK GROUT SETTING BED

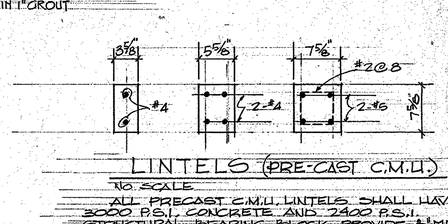
ABBREVIATIONS

C.B.B. - CONCRETE BOLSTER BEAM - 7⅝ x 10" x 4'-0" MIN.
2-#6 T & B.
#3 ⊓ @ 12"
6"x 1¼ x 0'-10" BASE PL w/ 2-¾"ϕ x 1'-6" ANCHOR BOLTS - 4½" PROJ. & 3" HKS

BP-1 - 6" x ¾" - 0'-8" BASE PLATE 2-¾"ϕ x 1'-6" ANCHOR BOLTS W/ 3" HKS SET IN 1" GROUT

S.J. STRUT JOIST AT ℄ OF COL.



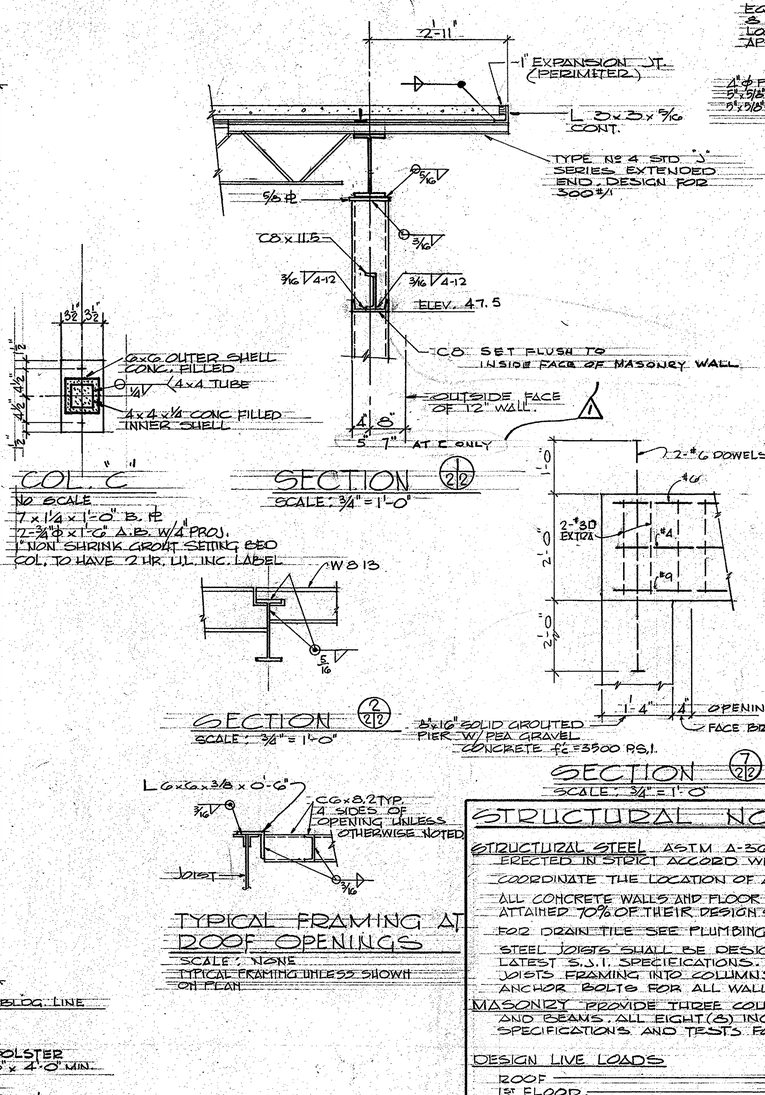


LINTELS (PRE-CAST C.M.U.)

NO SCALE

ALL PRECAST C.M.U. LINTELS SHALL HAVE 3000 P.S.I. CONCRETE AND 2400 P.S.I. STRUCTURAL BEARING BLOCK. PROVIDE 8" MIN. BEARING EACH END. MATCH WALL TEXTURE

NOTE:
FOR ROOF OPENINGS SEE ARCH. AND MECH. DWGS. OPNGS SMALLER THAN 12" SQ SHALL BE FRAMED WITH BULB TEES

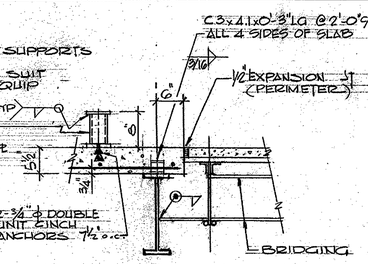


SECTION 1/2/2

SCALE: ¾"=1'-0"

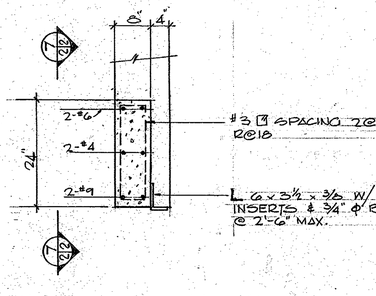
SECTION 2/2/2

SCALE: ¾"=1'-0"



SECTION 5/2/2

SCALE: ¾"=1'-0"



SECTION 7/2/2

SCALE: ¾"=1'-0"

TYPICAL FRAMING AT ROOF OPENINGS

SCALE: NONE

TYPICAL FRAMING UNLESS SHOWN ON PLAN

STRUCTURAL NOTES

STRUCTURAL STEEL ASTM A-36, F_y = 36000 PSI. ALL STRUCTURAL STEEL SHALL BE DETAILED AND ERECTED IN STRICT ACCORD WITH THE LATEST A.I.S.C. CODE.

COORDINATE THE LOCATION OF ALL INSERTS, SLEEVES AND OTHER OPENINGS WITH ALL TRADES.

ALL CONCRETE WALLS AND FLOOR SLABS SHALL BE SECURELY BRACED UNTIL ADJACENT FLOORS HAVE ATTAINED 70% OF THEIR DESIGN STRENGTH.

FOR DRAIN TILE SEE PLUMBING SHEET.

STEEL JOISTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST S.J.I. SPECIFICATIONS. STEEL FABRICATOR SHALL SUPPLY SEATS AND CAP PLATES FOR JOISTS FRAMING INTO COLUMNS. PAINTING AS SPECIFIED. PROVIDE 2-½"ϕ x 1'-0" HK'D ANCHOR BOLTS FOR ALL WALL BEARING JOISTS. PROVIDE ¼" THK BEARING PLATES.

MASONRY PROVIDE THREE COURSES OF SOLID BEARING UNDER ALL WALL BEARING JOISTS AND BEAMS. ALL EIGHT (8) INCH HOLLOW CONCRETE BLOCK SHALL CONFORM TO SPECIFICATIONS AND TESTS FOR LOAD-BEARING CONCRETE MASONRY UNITS.

DESIGN LIVE LOADS

ROOF	30 P.S.F.
1st FLOOR	100 P.S.F.
BSMT	100 P.S.F.

SOIL BEARING VALUE (undisturbed soil) 3000 P.S.F.

COMPACTION ALL FILL AND THE TOP 6" OF CUT UNDER BASEMENT FLOOR SLAB SHALL BE COMPACTED TO 95% OF OPTIMUM DENSITY.

CONCRETE: ALL BUILDING STRUCTURAL CONCRETE SHALL BE 145 P.C.F., BALTO CO. CLASS A
MUD SLAB UNDER BASEMENT SHALL BE 145 PCF, f'_c = BALTO CO. CLASS B
ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301 & 318

CONCRETE PROTECTION (UNLESS NOTED OTHERWISE)

BSMT WALLS	2" CL. EXT., ¾" CL. INT.
SLABS	¾" CL.
BEAMS	1½" CL.
COLUMN TIES	1½" CL.

REINFORCING STEEL ASTM 615, GRADE 60, F_y = 24000 P.S.I., ALL REINFORCING STEEL SHALL BE DETAILED AND ERECTED IN STRICT ACCORD WITH THE LATEST A.C.I. CODE AND DETAILING MANUAL.

7-26-72	AS BUILT		
DATE	REVISION	BY	

COUNTY EXECUTIVE	AGENCY	CHIEF – BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT	MECHANICAL CONSULTANT
LOEWER & ASSOCIATES	LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
P.L. Mann		K.B. Hamm					

STATE OF MARYLAND — ALBERT CONRAD LOEWER JR. — No. 2288 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND
1970-1584

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: R | DRAWING NO. S-2
DATE | CONTRACT NO. H 2039 | 10 OF 20
JOB ORDER | SCALE 30-5-1 AS NOTED

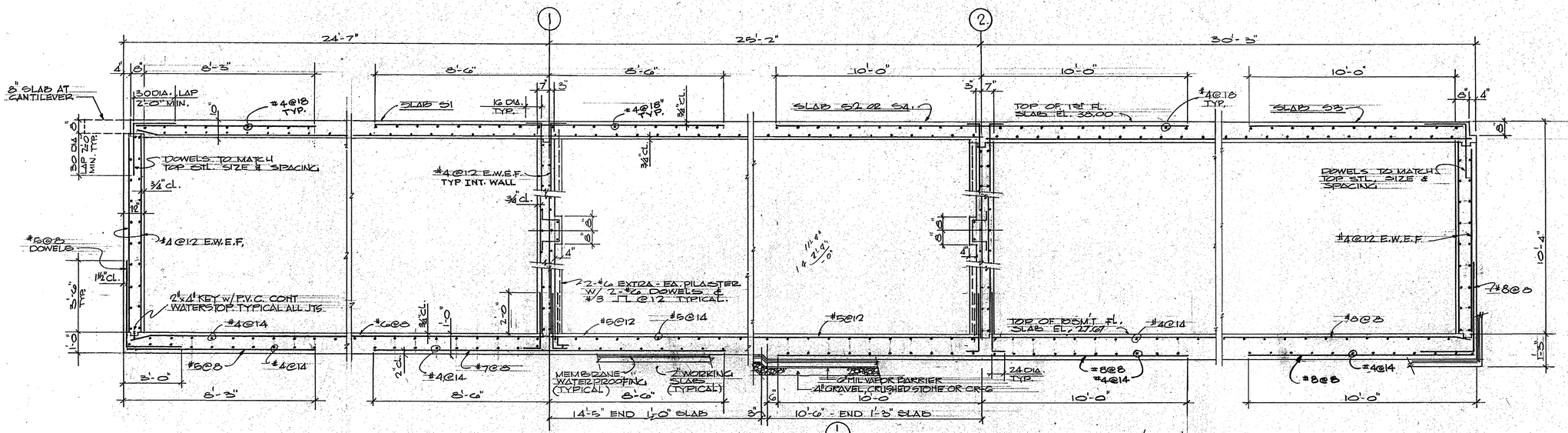
SHEET TITLE: ROOF FRAMING PLAN, SECTIONS & DETAILS

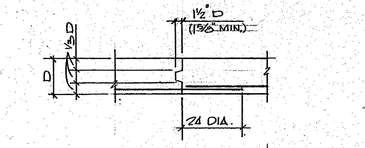
MICROFILMED I SW 07 NE 29 70-6983, 11 DIST 15

Contract No.25022 PPO
Addendum No.4
Revised, January 12, 2026

K&E PHOENIX 74480 THUNDERBIRD

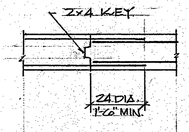
Drawing No. 1970-1584 Oct 26, 2012 8:13:34 AM



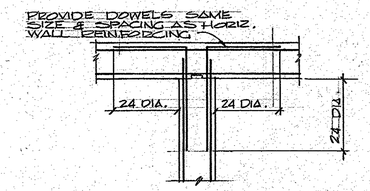


SLAB JOINT

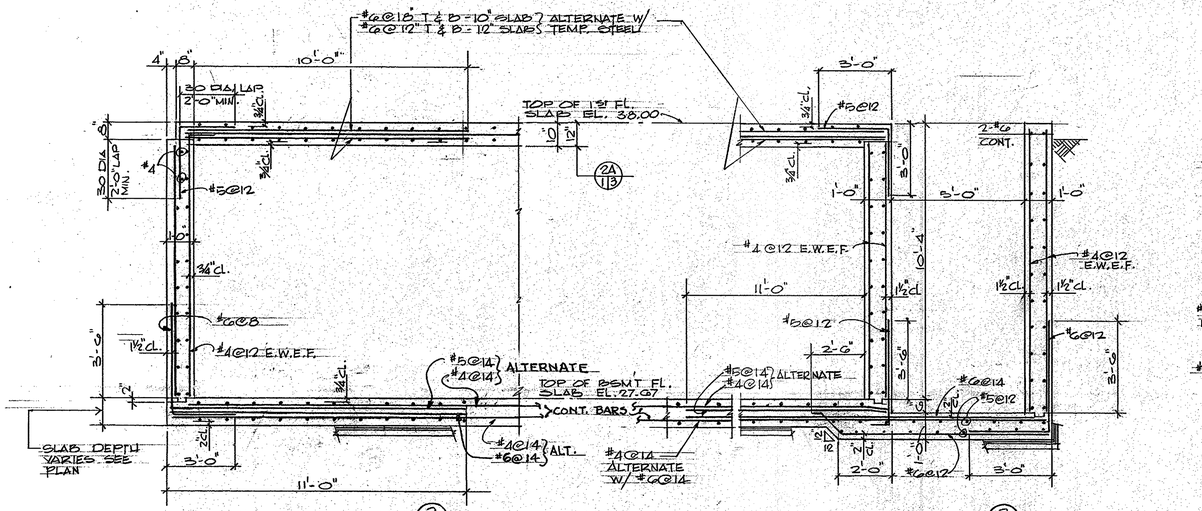
COAT ALL JOINTS W/ METALLIC WATER PROOFING PRIOR TO POURING ADJACENT CONCRETE TYP @ ALL SLAB JTS. AND WALL JTS



WALL JOINT
(VERT.)



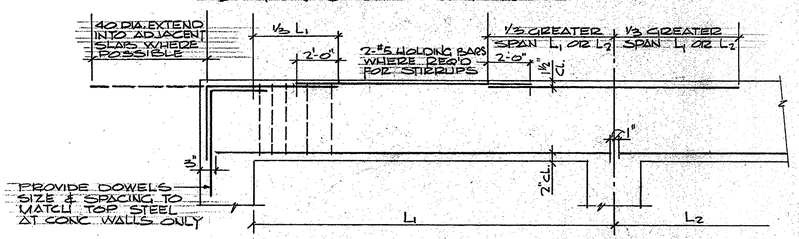
WALL INTERSECTION



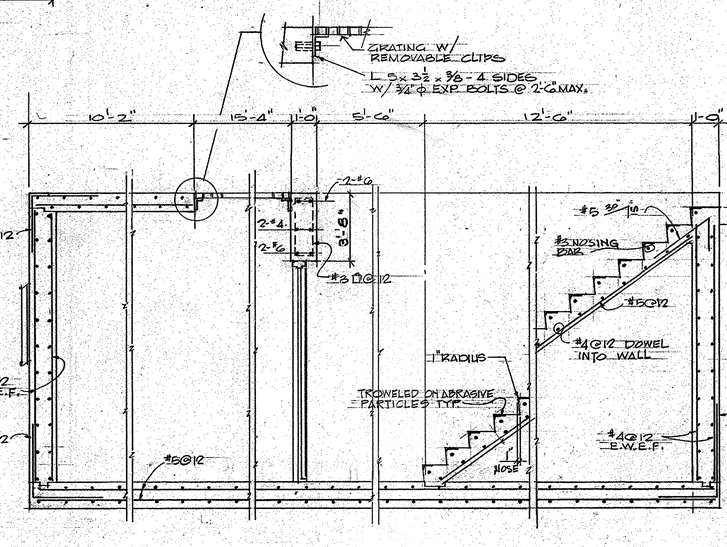
SECTION (2/1B)
SCALE: 3/8" = 1'-0"

SECTION (3/1B)
SCALE: 3/8" = 1'-0"

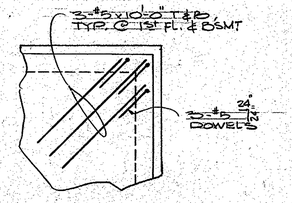
SECTION 2A/1B SIMILAR and AS NOTED



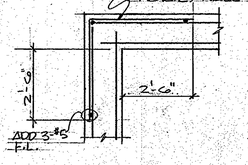
BEAM REINFORCING DIAGRAM



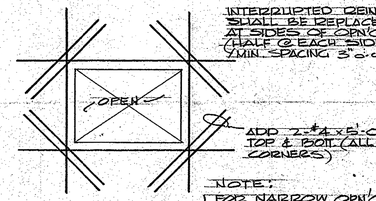
SECTION (4/1B)
SCALE: 3/8" = 1'-0"



SLAB CORNER



WALL CORNER



OPENING IN WALL OR SLAB

TYPICAL DETAILS

NO SCALE

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS

AGENCY: Ellison F. Lomax

CHIEF – BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING
R.L. Mann — STRUCTURAL
K.P. Mann — MECHANICAL
ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

STATE OF MARYLAND — ALLEN CONRAD LOEWER JR. — No. 25598 — PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970 - 1585

ARCHITECT: LOEWER & ASSOCIATES
BALTIMORE, MARYLAND

DRAWN BY: RB
DATE:
CONTRACT NO.: H 2039
JOB ORDER: 80-59-1
DRAWING NO.: S-3
11 OF 20
SCALE: AS NOTED

SHEET TITLE: SECTIONS & DETAILS

MICROFILMED

1 SW 07NE29 70-0983-12 Dist. 15

Contract No. 25022 PP0
Addendum No. 4
Revised, January 12, 2026

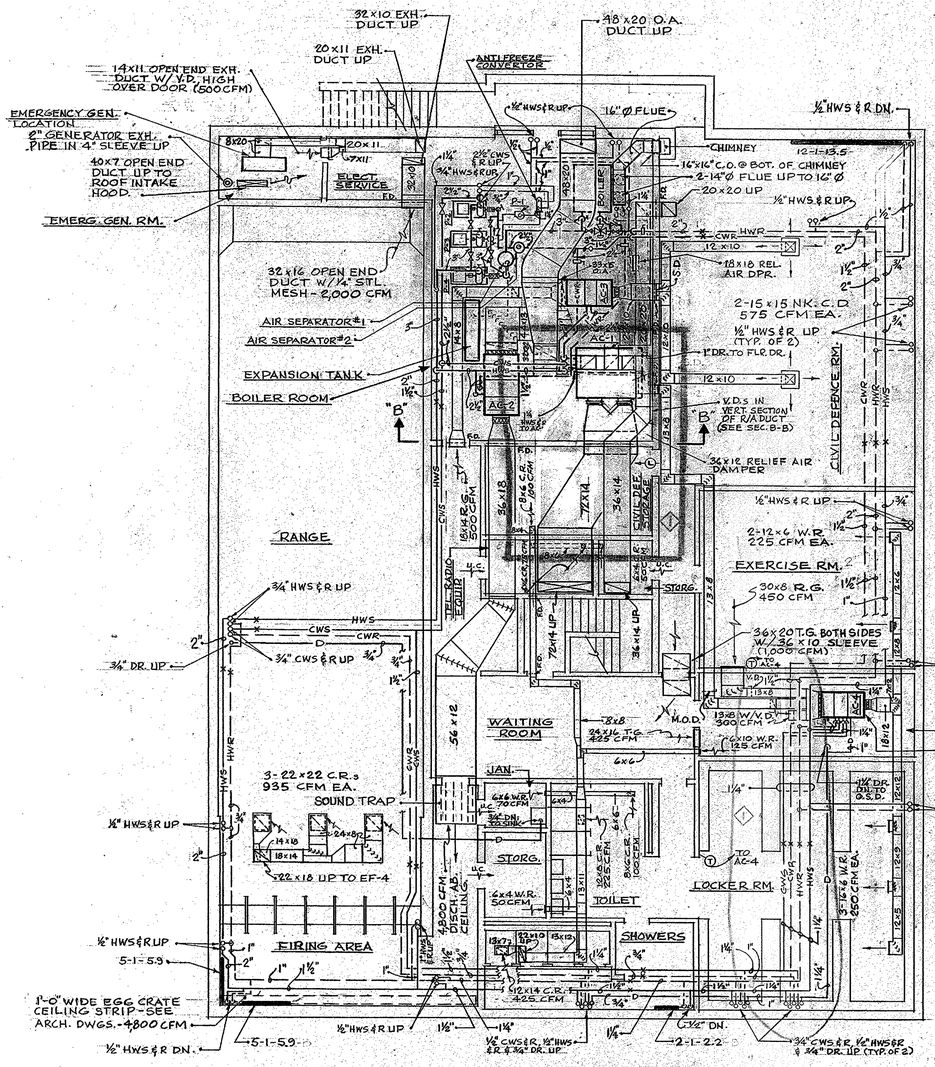
Arnold Oct 28, 2025 8:13:36 AM

SYMBOLS

—CWS—	-CHILLED WATER SUPPLY PIPING
—CWR—	-CHILLED WATER RETURN PIPING
—HWS—	-HOT WATER HEATING SUPPLY PIPING
—HWR—	-HOT WATER HEATING RETURN PIPING
—D—	-CONDENSATE DRAIN PIPING
—⋈—	-GATE VALVE
—N—	-CHECK VALVE
—⊟—	-BUTTERFLY VALVE
—◇—	-PLUG COCK VALVE
—○—	-GLOBE VALVE
—T—	-CONTROL VALVES
—⋈—	-BALANCE-STOP VALVE
—PR—	-PRESSURE REDUCING VALVE
—R—	-PRESSURE RELIEF VALVE
—X—	-PIPE ANCHOR
—Y—	-STRAINER
—T—	-THERMOMETER
—P—	-GAGE
▬▬	-FIN-TUBE RADIATION
▭	-FAN COIL UNIT (FCU)
Ⓣ	-THERMOSTAT LOCATION
—L—	-LOUVERED DOOR
—U—	-UNDER CUT DOOR
M.O.D.	-MOTER-OPERATED DAMPER
V.D.	-VOLUME DAMPER (MANUAL)
S.D.	-SPLITTER DAMPER
F.D.	-FIRE DAMPER
C.D.	-CEILING DIFFUSER
C.R.	-CEILING REGISTER
C.G.	-CEILING GRILLE
T.G.	-TRANSFER GRILLE
R.G.	-RETURN GRILLE
W.R.	-WALL REGISTER
NK.	-NECK
E.F.	-EXHAUST FAN
S/A	-SUPPLY AIR
R/A	-RETURN AIR
O/A	-OUTSIDE AIR
MIN.	-MINIMUM
MAX.	-MAXIMUM
S.P.	-STATIC PRESSURE
P.D.	-PRESSURE DROP
DPR.	-DAMPER
C.W.	-COLD WATER
Ø	-DIAMETER
C.O.	-CLEAN OUT DOOR
F.C.U.	-FAN COIL UNIT
	-EXTRACTOR
V.P.C.D.	-VANDEL PROOF CEILING DIFFUSER

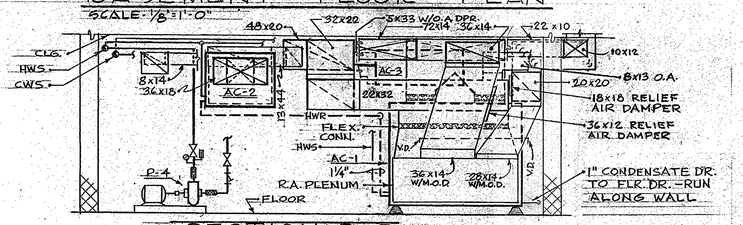
GENERAL NOTES

1. ALL DIFFUSERS, REGISTERS & GRILLES SHALL BE SELECTED AT MAX. 0.05" S.P. DROP @ CFM's LISTED.
2. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS OF PIPING SYSTEMS.
3. ELECTRICAL CHARACTERISTICS OF ALL MECHANICAL EQUIPMENT SHALL BE CHECKED AND VERIFIED WITH THE ELECTRICAL DWGS.
4. BASE MOUNTED PUMPS P-1, P-3, & P-4 SHALL BE MOUNTED ON A MIN. 6 INCH HIGH REINFORCED CONCRETE PAD.



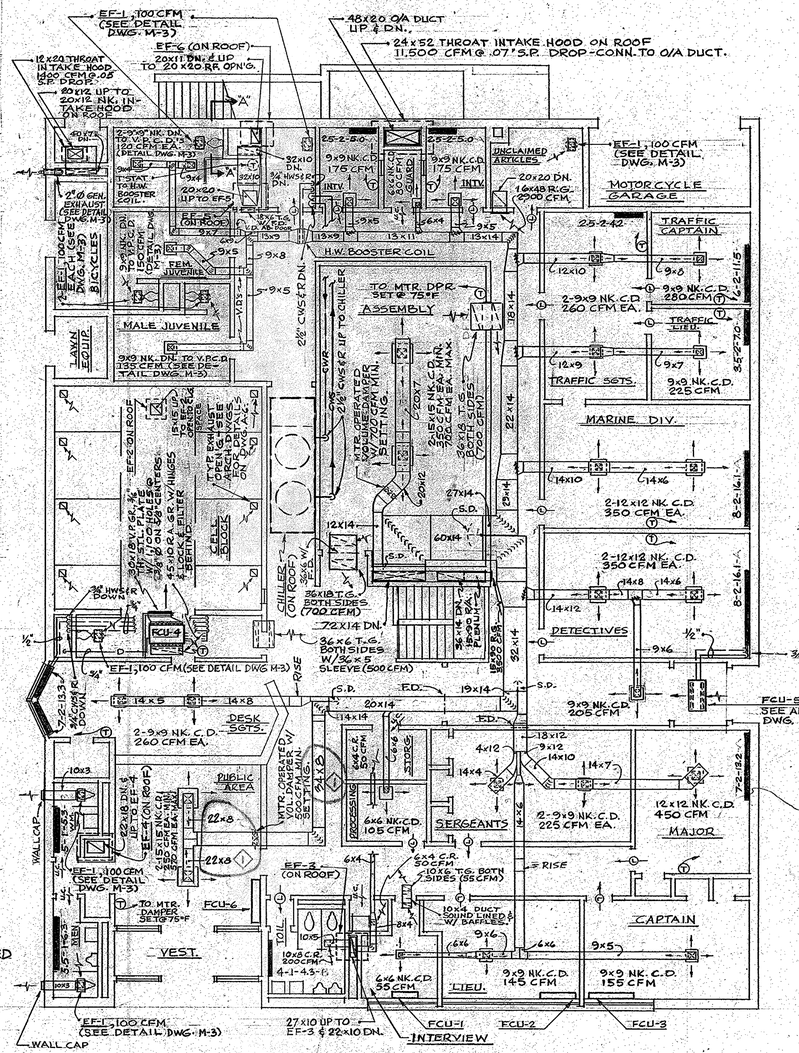
BASEMENT FLOOR PLAN

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



SECTION B-B

SCALE: ¼" = 1'-0"



FIRST FLOOR PLAN

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

7-26-72	AC-1 DISCH. CWS & CWR PIPES, DUCT SIZES	TMR	1	AS BUILT							
DATE	REVISION	BY	REV. No.								

COUNTY EXECUTIVE	AGENCY	CHIEF - BUREAU OF ENGINEERING	STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES	MECHANICAL CONSULTANT: LOEWER & ASSOCIATES					
ADMINISTRATIVE OFFICER			BUREAU OF ENGINEERING						
DIRECTOR OF PUBLIC WORKS			STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING

STATE OF MARYLAND — ALVIN EDWARD LOEWER, JR. — No. 2398 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970-1580

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY	DRAWING NO.
F.S.	M-1
DATE	
CONTRACT NO. H2059	
JOB ORDER 30-5-1	SCALE AS NOTED

SHEET TITLE: BASEMENT & FIRST FLOOR MECHANICAL

12 OF 20

MICROFILMED — I SW 02 NE 29 — 13 DIST. 15

Contract No. 25022 PPO
Addendum No. 4
Revised, January 12, 2026

PHOENIX — 76480

Arnold Oct 26, 2022 8:14:56 AM

PUMP SCHEDULE

MARK	GPM	HEAD FT. WTR	MTR. H.P.	VOLT	PHASE
P-1	10	5	1/8	120	1
P-2	71	52	2	208	3
P-3	108	43	2	208	3
P-4	108	43	2	208	3

PROTOTYPES; P-1, "TACO" IN-LINE
P-2, 3 & 4, "TACO" L.P.

FAN COIL UNIT SCHEDULE

MARK	NOM. CFM	COOLING COIL * SENS. MBH	COOLING COIL * TOTAL MBH	COOLING COIL * GPM	COOLING COIL * COIL P.D.	HEATING COIL ** MBH	HEATING COIL ** GPM	HEATING COIL ** COIL P.D.	HEATING COIL ** E.A.T.	PROTOTYPE	REMARKS
FCU-1	700	2.9	3.2	1.0	1.7'	6.5	.7	0.5'	60°	TRANE "UNITRANE	VERTICAL, VCAB-22
FCU-2	400	7.8	8.3	2.0	4.8'	13.6	1.4	2.7'	60°	TRANE "UNITRANE	VERTICAL, VCAB-22
FCU-3	600	8.4	8.7	2.0	4.9'	16.1	1.6	5.0'	60°	TRANE "UNITRANE	VERTICAL, VCAB-22
FCU-4	800 ***	14.8	16.7	3.0	1.5'	17.3	2.0	2.5'	70°	TRANE "UNITRANE	HORIZONTAL, HCAB-34
FCU-5	300	—	—	—	—	8.1	1.0	0.24'	60°	TRANE "FORCE FLO	HORIZONTAL, ARRG. E-46
FCU-6	800	—	—	—	—	49.5	5.0	1.17'	60°	TRANE "FORCE FLO	VERTICAL, ARRG. B-42

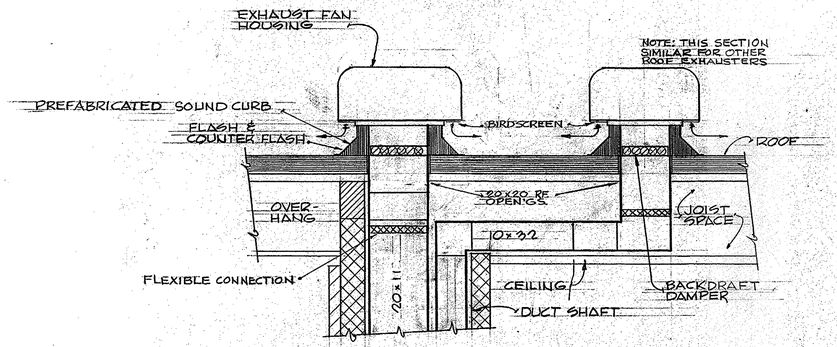
* COOLING CAPACITIES BASED ON 45°F E.W.T. AND 75°F D.B. AND 63°F W.B. E.A.T.
** HEATING CAPACITIES BASED ON 200°F E.W.T.
*** ECU-4 = 800 CFM @ 0.15" S.P. EXTERNAL TO FILTER

EXHAUST FAN SCHEDULE

MARK	CFM	S.P.	T.S. MAX.	APPROX. RPM	MOTOR HP	MOTOR VOLT	MOTOR ϕ	FAN TYPE	DRIVE	PROTOTYPE	REMARKS
EF-1	100	.10	3000	1050	1/25	120	1	CENT	DIRECT	"PENN" ZEPHYR	WITH BER ROOFCAP OR WC-10 WALL CAP
EF-2	400	.20	2850	860	1/6	120	1	PRV	BELT	"PENN" LC	WITH SONOTROL AND BACK DRAFT DAMPER
EF-3	1520	.375	4390	1015	1/3	208	3	PRV	BELT	"PENN" LC	WITH SONOTROL AND BACK DRAFT DAMPER
EF-4	2800	.25	4130	765	1/2	208	3	PRV	BELT	"PENN" LC	D.O.
EF-5	2000	.125	4245	980	1/3	208	3	PRV	BELT	"PENN" LC	D.O.
EF-6	1400	.25	3850	870	1/4	208	3	PRV	BELT	"PENN" LC	D.O.

AIR HANDLING UNIT SCHEDULE

MARK	SUPPLY CFM	O.A. MIN.	EXT. S.P. (INCHES W.G.)	MOTOR HP	MOTOR VOLT	MOTOR ϕ	COOLING COIL MAX. F.V. (F.P.M.)	COOLING COIL ENT. AIR TEMP. D.B.	COOLING COIL ENT. AIR TEMP. W.B.	COOLING COIL LVG. AIR TEMP. D.B.	COOLING COIL LVG. AIR TEMP. W.B.	COOLING COIL GPM	COOLING COIL COIL P.D.	HEATING COIL MAX. F.V. (F.P.M.)	HEATING COIL E.A.T. D.B.	HEATING COIL L.A.T. D.B.	HEATING COIL GPM	HEATING COIL COIL P.D.	MAX. FILTER VEL.	PROTOTYPE	REMARKS
AC-1	8000	1600	0.60	5	208	3	500	81.8°	67.0°	56.0°	54.5°	51.5	7'	500	55°	70°	13	5'	300	TRANE "CLIMATE CHGER	VERTICAL
AC-2	4800	4800	0.50	3	208	3	—	—	—	—	—	—	—	700	0°	72°	50	3'	300	TRANE "TORRIVENT	HORIZONTAL
AC-3	1200	650	0.20	3/4	208	3								700	33°	72°	6.8	5'	300	TRANE "TORRIVENT	HORIZONTAL
AC-4	1200	450	0.30	3/4	208	3	500	87.5°	73.0°	62.3°	56.3°	11.5	7'	500	43.5°	76°	4.7	2'	300	TRANE "CLIMATE CHGER	HORIZONTAL



SECTION A-A
NO SCALE

EQUIPMENT LIST

BOILER – SHALL HAVE A GROSS A.G.A. OUTPUT CAPACITY OF 1,000,000 BTUH WITH 1,250,000 BTUH GAS INPUT. PROTOTYPE; "NATIONAL-U.S.", SERIES 66.

CHILLER – UNIT SHALL COOL 71 GPM OF WATER FROM 57°F TO 45°F WITH 95°F AMBIENT AIR AND CHILLER SCALE FACTOR OF .0005. PRESSURE DROP THRU CHILLER TUBES SHALL NOT EXCEED 10.0 FEET WATER GAGE. PROTOTYPE; TRANE TYPE CGAC, 208 VOLT, 3 PHASE.

CONVERTOR (ANTI-FREEZE) – SHALL HEAT 10 GPM OF WATER FROM 34°F TO 40°F WITH 200°F ENTERING WATER TEMPERATURE. PRESSURE DROP THRU CONVERTOR TUBES SHALL NOT EXCEED 1.0 FOOT WATER GAGE. PROTOTYPE; "TACO".

AIR SEPARATOR #1 – CAPACITY SHALL BE 108 GPM AT MAXIMUM 2 FEET WATER GAGE PRESSURE DROP. PROTOTYPE; "TACO"

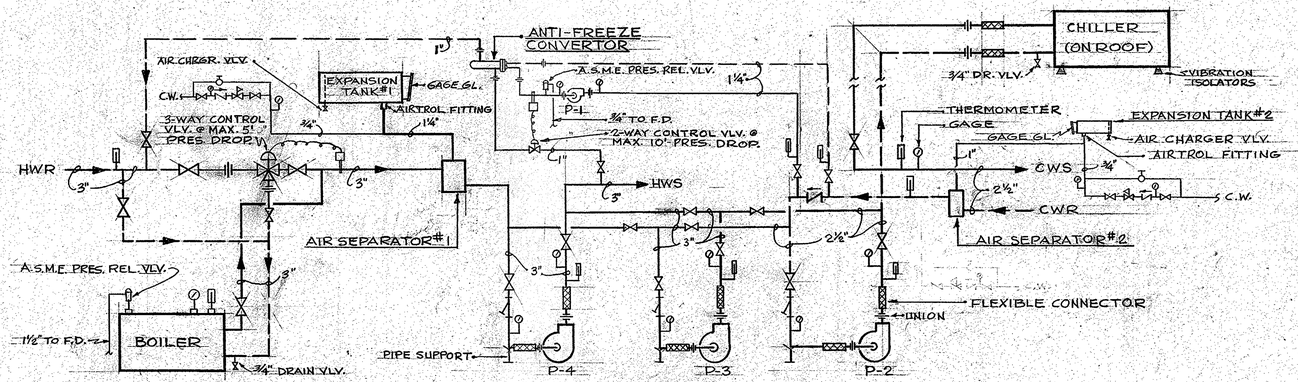
AIR SEPARATOR #2 – CAPACITY SHALL BE 71 GPM AT MAXIMUM 2 FEET WATER GAGE PRESSURE DROP PROTOTYPE; "TACO".

EXPANSION TANK #1 – MINIMUM CAPACITY AT 85 GALLON. APPROX. SIZE AT 82" LONG X 20" DIAMETER. PROTOTYPE; "TACO"

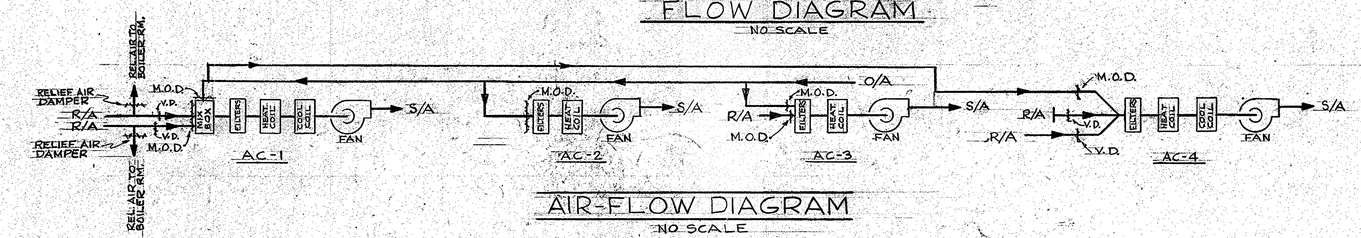
FIN-TUBE-RAD. – ONE ROW CAPACITY AT 1165 BTUH/L.F. AND TWO ROW CAPACITY AT 2020 BTUH/L.F. BASED ON 190°F AVG. ENTERING WATER, 60°F ENTERING AIR AND 0.25 FEET/SECOND WATER VELOCITY THRU TUBES. PROTOTYPE; "VULCAN" LINOVECTOR. FINTUBE SYMBOL AS FOLLOWS; L.F. OF ACTIVE ELEMENT — 0-0-00.0 — MBH ROWS.

EXPANSION TANK #2 – MINIMUM CAPACITY AT 15 GALLON, APPROXIMATE SIZE AT 39" LONG X 12" DIAMETER. PROTOTYPE; "TACO".

H.W. BOOSTER COIL – SHALL HEAT 525 CFM FROM 60°F TO 103°F WITH 3.2 GPM OF 200°F ENTERING WATER. MAX. W.P.R. PRES. DROP @ 10 FT. W.G., MAX. AIR PRES. DROP @ .05 INCH W.G. PROTOTYPE; "TRANE" WS



FLOW DIAGRAM
NO SCALE



AIR-FLOW DIAGRAM
NO SCALE

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY
CHIEF – BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING
STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

STATE OF MARYLAND — ALAN MORRAD LOEWER, JR. — No. 2288 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY · DEPARTMENT OF PUBLIC WORKS · BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970-1587

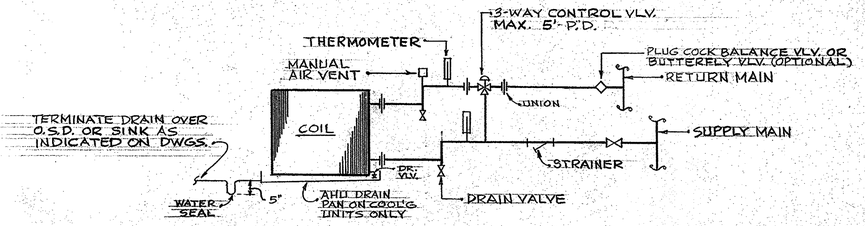
ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND
DRAWN BY: P.S.
DATE:
CONTRACT NO.: H.2099
DRAWING NO.: M-2
JOB ORDER: 30-5-1
SCALE: AS NOTED
SHEET TITLE: MECHANICAL SCHED, EQUIP'T & FLOW DIAG.
13 OF 20

MICROFILMED I SW 07/16/29 ~~78-0983~~ 14 DIST 15

Contract No.25022 PP0
Addendum No.4
Revised, January 12, 2026

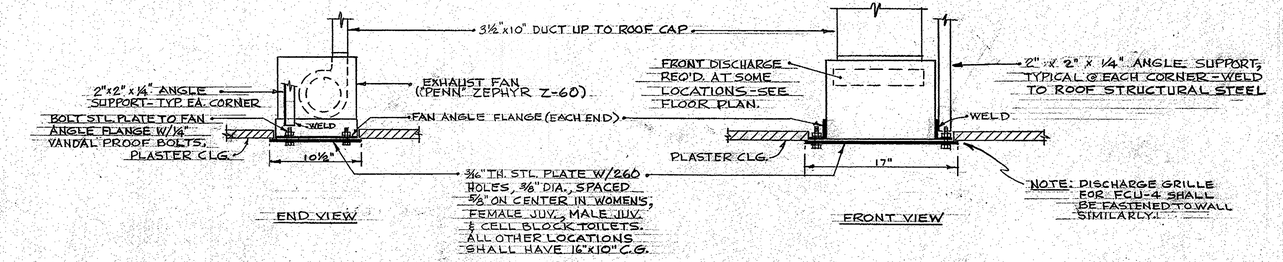
K&E PHOENIX 74480

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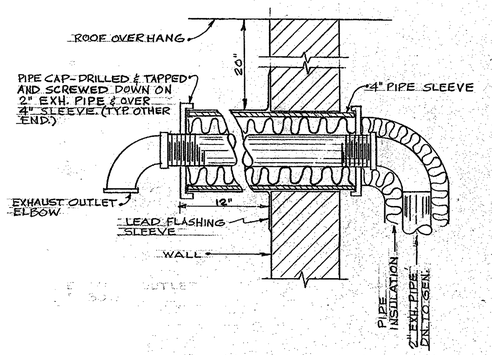
A.H.U. COOLING & HEATING COIL CONNECTION DETAIL

NO SCALE



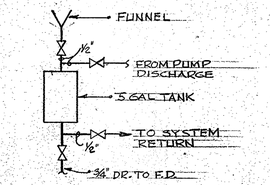
EF-1 DETAIL (TYPICAL)

NO SCALE



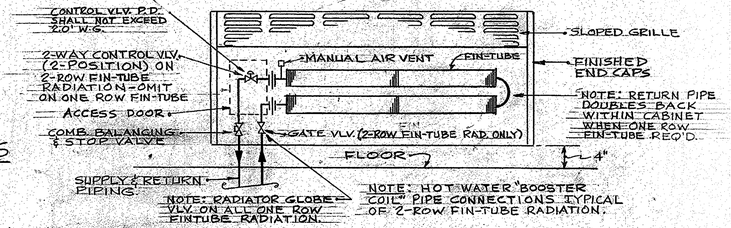
GENERATOR EXHAUST DETAIL

NO SCALE



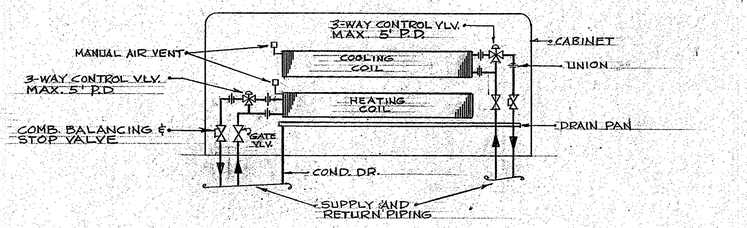
WATER TREATMENT FEEDER-TYPICAL FOR CHILLED AND HOT WATER SYSTEMS

NO SCALE



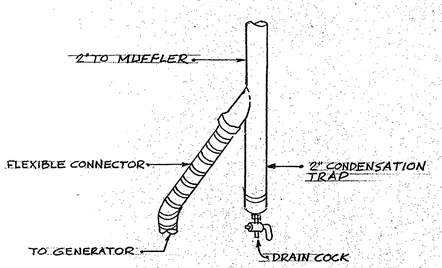
FIN-TUBE RADIATION CONNECTION DETAIL

NO SCALE



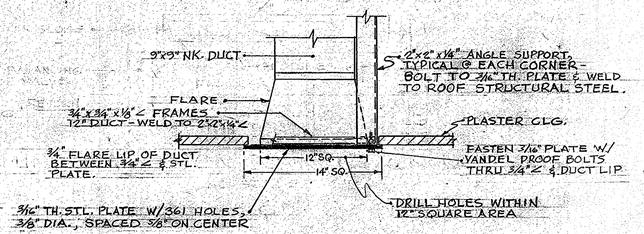
F.C.U. (HEATING-COOLING) CONNECTION DETAIL

NO SCALE



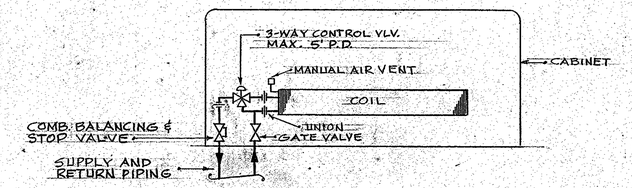
GENERATOR CONDENSATION TRAP DETAIL

NO SCALE



V.P.C.D. DETAIL

NO SCALE



F.C.U. (HEATING ONLY) CONNECTION DETAIL

NO SCALE

DATE	REVISION	BY

COUNTY EXECUTIVE	AGENCY: Ellison D. Emerson	CHIEF-BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES

MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING

SEAL: STATE OF MARYLAND · ALVIN CONRAD LOEWER · No. 2398 · REGISTERED PROFESSIONAL ENGINEER

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970-1588

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

SHEET TITLE: MECHANICAL DETAILS

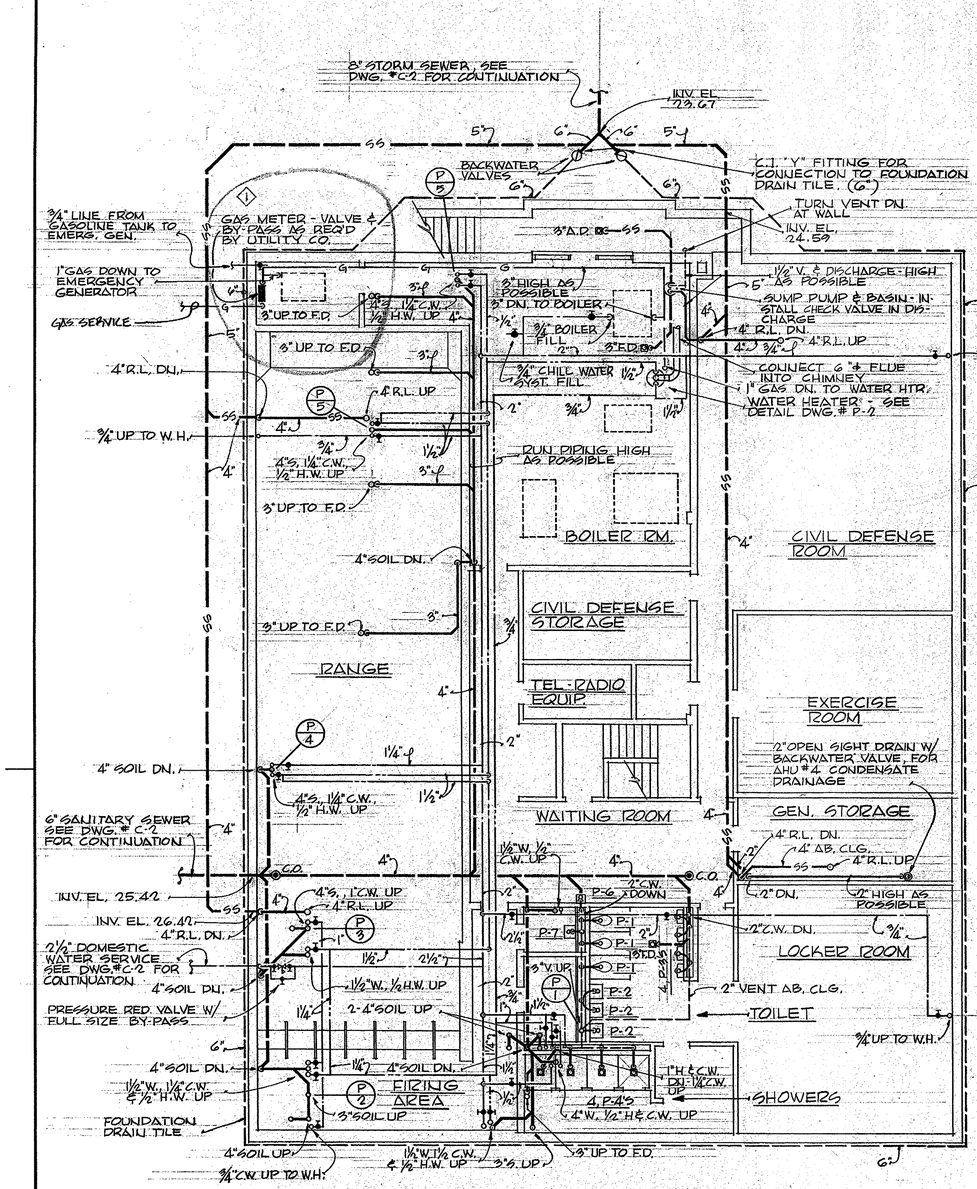
DRAWN BY	DRAWING NO.
FS	M-3
DATE	
CONTRACT NO. H 2039	14 OF 20
JOB ORDER 30-5-1	SCALE AS NOTED

MICROFILMED

I SW 09NE29 70-0785 15 DIST 15

Contract No.25022 PPO
Addendum No.4
Revised, January 12, 2026

Plotted: Oct 28, 2025 8:18:53 AM



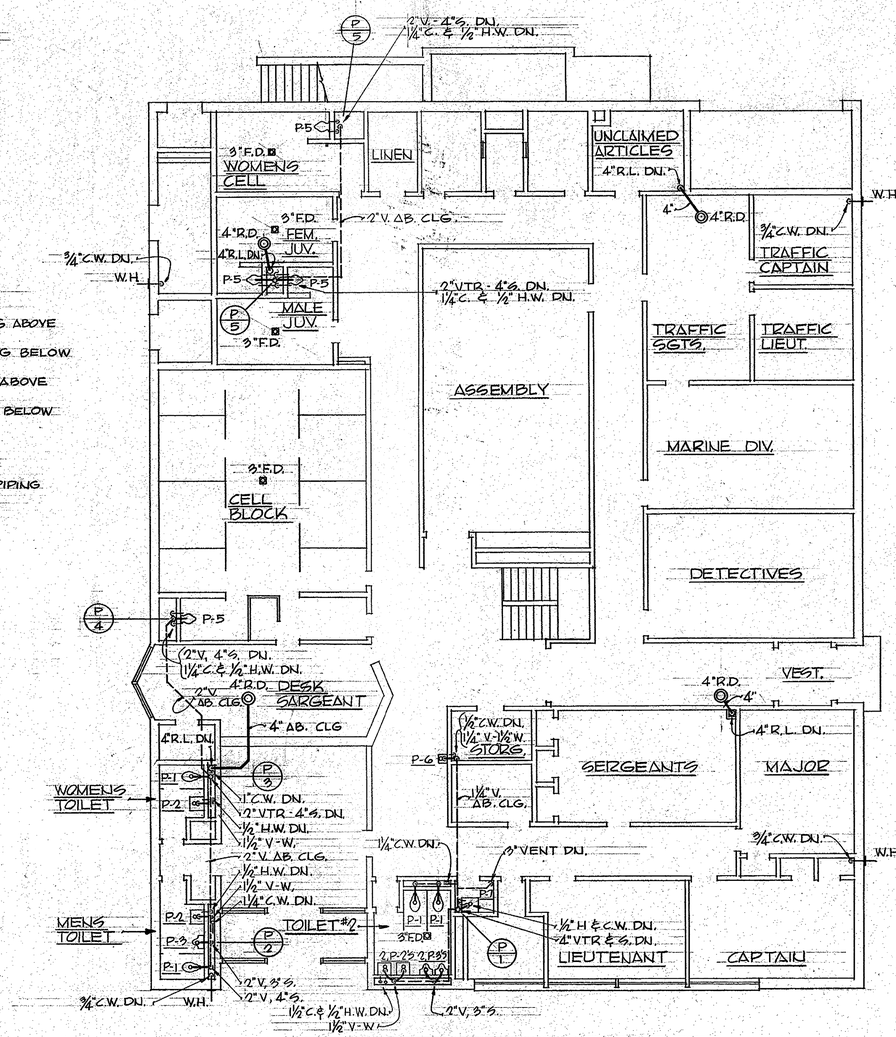
SUBMERSIBLE SUMP PUMP SHALL HAVE CAPACITY TO PUMP 30 GPM @ 20 FT. HD. PROTOTYPE, WEIL SS 805-HD. BASIN SHALL BE C.I. 18" x 5'-6" DEEP WITH GAS TIGHT COVER.

SYMBOLS

- SOIL &/OR WASTE PIPING ABOVE GRADE
- SOIL &/OR WASTE PIPING BELOW GRADE
- SS - STORM SEWER PIPING ABOVE GRADE
- SS - STORM SEWER PIPING BELOW GRADE
- VENT PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- H.W. RE-CIRCULATING PIPING
- ELBOW LOOKING UP
- ELBOW LOOKING DOWN
- GATE VALVE
- R.D. - ROOF DRAIN
- F.D. - FLOOR DRAIN
- C.O. - CLEAN OUT
- W.H. - WALL HYDRANT
- C.W., H.W. - COLD - HOT WATER
- R.L. - RAIN LEADER
- V.W. - VENT - WASTE
- AB. CLG. - ABOVE CEILING
- S. - SOIL

BASEMENT FLOOR PLAN

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



FIRST FLOOR PLAN

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

NOTES:

1. FOR PIPE SIZES NOT SHOWN, SEE RISER DIAGRAMS ON DWG. # P-2.
2. WATER PIPE SIZES BASED ON 80 PSI @ STEET MAIN.
3. TOTAL CONNECTED GAS LOAD 1,405,000 BTU/HR.
4. ALL FLOOR DRAINS SHALL HAVE A TRAP PRIMER CONNECTED TO THE NEAREST PLUMBING FIXTURE C.W. SUPPLY.

DATE	REVISION	BY	NO.
7-16-73	GAS LINE - AS BUILT	TMB	1

COUNTY EXECUTIVE	AGENCY Ellison N. Jones	CHIEF - BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES

MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

RLM STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING

STATE OF MARYLAND — ALAN CONRAD LOEWER — No. 2398 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970 - 1589

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

SHEET TITLE: BASEMENT & FIRST FLOOR PLUMBING PLANS

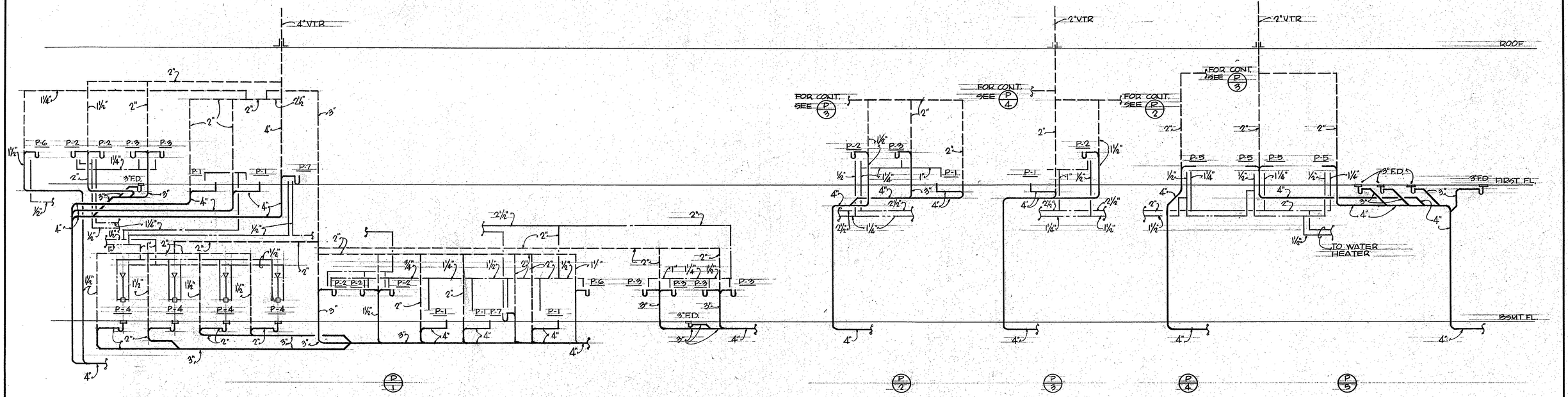
DRAWN BY	DRAWING NO.
PEN	P-1
DATE	
CONTRACT NO. H 2059	15 OF 20
JOB ORDER 20-5-1	SCALE AS NOTED

MICROFILMED — I SW 07 NE 29 — ~~220373~~ 16 DIST 15

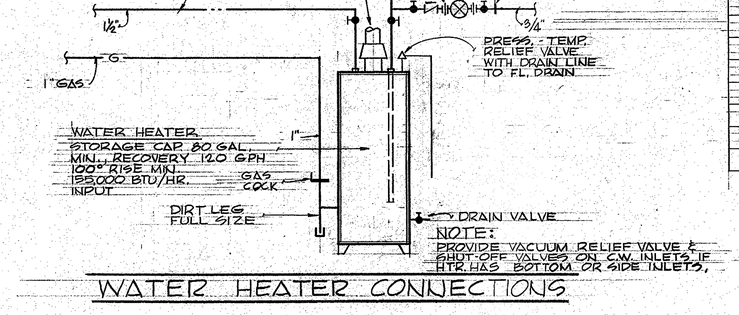
Contract No. 25022 PP0
Addendum No. 4
Revised, January 12, 2026

K&E PHOENIX 74480

Oct 26, 2023 8:30:09 AM



PLUMBING RISER DIAGRAMS



WATER HEATER CONNECTIONS

FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	TRAP	VENT	C.W.	H.W.
P-1	WATER CLOSET	4"	2"	1"	-
P-2	LAVATORY	1½"	1½"	½"	½"
P-3	URINAL	3"	2"	1"	-
P-4	SHOWER	2"	1½"	½"	½"
P-5	COMBINATION FIXTURE	4"	2"	1¼"	½"
P-6	ELECTRIC WATER CLR.	1½"	1¼"	½"	-
P-7	SERVICE SINK	3"	2"	½"	½"

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY
CHIEF – BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING
STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

SEAL: STATE OF MARYLAND · ALLEN GERARD LOEWER, JR. · No. 2398 · REGISTERED PROFESSIONAL ENGINEER

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970-1590

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: PEN
DATE:
CONTRACT NO.: H 2093
DRAWING NO.: P-2
16 OF 20
JOB ORDER: 50-5-1
SCALE: NO SCALE

SHEET TITLE: PLUMBING RISER DIAGRAMS & DETAILS

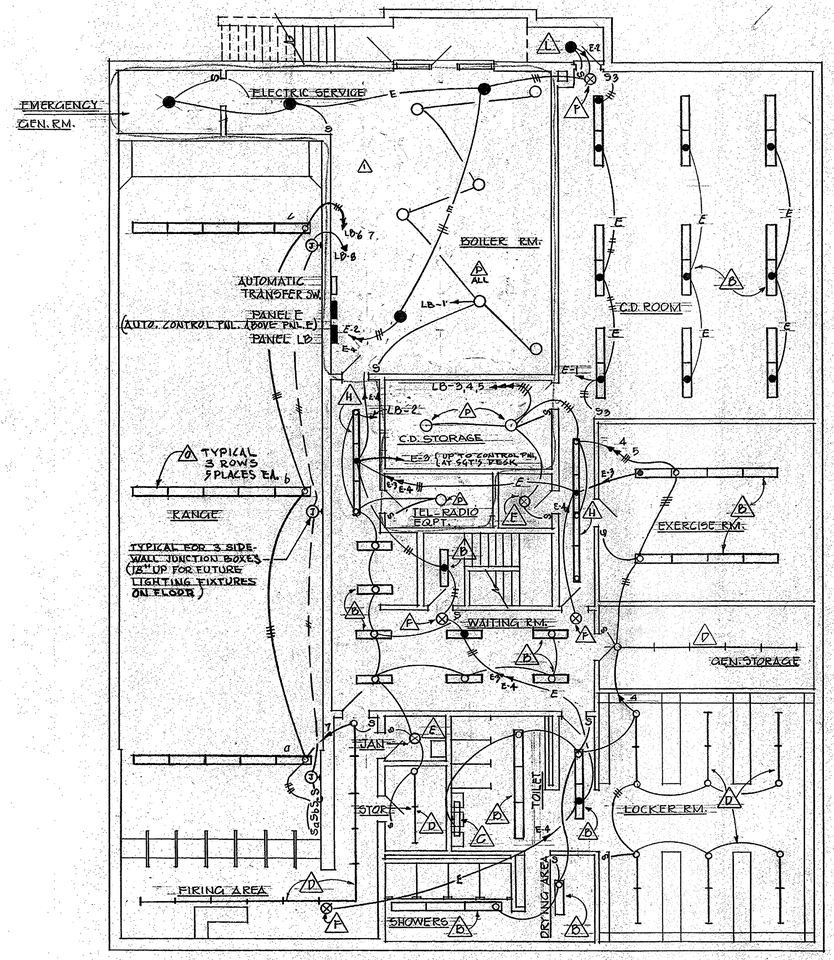
MICROFILMED

1 SW 07NE29 ~~20-0985~~ 18 DIST. 15

Contract No.25022 PPO
"Addendum No.4
Revised, January 12, 2026

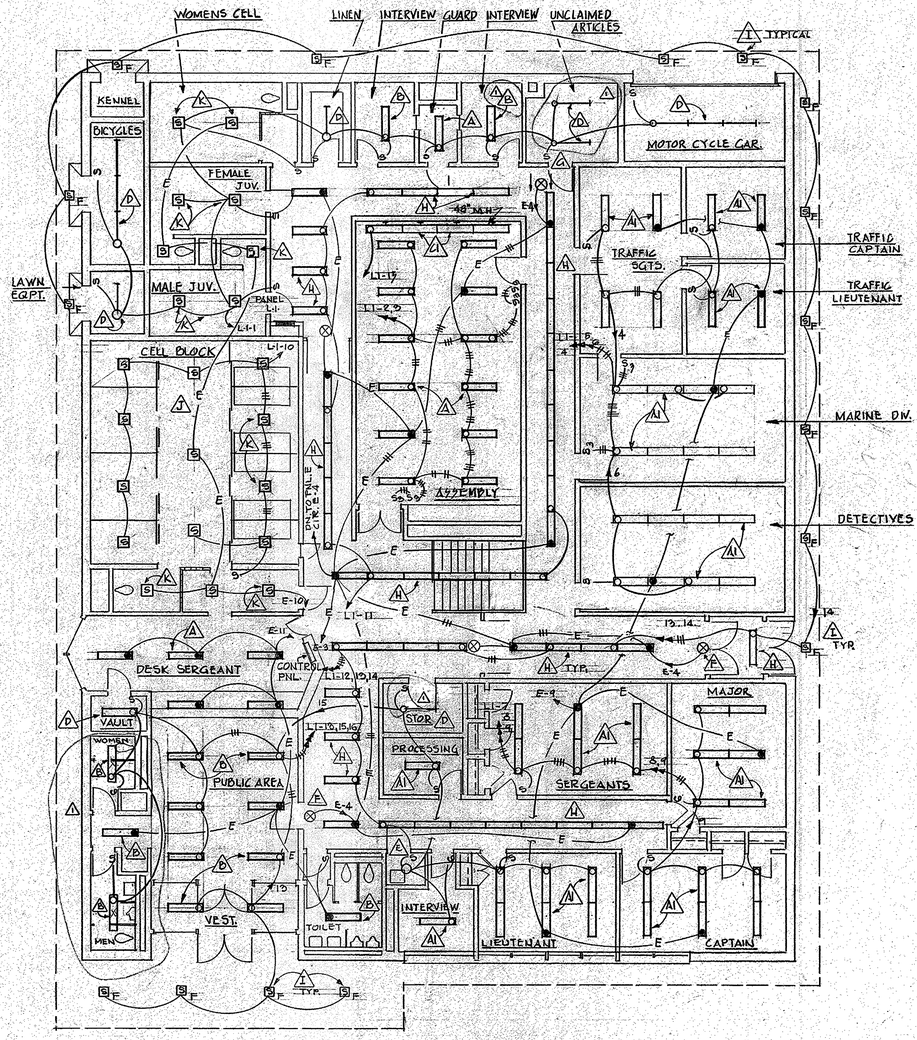
Oct 28, 2022 8:21:05 AM

K&E PHOENIX 74480



BASEMENT FLOOR PLAN

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



FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"

DATE	REVISION	BY
7-25-74	AS BUILT	V.K.

COUNTY EXECUTIVE	AGENCY	CHIEF – BUREAU OF ENGINEERING	STRUCTURAL CONSULTANT	MECHANICAL CONSULTANT						
ADMINISTRATIVE OFFICER			LOEWER & ASSOCIATES	LOEWER & ASSOCIATES						
DIRECTOR OF PUBLIC WORKS			BUREAU OF ENGINEERING							
			STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING

STATE OF MARYLAND · ALAN CONRAD LOEWER JR. · No. 2388 · REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970 – 59

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: JRS | DRAWING NO.: E-1

DATE | CONTRACT NO.: H 2039 | 17 OF 20

SHEET TITLE: BASEMENT & FIRST FLOOR LIGHTING LAYOUT

JOB ORDER: 20-5-1 | SCALE: AS NOTED

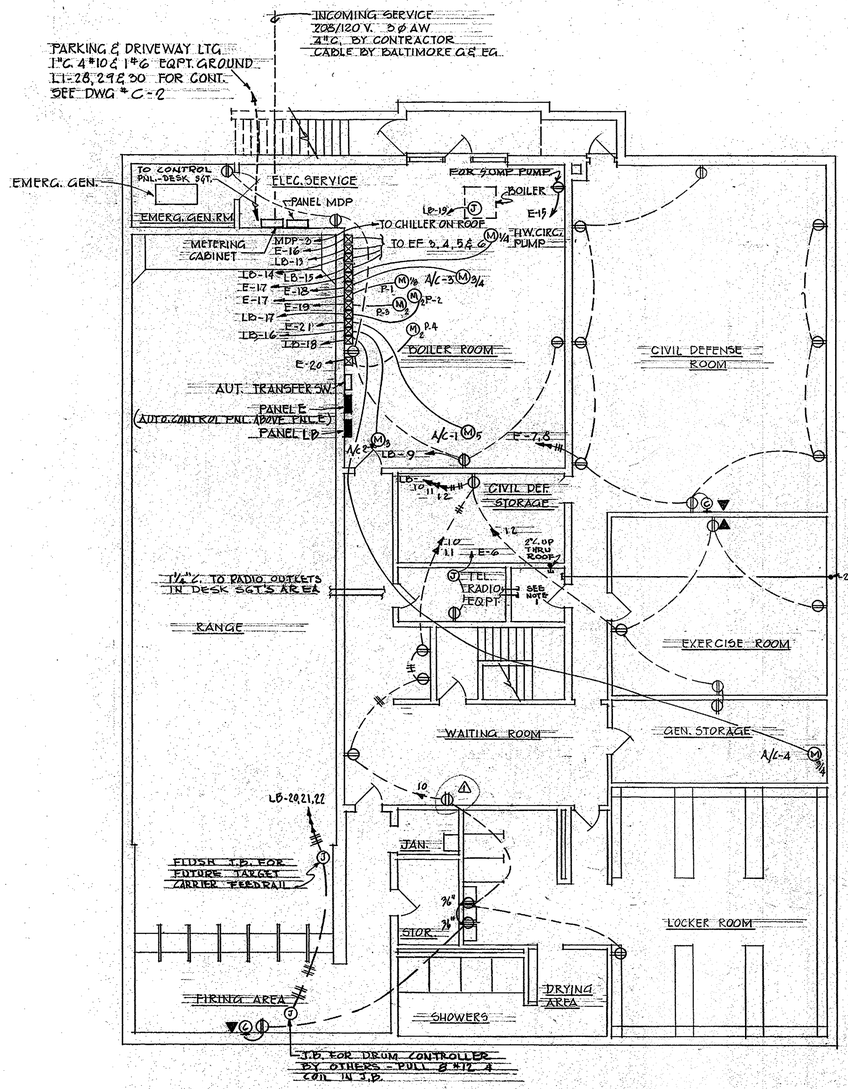
MICROFILMED

I SW 07NE29 ~~70-0983~~ 19 DIST 15

Contract No.25002 PPO
Addendum No.4
Revised, January 12, 2026

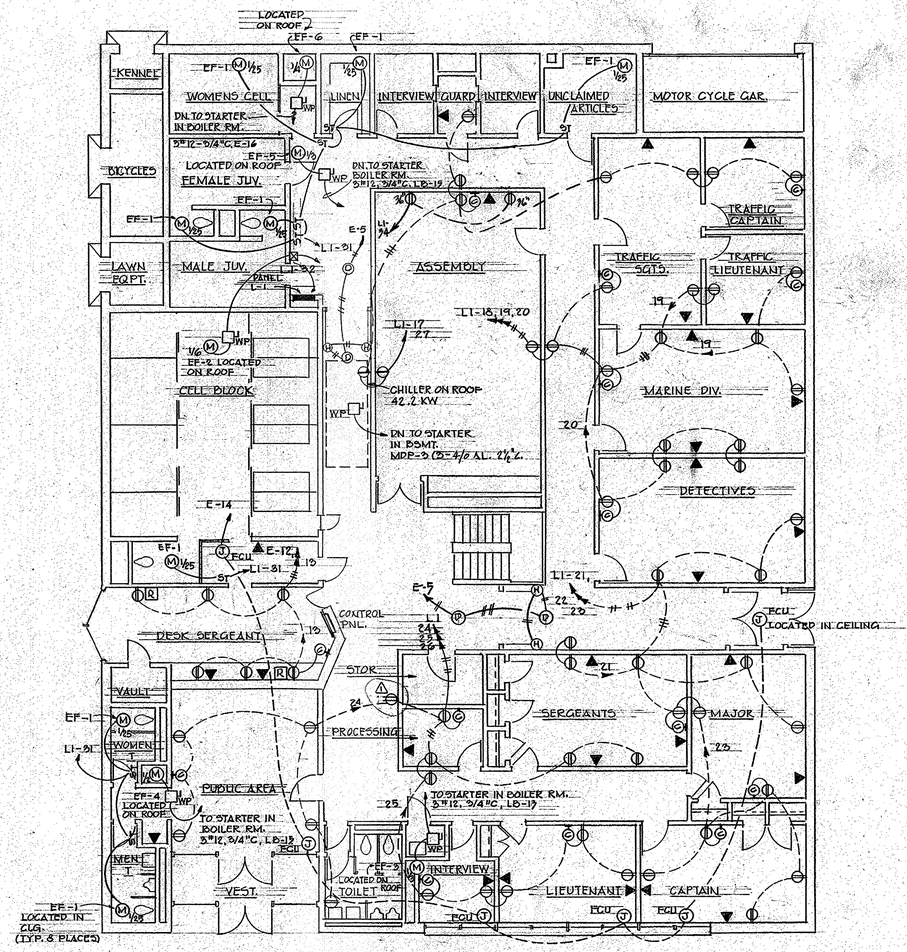
K&E PHOENIX TRANSPARENCIES 74480

Plotted: Oct 26, 2022 8:22:38 AM



BASEMENT FLOOR PLAN

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



FIRST FLOOR PLAN

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

NOTE: 1 TERMINATE CONDUITS WITH INSULATED BUSHINGS.

DATE	REVISION	BY
7-25-74	AS BUILT	V.K.

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY
CHIEF – BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING
STRUCTURAL | MECHANICAL | ELECTRICAL | STORM DRAINS | WATER | SEWER | HIGHWAYS | PLUMBING

STATE OF MARYLAND — ALVIN EDWARD LOEWER JR. — No. 2398 — REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND

1970-1592

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

SHEET TITLE: BASEMENT & FIRST FLOOR POWER

DRAWN BY	DRAWING NO.
DATE 25	E-2
CONTRACT NO. H-2029	18 OF 220
JOB ORDER 30-5-1	SCALE AS NOTED

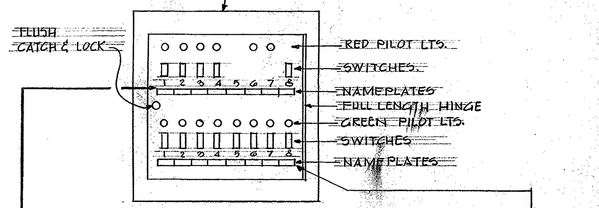
MICROFILMED ISW 07NE29 ~~30-0993~~ 20 DIST 15

Contract No.25022 PPO
Addendum No.4
Revised, January 12, 2026

K&E PHOENIX 74-6890

Oct 25, 2022 8:53:47 AM

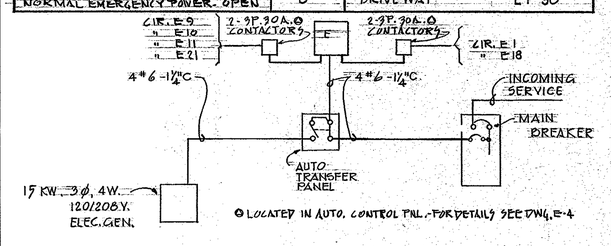
NOTE
PROVIDE INTERIOR PARTITION FOR SEPARATION OF EMERGENCY AND NORMAL POWER WIRING.



CONTROL PANEL AT SGT'S DESK

NO SCALE

EMERGENCY LIGHTING		POSITION	NORMAL LIGHTING	
CORRIDORS	CIR E-9	1	PUBLIC AREA	CIR. L1-16
CELLS	" E-10	2	CORRIDORS	" L1-11
OFFICES	" E-9	3	CORRIDORS	" L1-12
SGT'S AREA & WAITING	" E-11	4	VESTIBULE & EXT.	" L1-13
SPACE		5	EXTERIOR	" L1-14
NORMAL POWER		6	PARKING	" L1-28
EMERGENCY POWER		7	PARKING	" L1-29
CIV. DEF. EMERGENCY POWER - CLOSE NORMAL, EMERGENCY POWER - OPEN		8	DRIVEWAY	" L1-30



❶ LOCATED IN AUTO. CONTROL PNL. - FOR DETAILS SEE DWG. E-4

PART ONE LINE DIAGRAM

NO SCALE

CIRCUIT BREAKER PANELBOARD SCHEDULE

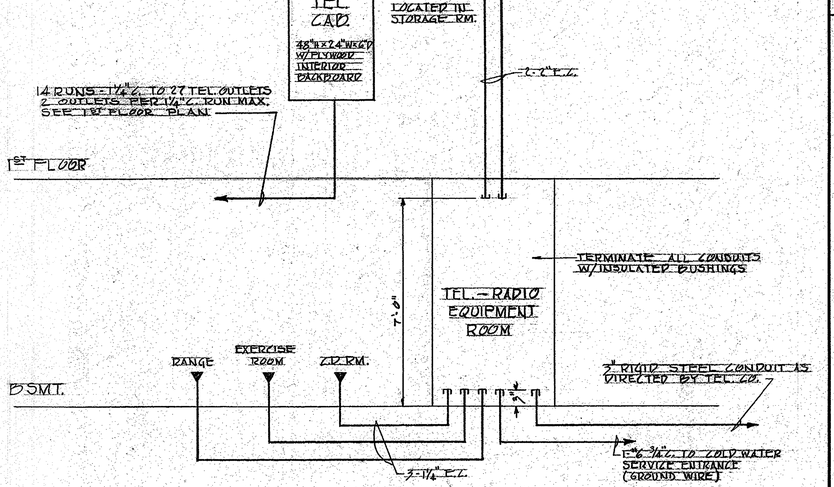
PANEL	BUS DATA	MOUNTING	CIRCUIT NO.S	POLES	TRIP	I.S.C. RATING	LOAD SERVE	REMARKS
LD	208/120 V, 3ø, 4W. 225A. M.L.O.	SURFACE	1-8	1	20	10,000	LIGHTING	
			9-12	1	20		RECEPTACLES	
			13-18	2	15		EF-3,4,5; A/C-2, P-2, A/C-4	
			19	1	20		OIL BURNER	
			20-22	1	20		RANGE TARGETS	
			23-26	1	20		SPARES	
E1	208/120 V, 3ø, 4W. 225A. M.L.O.	FLUSH	1-16	1	20	10,000	LIGHTING	
			17-24&4	1	20		RECEPTACLES	
			28-30	1	20		LIGHTING	
			31-32	1	20		EF-1, EF-2	
			33	1	20		SPARE	
			35-38	1	20		SPARE	
E	208/120 V, 3ø, 4W. 100 A. M.L.O.	SURFACE	1-4	1	20	10,000	LIGHTING	
			5	1	20		FIRE DETECTOR & DOOR HOLDERS	
			6	1	20		TEL. & RADIO EQUIP. RM.	
			7-8	1	20		RECEPTACLES	
			9-11	1	20		LIGHTING	
			12-13	1	20		RECEPTACLES	
			14-15	1	20		FCU'S SUMP PUMP	
			16	2	15		EF-6	
			17	1	20		HW. CIRC. PUMP & P-1	
			18	3	20		A/C-3	
			19-20	3	20		P-3, P-4 HW. PUMPS	
			21	3	30		A/C-1	
			22-24	1	20		SPARES	
MDP	208/120 V, 3ø, 4W. SPACE FOR 400A. MAINBKR. M.L.O.	SURFACE	1	3	150	25,000	PANEL 'LD'	
			2	3	150		PANEL 'L1'	
			3	3	200		WATER CHILLER	K.L. FRAME OR EQUAL
			4	3	60		EMERGENCY LIGHTING	
				?			SPACE	
				?			SPACE	

LIGHTING FIXTURE SCHEDULE

TYPE	MOUNTING AFF	LAMP DATA	DESCRIPTION (OR EQUAL)	REMARKS
A		4-40W.RS 120V	4 LAMP 48" RAPID START FLUORESCENT FIXTURE WITH DISHED ACRYLIC DIFFUSER.	SURFACE
B		2-40W.RS 120V	2 LAMP 48" RAPID START FLUORESCENT FIXTURE WITH DISHED ACRYLIC DIFFUSER.	SURFACE
C		2-40W.RS 120V	2 LAMP 48" RAPID START FLUORESCENT FIXTURE WITH PLASTIC DIFFUSER & CONVENIENCE OUTLET	WALL MTD.
D		1-40W.RS 120V	SINGLE LAMP, 48" RAPID START FLUORESCENT STRIP FIXTURE	SURFACE
E		1-100W 120V	INCANDESCENT CAST ALUM. TAPERED OPAL GLOBE FIXTURE.	SURFACE
F		2,T-6½ 120V	EXIT LIGHT, SINGLE FACE	SURFACE, CEILING MTD.
G		2,T-6½ 120V	EXIT LIGHT, DOUBLE FACE WITH DIRECTIONAL ARROWS	SURFACE, CEILING MTD.
H		1-40W.RS 120V	SINGLE LAMP, 48" RAPID START FLUORESCENT FIXTURE WITH DISHED ACRYLIC DIFFUSER.	SURFACE,
I		150W.PAR 120V.	INCANDESCENT RECESSED DIRECTIONAL DOWN LIGHT.	RECESSED (SOFFIT)
J		1-150W. 120V.	INCANDESCENT FIXTURE WITH OFFSET BEAM & HI-STRESS PRISON TYPE GLASS.	RECESSED
K		1-60W. 120V.	INCANDESCENT FIXTURE WITH OFFSET BEAM & HI-STRESS PRISON TYPE GLAS	RECESSED
L		100W 120V.	INCANDESCENT FIXTURE WITH GLOBE & GUARD W.P.	SURFACE
M		2-40W.RS 120V.	2 LAMP 48" RAPID START FLUORESCENT STRIP FIXTURE	SURFACE
N	30 FT.	400W 120 V	MERCURY VAPOR, SINGLE UNIT LIGHTING STANDARD.	AS NOTED
O		2-40W 120V.	SIMLINE FLUORESCENT FIXTURE	SURFACE
P1		4-40W.RS 120V.	4 LAMP 48" RAPID START LIGHT W/DISHED ACRYLIC DIFFUSER	RECESSED
Q1		2-40W.RS 120V.	2 LAMP 48" RS LIGHT W/PLASTIC DIFFUSER & PULL SWITCH	WALL MOUNTED
P2 ⚠1		150W 120V.	INCANDESCENT INDUSTRIAL FIXTURE W/STANDARD REFLECT.	PENDANT

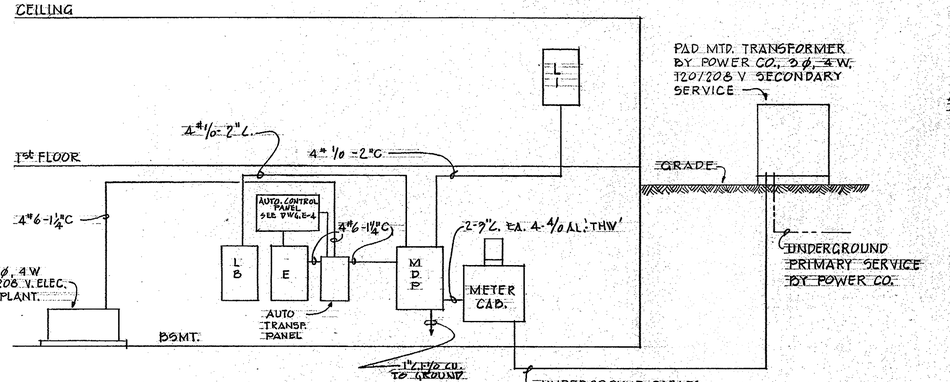
LEGEND

- 1'x 4' (APPR.) FLUORESCENT CEILING FIXTURES
- FLUORESCENT WALL BRACKET FIXTURES
- FLUORESCENT STRIP FIXTURE
- FLUORESCENT CEILING FIXTURE ON EMERGENCY CIRCUIT
- INCANDESCENT CEILING FIXTURE
- INCANDESCENT FIXTURE - F DENOTES SOFFIT TYPE
- 20 A. GRD. DUPLEX RECEPTACLE
- CLOCK OUTLET, 'D' SUBSCRIPT INDICATES DOUBLE FACED
- JUNCTION BOX
- TELEPHONE WALL OUTLET
- MOTOR CONTROLLER W/P.B. START-STOP STATION (SEL. SYM. WHEN MORE THAN 1 STATION)
- SAFETY SWITCH, WP DENOTES WEATHER PROOF.
- COMBINATION MOTOR CONTROLLER.
- POWER & LIGHTING PANEL
- CONDUIT IN WALL OR ABOVE CEILING
- CONDUIT IN FLOORSLAB.
- EXIT FIXTURE - ARROW DENOTES DIRECTIONAL SIGN
- SINGLE POLE TOGGLE SWITCH
- HOME RUN FOR RECEPTACLE & LIGHTING CIRCUITS TO BRANCH CIRCUIT - PANEL NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS IN RUN. NUMERALS INDICATE PANEL CIRCUIT NUMBERS - HATCH MARKS INDICATE NUMBER OF WIRES (GROUND WIRE NOT INDICATED BY HATCH MARK) - ALL WIRES #12 AWG UNLESS SHOWN OTHERWISE BY X NUMBER ADJACENT TO HATCH MARKS.
- THREE WAY TOGGLE SWITCH
- SINGLE POLE SWITCH W/ MOTOR THERMAL OVERLOAD PROTECTION
- RADIO OUTLET
- ELECTRO-MAGNETIC DOOR HOLDER-RELEASE - FIREMARK CAT. NO. FM-998 OR APPROVED EQUAL.
- IONIZATION FIRE DETECTOR W/BUILT-IN 135°F. HEAT DETECTOR FOR DOOR HOLDER RELEASE - FIREMARK FM-1420 OR APPROVED EQUAL



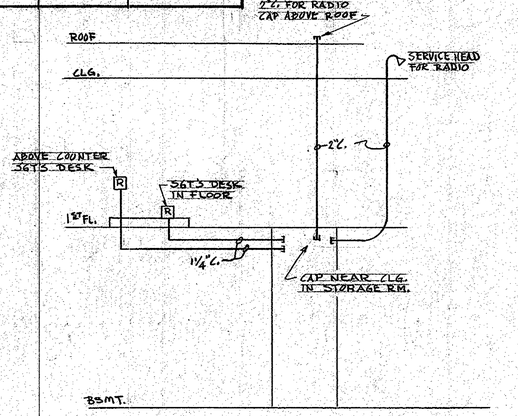
TELEPHONE CONDUIT RISER DIAGRAM

NO SCALE



POWER RISER DIAGRAM

NO SCALE



RADIO CONDUIT RISER DIAGRAM

NO SCALE

7-25-74	⚠ AS BUILT	V.K.	
DATE	REVISION	BY	

COUNTY EXECUTIVE	AGENCY Ellison D. Gibson	CHIEF - BUREAU OF ENGINEERING
ADMINISTRATIVE OFFICER		
DIRECTOR OF PUBLIC WORKS		

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L.M.	D.A.S.	V.K.					

STATE OF MARYLAND CONRAD LOEWER JR. No. 2306 REGISTERED PROFESSIONAL ENGINEER — SEAL

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND
1970-1593

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

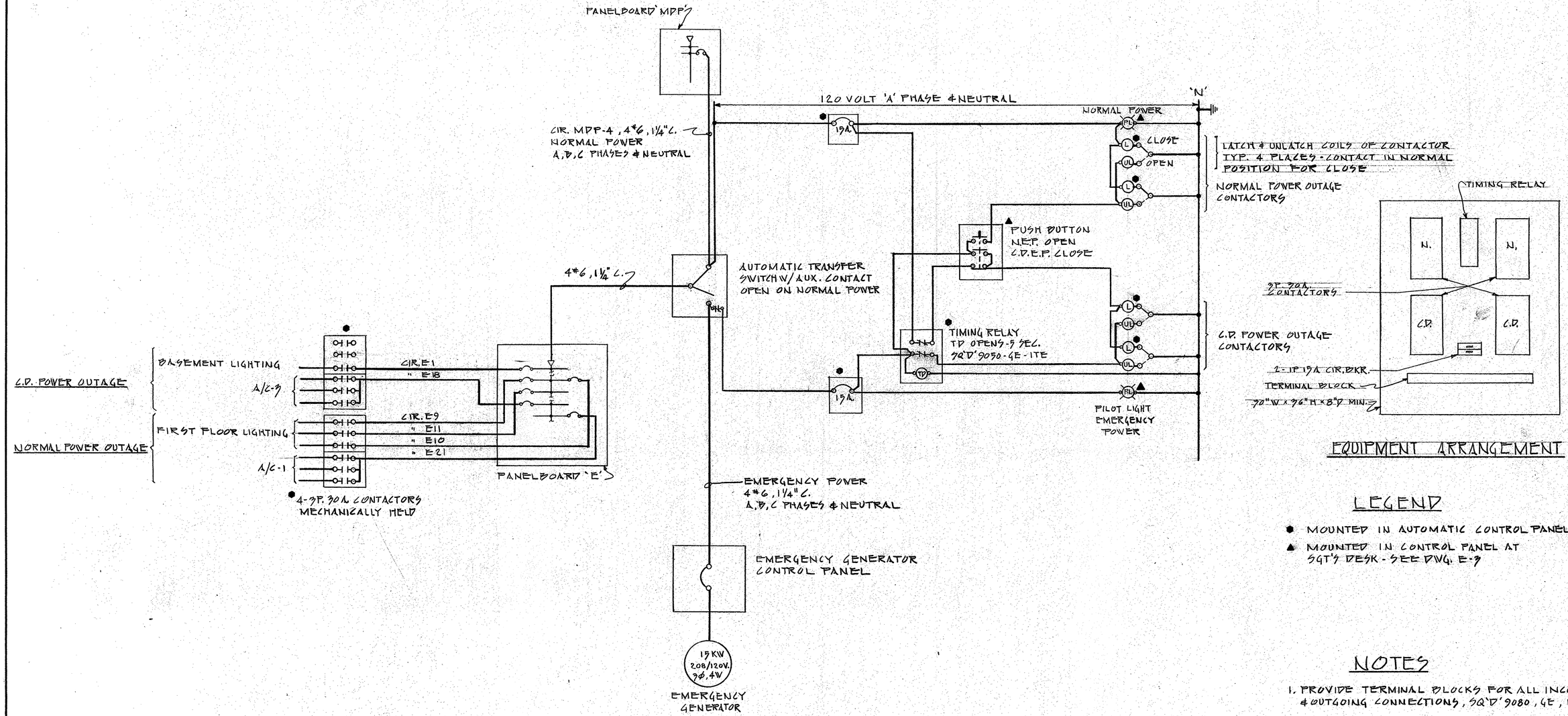
DRAWN BY	DRAWING NO.
GC	E-3
DATE	
CONTRACT NO.	
H 2039	19 OF 20
JOB ORDER	SCALE
30-5-1	AS NOTED

SHEET TITLE: SCHEDULES, RISER DIAGRAMS, LEGEND & CONTROL PANEL

MICROFILMED I SW 07 NA 29 ~~30-0783~~ 21 DIST 15

Contract No. 25022 PP9
Addendum No. 4
Revised, January 12, 2026

Plotted: Oct. 25, 2023 8:42:42 AM



EQUIPMENT ARRANGEMENT

LEGEND

- ● MOUNTED IN AUTOMATIC CONTROL PANEL
- ▲ MOUNTED IN CONTROL PANEL AT SGT'S DESK - SEE DWG. E-3

NOTES

1. PROVIDE TERMINAL BLOCKS FOR ALL INCOMING & OUTGOING CONNECTIONS, SQ'D' 9080, GE, ITE,

ELEMENTARY SCHEMATIC
AUTOMATIC CONTROL FOR NORMAL & C.D. POWER OUTAGE

DATE	REVISION	BY

COUNTY EXECUTIVE
ADMINISTRATIVE OFFICER
DIRECTOR OF PUBLIC WORKS
AGENCY Elliott D. Lenon
CHIEF - BUREAU OF ENGINEERING

STRUCTURAL CONSULTANT: LOEWER & ASSOCIATES
MECHANICAL CONSULTANT: LOEWER & ASSOCIATES

BUREAU OF ENGINEERING

STRUCTURAL	MECHANICAL	ELECTRICAL	STORM DRAINS	WATER	SEWER	HIGHWAYS	PLUMBING
R.L. Moore	Harry Bramble	P.B. Howard					

SEAL: M. CONRAD LOEWER No. 2396 — STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER

BALTIMORE COUNTY — DEPARTMENT OF PUBLIC WORKS — BUREAU OF ENGINEERING

TITLE: ESSEX POLICE STATION
ROSSVILLE BOULEVARD AT MARLYN AVE.
BALTIMORE COUNTY, MARYLAND
1970-1594

ARCHITECT: LOEWER & ASSOCIATES, BALTIMORE, MARYLAND

DRAWN BY: JS
DATE:
CONTRACT NO.: H2099
DRAWING NO.: E-4, 20 of 20
SHEET TITLE: AUTOMATIC CONTROL FOR NORMAL & C.D. POWER OUTAGE
JOB ORDER: 30-5-1
SCALE: NOTED

MICROFILMED

I SW 07NE29 70-0983 22 DIST. 15

Contract No.25022 PPD
Addendum No.4
Revised, January 12, 2026

K&E PHOENIX 24480