MAROTTA/MAIN
ARCHITECTS

ADDENDUM

 # 02 | 250117

School District of Lancaster

McCaskey High School Stadium Projects
Lancaster, PA

Date of Addendum: 17 January, 2025

Marotta/Main Architects Project No.
24-SDL-03

The original Project Manuals and Drawings dated 06 January, 2025 for the project noted above, are amended as noted in this Addendum No. 02.

Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Bid Form.

This Addendum consists of 5 Pages and all attachments listed.

CLARIFICATIONS

No items

SPECIFICATIONS

VOLUME 1 – LEGAL SPECIFICATIONS

02.01 Refer to Specification Section 00 02 00 INSTRUCTIONS TO BIDDERS, REVISE 4.1.11 paragraph 2 to read:
All proposals shall be clearly marked “BID PROPOSAL MCCASKEY HIGH SCHOOL STADIUM PROJECTS FOR 1:00 PM BID OPENING.

02.02 Refer to Specification Section 00 31 32 GEOTECHNICAL DATA, ADD 1.1,B.2 as follows:
2. Geotechnical Engineering Report, prepared by Kleinfelder, dated 08 January 2025.

02.03 ADD attached GEOTECHNICAL ENGINEERING REPORT.

02.04 Refer to Specifications Section 00 43 23 ALTERNATES FORM, REPLACE with attached, revised form that include Alternate 04B.

02.05 Refer to Specifications Section 01 12 00 Multiple Contract Summary, section 1.8.A.5, DELETE ‘and fire protection’ from this line.

02.06 Refer to Specifications Section 01 23 00 ALTERNATES, ADD the following to 3.1.1.A:
‘2. Alternate Bid No. 04B – Foundation, Wall, Pier Work (to be bid by the GC)

a. Base Bid: Provide Visitor Bleacher wall, foundation, and pier work per the Bid Documents in the base bid price.
b. Add/Deduct Alternate Bid: Provide the cost (select add or deduct) to perform the work per Drawing S1.0.5 Alternate 04B Foundation Plan & Details at the Visitor Bleacher building.
c. Add/Deduct Alternate Bid: Provide the time (select add or deduct) in days that Alternate 04B work would take in comparison to the Base Bid scope.

VOLUME 2 – TECHNICAL SPECIFICATIONS

02.07 Refer to Specifications Section 10 51 26 Solid Plastic Storage Lockers, for section 2.1.A, Elite Storage Products has been reviewed as an equal product to the Basis-of-Design product.

VOLUME 3 – MEP & SITE/CIVIL SPECIFICATIONS

02.08 Refer to Specification Section 26 06 20 SCHEDULES FOR ELECTRICAL DISTRIBUTION EQUIPMENT, and make the following changes:

a. Panel DPV; Ckt #7: Add Note #10.

b. Panel VL1; Ckt 44/46/48: Add 3P.110A with Notes #2,12 for Scoreboard Panel SB1.

c. Panel SB1: Add panel schedule as attached.

d. Panel HH1; Ckt 38/40/42: Add Note #12.

e. Panel LS-VH1: Delete Feed-Thru Lugs

f. Panel LS-VH1; Ckt #20/22/24; Revise to 3P.70A subfeed breaker with Notes #2,10 for Panel LS-HH1.

g. Panel LS-HH1: Revise to 70A Main Breaker in lieu of 225A Lugs. Add Panel Note “See Note 10 for Main Breaker requirements”.

h. Panel Notes: Revise Note #10 to read “Provide electronic mission critical breaker with minimum 225A sensor that selectively coordinates with all upstream and downstream overcurrent devices.”

DRAWINGS

ARCHITECTURAL DRAWINGS

02.09 Refer to Drawing CS1 COVER SHEET, ADD the following to the drawing list:

CIVIL

CSK-01 – Existing Conditions and Demolition Plan
CSK-02 – Layout Plan
CSK-03 - Grading and Drainage Plan
CSK-04 - Utility Plan

DELETE the following from the drawing list:
‘CIVIL DRAWINGS – GRADING PLAN – FOR REFERENCE ONLY’
‘CIVIL DRAWINGS – EXISTING CONDITIONS/DEMOLITION PLAN – FOR REFERENCE ONLY’
‘CIVIL DRAWINGS – LAYOUT PLAN – FOR REFERENCE ONLY’

02.10 Refer to Drawings AD1.1 – BLEACHER DEMOLITION PLAN – SALVAGE NOTES – REVISE Note 1 as follows:

1. SALVAGE ALUMINUM BLEACHER SEATS BY G.C., GC TO STORE IN PROTECTED MANNER (ON SITE OR OFF SITE) AND TURN OVER TO BLEACHER CONTRACTOR TO MODIFY LENGTH AND REINSTALL.

02.11 Refer to Drawing A1.1 – BLEACHER PLAN.

a. Floor Plan 3/A1.1 ADD general note '1. REPLACE 80 SF OF WALL PANEL BELOW SILL OF EXISTING WINDOWS WITH 5/8" PLYWOOD'
b. Floor Plan 3/A1.1 ADD general note '2. REPLACE 40 SF WOOD FLOOR WITH 3/4" PLYWOOD PANEL'

02.12 Refer to Drawing A1.2 – FIRST FLOOR PLAN. Floor Plan 1/A1.2.

a. DELETE Manhole located in Storage V-109.
b. ADD Floor hatch in Storage V-109 – Refer to sketch ASK-01
c. ADD concrete hatch pattern to stairs located in ENTRY V-111.

02.13 Refer to Drawings A1.3 – SECOND FLOOR PLAN. ADD Detail 6/A1.3 SECTION DETAIL. Refer to sketch ASK-02.

02.14 Refer to Drawing A2.2 – HOME EXTERIOR ELEVATIONS. Detail 5/A2.2 ADD note '3. EXTERIOR GRADE CUSTOM WALL GRAPHICS OF ALUMINUM FOIL BASE, UV DURABLE INKS, ADHESIVE APPLIED'

02.15 Refer to Drawing A7.2 – VERTICAL CIRCULATION.

a. Refer to plan 3/A7.2. REVISE plan layout – Refer to ASK-02
b. Refer to detail 9/A7.2. REVISE note of center rail to read as '1 1/2" DIA MTL PIPE INTERMEDIATE RAIL – TYP'
c. Refer to detail 11/A7.2. ADD note '1 1/2" DIA MTL PIPE INTERMEDIATE RAIL, PAINT – TYP' to center rail.
d. Refer to detail 12/A7.2. REVISE note of center rail to read as '1 1/2" DIA MTL PIPE INTERMEDIATE RAIL – TYP'.

02.16 Refer to Drawing A9.1 – DOOR & WINDOW SCHEDULE & TYPES –

a. Refer to ALUMINUM FRAME TYPES – ADD Frame type AL6 - Refer to ASK-03.
b. ADD detail 26/A9.1, 27/A9.1 and 28/A9.1 – Refer to ASK-03.

STRUCTURAL DRAWINGS

02.17 Refer to drawing S-0.0 "GENERAL STRUCTURAL NOTES".

a. Revise "DESIGN CRITERIA NOTES" no. 1 per the attached reissued S0.0 drawing.
b. Revise "SUBGRADE PREPARATION NOTES" no. 1, 4, 5, & 6 per the attached reissued S0.0 drawing.

c. Revise “FOUNDATION NOTES” no. 1 per the attached reissued S0.0 drawing.
d. Revise “SLAB ON NOTES” no. 1 per the attached reissued S0.0 drawing.
e. Revise the “STUCTURAL DRAWING LIST” to include “S1.0.5 – ALTERNATE 04B FOUNDATION PLAN & DETAILS”.

02.18 Refer to drawing S0.1 “GENERAL STRUCTURAL NOTES & SCHEDULES”.
a. Revise the “FOOTING SCHEDULE” to include “SF-36” & “SF-21” per the attached SSK-01.

02.19 Refer to drawing S1.0 “FOUNDATION PLANS”.
a. REVISE drawing 1/S1.0 per the attached reissued S1.0 drawing.

02.20 ADD drawing S1.0.5 “ALTERNATE 04B FOUNDATION PLAN & DETAILS” attached to the final set.

02.21 Refer to drawing S1.2 “CONCRETE RESTORATION WORK – VISITOR BLEACHER”.
a. REVISE drawing 2/S1.2 per the attached reissued S1.2 drawing.

02.22 Refer to drawing S1.3 “CONCRETE RESTORATION WORK – HOME BLEACHER”.
a. REVISE drawing 2/S1.3 per the attached reissued S1.3 drawing.

02.23 Refer to drawing S2.3 “SECTION DETAILS”.
a. ADD section detail 9/S2.3 “SECTION @ PIT” to drawing S2.3 per the attached SSK-02.

CIVIL DRAWINGS

02.24 Refer to attached, new Drawing CSK-01 – Existing Conditions and Demolition Plan, ADD to Bid Drawings.

02.25 Refer to attached, new Drawing CSK-02 – Layout Plan, ADD to Bid Drawings.

02.26 Refer to attached, new Drawing CSK-03 Grading and Drainage Plan, ADD to Bid Drawings.

02.27 Refer to attached, new Drawing CSK-04 Utility Plan, ADD to Bid Drawings.

PLUMBING DRAWINGS

No items

MECHANICAL DRAWINGS

No items.

ELECTRICAL DRAWINGS

02.28 Refer to Drawing E1.1, SITE PLAN - ELECTRICAL DEMOLITION
a. Replace drawing with attached drawing.

02.29 Refer to Drawing E1.2, SITE PLAN - ELECTRICAL
a. Replace drawing with attached drawing.

02.30 Refer to Drawing E1.3, SITE PLAN - LIGHTING

a. Replace drawing with attached drawing.

02.31 Refer to Drawing E7.1, POWER RISER DIAGRAM

a. Replace drawing with attached drawing.

END OF ADDENDUM 02

Respectfully Submitted,

Connie King, AIA, ALEP, GGP
Marotta/Main Architects, Inc.

Attachments:

GEOTECHNICAL ENGINEERING REPORT
00 43 23 ALTERNATES FORM, ADDENDUM 02
260620 SCHEDULES FOR ELECTRICAL DISTRIBUTION EQUIPMENT - PANEL SB1
ASK-01 FLOOR HATCH
ASK-02 STAIR AND RAILING AT ENTRYH105.1
ASK-03 WINDOW AL6 ELEVATION AND DETAILS
S0.0 GENERAL STRUCTURAL NOTES
S1.0 FOUNDATION PLANS
S1.0.5 ALTERNATE 04B FOUNDATION PLAN AND DETAILS
S1.2 CONCRETE RESTORATION WORK – VISITOR BLEACHER
S1.4 CONCRETE RESTORATION WORK – HOME BLEACHER
SSK-01 REVISED FOOTING SCHEDULE
SSK-02 MECHANICAL PIT DETAIL
E1.1 SITE PLAN – ELECTRICAL DEMOLITION
E1.2 SITE PLAN – ELECTRICAL
E1.3 SITE PLAN – LIGHTING
E7.1 POWER RISER DIAGRAM
CSK-01 – Existing Conditions and Demolition Plan
CSK-02 – Layout Plan
CSK-03 - Grading and Drainage Plan
CSK-04 - Utility Plan

MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
GEOTECHNICAL ENGINEERING REPORT
CITY OF LANCASTER
LANCASTER COUNTY, PENNSYLVANIA
KLEINFELDER PROJECT NO.: 25001905.002A

January 8, 2025

A Report Prepared for:

Mr. Andrew Schenk
Director of Operations
School District of Lancaster
251 South Prince Street
Lancaster, PA 17603

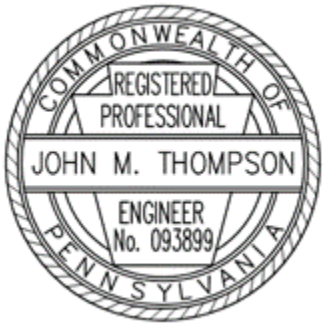
MCCASKEY HIGH SCHOOL STADIUM RENOVATIONS
GEOTECHNICAL ENGINEERING REPORT
CITY OF LANCASTER
LANCASTER COUNTY, PENNSYLVANIA

Prepared by:

Michael Owen
Project Manager

Reviewed by:

John Thompson, P.E.
Staff Professional II
PA License Number: PE-093899



KLEINFELDER
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Mechanicsburg, PA 17055
Phone: 717-458-0800

January 8, 2025
Kleinfelder Project No: 25001905.002A

TABLE OF CONTENTS

APPENDIX

1 INTRODUCTION

This report was prepared by Kleinfelder, Inc. (Kleinfelder), on behalf of the School District of Lancaster and contains the results of a geotechnical engineering exploration conducted at the site of the proposed improvements. The purpose of this exploration has been to evaluate the suitability of the existing subsurface conditions to support the proposed site improvements. The scope of work for this project included a subsurface exploration, laboratory testing program and geotechnical engineering analysis. This report summarizes the results of the work performed and provides geotechnical recommendations and general construction considerations.

1.1 SITE AND PROJECT DESCRIPTION

The project site currently consists of the existing football stadium located on the grounds of the McCaskey High School in the City of Lancaster, Lancaster County, Pennsylvania. The project site is bordered to the north by a tree line, to the east by a grass covered field, to the south by a drive lane, and to the west by a baseball field and McCaskey High School. The approximate location of the property in relation to the surrounding area is presented on the *Topographic Map* (Figure 1) found within the Appendix.

Based on information provided by the client, development of the project site will consist of constructing new accessibility ramps to both the existing home and away bleachers as well as renovations to both sets of bleachers.

1.2 SITE GEOLOGY

According to the Pennsylvania State Geologic Survey, Atlas of Preliminary Geologic Quadrangles, 1981, the project site is underlain by the Ordovician Conestoga Formation (geologic symbol OCc). The project site within its geologic setting is presented within the Appendix on the *Geologic and Karst Features Map* (Figure 2).

The Pennsylvania Geologic Survey publication *The Engineering Characteristics of the Rocks of Pennsylvania*, Second Edition 1982, describes the Conestoga Formation as being composed of medium-gray impure limestone with graphitic shale partings. This formation is crudely bedded to poorly bedded, thin and highly crumpled. Fractures are moderately abundant and have an irregular pattern. Joints are poorly formed and widely spaced, having an uneven regularity and are often times filled with quartz and calcite. The rock in this formation is moderately resistant to weathering and is slightly weathered to a shallow depth. Decomposition results in large irregularly shaped fragments. The overlying soil mantle varies in thickness and may be extremely thick, and the soil-to-bedrock interface is characterized by bedrock pinnacles.

This formation is comprised of carbonate lithology which is subject to dissolution and the development of solution features and other karst-related features. The *Geologic and Karst Features Map* (Figure 2), prepared by William Kochonov of the Pennsylvania Geologic Survey, shows no mapped surface depressions within the site boundary or within 1,500 feet of the project site on adjacent lands; however, a surface mine is noted to the southeast of the project site.

2 SUBSURFACE EXPLORATION PROGRAM

To evaluate subsurface conditions across the footprints of the accessibility ramps, six (6) test pits, referenced herein as TP-1 through TP-6, were excavated on October 9, 2024. Additionally, to aid in design of renovations to the existing bleachers, four (4) interior test pits, referenced herein as TP-1A through TP-4A, were completed on December 23 through 27, 2024. Supervision and monitoring of the subsurface explorations were provided by a representative of Kleinfelder, who field located the test locations based on the presence of utilities relative to the footprints of the proposed improvements as well as site conditions and accessibility. The approximate test locations are shown on the *Exploration Plan* (Figure 3) presented within the Appendix.

Test pits TP-1 through TP-6 were excavated utilizing a rubber-tired backhoe while test pits TP-1A through TP-4A were excavated utilizing hand tools and a mini-excavator. A detailed account of the material encountered during completion of test pits TP-1 through TP-6 is presented on the *Test Pit Logs.* Existing foundation data obtained from test pits TP-1A through TP-4A is presented within **Section 4.6** of this Report and visual depictions of the existing foundations are presented within the *Foundations Photographs* within the Appendix.

Additional information pertaining to symbols used within the *Test Pit Logs* can be found within the *Graphics Key* (Figure 4) and *Soil Description Key* (Figure 5) presented within the Appendix.

3 LABORATORY TESTING

Soil samples retrieved were visually reviewed and classified by Kleinfelder. A representative soil sample from test pits TP-1 through TP-6 was subjected to laboratory analyses to verify visual classifications and aid in establishing the engineering parameters for foundation design. The representative soil sample was subjected to laboratory analyses in accordance with the following schedule:

- Natural Moisture Content (ASTM D2216)
- Sieve Analysis (ASTM D422)
- Atterberg Limits Determination (ASTM D4318)

A Unified Soil Classification System (USCS) Group Symbols and ASTM Group Name have been assigned to the soils analyzed. The results of these analyses are presented within the table below and graphical depictions of the particle gradation are presented within the Appendix.

STANDARD CLASSIFICATION RESULTS											
Location	**Depth (ft)**	**Soil Type**	**% Gravel**	**% Sand**	**% Fines**	**LL**	**PL**	**PI**	**Natural Moisture Content**	**USCS Group Symbol**	**ASTM Group Name**
TP-1	5.5	Stratum I	0	24	76	36	24	12	23.7%	CL	Lean CLAY with Sand
LL-Liquid Limit; PL-Plastic Limit; PI-Plasticity Index											

4 DESCRIPTION OF SUBSURFACE CONDITIONS

A general description of the conditions encountered within test pits TP-1 through TP-6 at the subject project site are described within **Sections 4.1 through 4.5**, while the conditions encountered within test pits TP-1A through TP-4A are described within **Section 4.6**, as follows:

4.1 SURFICIAL MATERIALS

The test locations were covered by approximately 3 to 5 inches of topsoil; however, the thickness of surficial materials may differ in unexplored areas of the project site. Kleinfelder utilized visual classifications to estimate thicknesses of the topsoil encountered during the field exploration.

4.2 FILL

Existing Fill was encountered within test locations TP-3 and TP-5, extending to depths of approximately 1.5 and 2 feet, respectively, below existing site grades. The observed colors of the Fill material during our exploration were brown and dark gray.

Upon review, the existing Fill was found to contain varying amounts of limestone gravel, but otherwise observed to be free of deleterious materials (i.e., ash, cinder, slag and/or organic debris). However, these samples were taken from discrete locations and the possibility does exist for deleterious materials to be present in unexplored portions of the site.

4.3 STRATUM I

Stratum I was encountered within each test location extending to depths ranging from approximately 1 to 6 feet below existing site grades. The observed colors of the Stratum I soil during our exploration were brown and orange-brown.

Laboratory testing conducted on a representative sample of Stratum I shows this soil to be poorly graded and plastic, with a natural moisture content of 23.7%. Stratum I is described under USCS as Lean CLAY with Sand (CL).

4.4 BEDROCK

The bedrock surface was encountered within test locations TP-4 and TP-5 at depths of approximately 1.5 and 4.5 feet, respectively, below existing site grades, corresponding to bedrock surface elevations of 301.5 and 298.5 feet, respectively. The bedrock surface was defined as the depth at which the bucket of the excavator could no longer advance. **Published data coupled with the data recorded during the subsurface exploration indicates the bedrock surface beneath the project site is highly pinnacled with a considerable variation in the elevation of the bedrock**

surface over short lateral distances. As such, the bedrock surface may be encountered at depths which vary from those stated above during construction.

4.5 GROUNDWATER

Groundwater was not encountered within the test locations completed. This observation was made at the time of the field operation and the groundwater table elevation will vary with daily, seasonal, anthropogenic, and climatological variations.

4.6 EXISTING BLEACHER FOUNDATION DATA

In an effort to determine dimensions of the existing foundations associated with the home and away bleachers to aid with the design of renovations, two (2) test pits were excavated within the interior of each set of bleachers. The test pits, referenced herein as TP-1A through TP-4A, are depicted on the *Exploration Plan* within the Appendix and details regarding conditions encountered are presented within the table below. Additionally, representative photographs of conditions encountered are presented on the *Foundation Photographs* within the Appendix.

EXISTING BLEACHER FOUNDATION DATA				
Location	**Floor Slab Thickness (in.)**	**Foundation Projection (in.)**	**Foundation Thickness (in.)**	**Distance from Top of Floor Slab to Bottom of Foundation (in.)**
TP-1A	3.5 – 6.0	7.0 – 8.0	10.0 – 10.5	15.5 – 16.0
TP-2A	4.0	6.0	8.0 – 10.0	12.0 – 14.0
TP-3A	4.0 – 5.0	9.0 – 10.0	9.0	73.0
TP-4A (prior to stepdown)	3.75 – 4.0	5.0 – 6.5	15.0	19.0
TP-4A (after stepdown)	3.75 – 4.0	5.0 – 6.5	8.0 – 9.0	12.0

5 CONSIDERATION OF KARST GEOLOGY

The following general construction considerations are provided in an effort to minimize the potential for development of sinkholes at the site both during and following construction.

- Surface water should not be allowed to collect or pool in low lying areas of the site and should be directed to appropriate stormwater channels. Expeditious backfilling or grading of low-lying areas will also help minimize the potential for the development of sinkholes.

- The bases of all foundation excavations should be reviewed for unusually soft or wet soil conditions. Any unstable areas encountered should be further excavated and reviewed by the geotechnical engineer to determine the extent of any solution activity so that remedial measures can be designed and implemented.

- The extent of excavations should be kept to a minimum and the influx of surface water into excavations should be minimized.

- Positive drainage away from the proposed improvements should always be maintained.

- Storm sewer conveyance lines should be constructed with watertight joints.

- Unpaved areas, swales or surface basins should be minimized adjacent to foundation areas.

- Exterior backfill around foundations should consist of fine-grained, on-site soils, (i.e. clay) in an effort to limit stormwater infiltration in foundation areas.

The site Owner must recognize the risks associated with development in areas underlain by karst geologic formations. Contingencies should be made in the construction schedule and budget for the repair of sinkholes and unstable soil conditions encountered during development of the site.

6 GEOTECHNICAL RECOMMENDATIONS

Provided the recommendations within this report are followed, firm and stable existing soils and/or suitable structural fill placed under engineering control should be suitable for the support of the proposed improvements. Our geotechnical recommendations are provided in the following sections.

6.1 STRUCTURAL FILL

Our recommendations regarding suitable imported fill and the reuse of on-site soils as structural fill are provided below.

Imported Fill

- Free of organic matter, ash, cinders, trash, or other unsuitable or deleterious materials.
- Particle size distribution that is well-graded, per USCS guidelines.
- Liquid Limit (LL) less than 30 and Plasticity Index (PI) less than 10.
- Less than 15 percent by weight rock fragments larger than 3" with no particle size exceeding 6”, less than 30 percent by weight larger than the 3/4" and less than 30 percent smaller than the no. 200 sieve.

Alternate soils proposed for use which differ from those specified above should be evaluated by the Kleinfelder regarding their suitability prior to placement at the sites.

Reuse of On-Site Soils

Topsoil – The topsoil will not be suitable for reuse as structural fill, however, the topsoil may be stockpiled for reuse within landscaping areas, non-structural areas, berms, etc. As written above, Kleinfelder utilized visual classifications to estimate the topsoil thicknesses encountered during the field explorations. The Client or construction team (i.e., general contractor, earthwork contractor, etc.) may consider the topsoil depth information in their evaluation of the project site; however, we recommend they complete their own evaluation prior to the start of construction. The Geotechnical Engineer of Record and/or other professionals (i.e. soil agronomist) should be consulted during the pre-construction process in order to reduce the risk of incorrect estimation of topsoil thickness.

Fill/Stratum I – These soils were found to be poorly graded, plastic, and predominantly comprised of CLAY with varying amounts of Sand and Gravel. These soils are considered to be marginally suitable for reuse as structural fill, provided any deleterious material, if encountered, is removed prior to placement. **Due to the content of fines (CLAY), these soils will be moisture sensitive and difficult to place during periods of adverse weather and may require mixing, scarifying, windrowing, or possibly other means of conditioning though chemical stabilization (i.e. soil**

cement, lime stabilization, etc.) to reduce the moisture content to acceptable levels prior to and during placement.

Our analysis of the suitability of the on-site soil for use as structural fill is based on data collected from the test locations completed at the site. Soil suitability should be confirmed in the field by Kleinfelder during construction.

6.2 SHALLOW FOUNDATIONS (ACCESSIBILITY RAMPS)

Based on the data obtained from test pits TP-1 through TP-6, Fill was encountered within test locations TP-3 and TP-5, extending to depths of approximately 1.5 and 2 feet, respectively, below existing site grades. Though deeper limits of existing Fill were not encountered during our exploration, the possibility for deeper zones of existing Fill exists. Based on the lack of historical data, coupled with the data obtained during our exploration, support of the proposed accessibility ramps on conventional shallow foundations bearing directly on the existing Fill is not recommended due to intolerable post-construction settlement. Therefore, it is recommended the existing Fill beneath the foundation elements, where encountered, be excavated and replaced under engineering control. Details concerning the removal and replacement of the Fill are presented below.

- The existing Fill, where encountered, should be completely excavated from beneath the proposed foundation elements until the naturally occurring soils are encountered. The excavation sidewalls should be adequately sloped or benched, as necessary, to minimize collapse and protect personnel. The extent of the excavations should extend a minimum of 1-foot beyond all foundation edges.

- Excavations will take place adjacent to the existing structure. Care must be exercised to provide temporary support to the existing foundations. This may be accomplished with shoring, bracing, or underpinning. The Structural Engineer and Geotechnical Engineer should be consulted prior to implementation of any temporary foundation support system.

- Once excavated, the base of the resulting excavation should be thoroughly compacted utilizing appropriate equipment and reviewed by a qualified geotechnical professional. Should any weak or yielding areas be encountered, excavation should continue until suitable stable soils are encountered.

- Following review, the excavation may be backfilled to the prevailing subgrade elevations with structural fill. The placement and compaction of structural fill should be completed in accordance with this report.

Provided the removal and replacement of Fill procedure is satisfactorily completed, our foundation recommendations are provided as follows:

1. Foundation systems consisting of strip and/or spread footings are recommended for support of the proposed improvements provided the foundations are supported on firm

and stable naturally occurring materials and/or structural fill properly placed under engineering control. **In no case should the foundations be supported on unimproved Fill.**

2. A maximum allowable bearing pressure of **3,000** pounds per square foot (psf) should be considered in design of the foundation of the proposed improvements.

3. To protect against frost heave, spread footing foundations, including those in unheated areas, should extend to depths specified by the building code or local code amendments.

4. Foundation bottoms should be free of loose material or debris immediately prior to the placement of concrete.

5. Concrete should be placed in excavated foundation areas as quickly as possible to minimize degradation to the foundation subgrade due to exposure.

6. The suitability of the materials encountered at the proposed foundation subgrade elevations should be confirmed during construction by Kleinfelder.

7. Column and wall foundations should be a minimum of 3.0 and 1.5 feet in width, respectively.

8. All proposed foundation subgrade elevations must match the subgrade elevation of the existing adjacent foundation elements. The proposed foundation subgrade may then be stepped up, as necessary, at an interval of 2H:1V, moving away from the structure.

9. If encountered, the bedrock surface should be over-excavated a minimum of 6-inches below the foundation subgrade elevation and be backfilled with crushed stone. Proceeding in this manner should minimize the potential for point loading and allow for more uniform load distribution.

6.3 LATERAL EARTH PRESSURES

The following data is provided for the design of below grade structures which may be constructed at the sites. The data presented is based on the use of the on-site soils placed under engineering control for backfill of all retaining walls and below grade structures. Should different soil be used, design data should be re-evaluated and changed based on the specific material. The Earth Pressure Design Data for the use of the above referenced soils is provided in the table below.

EARTH PRESSURE DESIGN DATA	
Parameter	**Fill/Stratum I**
Angle of Internal Friction (degrees)	22
Unit Weight of Soil (pounds per cubic foot, pcf)	115
Coefficient of Active Earth Pressure	0.45
Coefficient of Passive Earth Pressure	2.20
Coefficient of At-Rest Earth Pressure	0.63
Cohesion (psf)	0

The parameters recommended above are based upon 1) adequate drainage to prevent the accumulation of water, 2) horizontal select granular backfill capped with an impervious layer, such as the finished floor, 3) retaining walls that can rotate a sufficient amount to mobilize an active state of earth pressure, and 4) foundation walls have been assumed to be in a fixed condition. The effects of surcharge loadings should be included as warranted. Care should be exercised so that heavy compaction equipment does not damage the walls. Having foundation walls braced during backfilling may be prudent.

Adequate drainage must be maintained adjacent to all earth retaining walls to minimize the buildup of hydrostatic pressure on the structures. At a minimum, a drainage blanket consisting of clean, crushed aggregate should be placed behind the retaining wall. The drainage blanket should be connected to a drain at the base of the retaining wall with all water directed to dedicated stormwater channels. Consideration may also be given to placing a non-woven geotextile filter fabric between the drainage blanket and on-site soil backfill to minimize potential clogging and sedimentation of the drainage blanket.

6.4 SEISMIC SITE CLASS

A Seismic Site Classification of C is recommended based on relevant test boring data conducted previously in the nearby area and our experience with the region.

7 CONSTRUCTION CONSIDERATIONS

Based on the results of our geotechnical exploration and our experience with similar project sites, we have developed the following site-specific recommendations for construction of the proposed site improvements.

7.1 SITE PREPARATION

At the outset of the project, all surficial materials should be stripped from all structural areas. Structural areas are defined as those areas to be covered by the proposed improvements, extending to a minimum of 5 feet beyond all foundation lines and any portion of the site to be covered by asphalt or concrete pavements. Unstable or deleterious materials, if encountered, should also be removed in their entirety.

7.2 PROOF-ROLLING

Following excavations required to reach proposed subgrade elevations and prior to the placement of structural fill or construction of foundation elements, structural areas should be compacted using a steel-drum, vibratory roller, having a minimum static weight of 15 tons. A minimum of 5 overlapping perpendicular passes of the roller should be completed across the entirety of the proposed improvements and other structural areas.

Following the compaction procedures, proof-rolling should be performed using a loaded, tandem-axle dump truck under the direction of a qualified Geotechnical Engineer. Proof-rolling and compaction procedures are necessary to compact and verify the integrity of the upper zones of the soils and allow for a uniform distribution of loads. Loose or unstable areas encountered during proof-rolling and compaction should be compacted in place or removed and replaced with structural fill placed in accordance with the recommendations provided in this report.

In areas of the site where a cut or removal of soil is necessary to achieve the required soil subgrade elevation, proof-rolling of the surface may be waived until the proposed subgrade elevation is achieved.

The project site is underlain by existing Fill and a carbonate geologic formation. Proof-rolling of the project site is considered to be an integral part of the foundation design criteria for the project. Proof-rolling will allow for a final evaluation of subgrade conditions for indications of loose/soft soil conditions and conditions associated with incipient sinkhole activity. Proof-rolling should be carried out as specified above under direction of Kleinfelder.

7.3 EXCAVATION CONSIDERATIONS

The test locations completed for the proposed accessibility ramps indicate construction of the project will take place within the existing Fill and naturally occurring soils of Stratum I, which may be removed utilizing conventional excavation equipment. Final site grades were unknown at the time of this writing; however, based on existing and anticipated final site grades, coupled with the data obtained during the subsurface exploration, bedrock removal is expected to be required during development of the project site. If encountered, bedrock excavation will be difficult and require the use of hydraulic or pneumatic "hammering" equipment for removal.

Excavation for the proposed accessibility ramps will take place adjacent to the existing structures. Care must be exercised to provide adequate temporary support to existing foundations and subsurface utilities as necessary. This may be accomplished with shoring, bracing, or underpinning. The Structural Engineer and Geotechnical Engineer should be consulted prior to implementation of any temporary foundation support system.

All excavations should be adequately sloped, benched, or supported to minimized collapse and protect personnel. All excavations should be completed in accordance with OSHA requirements. Every effort should be made to prevent surface water from entering open excavations. Any water which may accumulate in the bottoms of the excavation should be removed immediately.

7.4 COMPACTION AND PLACEMENT REQUIREMENTS

Structural fill should be placed in lifts not exceeding 10 inches in loose thickness where heavy compaction equipment can be utilized and 6 inches in loose thickness where hand-operated equipment is necessary. Only hand-operated tampers and rollers should be used immediately behind below-grade and retaining walls during backfilling unless permission is granted by the Structural Engineer to utilize heavy compaction equipment.

The optimum lift thickness and number of repetitive passes with compaction equipment necessary to achieve the required percentage compaction values should be determined in the field with test passes of the chosen compaction equipment. New structural fill should be placed at or deviate nominally from (±2%) the optimum moisture content as determined in accordance with ASTM D698 or ASTM D1557 and compacted to the minimum percentages of maximum dry density as indicated below.

COMPACTION CRITERIA		
Fill Area	**Percent of Maximum Dry Density per Standard Proctor (ASTM D698)**	**Percent of Maximum Dry Density per Modified Proctor (ASTM D1557)**
Foundation Support Fill	98	95
Foundation Backfill	98	95
Slab-On-Grade, Parking Areas	98	95
Non-Structural Areas, Green	92	90

7.5 FOUNDATION CONSTRUCTION

Prior to the placement of concrete, the foundation subgrade should be densified and compacted using a walk-behind vibratory roller, gas-powered automatic tamper, or similar equipment. Densification should be performed to provide uniform density of the foundation subgrade and allow for proper distribution of loads. Proper compaction and densification of the foundation subgrade should be verified by Kleinfelder prior to placement of concrete.

It is emphasized that caution should be exercised to not disturb foundation subgrade soils. Should the subgrade be disturbed, the soil should be compacted in place or removed until firm soil is encountered, and the resulting excavation backfilled with concrete or controlled structural fill as described above. **Every effort should be made to prevent water from entering open foundation excavations. Water that may accumulate in foundation excavations should be removed immediately.** It is recommended that footing excavation and placement of concrete be performed on the same day whenever practical.

7.6 WET WEATHER CONSTRUCTION

Construction during extended wet weather periods could create the need to over-excavate exposed soils if they become disturbed and cannot be recompacted due to elevated moisture content and/or weather conditions. The need for over-excavation should be confirmed through continuous observation and testing by Kleinfelder. Selective drying and re-compaction of unsuitable subgrades may be accomplished by scarifying or windrowing surficial material during extended periods of dry and warm weather. Otherwise, the use of imported material could become necessary at an additional cost. The need for subgrade over-excavation and/or stabilization will be dependent, in part, on the subgrade protection effort exercised by the contractor. Similar subgrade stability problems may develop after completion of subgrade preparation due to weather and construction traffic effects, requiring stabilization prior to floor slab and pavement construction.

7.7 CONSTRUCTION DEWATERING

Groundwater was not encountered within any of the test locations completed during the subsurface exploration. Should groundwater or perched water be encountered during construction, a dewatering specification should require the Contractor to provide an adequate dewatering system capable of maintaining the groundwater table a minimum of 2 feet below

subgrade elevations during earthwork, foundation construction, concrete placement, and backfilling operations. The specifications should also require that the dewatering system be designed such that adjacent structures will not be impacted.

8 CONSTRUCTION QUALITY CONTROL

At the time of this report, Kleinfelder, Inc. is the Geotechnical Engineer of Record for this project. Regardless of the thoroughness of a geotechnical engineering exploration, there is always a possibility that conditions between the test locations and below the depths explored may be different from those encountered, that conditions are not as anticipated by the designers, or that the construction process has altered the subsurface conditions. We should be retained to provide foundation inspection and materials testing and observation services during construction to ensure continuation of geotechnical interpretation and to verify the recommendations prepared for geotechnical aspects of site development are adhered to during construction.

If an outside firm is selected to provide foundation inspection and/or construction materials testing and observation services for this project, the engaged firm should prepare a letter indicating their intent to assume the responsibilities as Geotechnical Engineer of Record. The selected firm should also provide a written acknowledgement of their concurrence with the recommendations presented in our report or revised recommendations concerning the geotechnical aspects of the proposed development.

Additional soil and foundation engineering, testing, and consulting services recommended for this project are summarized below:

- **Review of Final Project Plans and Specifications**: As finalized project documents were not available at the time of this report, we recommend that Kleinfelder be engaged to review the final project plans and specifications to ensure that our recommendations are appropriately incorporated into the project documents.

- **Special Inspections/Fill Placement and Compaction**: Kleinfelder should witness any required earthwork operations and should perform sufficient in place density tests to verify that the required degree of compaction is achieved. Kleinfelder should also evaluate borrow materials used and determine if their existing moisture contents are suitable.

- **Foundation Excavation Examination and Testing**: Kleinfelder should examine all foundation excavations. Significant differences between field observations and our test pit log records should be brought to the attention of the Owner's representative along with appropriate recommendations.

9 LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided. This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than 2 years from the date of the report.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of our clients. Although risk can never be eliminated, more detailed and extensive studies yield more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service, which provide information for their purposes at acceptable levels of risk. Client and key members of the design team should discuss the issues addressed in this report with Kleinfelder, so that the issues are understood and applied in a manner consistent with the Client's budget, tolerance of risk and expectations for future performance and maintenance.

The varied nature of carbonate geology precludes absolute certainty in assessing karst formations. Therefore, the Client/Owner should be aware that conditions could be encountered during construction that would require modifications to our recommendations. Kleinfelder makes no warranty or guarantee with regard to the development of sinkholes on the project site. The Client/Owner must recognize the risks associated with development in areas underlain by karst geologic formations. Contingencies should be made in the construction schedule and budget for the repair of sinkholes and unstable soil conditions encountered during development of the site.

This report, and any future addenda or reports regarding this site, may be made available to bidders to supply them with only the data contained in the report regarding subsurface conditions and laboratory test results at the point and time noted. Bidders may not rely on interpretations, opinion, recommendations, or conclusions contained in the report. Further, Kleinfelder assumes no liability for interpolation of data between the specific testing locations discussed herein. Because of the limited nature of any subsurface study, the contractor may encounter conditions during construction which differ from those presented in this report. In such event, the contractor should promptly notify the owner so that Kleinfelder's geotechnical engineer can be contacted to confirm those conditions. We recommend the contractor describe the nature and extent of the differing conditions in writing and that the construction contract include provisions for dealing with differing conditions. Contingency funds should be reserved for potential problems during earthwork and foundation construction.

The work performed was based on project information provided by the Client. If there are any changes in the field to the plans and specifications, the Client must obtain written approval from Kleinfelder's engineer that such changes do not affect our recommendations. Failure to do so will vitiate Kleinfelder's recommendations.

10 CLOSING

We thank you for the opportunity to work on this project with you. Should you have any questions or require any additional information, please do not hesitate to contact us.

APPENDIX

FIGURE 1 – TOPOGRAPHIC MAP

FIGURE 2 – GEOLOGIC & KARST FEATURES MAP

FIGURE 3 – EXPLORATION PLAN

FIGURE 4 – GRAPHICS KEY

FIGURE 5 – SOIL DESCRIPTION KEY

LABORATORY TEST RESULTS

TEST PIT LOGS (TP-1 THROUGH TP-6)

FOUNDATION PHOTOGRAPHS (TP-1A THROUGH TP-4A)

GBA – GEOTECHNICAL REPORT ADVISORY

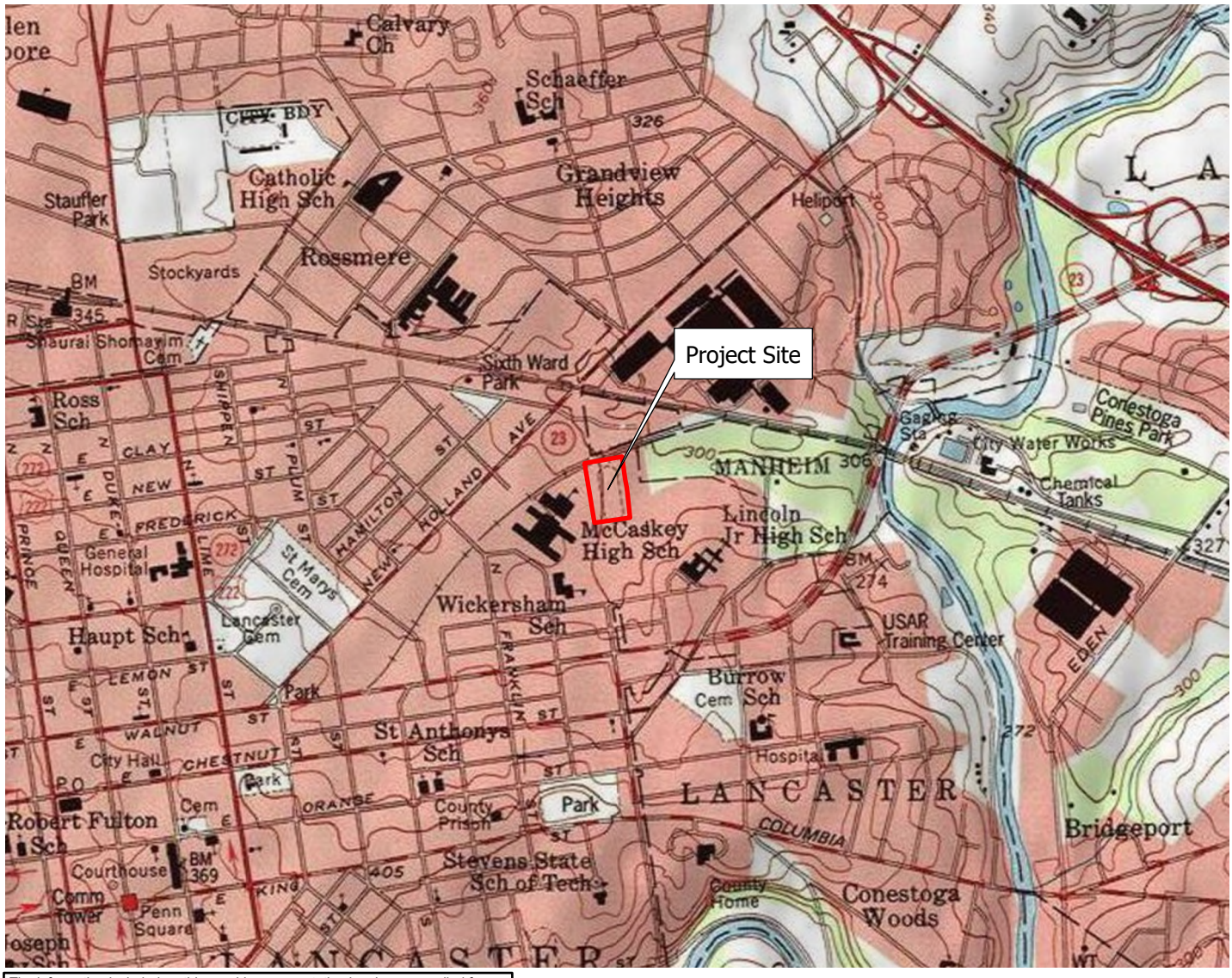
LEGEND

Project Site

N

NOTE:BASE MAPPING AND VICINITY MAP CREATED FROM LAYERS COMPILED BY ESRI PRODUCTS AND 1/6/2025 3:04 PM MICROSOFT CORPORATION. COORDINATE SYSTEM: NAD 1983 STATEPLANE PENNSYLVANIA SOUTH FIPS 3702 FEET

VICINITY MAP NOT TO SCALE



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0 1,000 2,000 4,000 Feet

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TOPOGRAPHIC MAP

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

FIGURE 1

GIS FILE PATH: G:\Client\ELA Sport\McCaskey Maps updated 11-2024\
GIS FILE NAME: McCaskey Maps updated 11-2024
PLOTTED: 1/6/2025 3:04 PM BY: BMOSSER

LEGEND

- Cl — Ledger Formation
- OCc — Conestoga Formation
- Surface Mine
- Project Site

NOTE: BASE MAPPING AND VICINITY MAP CREATED FROM LAYERS COMPILED BY ESRI PRODUCTS AND 1/6/2025 3:03 PM MICROSOFT CORPORATION. COORDINATE SYSTEM: NAD 1983 STATEPLANE PENNSYLVANIA SOUTH FIPS 3702 FEET

VICINITY MAP — NOT TO SCALE

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0 500 1,000 2,000 Feet

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GEOLOGIC AND KARST FEATURES MAP

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

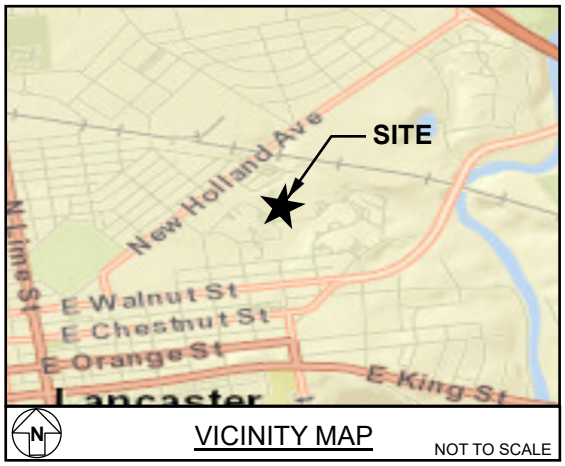
FIGURE 2

GIS FILE PATH: G:\Client\ELA Sport\McCaskey Maps updated 11-2024\
GIS FILE NAME: McCaskey Maps updated 11-2024
PLOTTED: 1/6/2025 3:03 PM BY: BMOSSER

LEGEND

- Approximate Test Pit Location
- Approximate Interior Test Pit Location (Bleacher Foundations)

NOTE:BASE MAPPING AND VICINITY MAP CREATED FROM LAYERS COMPILED BY ESRI PRODUCTS AND 1/7/2025 11:16 AM MICROSOFT CORPORATION. COORDINATE SYSTEM: NAD 1983 STATEPLANE PENNSYLVANIA SOUTH FIPS 3702 FEET



VICINITY MAP NOT TO SCALE

0 75 150 300 Feet

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EXPLORATION PLAN

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

FIGURE
3

GIS FILE PATH: G:\Client\ELA Sport\McCaskey Maps updated 11-2024\
GIS FILE NAME: McCaskey Maps updated 11-2024
PLOTTED: 1/7/2025 11:16 AM BY: BMOSSER

DRILLING METHOD/SAMPLER TYPE GRAPHICS

GROUND WATER GRAPHICS

- WATER LEVEL (level where first observed)
- WATER LEVEL (level after stabilizing period)
- WATER LEVEL (additional levels after exploration)
- OBSERVED SEEPAGE

NOTES

- The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Solid lines separating strata on the logs represent approximate boundaries only, dashed lines are inferred or extrapolated boundaries. Actual transitions may be gradual or differ from those represented.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.
- In general, Unified Soil Classification System (ASTM D2488/D2487) designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.
- Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5% and 12% passing the No. 200 sieve require dual USCS symbols, ie., CL-ML, GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SP-SC, SC-SM.
- If sampler is not able to be driven at least 6 inches then 50/X indicates number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

ABBREVIATIONS

C_u - Coefficients of Uniformity
C_c - Coefficients of Curvature
WOH - Weight of Hammer
WOR - Weight of Rod

REFERENCES

1. American Society for Testing and Materials (ASTM), 2011, ASTM D2487: Classification of Soils for Engineering Purposes (Unified Soil Classification System).

UNIFIED SOIL CLASSIFICATION SYSTEM[1]

COARSE GRAINED SOILS (More than 50% retained on No. 200 Sieve)	**GRAVELS** (More than 50% of coarse fraction retained on No. 4 Sieve)	CLEAN GRAVEL WITH <5% FINES	**GW**	WELL-GRADED GRAVEL, WELL-GRADED GRAVEL WITH SAND
			GP	POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
		GRAVELS WITH 5% TO 12% FINES	**GW-GM**	WELL-GRADED GRAVEL WITH SILT, WELL-GRADED GRAVEL WITH SILT AND SAND
			GW-GC	WELL-GRADED GRAVEL WITH CLAY (OR SILTY CLAY), WELL-GRADED GRAVEL WITH CLAY AND SAND (OR SILT CLAY AND SAND)
			GP-GM	POORLY GRADED GRAVEL WITH SILT, POORLY GRADED GRAVEL WITH SILT AND SAND
			GP-GC	POORLY GRADED GRAVEL WITH CLAY (OR SILTY CLAY), POORLY GRADED GRAVEL WITH CLAY AND (OR SILTY CLAY AND SAND)
		GRAVELS WITH > 12% FINES	**GM**	SILTY GRAVEL, SILTY GRAVEL WITH SAND
			GC	CLAYEY GRAVEL, CLAYEY GRAVEL WITH SAND
			GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL WITH SAND
	SANDS (50% or more of coarse fraction passes the No. 4 Sieve)	CLEAN SANDS WITH <5% FINES	**SW**	WELL-GRADED SAND, WELL-GRADED SAND WITH GRAVEL
			SP	POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
		SANDS WITH 5% TO 12% FINES	**SW-SM**	WELL-GRADED SAND WITH SILT, WELL-GRADED SAND WITH SILT AND GRAVEL
			SW-SC	WELL-GRADED SAND WITH CLAY (OR SILTY CLAY), WELL-GRADED SAND WITH CLAY AND GRAVEL (OR SILTY CLAY AND GRAVEL)
			SP-SM	POORLY GRADED SAND WITH SILT, POORLY GRADED SAND WITH SILT AND GRAVEL
			SP-SC	POORLY GRADED SAND WITH CLAY, POORLY GRADED SAND WITH CLAY AND GRAVEL (OR SILTY CLAY AND GRAVEL)
		SANDS WITH > 12% FINES	**SM**	SILTY SAND, SILTY SAND WITH GRAVEL
			SC	CLAYEY SAND, CLAYEY SAND WITH GRAVEL
			SC-SM	SILTY, CLAYEY SAND, SILTY, CLAYEY SAND WITH GRAVEL
FINE GRAINED SOILS (50% or more passes the No. #200 sieve)	SILTS AND CLAYS (Liquid Limit less than 50)		**ML**	SILT, SILT WITH SAND, SILT WITH GRAVEL
			CL	LEAN CLAY, LEAN CLAY WITH SAND, LEAN CLAY WITH GRAVEL
			CL-ML	SILTY CLAY, SILTY CLAY WITH SAND, SILTY CLAY WITH GRAVEL
			OL	ORGANIC CLAY, ORGANIC CLAY WITH SAND, ORGANIC CLAY WITH GRAVEL, ORGANIC SILT, ORGANIC SILT WITH SAND, ORGANIC SILT WITH GRAVEL
	SILTS AND CLAYS (Liquid Limit 50 or greater)		**MH**	ELASTIC SILT. ELASTIC SILT WITH SAND, ELASTIC SILT WITH GRAVEL
			CH	FAT CLAY, FAT CLAY WITH SAND, FAT CLAY WITH GRAVEL
			OH	ORGANIC CLAY, ORGANIC CLAY WITH SAND, ORGANIC CLAY WITH GRAVEL, ORGANIC SILT, ORGANIC SILT WITH SAND, ORGANIC SILT WITH GRAVEL

NOTE: USE MATERIAL DESCRIPTION ON THE LOG TO DEFINE A GRAPHIC THAT MAY NOT BE PROVIDED ON THIS LEGEND.

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GRAPHICS KEY

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

4

GRAIN SIZE[1]

DESCRIPTION		SIEVE SIZE	GRAIN SIZE
Boulders		>12 in.	>12 in. (304.8 mm.)
Cobbles		3 - 12 in.	3 - 12 in. (76.2 - 304.8 mm.)
Gravel	coarse	3/4 -3 in.	3/4 -3 in. (19 - 76.2 mm.)
	fine	#4 - 3/4 in.	0.19 - 0.75 in. (4.8 - 19 mm.)
Sand	coarse	#10 - #4	0.079 - 0.19 in. (2 - 4.9 mm.)
	medium	#40 - #10	0.017 - 0.079 in. (0.43 - 2 mm.)
	fine	#200 - #40	0.0029 - 0.017 in. (0.07 - 0.43 mm.)
Fines		Passing #200	<0.0029 in. (<0.07 mm.)

SECONDARY CONSTITUENT[1]

Term of Use	AMOUNT	
	Secondary Constituent is Fine Grained	Secondary Constituent is Coarse Grained
Trace	<5%	<15%
With	≥5 to <15%	≥15 to <30%
Modifier	≥15%	≥30%

PLASTICITY[1]

DESCRIPTION	CRITERIA
Non-Plastic	A 1/8 in. (3 mm) thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

MOISTURE CONTENT[1]

DESCRIPTION	FIELD TEST
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

CONSISTENCY - FINE-GRAINED SOIL[2, 3]

CONSISTENCY	SPT - N (# blows / ft)	Pocket Pen (tsf)	UNCONFINED COMPRESSIVE STRENGTH (Q_u)(psf)	VISUAL / MANUAL CRITERIA
Very Soft	<2	PP < 0.25	<500	Easily penetrated several inches by fist
Soft	2 - 4	0.25 ≤ PP <0.5	500 - 1,000	Easily penetrated several inches by thumb
Medium Stiff	4 - 8	0.5 ≤ PP <1	1,000 - 2,000	Can be penetrated several inches by thumb with moderate effort
Stiff	8 - 15	1 ≤ PP <2	2,000 - 4,000	Readily indented by thumb but penetrated only with great effort
Very Stiff	15 - 30	2 ≤ PP <4	4,000 - 8,000	Readily indented by thumbnail
Hard	>30	4 ≤ PP	>8,000	Indented by thumbnail with difficulty

APPARENT DENSITY - COARSE-GRAINED SOIL[2]

APPARENT DENSITY	SPT-N (# blows / ft)
Very Loose	<4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	>50

STRUCTURE[1]

DESCRIPTION	CRITERIA
Stratified	Alternating layers of varying material or color with layers at least 1/4-in. (6mm) thick, note thickness.
Laminated	Alternating layers of varying material or color with the layers less than 1/4-in. (6 mm) thick, note thickness.
Fissured	Breaks along definite planes of fracture with little resistance to fracturing.
Slickensided	Fracture planes appear polished or glossy, sometimes striated.
Blocky	Cohesive soil that can be broken down into small angular lumps which resist further breakdown.
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness.
Homogeneous	Same color and appearance throughout

ANGULARITY[1]

DESCRIPTION	CRITERIA
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces.
Subangular	Particles are similar to angular description but have rounded edges.
Subrounded	Particles have nearly plane sides but have well-rounded corners and edges.
Rounded	Particles have smoothly curved sides and no edges.

REACTION WITH HYDROCHLORIC ACID[1]

DESCRIPTION	FIELD TEST
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violent reaction, with bubbles forming immediately

CEMENTATION[1]

DESCRIPTION	FIELD TEST
Weakly	Crumbles or breaks with handling or little finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

REFERENCES

1. American Society for Materials and Testing (ASTM), 2017, ASTM D2488: Standard Practice for Description and Identification of Soils (Visual Manual Procedures).
2. Terzaghi, K and Peck, R., 1948, Soil Mechanics in Engineering Practice, John Wiley & Sons, New York.
3. United States Department of the Interior Bureau of Reclamation (USBR), 1998, Earth Manual, Part I.

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DATE: 10/25/2024

SOIL DESCRIPTION KEY
(For additional tables, see ASTM D2488)

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

Exploration ID	Depth (ft.)	Sample Description	Water Content (%)	Dry Unit Wt. (pcf)	Sieve Analysis (%)			Atterberg Limits			Additional Tests
					Passing 3/4"	Passing #4	Passing #200	Liquid Limit	Plastic Limit	Plasticity Index	
TP-1	5.5	LEAN CLAY WITH SAND (CL)	23.7		100	100	76	36	24	12	

Refer to the Geotechnical Evaluation Report or the supplemental plates for the method used for the testing performed above.
NP = NonPlastic

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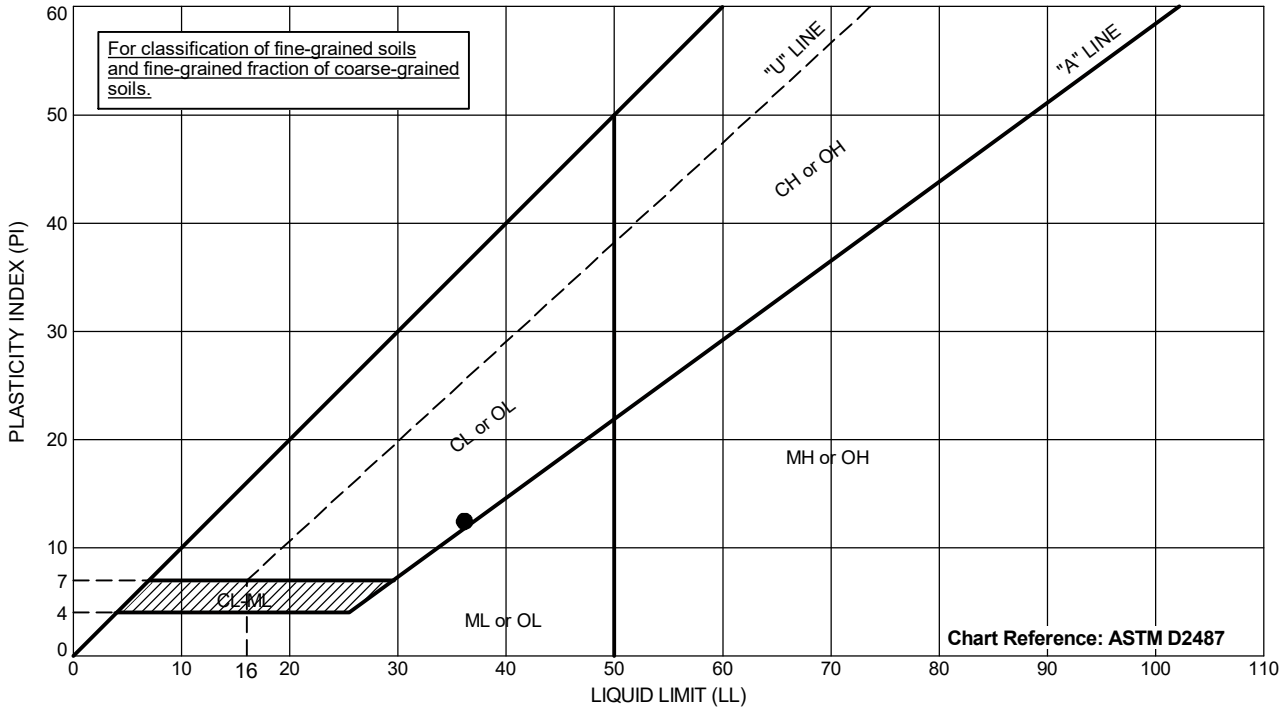
LABORATORY TEST RESULT SUMMARY

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania



Exploration ID	Depth (ft.)	Sample Description	Passing #200	LL	PL	PI
● TP-1	5.5	LEAN CLAY with SAND (CL)	76	36	24	12

Testing performed in general accordance with ASTM D4318.
NP = Nonplastic
NM = Not Measured

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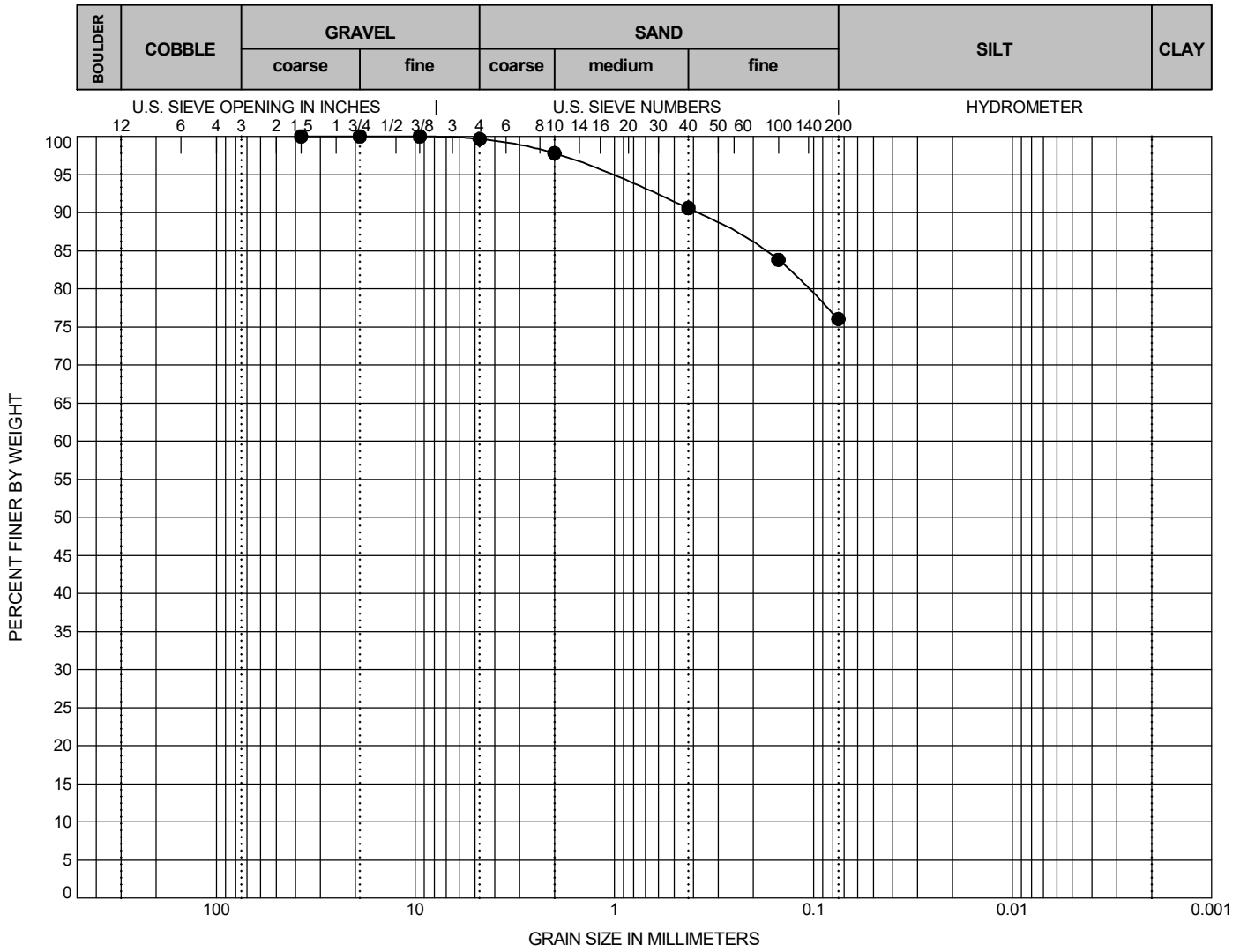
ATTERBERG LIMITS

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

TABLE



Exploration ID	Depth (ft.)	Sample Description	LL	PL	PI
● TP-1	5.5	LEAN CLAY with SAND (CL)	36	24	12

Exploration ID	Depth (ft.)	D_{100}	D_{60}	D_{30}	D_{10}	Cc	Cu	Passing 3/4"	Passing #4	Passing #200	%Silt*	%Clay*
● TP-1	5.5	37.5	NM	NM	NM	NM	NM	100	100	76	NM	NM

*These numbers represent silt-sized and clay-sized content but may not indicate the percentage of the material with the engineering properties of silt or clay. Sieve Analysis and Hydrometer Analysis testing performed in general accordance with ASTM D6913(Sieve Analysis) and ASTM D7928 (Hydrometer Analysis).
NP = Nonplastic
NM = Not Measured

Coefficients of Uniformity - $C_u = D_{60} / D_{10}$
Coefficients of Curvature - $C_C = (D_{30})^2 / D_{60} D_{10}$
D_{60} = Grain diameter at 60% passing
D_{30} = Grain diameter at 30% passing
D_{10} = Grain diameter at 10% passing

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Bright People. Right Solutions.

PROJECT NO.: 25001905.002A
DRAWN BY: JT
CHECKED BY: MO
DATE: 10/25/2024

SIEVE ANALYSIS

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

TABLE

Date Begin - End: 10/09/2024 **Excavation Company:** Gleim Excavating

Logged By: JT **Excavation Crew:** KM

Hor.-Vert. Datum: NAD83 - Assumed Elevation **Excavation Equip.:** Rubber-tire Back Hoe

Plunge: N/A degrees **Excav. Dimensions:** 10x3 ft

Weather: 65° Sunny

TEST PIT LOG TP-1

FIELD EXPLORATION

State Plane PA South
Latitude: 40.04861°
Longitude: -76.28862°
Approximate Ground Surface Elevation (ft.): 308.00
Surface Condition: Grass

Approximate Elevation (feet)	Depth (feet)	Graphical Log	Lithologic Description	Sample Type	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Topsoil: 4" dark brown organic soil									
			Stratum I **CLAY with Sand (CL)**: brown, dry									
			CLAY with Sand (CL): dolomite boulder; able to excavate									Pocket Penetrometer Reading: PP=1.5
												PP=2.0
305												PP=2.0
			CLAY with Sand (CL): dolomite boulder; able to excavate; additional boulders seen in sidewalls									PP=2.0
	5											PP=2.0
			Lean CLAY with Sand (CL): brown, dry		CL	23.7		100	76	36	12	
300												

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on October 09, 2024.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A
DRAWN BY: JT
CHECKED BY: MO
DATE: 10/15/2024

TEST PIT LOG TP-1

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

Date Begin - End:	10/09/2024	**Excavation Company:**	Gleim Excavating	**TEST PIT LOG TP-2**
Logged By:	JT	**Excavation Crew:**	KM	
Hor.-Vert. Datum:	NAD83 - Assumed Elevation	**Excavation Equip.:**	Rubber-tire Back Hoe	
Plunge:	N/A degrees	**Excav. Dimensions:**	10x3 ft	
Weather:	65° Sunny			

FIELD EXPLORATION

State Plane PA South
Latitude: 40.04929°
Longitude: -76.28804°
Approximate Ground Surface Elevation (ft.): 308.00
Surface Condition: Grass

Approximate Elevation (feet)	Depth (feet)	Graphical Log	Lithologic Description	Sample Type	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Topsoil: 3" dark brown organic soil									
			Stratum I **CLAY with Sand (CL)**: orange brown, damp									Pocket Penetrometer Reading: PP=1.5 PP=3.0 PP=4.0 PP=4.5 PP=4.5
305	5											
300												

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on October 09, 2024.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.
GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A
DRAWN BY: JT
CHECKED BY: MO
DATE: 10/15/2024

TEST PIT LOG TP-2

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

Date Begin - End: 10/09/2024 **Excavation Company:** Gleim Excavating

Logged By: JT **Excavation Crew:** KM

Hor.-Vert. Datum: NAD83 - Assumed Elevation **Excavation Equip.:** Rubber-tire Back Hoe

Plunge: N/A degrees **Excav. Dimensions:** 10x3 ft

Weather: 65° Sunny

TEST PIT LOG TP-3

Approximate Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION State Plane PA South Latitude: 40.04929° Longitude: -76.28870° Approximate Ground Surface Elevation (ft.): 305.00 Surface Condition: Grass Lithologic Description	Sample Type	LABORATORY RESULTS USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Topsoil: 5" dark brown organic soil									
			Fill **Clayey SAND with Gravel**: brown to dark gray, moist, brown clayey sand with gray limestone gravel									Pocket Penetrometer Reading: PP=2.0
			Stratum I **CLAY with Sand (CL)**: orange brown, moist									PP=4.0
												PP=4.5
												PP=4.0
300	5											PP=4.0

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on October 09, 2024.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A

DRAWN BY: JT

CHECKED BY: MO

DATE: 10/15/2024

TEST PIT LOG TP-3

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

Date Begin - End: 10/09/2024 **Excavation Company:** Gleim Excavating

Logged By: JT **Excavation Crew:** KM

Hor.-Vert. Datum: NAD83 - Assumed Elevation **Excavation Equip.:** Rubber-tire Back Hoe

Plunge: N/A degrees **Excav. Dimensions:** 10x3 ft

Weather: 65° Sunny

TEST PIT LOG TP-4

Approximate Elevation (feet) / Depth (feet)	Graphical Log	FIELD EXPLORATION — Lithologic Description	Sample Type	LABORATORY RESULTS: USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
		State Plane PA South Latitude: 40.04871° Longitude: -76.28764° Approximate Ground Surface Elevation (ft.): 303.00 Surface Condition: Grass									
		Topsoil: 3" dark brown organic soil									
		Stratum I **Sandy CLAY with Gravel (CL)**: brown, dry									
		Stratum II **GRAVEL (GP)**: gray, dry, gray dolomite gravel and cobbles; weathered bedrock									Pocket Penetrometer Reading: PP=2.0
300											
5											
295											

The test pit was terminated because of backhoe refusal (▲) at approximately 1.5 ft. below ground surface on bedrock. The test pit was backfilled with excavated material on October 09, 2024. Rock was encountered at a depth of 1.5 ft. during this exploration.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A

DRAWN BY: JT

CHECKED BY: MO

DATE: 10/15/2024

TEST PIT LOG TP-4

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

TEST PIT LOG TP-5

Date Begin - End:	10/09/2024	**Excavation Company:**	Gleim Excavating
Logged By:	JT	**Excavation Crew:**	KM
Hor.-Vert. Datum:	NAD83 - Assumed Elevation	**Excavation Equip.:**	Rubber-tire Back Hoe
Plunge:	N/A degrees	**Excav. Dimensions:**	10x3 ft
Weather:	65° Sunny		

FIELD EXPLORATION

State Plane PA South
Latitude: 40.04941°
Longitude: -76.28754°
Approximate Ground Surface Elevation (ft.): 303.00
Surface Condition: Grass

Approximate Elevation (feet)	Depth (feet)	Graphical Log	Lithologic Description	Sample Type	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Topsoil: 3" dark brown organic soil									
			Fill **Sandy CLAY (CL)**: brown, damp, debris within soil layer									Pocket Penetrometer Reading: PP=1.0
			Stratum I **CLAY with Sand (CL)**: orange brown, damp									PP=3.5
300												PP=4.0
												PP=3.5
	5		The test pit was terminated because of backhoe refusal ( ) at approximately 4.5 ft. below ground surface on bedrock. The test pit was backfilled with excavated material on October 09, 2024. Rock was encountered at a depth of 4.5 ft. during this exploration.									
295												

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A
DRAWN BY: JT
CHECKED BY: MO
DATE: 10/15/2024

TEST PIT LOG TP-5

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

Date Begin - End: 10/09/2024 **Excavation Company:** Gleim Excavating

Logged By: JT **Excavation Crew:** KM

Hor.-Vert. Datum: NAD83 - Assumed Elevation **Excavation Equip.:** Rubber-tire Back Hoe

Plunge: N/A degrees **Excav. Dimensions:** 10x3 ft

Weather: 65° Sunny

TEST PIT LOG TP-6

FIELD EXPLORATION

State Plane PA South
Latitude: 40.04939°
Longitude: -76.28776°
Approximate Ground Surface Elevation (ft.): 303.00
Surface Condition: Grass

Approximate Elevation (feet)	Depth (feet)	Graphical Log	Lithologic Description	Sample Type	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Topsoil: 5" dark brown organic soil									
			Stratum I **Sandy CLAY (CL)**: brown, dry									Pocket Penetrometer Reading: PP=2.5
												PP=4.0
300												PP=4.0
			CLAY with Sand (CL): brown, dry, dolomite cobbles and boulders within soil layer to 6 feet									PP=3.5
	5											PP=3.5
295												

The test pit was terminated at approximately 6 ft. below ground surface.
The test pit was backfilled with excavated material on October 09, 2024.

GROUNDWATER LEVEL INFORMATION:
Groundwater was not observed during excavation or after completion.

GENERAL NOTES:
The exploration location and elevation are approximate and were estimated by Kleinfelder.

KLEINFELDER
Bright People. Right Solutions.

PROJECT NO.: 25001905.002A
DRAWN BY: JT
CHECKED BY: MO
DATE: 10/15/2024

TEST PIT LOG TP-6

McCaskey High School Stadium Renovations
City of Lancaster
Lancaster County, Pennsylvania

FOUNDATION PHOTOGRAPHS

Photo 1: Interior Test Pit TP-1A (away bleachers). Floor slab and foundation exposed

Photo 2: Interior Test Pit TP-1A; view of floor slab thickness

FOUNDATION PHOTOGRAPHS

Photo 3: Interior Test Pit TP-1A; view of foundation thickness

Photo 4: Interior Test Pit TP-1A; view of foundation projection

FOUNDATION PHOTOGRAPHS

Photo 5: Interior Test Pit TP-2A (away bleachers). Floor slab and foundation exposed

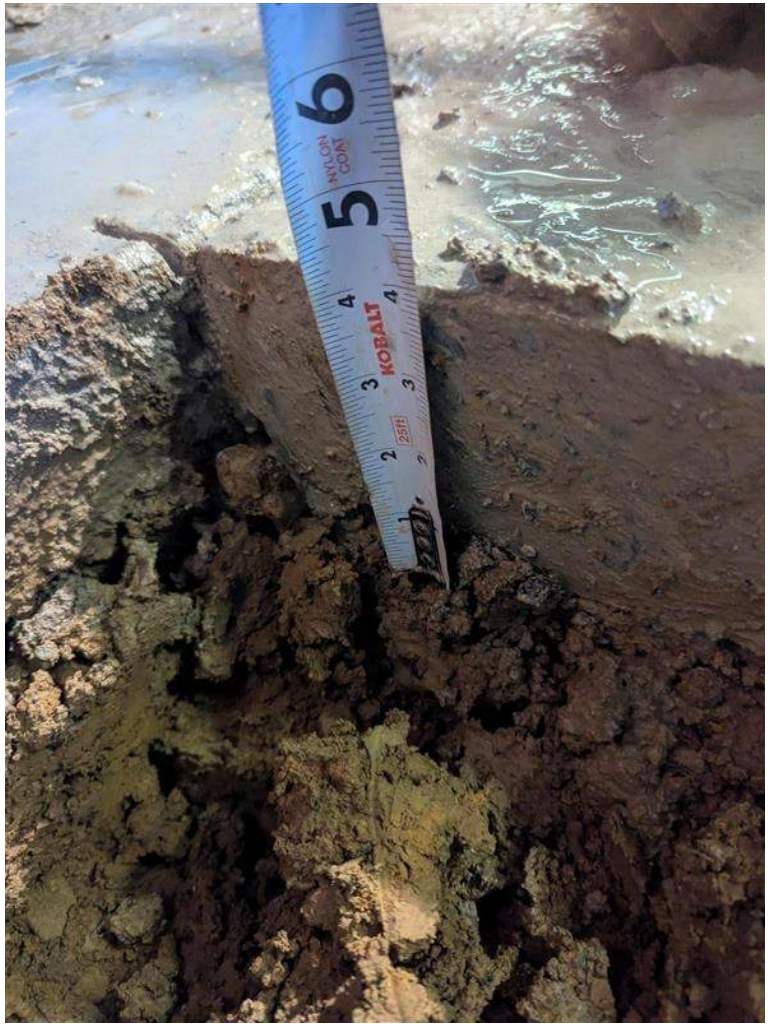


Photo 6: Interior Test Pit TP-2A; view of floor slab thickness

FOUNDATION PHOTOGRAPHS

Photo 7: Interior Test Pit TP-2A; view of foundation thickness

Photo 8: Interior Test Pit TP-2A; view of foundation projection

FOUNDATION PHOTOGRAPHS

Photo 9: Interior Test Pit TP-3A (home bleachers). Floor slab and foundation exposed

Photo 10: Interior Test Pit TP-3A; view of floor slab thick-

FOUNDATION PHOTOGRAPHS

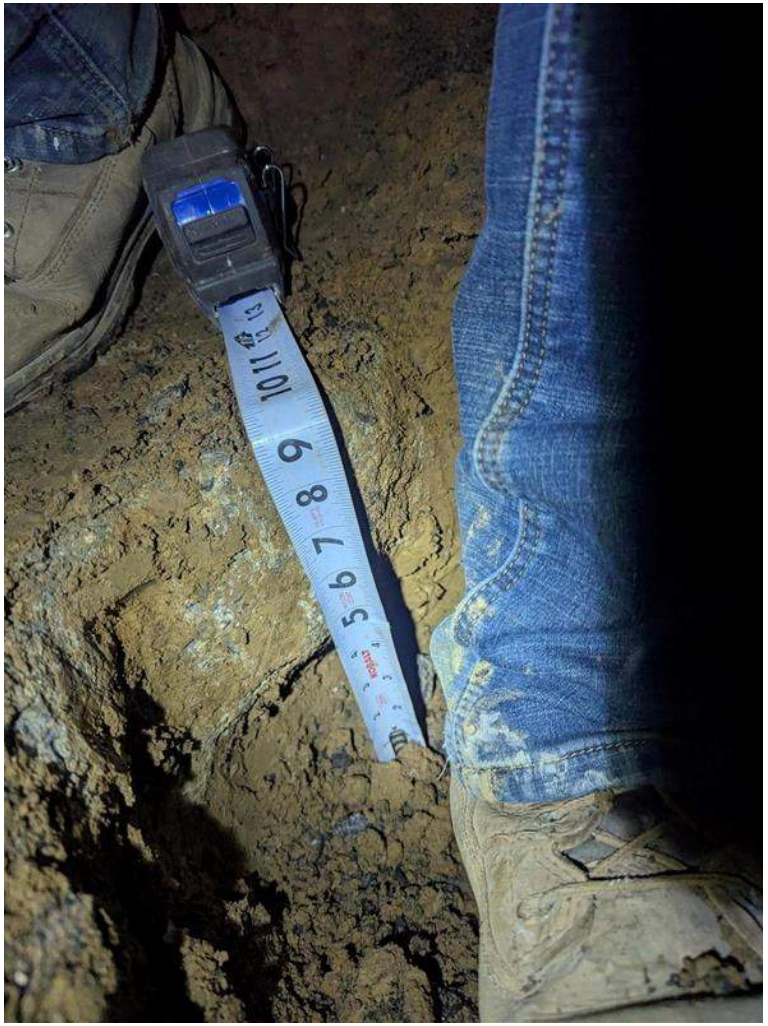


Photo 11: Interior Test Pit TP-3A; view of foundation thickness

Photo 12: Interior Test Pit TP-3A; view of foundation projection

FOUNDATION PHOTOGRAPHS

Photo 13: Interior Test Pit TP-4A (home bleachers). Floor slab and foundation exposed

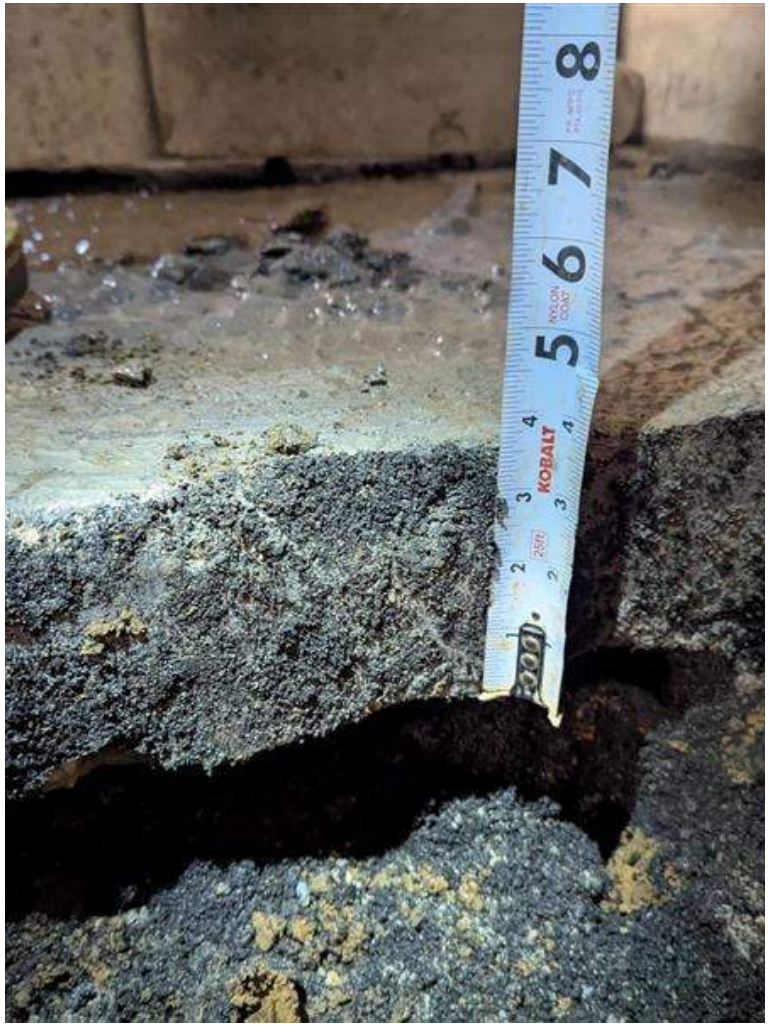


Photo 14: Interior Test Pit TP-4A; view of floor slab thick-

FOUNDATION PHOTOGRAPHS

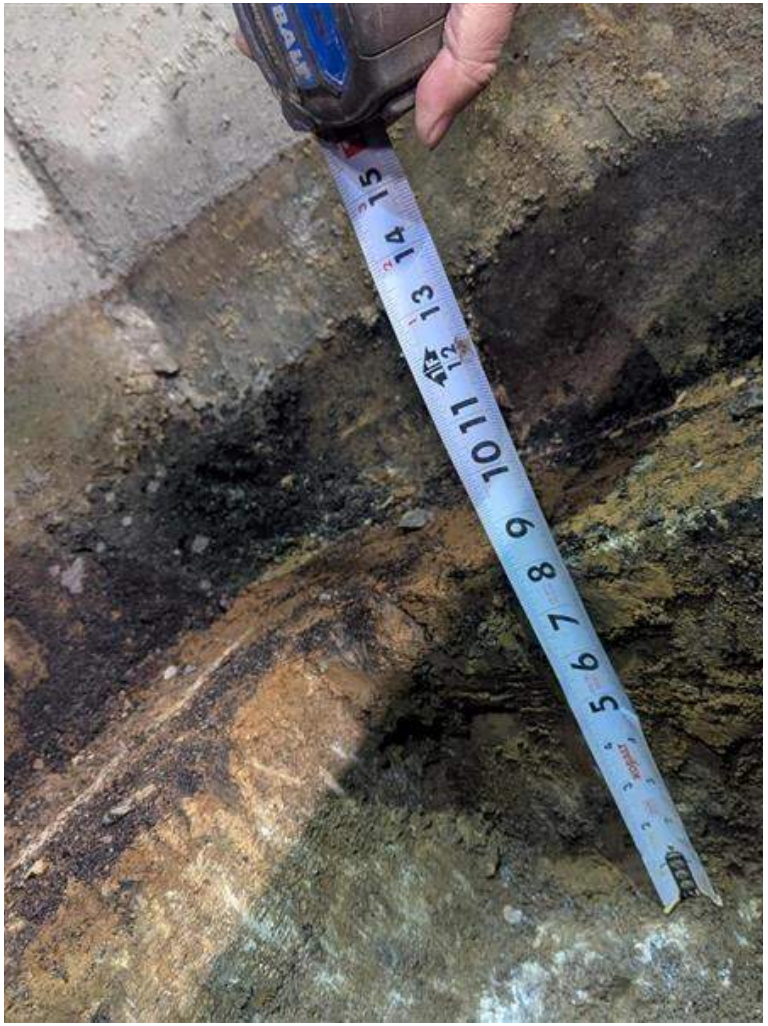


Photo 15: Interior Test Pit TP-4A; view of foundation thickness after stepdown

Photo 16: Interior Test Pit TP-4A; view of foundation projection after stepdown

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

DOCUMENT 00 43 23 - ALTERNATES FORM, ADDENDUM 02

1.1 BID INFORMATION

A. Bidder: _____.

B. Prime Contract: _____.

C. Project Name: McCaskey High School Stadium Projects

D. Project Location: 445 N. Reservoir Street, Lancaster PA 17602

E. Owner: School District of Lancaster, 251 S. Prince St., 3rd Floor, Lancaster, PA 17603

1. District Representatives: Drew Schenk, Director of Operations; Matthew Shields, Director of Facilities & Building Operations

F. Project Number: 24-SDL-03

1.2 BID FORM SUPPLEMENT

A. This form is required to be attached to the Bid Form.

1.3 DESCRIPTION

A. The undersigned Bidder proposes the amount below be added to or deducted from the Base Bid if particular alternates are accepted by Owner. Amounts listed for each alternate include costs of related coordination, modification, or adjustment.

1. Alternate price given below includes adjustment to Contractor's Fee.

B. If the alternate does not affect the Contract Sum, the Bidder shall indicate "NO CHANGE."

C. If the alternate does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."

D. The Bidder shall be responsible for determining from the Contract Documents the affects of each alternate on the Contract Time and the Contract Sum.

E. Owner reserves the right to accept or reject any alternate, in any order, and to award or amend the Contract accordingly within 60 days of the Notice of Award unless otherwise indicated in the Contract Documents.

F. Acceptance or non-acceptance of any alternates by the Owner shall have no affect on the Contract Time unless the "Schedule of Alternates" Article below provides a formatted space for the adjustment of the Contract Time.

1.4 SCHEDULE OF ALTERNATES

A. Alternate Bid No. 04A – Masonry Repointing

ADD_____ Dollars ($_____).

B. Alternate Bid No. 04B – Foundation / Wall / Pier Work

ADD/DEDUCT_____ Dollars ($_____).

ADD/DEDUCT_____Days (_____days).

C. Alternate 26A – Softball Field Lighting

DEDUCT_____ Dollars ($_____).

SUBMISSION OF BID SUPPLEMENT

Respectfully submitted this ____ day of _____, 20___.

Submitted By: _____
(Name of bidding firm or corporation)

Authorized Signature: _____
(Handwritten signature)

Signed By: _____
(Type or print name)

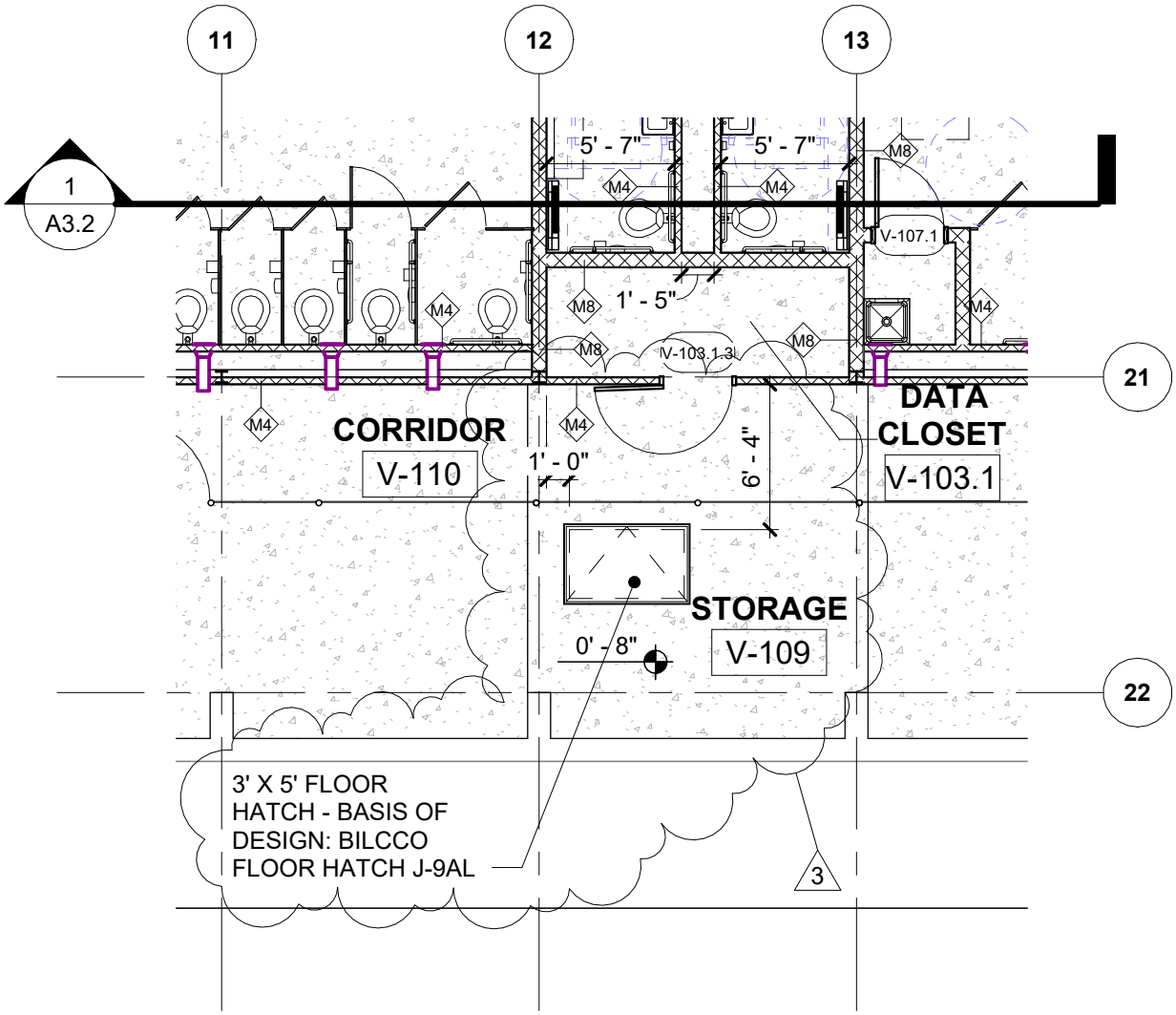
Title: _____
(Owner/Partner/President/Vice President)

END OF DOCUMENT 00 43 23

PANEL	Bus:	110A Main Breaker	Additional Panel Notes
SB1	Volts:	120/208V, 3PH, 4W	100% Neutral with Ground Bus
	Poles:	42	Integral TVSS L3
	AIC:	10,000	NEMA 3R Enclosure
	Mounting:	Surface	Fed From: Panel VL1

CKT.	Breaker		Description	Notes	Load						Notes	Description	Breaker		CKT.
	Amp	Pole			A		B		C				Pole	Amp	
1	20	2	Video 1		1.5	1.2						Video 6	2	20	2
3							1.5	1.2							4
5	20	2	Video 2						1.2	1.5		Video 7	2	20	6
7					1.2	1.5									8
9	20	2	Video 3				1.5	1.2				Video 8	2	20	10
11									1.5	1.2					12
13	20	2	Video 4		1.2	1.5						Video 9	2	20	14
15							1.2	1.5							16
17	20	2	Video 5						1.5	1.2		Video 10	2	20	18
19					1.5	1.2									20
21	20	1	Scoreboard Control				0.7	0.2				Receptacle	1	20	22
23	20	1	Fiber Converters						0.1			Spare	2	20	24
25	20	1	Spare												26
27	20	1	Spare									Spare	2	20	28
29	20	1	Spare												30
					10.8		9.0		8.2						
					Phase Totals							Total Connected Load KVA:		28.0	KVA

(Addendum 2)



1 PARTIAL VISITOR FIRST FLOOR PLAN

ASK-01 1/8" = 1'-0"

MAROTTA/MAIN ARCHITECTS

WWW.MAROTTAMAIN.COM

RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

DRAWN BY: WEM

DATE: 01/15/25

SHEET TITLE:

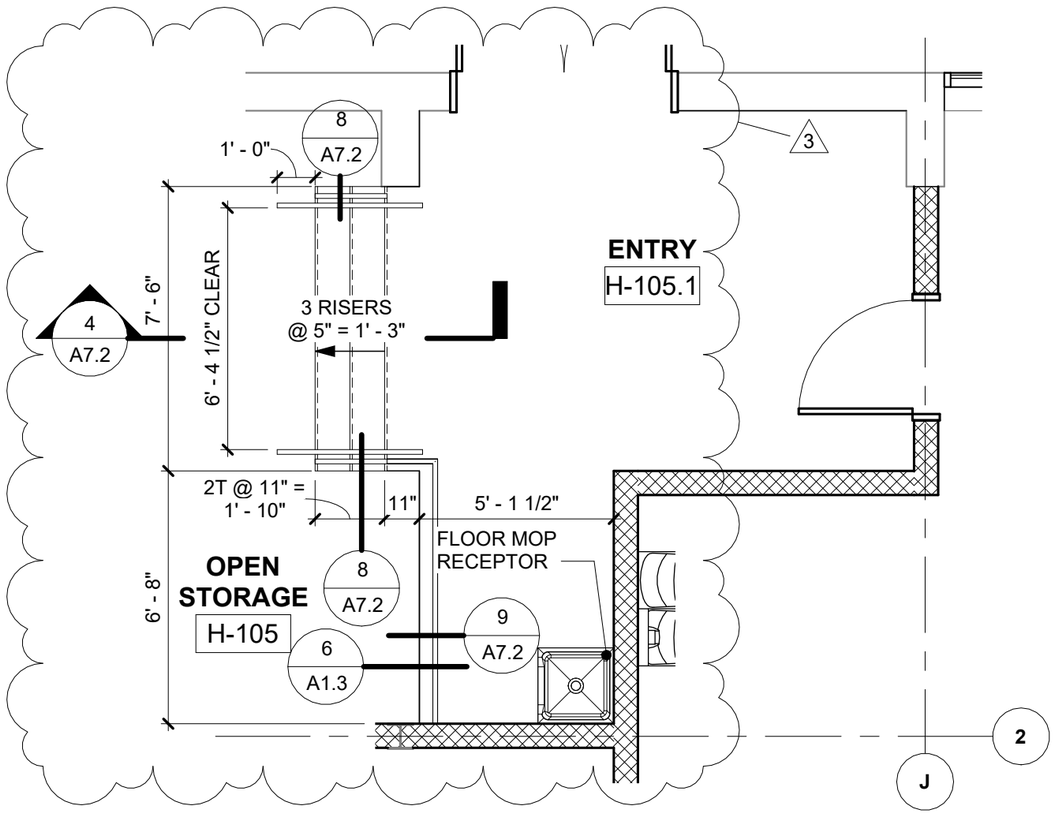
FLOOR HATCH

SHEET NUMBER:

ASK-01

SKETCH SHEET REFERENCE DWG. NUMBER:

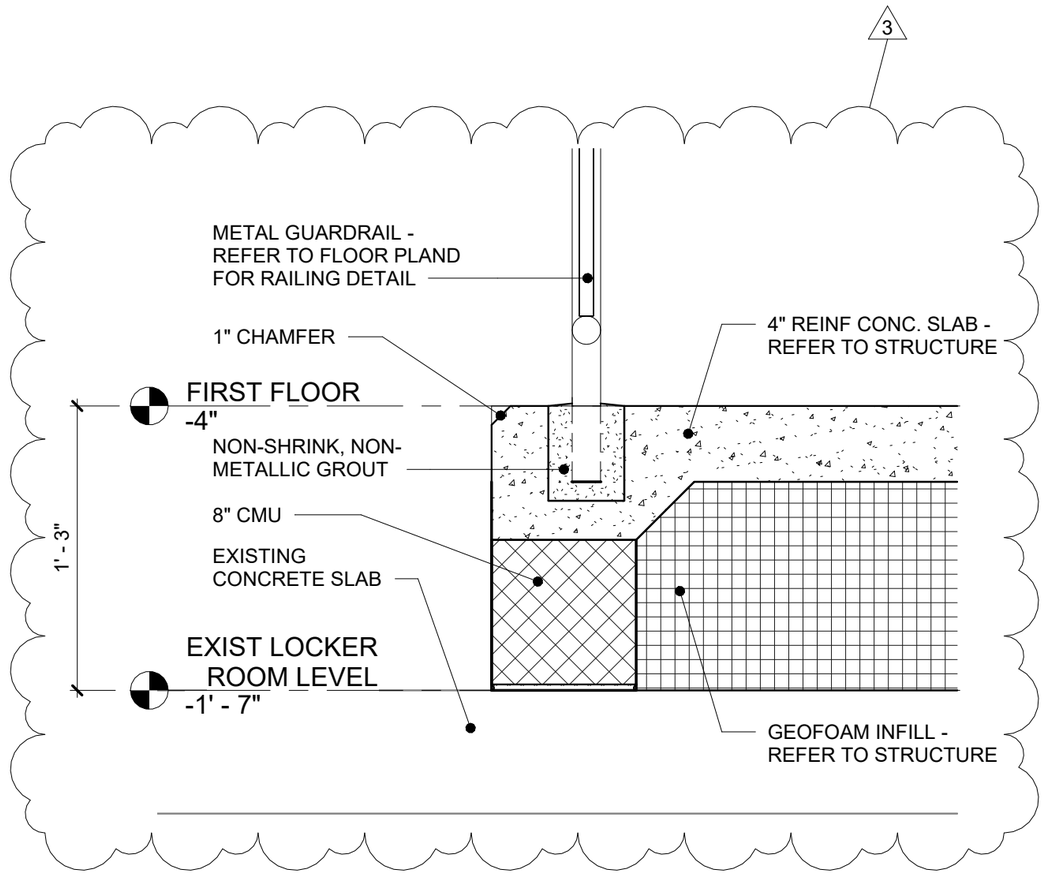
1/15/2025 11:07:07 AM



1 ENLARGED PLAN

ASK-02 1/4" = 1'-0"

REFER TO PLAN 3/A7.2



2 SECTION DETAIL

ASK-02 1 1/2" = 1'-0"

REFER TO PLAN 6/A1.3

SKETCH SHEET REFERENCE DWG. NUMBER:

MAROTTA/MAIN
ARCHITECTS
WWW.MAROTTAMAIN.COM

RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF
LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

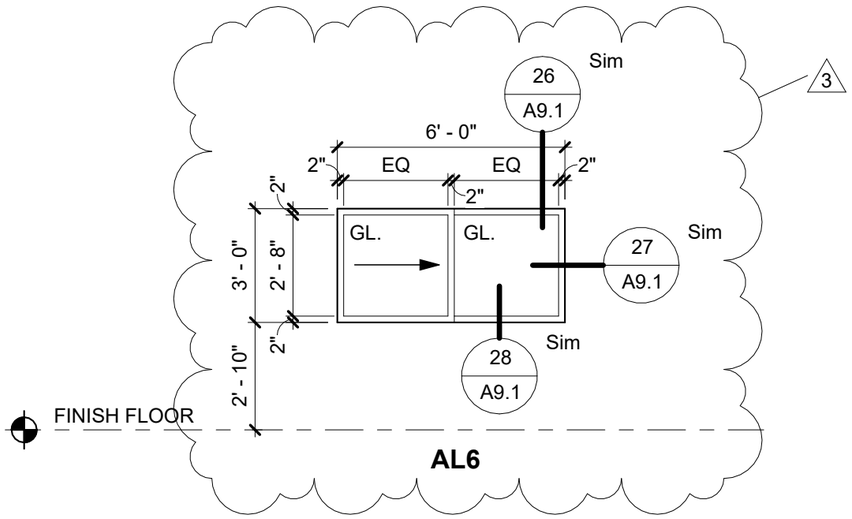
DRAWN BY: WEM

DATE: 01/15/25

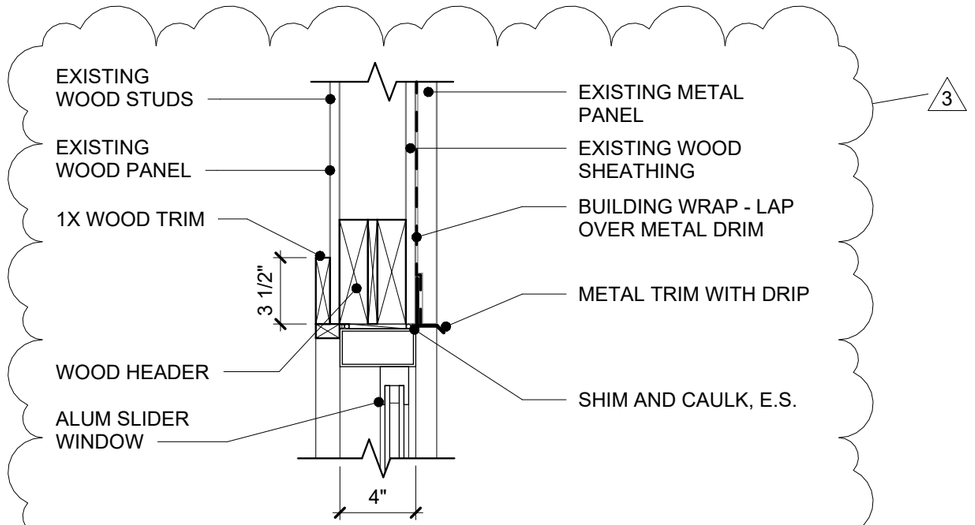
SHEET TITLE:
STAIR AND RAILING AT ENTRY H105.1

SHEET NUMBER:
ASK-02

1/17/2025 12:21:15 AM



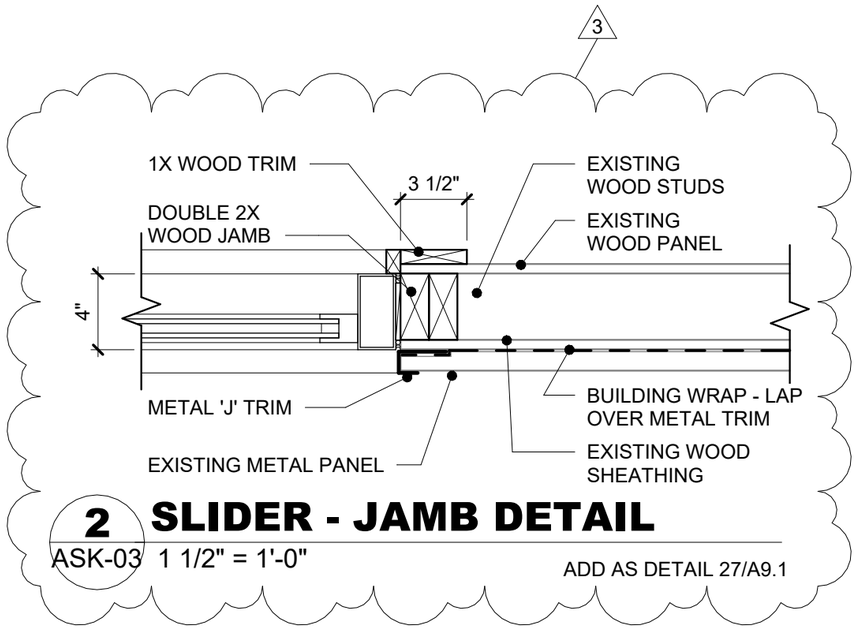
ADD AS ALUMINIUM FRAME TYPE AL6 ON SHEET A9.1



1 SLIDER - HEAD DETAIL

ASK-03 1 1/2" = 1'-0"

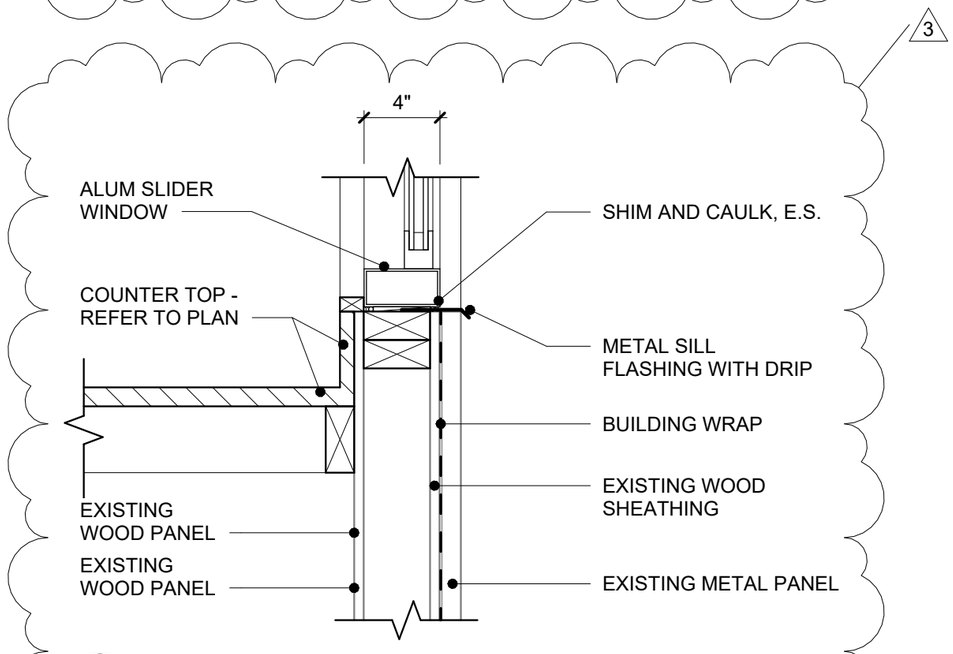
ADD AS DETAIL 26/A9.1



2 SLIDER - JAMB DETAIL

ASK-03 1 1/2" = 1'-0"

ADD AS DETAIL 27/A9.1



3 SLIDER - SILL DETAIL

ASK-03 1 1/2" = 1'-0"

ADD AS DETAIL 28/A9.1

SKETCH SHEET REFERENCE DWG. NUMBER:

MAROTTA/MAIN
ARCHITECTS
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RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF
LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

DRAWN BY: Author

DATE: 01/16/25

SHEET TITLE:
WINDOW AL6 ELEVATION AND DETAILS

SHEET NUMBER:

ASK-03

1/17/2025 12:19:13 AM

GENERAL STRUCTURAL NOTES

GENERAL STRUCTURAL NOTES:

1. The structural drawings shall be used in conjunction with the drawings of all other disciplines and the specifications. The contractor shall verify the requirements of other trades as to sleeves, chases, hangers, inserts, anchors, holes and other items to be placed or set in the structural work.

2. The contractor shall be responsible for complying with all safety precautions and regulations during the work. The engineer will not advise on nor issue direction as to safety precautions and programs.

3. The structural drawings herein represent the finished structure. The contractor shall provide all temporary shoring, guying, and bracing required to erect and hold the structure in proper alignment until all structural work and connections have been completed. The investigation, design, safety, adequacy and inspection of erection bracing, shoring, temporary supports, etc. is the sole responsibility of the contractor.

4. The engineer shall not be responsible for the methods, techniques and sequences of procedures to perform the work. The supervision of the work is the sole responsibility of the contractor.

5. Drawings indicate general and typical details of construction. Where conditions are not specifically shown, similar details of construction shall be used, subject to approval by the engineer.

6. All structural systems which are to be composed of components to be field erected shall be supervised by the supplier during manufacturing, delivery, handling, storage and erection in accordance with the supplier's instructions and requirements.

7. Contractor shall provide all temporary supports required for stability and for resistance to wind and seismic forces until the structure is capable of providing this support. Contractor to refer to A.I.S.C. steel design guide #10, "Erection bracing of low-rise structural steel frames" and to the National Concrete Masonry Association technical guide #03-04C, "Bracing concrete masonry walls under construction".

8. Loading applied to the structure during the process of construction shall not exceed the safe load-carrying capacity of the structural members. The live loadings used in the design of this structure are indicated in the "Design Criteria Notes". Do not apply any construction loads until structural framing is properly connected together and until all temporary bracing is in place.

9. All ASTM and other references are per the latest editions of these standards, unless otherwise noted.

10. In accordance with Section 1704 of IBC 2018, special inspections will be required for this project. Special inspections shall be performed in accordance with the "Schedule of Special Inspections". All fabricators shall satisfy the "Exception" noted in section 1704.2.5.1, which requires the fabricator to maintain an agreement with an approved independent inspection or quality control agency. The contractor shall notify the special inspector at least 48 hours in advance for work that will require inspection or testing

11. Unless otherwise indicated, all items noted to be demolished shall become the contractor's property and be removed from the site.

12. Contractors shall visit the site prior to bid to ascertain conditions which may adversely affect the work or cost thereof.

13. Dimensions shown on the architectural drawings shall govern over dimensions shown on the structural drawings. The contractor shall generate an RFI regarding discrepancies prior to construction.

SHOP DRAWING NOTES:

1. Shop drawings and other items shall be submitted to the engineer for review prior to fabrication. The engineer's review is to be for conformance with the design concept and general compliance with the relevant contract documents. The engineer's review does not relieve the contractor of the sole responsibility to review, check and coordinate the shop drawings prior to submission. The contractor remains solely responsible for errors and omissions associated with the preparation of shop drawings as they pertain to member sizes, details, dimensions, etc.

2. Submit shop drawings as per note #3 below. In no case shall reproduction of the contract drawings be used as shop drawings. As a minimum, submit the following items for review:
   A. Temporary shoring shop drawings and delegated design submittal.
   B. Concrete mix design(s).
   C. Reinforcing steel shop drawings.
   D. Structural steel shop drawings.
   E. Metal decking shop drawings.
   F. Pre-fabricated walkway, ramp, seating and press-box shop drawings and delegated design submittal.
   G. Metal stair and guardrail shop drawings and delegated design submittals.

   Other submittals may be required per the "Schedule of Special Inspections" or the separate notes contained herein.

3. Contractor shall submit electronic shop drawings. Any additional shop drawings submitted will not be reviewed or returned.

4. Contractor shall submit a schedule indicating when each set of shop drawings will be submitted to the architect/engineer prior to any shop drawing submission.

5. All notes or questions from the detailer to the engineer or architect shall be clouded, numbered and with the text "Arch/Engr. review." Any notes or questions from the detailer to the contractor shall be clouded, numbered and with the text "G.C. Review."

6. All shop drawings shall be reviewed by the contractor before submittal to the engineer or architect. Shop drawings will be rejected if the contractor has not reviewed the shop drawings prior to submittal to engineer or architect.

7. The contractor shall produce all shop drawings. Copying, scanning and/or reusing any portion of the structural drawings as part of the shop drawings submittal is not permitted. Submittals that include reproduced portions of the structural drawings will be rejected without review.

DESIGN CRITERIA NOTES:

1. The intended design standards and/or criteria are as follows:
   General: Uniform statewide bldg. code (IBC 2018, Chapter 16 as amended)
   Concrete: ACI 318-14
   Masonry: TMS 402/602-16
   Structural Steel: ANSI/AISC 360-16 A.S.D. (15TH Edition)
   Wind Design: ASCE 7-16
   Foundations: Geotechnical Investigation and Report completed by Kleinfelder, Inc., dated January 8th, 2025.

2. Design gravity dead loads used in the design of this structure are as follows (refer to IBC 2018 section 1606):

Concrete Risers & Bleachers	80 PSF
First Floors	On-Grade
Second Floor (Home Bleacher)	60 PSF
New Press Box (Home Bleacher)	15,850 LBS. Applied evenly over area of new steel platform.
All other	Actual weight

3. Design gravity live loads used in the design of this structure are as follows (refer to IBC 2018 section 1607):

Concrete Risers & Bleachers	100 PSF
New Press Box Roof (Home Bleacher)	50 PSF
New Press Box Floor (Home Bleacher)	100 PSF
Mechanical Spaces (Home Bleacher - Second Floor)	40 PSF
Ramps & Stairs	100 PSF
Slab-On-Grade Corridors	100 PSF

4. The structure has been designed as Risk Category III in accordance with IBC 2018 table 1604.5.

5. Design lateral live loads used in the design of this structure, in accordance with Chapters 11 through 31 of ASCE 7-16, are as follows:
   Wind - Ultimate, main system: 113 mph, Exposure B, Iw = 1.0
   Wind - Ultimate, components: 113 mph, Exposure B, Iw = 1.0

6. Design snow loads used in the design of this structure, in accordance with Chapter 7 of ASCE 7-16, are as follows:
   Pg (ground snow load) = 35 PSF, Ce = 1.0, Is = 1.0, Ct = 1.0
   Pf (flat roof) = 35 PSF, Cs = 1.0
   Pm (minimum snow load) = 35 PSF

7. The lateral load resisting system of this building consists of:
   Home Bleachers:
   Perimeter - Unreinforced masonry shear walls
   Visitor Bleachers:
   Perimeter - Unreinforced masonry shear walls
   New Press Box Steel Platform:
   Perimeter - Steel braced-frame bays.

8. This structure has been designed with "safety factors" in accordance with generally accepted principles of structural engineering. The fundamental nature of the "safety factor" is to compensate for uncertainties in the design, fabrication and erection of structural building components. It is intended that "safety factors" be used so that the load carrying capacity of the structure does not fall below the design load and that the building will perform under design load without distress. While the use of "safety factors" implies some excess capacity beyond design load, such excess capacity cannot be adequately predicted and SHALL NOT BE RELIED UPON.

EXISTING CONSTRUCTION NOTES:

1. Before proceeding with any work within the existing facility, the contractor shall familiarize himself with existing structural and other conditions. It shall be the contractor's responsibility to provide all necessary bracing, shoring and other safeguards to maintain all parts of the existing work in a safe condition during the process of demolition and construction and to protect from damage those portions of the existing work which are to remain.

2. The contractor shall field verify the dimensions, elevations, etc. necessary for the proper construction and alignment of the new portions of the work to the existing work. The contractor shall make all measurements necessary for fabrication and erection of structural members. Any discrepancy shall be immediately brought to the attention of the engineer.

3. Welding to and within an existing facility presents potential hazards, including:
   A. Fire hazard - due to the existing construction and building contents.
   B. Structural liquefaction - due to welding across the full section of structural steel members.

   Recommendations to prevent these hazards include:
   A. Fire hazard - protect existing combustibles prior to welding. Keep a separate watchman and several fire extinguishers on hand.
   B. Structural liquefaction - weld in small increments. Allow welds to harden before continuing to the next increment.
   C. Do not leave the site until satisfied that no fire hazard exists.

4. Information used in preparing these drawings was taken from drawings prepared by the firm of Henry Y. Shaub & H. Clifford Kreisle Associated Architects, dated March 11th, 1948.

5. The contractor shall be responsible for the design and erection of all shoring necessary to safeguard the existing structure. Any shoring shown is a partial and schematic representation of that required. The contractor shall submit a detailed plan for shoring, bracing and protection of the existing construction. The plan shall include a construction sequence, design calculations, bear the seal of a professional engineer registered in the state of the project and be submitted to the engineer for review prior to beginning the work.

DEMOLITION NOTES:

1. The contractor is to obtain and pay for all necessary permits for the demolition and removal work required.

2. Demolition procedures, shoring requirements, sequences, techniques, etc. either given in or implied to by these drawings are suggestions only.

3. Prior to undertaking any demolition work, the contractor shall ascertain, by survey, the existing conditions of the property and the extent of the demolition work involved.

4. The contractor shall perform all demolition work in such a manner as to protect the existing structure and be responsible to properly repair any damage which may occur as a result of his demolition work. If the contractor damaged the existing structure to remain, he shall notify the owner and engineer immediately and for all repair costs, including design and inspection expenses.

5. The contractor shall cease demolition operations and notify the owner and engineer immediately if it appears that the integrity of the structure has been affected by the demolition work.

6. The contractor shall not cut or alter any structural members to remain without written authorization by the engineer or as indicated on the structural drawings.

7. All existing dimensions (distances, elevations, member sizes, etc.) shown on the drawings shall be verified in the field by the contractor.

8. The contractor shall provide a temporary platform to catch debris from slab removal. Do not allow resulting debris to accumulate in the work area. All debris shall be disposed of in a legal manner with as little disturbance to adjacent spaces and occupants as possible.

9. Cutting of existing concrete slabs shall be performed in a neat professional manner. Drill corners and saw cut straight lines around the perimeter of the new opening.

SUBGRADE PREPARATION NOTES:

2

1. All site preparation shall conform to the requirements of IBC 2018 Chapter 18 and the Geotechnical Investigation and Report completed by Kleinfelder, Inc., dated January 8th, 2025.

2. Within an area a minimum of 5 feet beyond the building limits, excavate a minimum of 4" of existing soil. Remove all organics, pavement, roots, debris and otherwise unsuitable material.

3. The surface of the exposed subgrade shall be inspected by probing or testing to check for pockets of soft or unsuitable material. Excavate unsuitable soil as directed by the geotechnical engineer/testing agency.

2

4. Proofroll the surface of the exposed subgrade with a steel drum vibratory roller having a minimum static weight of 15 tons. Remove all soils which pump or do not compact properly as directed by the geotechnical engineer/testing agency.

5. Fill all excavated areas with approved controlled fill. Place in 10 inch loose lifts (6 inch lifts where hand-operated equipment is necessary) and compact to a minimum of 98% of the maximum dry density in accordance with ASTM D-698 (95% per ASTM D1557).

6. All controlled fill material shall be a select granular material free from all organics or otherwise deleterious material with not more than 30% by weight passing a No. 200 sieve (classified as SC, SM, SP or better in accordance with the unified soil classification system) and with a plasticity index not exceeding 10%.

7. Provide field density tests for each 3000 SF of building area for each lift of controlled fill.

FOUNDATION NOTES:

2

1. All foundation construction shall conform to the requirements of IBC 2018 Chapter 18 and the Geotechnical Investigation and Report completed by Kleinfelder, Inc., dated January 8th, 2025.

2. All footings have been designed based upon an assumed soil bearing pressure of 3,000 psf. All footings shall bear on undisturbed, firm natural soil or compacted fill. All foundation excavations shall be evaluated by the geotechnical engineer/testing agency prior to pouring foundation concrete.

3. Top of footing elevation shall be as shown on the foundation plan. These elevations are a maximum and shall be lowered as required to obtain the required design bearing pressure or lowered below new or existing utilities per typical details.

4. All foundation concrete shall obtain a 28 day compressive strength of 3,000 psi. All concrete to be permanently exposed to weather shall be air entrained to 5% (+-1%) with an admixture that conforms to ASTM C-260.

5. All concrete work shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings". Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI 306.

6. All reinforcing steel shall conform to ASTM A-615, Grade 60. Reinforcing shall be detailed and installed per ACI 315 and CRSI Manual of Standard Practice.

7. Unless otherwise noted, the following concrete cover shall be provided for reinforcement.
   A) Concrete cast against and permanently exposed to earth: 3"
   B) Concrete exposed to earth or weather:
   #6 through #18 bars: 2"
   #5 bar, W31 or D31 wire and smaller: 1-1/2"

8. All reinforcing marked continuous (cont.) on the plans and details shall be lapped 36xbar diameters at splices unless otherwise noted.

9. No unbalanced backfilling shall be placed against foundation walls unless walls are securely braced against overturning, either by temporary bracing or by permanent construction.

10. Prior to commencing any foundation work, coordinate work with any existing utilities. Foundations shall be lowered where required to avoid utilities.

11. Unless otherwise noted, the centerlines of column foundations shall be located on column centerlines.

SLAB ON GRADE NOTES:

2

1. Slab-on-grade construction shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings" and IBC 2018 Section 1907 and the Geotechnical Investigation and Report completed by Kleinfelder, Inc., dated January 8th, 2025.

2. Provide concrete slabs as indicated on plans over a 15 mil polyethylene vapor barrier and 4" of porous fill as follows:
   4" slab reinforced with 6x6- W1.4xW1.4 welded wire fabric and with 4000 psi mix concrete
   Maximum slump for all concrete slabs shall be 5 inches, using type I cement.

3. All welded wire fabric shall be in accordance with ASTM A-1064. Lap adjoining pieces at least one full mesh.

4. All porous fill material shall be a clean granular material with 100% passing a 1-1/2" sieve and no more than 5% passing a no. 4 sieve. Porous fill shall be compacted to 95% max. dry density per ASTM D-698.

5. Slab joints shall be filled with approved material. This should take place as late as possible, preferably 4 to 6 weeks after the slab has been cast. Prior to filling, remove all debris from the slab joints, then fill in accordance with the manufacturer's recommendations as follows:
   Fill with field molded or elastomeric sealant

6. Unless otherwise approved, all welded wire fabric shall be blocked into the position indicated with precast concrete blocks having a compressive strength equal to that of the slab.

7. Walkways and other exterior slabs are not indicated on the structural drawings. See the site plan and architectural drawings for locations, dimensions, elevations, jointing details and finish details. Provide 4" walks reinforced with 6x6 - W1.4xW1.4 WWF unless otherwise noted.

8. Slabs to be permanently exposed to weather shall be air entrained to 5% (+-1%) with an admixture that conforms to ASTM C-260.

9. All concrete work shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings". Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI 306.

10. In order to avoid concrete shrinkage cracking, the maximum length of slab cast in any one continuous pour is recommended to be less than 100 feet. The maximum spacing of joints shall be 12'.

11. The alternate wires of the welded wire fabric must be precut at the slab contraction joint locations to create a "weakened plane". Without cutting the alternate wires, the strength of the wire will prevent the slab from cracking (separating) at the joint and the slab may begin to crack elsewhere.

12. The use of polypropylene fibers (in lieu of welded wire fabric) is prohibited without the written authorization of the engineer.

13. See the architectural drawings for exact locations of depressed slab areas and drains. Slope slab to drains where shown.

14. Slabs have been designed based on the following criteria:
   Subgrade modulus, K=200 pci (assumed)
   Uniform live loading = 100 psf

15. The finish tolerance of all slabs shall be in accordance with ACI 302, Section 8.4.

16. Slabs shall be constructed in accordance with the following flatness/levelness requirements:

Slab Category	Specified	Local Minimum
Straight edged	F_F = 25 , F_L = 20	F_F = 17 , F_L = 15

Floor flatness and levelness tests shall be conducted by the owner in accordance with ASTM E 1155. Results, including acceptance or rejection of the work will be provided to the contractor within 48 hours after data collection. Remedies for out of tolerance work shall be in accordance with the specifications.

CAST-IN-PLACE CONCRETE NOTES:

1. Concrete mixes shall be designed per ACI 301, using Portland cement conforming to ASTM C-150 or C-595, aggregate conforming to ASTM C-33, and admixtures conforming to ASTM C-494, C-1017, C-618, C-989 and C-260. Concrete shall be ready-mixed in accordance with ASTM C-94.

2. Concrete shall conform to the following compressive strength, slump and water/cement ratio requirements:

Concrete	Min. f'c (28 days)	Slump*	W/C ratio
Columns & Piers	4000 psi	2" to 4"	.46
Elevated Slabs	4000 psi	2" to 4"	.46
Concrete not noted	4000 psi	2" to 4"	.50
Foundation	See Fdn. Notes	2" to 4"	.50
Slabs-on-grade	See "Slab-on-Grade Notes"		.50

*At contractor's option, an approved admixture may be used to produce flowable concrete. Maximum slump shall not exceed 10 inches. The contractor shall submit test results of the proposed concrete mixes along with the manufacturer's technical data for approval prior to pouring concrete.

3. All concrete work shall conform to the requirements of ACI 301, "Specification for Structural Concrete Buildings" and IBC 2018 Chapter 19. Hot weather concreting shall be in accordance with ACI 305. Cold weather concreting shall be in accordance with ACI 306.

4. All reinforcing steel shall conform to ASTM A-615, grade 60. All welding of reinforcing steel shall be in accordance with AWS D1.4. Reinforcing shall be detailed and installed per ACI 315 and CRSI Manual of Standard Practice.

5. All welded wire fabric (W.W.F.) shall conform to ASTM A-1064.

6. All reinforcing steel shall be set and tied in place prior to pouring of concrete, except that vertical dowels for masonry wall reinforcing may be "floated" in place. Do not field bend bars partially embedded in hardened concrete unless specifically indicated or approved by the engineer.

7. Reinforcing steel, including hooks and bends, shall be detailed in accordance with ACI 315. All reinforcing steel indicated as being continuous (cont) shall be lapped with a type 2 lap splice unless otherwise noted.

8. Unless otherwise noted, the following concrete cover shall be provided for reinforcement:
   A) Concrete exposed to earth or weather:
   #6 through #18 bars : 2"
   #5 bar, W31 or D31 wire and smaller : 1-1/2"
   B) Concrete not exposed to earth or weather:
   Walls, elevated slabs : 3/4"
   Beams, piers, and columns : 1-1/2"
   C) Foundation concrete (see "Foundation Notes")

9. Bar supports and holding bars shall be provided for all reinforcing steel to insure minimum concrete cover. Bar supports shall be plastic tipped or stainless steel.

10. All edges of permanently exposed concrete surfaces shall be chamfered 3/4" unless otherwise noted.

11. The contractor shall provide the engineer with documentation that all materials conform to the quality standards specified in IBC 2018.

12. In accordance with IBC 2018, special inspections are required for the concrete work. The owner will hire the special inspector to perform all required special inspections.

13. In order to avoid concrete shrinkage cracking, place concrete slabs in an alternating lane pattern. The maximum length of slab cast in any one continuous pour shall be limited to 80 feet.

14. Formwork shall remain in place until concrete has obtained at least 90% of its 28 day compressive strength. The contractor shall provide all shoring and reshoring.

MASONRY NOTES:

1. Masonry construction shall conform to the requirements of the "Building Code Requirements and Specification for Masonry Structures (TMS 402/602-16)", published by The Masonry Society, Longmont, Colorado, and IBC 2018 Chapter 21.

2. Hollow load-bearing masonry units shall conform to ASTM C-90, and be made with normal weight or lightweight aggregate. The minimum prism compressive strength (f'm) shall be 2,500 psi at an age of 28 days, as determined by the unit strength method of ACI 530.1.

3. Fill all bond beams and reinforced cells solidly with grout. Grout shall conform to ASTM C-476 and shall obtain a min. 28 day compressive strength of 2,500 psi.

4. Reinforcing steel shall be in accordance with ASTM A-615, grade 60. Shop fabricate reinforcing bars which are shown to be hooked or bent. Provide a minimum lap of 48 x bar diameters at all splices, unless indicated otherwise.

5. The use of masonry-cement mortar is strictly prohibited. Mortar shall conform to ASTM C-270, type S. All mortar shall meet the "Proportion Specification" of ASTM C-270 and be made with Portland cement/lime (non air-entrained).

6. Unless otherwise indicated, all walls shall be laid in running bond. Bond corners and intersections of load-bearing walls.

7. Provide vertical reinforcing bars of the given size and spacing as indicated. Provide bars at all wall corners, intersections and opening edges. Masonry walls shall be constructed in accordance with the "low-lift" or "high-lift" methods. "High-lift" masonry construction is limited to specially qualified contractors meeting the following minimum requirements:
   A. Successful completion of at least 3 previous projects that utilized "high-lift" wall construction.
   B. Contractor shall submit a detailed "high-lift" wall construction procedure for approval, including the documentation of all personnel who have successfully been trained in "high-lift" masonry construction.

8. Provide rebar dowels from foundations to match vertical reinforcing size and spacing. Dowels shall have standard 90 degree hooks and lap with the first lift of reinforcing.
9. Provide horizontal bond beams with continuous reinforcing as indicated. Discontinue all horizontal reinforcing at control joints except for the bond beams at bearing elevations.

10. Provide standard, galvanized 9 gauge horizontal joint reinforcing at 16" on center in all walls. Provide ladder type joint reinforcing for all concrete masonry. Coordinate brick tie back requirements with the architectural drawings. Unless otherwise noted, stop all horizontal joint reinforcing at control joints.

11. Provide lintels above all wall openings per typical details and schedule. See the architectural drawings for locations of all door and window openings.

12. Provide CMU control joints as indicated on the architectural drawings, with additional joints such that the spacing between joints does not exceed a spacing of 3 x wall height (30 feet maximum). Where beams or lintels bear at CMU control joints, offset and lap the vertical reinforcing as indicated.

13. The masonry contractor shall provide all required temporary wall bracing during construction (see "General Structural Notes").

14. Hot weather masonry work shall be in accordance with ACI 530.1. Cold weather masonry work shall be in accordance with ACI 530.1.

STRUCTURAL STEEL NOTES:

1. All structural steel shall conform to the AISC "Manual of Steel Construction" (15th Edition) and IBC 2018 Chapter 22.

2. Unless otherwise noted, all materials shall be in accordance with the following ASTM specifications:

Member	ASTM	Fy (Min. Strength)
W and WT	A992	50 KSI
C and MC	A36/A992	36 KSI/50 KSI
Angles	A36	36 KSI
HSS (Rectangle)	A500 (Gr. C)	50 KSI
Plates/shapes	A36/A572 (Gr. 50)	36 KSI/50 KSI
Connection bolts	F3125 (Gr. A325)	90 KSI (F_{nt})
Anchor bolts	F1554 (Gr. 55, Supplement S1)	55 KSI
Threaded rods	A36	36 KSI
Non-shrink grout	C1107	8000 PSI

3. All connections shall be shear type connections and designed by a professional engineer registered in the state of the project retained by the fabricator as per the beam reactions shown on the drawings and the AISC specifications. The fabricator shall submit schematic connection details, signed and sealed connection design calculations and a letter prepared by the connection design engineer stating the shop drawings were reviewed prior to submittal for review & approval. Minimum bolt diameter shall be 3/4". Unless otherwise noted all bolts shall be shear/bearing type bolts and be "snug-tight".

4. All welding shall be in accordance with AWS D1.1 using E70XX electrodes. Unless otherwise noted, provide cont. min. sized fillet welds per AISC requirements. All filler material shall have a minimum yield strength of 70 KSI.

5. Holes in steel shall be drilled or punched. All slotted holes shall be provided with smooth edges. Burning of holes and torch cutting at the site is not permitted.

6. Unless otherwise noted, all structural steel permanently exposed to view shall be shop painted with one coat of SSPC 15-68, type 1 (red oxide) paint.

7. The structural steel erector shall provide all temporary guying and bracing (see General Structural Notes).

8. Columns, anchor bolts, base plates, etc. have been designed for the final completed condition and have not been investigated for potential loadings encountered during steel erection and construction. Any investigation of the columns, anchor bolts, base plates, etc. for adequacy during the steel erection and construction process is the sole responsibility of the contractor.

9. Unless otherwise noted, all structural steel permanently exposed to the weather, including all lintels in exterior walls, shall be hot-dipped galvanized in accordance with ASTM A153.

ABBREVIATIONS

@	AT
ø	DIAMETER
2X	TWO BY
(4)	QUANTITY OF 4
A.B.	ANCHOR BOLT
A.P.	ANCHOR POINT
ADD'L.	ADDITIONAL
ADJ.	ADJACENT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL.	ALUMINUM
ARCH.	ARCHITECT/ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWS	AMERICAN WELDING SOCIETY
BCX	BOTTOM CHORD EXTENSION
BEL.	BELOW
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
B.O.	BOTTOM OF
BTWN.	BETWEEN
C	CHANNEL
CFSF	COLD-FORMED STEEL FRAMING
CL	CENTER/COLUMN LINE
CLR.	CLEAR
C.J.	CONTROL/CONSTRUCTION JOINT
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
COORD.	COORDINATE
DBL.	DOUBLE
DET.	DETAIL
DN.	DOWN
DWL.	DOWEL
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
ELEV.	ELEVATION
EQ.	EQUAL
E.S.	EACH SIDE
E.W.	EACH WAY
EX.	EXISTING
EXP.	EXPANSION
FLG.	FLANGE
FLR.	FLOOR
FDN.	FOUNDATION
F.O.	FACE OF
F.S.	FAR SIDE
FTG.	FOOTING
GALV.	GALVANIZED
G.C.	GENERAL CONTRACTOR
HK.	HOOK
HGR.	HANGER
HSS	HOLLOW STRUCTURAL SECTION
HORIZ.	HORIZONTAL
HT.	HEIGHT
INT.	INTERIOR
JST.	JOIST
JT.	JOINT
K	KIPS
L	ANGLE
(LLH)	LONG LEG HORIZONTAL
(LLV)	LONG LEG VERTICAL
LOC.	LOCATION
LG.	LONG
L.R.F.D.	LOAD & RESISTANCE FACTOR DESIGN
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER
M.A.	MASONRY ANCHOR
MAX.	MAXIMUM
MIN.	MINIMUM/MINIMIZE
MANF.	MANUFACTURER
MECH.	MECHANICAL
M.O.	MASONRY OPENING
MTL.	METAL
(N)	NEW
N.S.	NEAR SIDE
N.S.G.	NON-SHRINK GROUT
O.C.	ON CENTER
OPN'G.	OPENING
OPP.	OPPOSITE
P.C.	PRE-CAST
PL	PLATE
PLYWD.	PLYWOOD
PMF	PRE-MOLDED FILLER
PSL	PARALLEL STRAND LUMBER
P.T.	PRESSURE TREATED
R/C	REINFORCED CONCRETE
REINF.	REINFORCING
REQ'D.	REQUIRED
RTU	ROOF TOP UNIT
SCH.	SCHEDULE
SECT.	SECTION
SF	STRIP FOOTING
SHT'G.	SHEATHING
SIM.	SIMILAR
SL	SLOPE
S.O.G.	SLAB-ON-GRADE
S.S.	STAINLESS STEEL
STL.	STEEL
SQ.	SQUARE
T&B	TOP AND BOTTOM
TCX	TOP CHORD EXTENSION
THK.	THICK
TJI	TRUSS JOIST I-SHAPED JOISTS
T.O.	TOP OF
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
V.L.D.	VERTICAL LEG DOWN
V.I.F.	VERIFY IN FIELD
WD.	WOOD
W/	WITH
W/O	WITHOUT
W.P.	WORK POINT
W.R.T.	WITH RESPECT TO
W.W.F.	WELDED WIRE FABRIC
WF	WIDE FLANGE BEAM
W	WIDE FLANGE BEAM
X	CROSS

SYMBOL KEY

CMU
BRICK
CONCRETE
WOOD ELEVATION
WOOD SECTION
STEEL
GRATING
EARTH
CRUSHED STONE/ BUILDING STONE
ENGINEERED WOOD PRODUCT

STRUCTURAL DRAWING LIST

MAROTTA/MAIN ARCHITECTS
WWW.MAROTTAMAIN.COM

SEAL:

School District of Lancaster
Together We Can!

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: DESCRIPTION:
01/08/2025 PERMIT SET
01/08/2025 BID DOCUMENTS
01/14/2025 ADDENDUM 1
01/17/2025 ADDENDUM 2

PROJ #: MM2410 DRAWN BY: ESR

SHEET TITLE:
GENERAL STRUCTURAL NOTES

SHEET NUMBER:
S0.0

ADDENDUM 2

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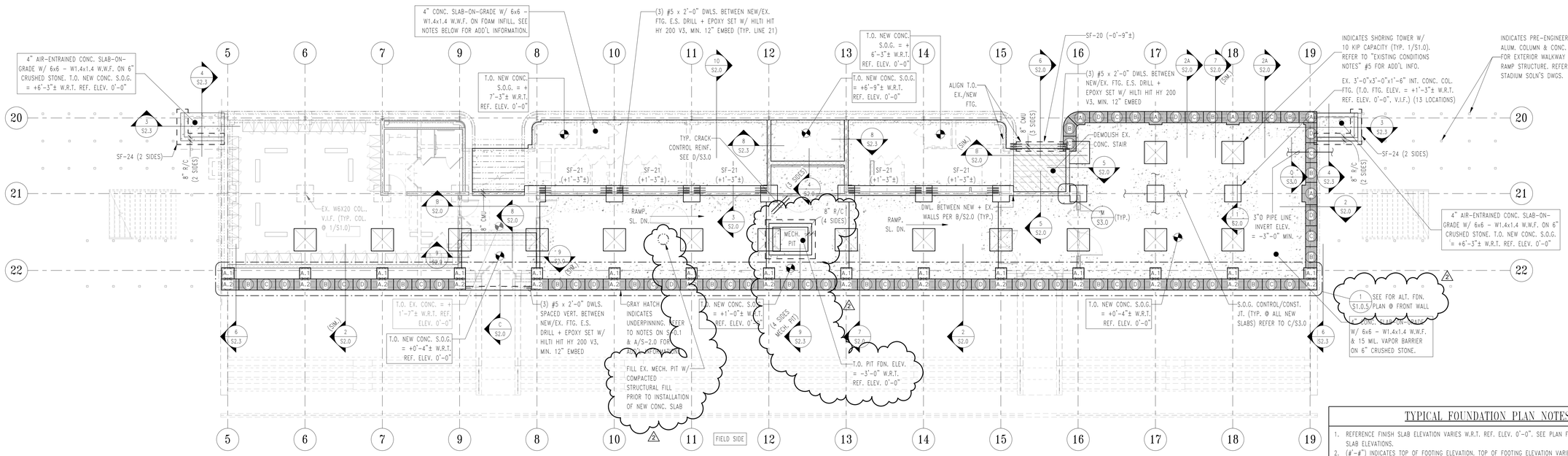


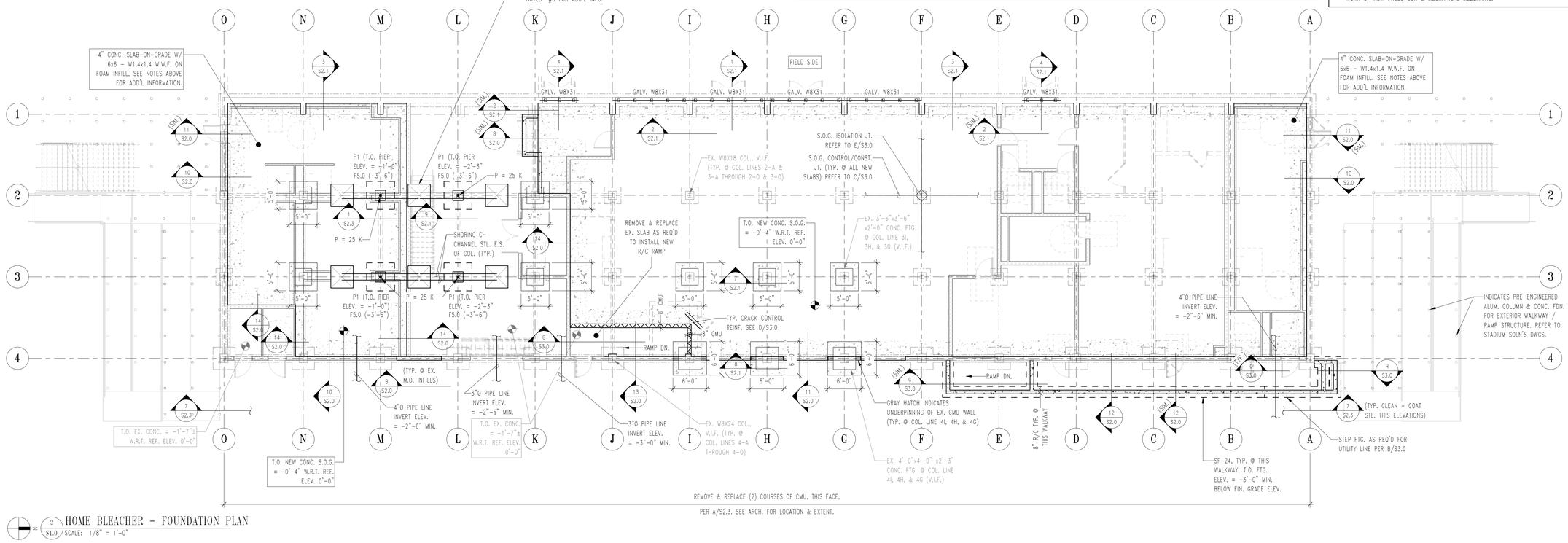
1 S1.0 = VISITOR BLEACHER – FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

EXPANDED POLYSTYRENE (EPS) FORMWORK NOTES

1. EXPANDED POLYSTYRENE SHALL BE PRODUCED IN ACCORDANCE WITH ASTM D6817 TYPE EPS15 – STANDARD SPECIFICATION FOR RIGID, CELLULAR POLYSTYRENE.
2. PROVIDE A MINIMUM OF 5 YEARS EXPERIENCE IN THE INSTALLATION AND PLACEMENT OF CONCRETE UTILIZING THIS FORMWORK PRODUCT. ADDITIONALLY, PROVIDE 5 REFERENCES TO SIMILAR TYPE PROJECTS.
3. SUBMIT EPS FORMWORK MANUFACTURER'S PRODUCT LITERATURE AND DATA, INCLUDING:
   A. PHYSICAL PROPERTIES IN COMPLIANCE WITH ASTM D6817 TYPE SPECIFIED.
   B. PROVIDE EPS FORMWORK 15-YEAR WARRANTY COVERING THE LONG-TERM PHYSICAL PROPERTY OF EXPANDED POLYSTYRENE FORMWORK.
   C. TEST COMPLIANCE: SUMMARY OF TEST COMPLIANCE WITH SPECIFIED PERFORMANCE CHARACTERISTICS AND PHYSICAL PROPERTIES.
4. SUBMIT SHOP DRAWINGS SHOWING EPS FORMWORK BLOCK LAYOUT.
5. DELIVER EPS FORMWORK LABELED WITH MATERIAL TYPE. STORE ABOVE GROUND, AND PROTECTED FROM MOISTURE AND SUNLIGHT PRIOR TO INSTALLATION.
6. PRODUCT SHOULD NOT BE EXPOSED TO OPEN FLAME OR OTHER IGNITION SOURCES.
7. LIGHT GAGE METAL PLATES SHALL BE USED TO RESTRAIN EPS FORMWORK FROM MOVING LATERALLY IN LAYER OVER LAYER APPLICATIONS. THE PLATE SHALL BE MADE OF GALVANIZED OR STAINLESS STEEL WITH TWO-SIDED MULTI-BARBED DESIGN CAPABLE OF PIERCING THE EPS FORMWORK. EACH PLATE SHALL BE CAPABLE OF A LATERAL HOLDING STRENGTH OF 120 LBS. PROVIDE TWO PLATES FOR EACH 4 FOOT X 8 FOOT SECTION OF EPS FORMWORK – MINIMUM.
8. ALL EPS FORMWORK INSTALLATION SHALL BE IN COMPLIANCE WITH MANUFACTURER'S EPS FORMWORK PRODUCT DATA; INCLUDING TECHNICAL BULLETINS. CONTRACTOR IS RESPONSIBLE FOR A COMPLETE SYSTEM INSTALLATION.
9. PRIOR TO INSTALLATION, VERIFY CONDITIONS OF SUBSTRATE, GRADE AND OTHER CONDITIONS WHICH AFFECT INSTALLATION OF EPS FORMWORK.
10. INSTALL EPS FORMWORK PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION GUIDELINES.
11. PROTECT INSTALLED PRODUCT AND FINISH SURFACES FROM DAMAGE DURING CONSTRUCTION AS REQUIRED.
12. PLACE A SAND PAD/LEVELING COURSE OVER THE PREPARED SUBSTRATE, 2" (50 MM) THICKNESS MINIMUM. LEVEL TO +–1/2" PER 10 FOOT HORIZONTAL.
13. AT TIME OF MATERIAL DELIVERY, VERIFY IDENTIFICATION MARKS ON FACE OF THE PRODUCT. USE MATERIAL OF PROPER TYPE ONLY AND AS SPECIFIED. FIELD SAMPLING AND TESTING OF THE EPS FORMWORK WILL BE AS SPECIFIED BY THE ENGINEER. PROPERTIES OF DENSITY AND COMPRESSIVE RESISTANCE SHALL BE VERIFIED IN ACCORDANCE WITH THE SPECIFICATION.
14. BLOCKS OF EPS FORMWORK SHOULD BE PLACED TIGHTLY ON THE PREPARED SAND PAD/LEVELING COURSE (SAND MUST NOT BE FROZEN). IF MULTIPLE LAYERS OF EPS FORMWORK ARE REQUIRED, ORIENT SUCCESSIVE LAYERS OF BLOCKS AT 90° TO PREVIOUS LAYER. OFFSET BLOCK JOINTS BETWEEN LAYERS.

TYPICAL FOUNDATION PLAN NOTES

1. REFERENCE FINISH SLAB ELEVATION VARIES W.R.T. REF. ELEV. 0'-0", SEE PLAN FOR REFERENCE FINISH SLAB ELEVATIONS.
2. (#'-#") INDICATES TOP OF FOOTING ELEVATION. TOP OF FOOTING ELEVATION VARIES W.R.T. REF. ELEVATION 0'-0". SEE PLAN FOR TOP OF FOOTING ELEVATIONS W.R.T. REF. ELEVATION 0'-0".
3. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:
   SF/F#.# FOOTING MARK (SEE FOOTING SCHEDULE)
   P# PIER MARK (SEE PIER SCHEDULE)
4. COORDINATE WITH ARCH, MECH, ELEC, AND PLUMBING DRAWINGS FOR FLOOR SLOPES, DRAINS, OPENINGS, DEPRESSIONS, ETC., NOT SHOWN ON THIS PLAN.
5. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
6. FOR GENERAL STRUCTURAL NOTES, REFER TO S0.0 & S0.1.
7. REFER TO TYPICAL FOUNDATION DETAILS ON DRAWINGS S3.0 & S3.1.
8. ALL WALL FOOTINGS SHALL BE INSTALLED CENTERED ON FOUNDATION WALL U.N.O.
9. TYPICAL MASONRY WALL REINFORCING = #5 @ 32"O.C., GROUT REINFORCED CORES AND ALL CMU BELOW GRADE SOLID. PROVIDE FOOTING DOWELS TO MATCH SIZE & SPACING OF WALL REINFORCING.
10. G.C. TO SUBMIT C.J. LAYOUT FOR APPROVAL FOR SLAB ON GRADE WORK. REFER TO TYPICAL DETAILS ON S3.0 AND NOTES FOR PREPARATION OF LAYOUT.
11. REFER TO SITE/CIVIL DRAWINGS FOR EXTERIOR SITE GRADES. THIS FOUNDATION PLAN PREPARED ACCORDING TO GRADING PLAN PREPARED BY ELA SPORT ATHLETIC FACILITIES DESIGN & CONSULTING, DATED OCTOBER, 2024. FOUNDATION DESIGN MAY CHANGE BASED ON FINAL SITE/CIVIL DRAWINGS.
12. EXISTING CONSTRUCTION SHOWN THUS, ——— ——— ———, TO BE FIELD VERIFIED BY GENERAL CONTRACTOR PRIOR TO DETAILING, FABRICATION, AND CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF WORK.
13. ALL TEMPORARY SHORING SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF FTG. EXTENSIONS & FTG. UNDERPINNING. ALL FTG. EXTENSIONS & FTG. UNDERPINNING WORK SHALL BE COMPLETED PRIOR TO WORK OF NEW PRESS BOX & MECHANICAL MEZZANINE.



2 S1.0 = HOME BLEACHER – FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: DESCRIPTION:
01/08/2025 PERMIT SET
01/08/2025 BID DOCUMENTS
01/14/2025 ADDENDUM 1
01/17/2025 ADDENDUM 2

PROJ # : MM2410 DRAWN BY : ESR

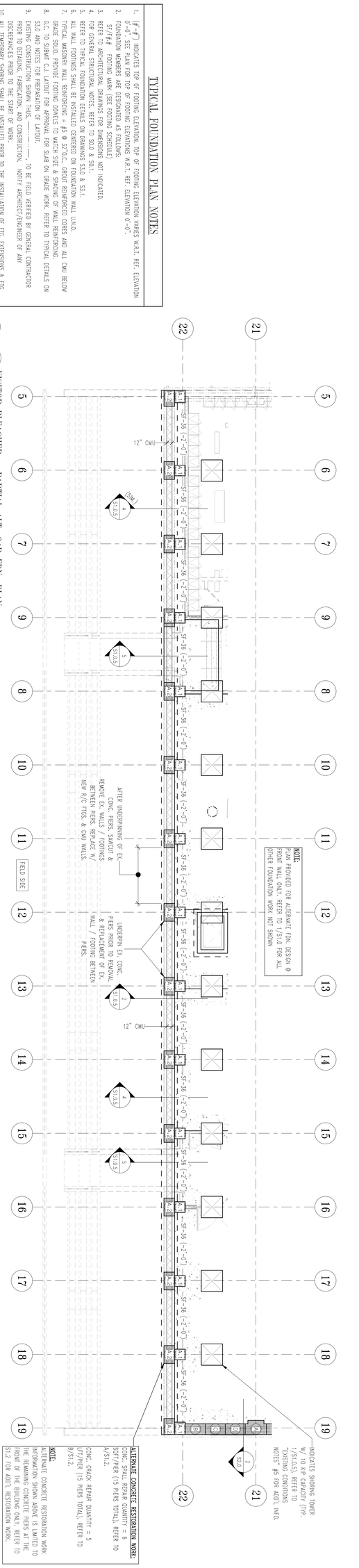
SHEET TITLE:
FOUNDATION PLANS

SHEET NUMBER:
S1.0

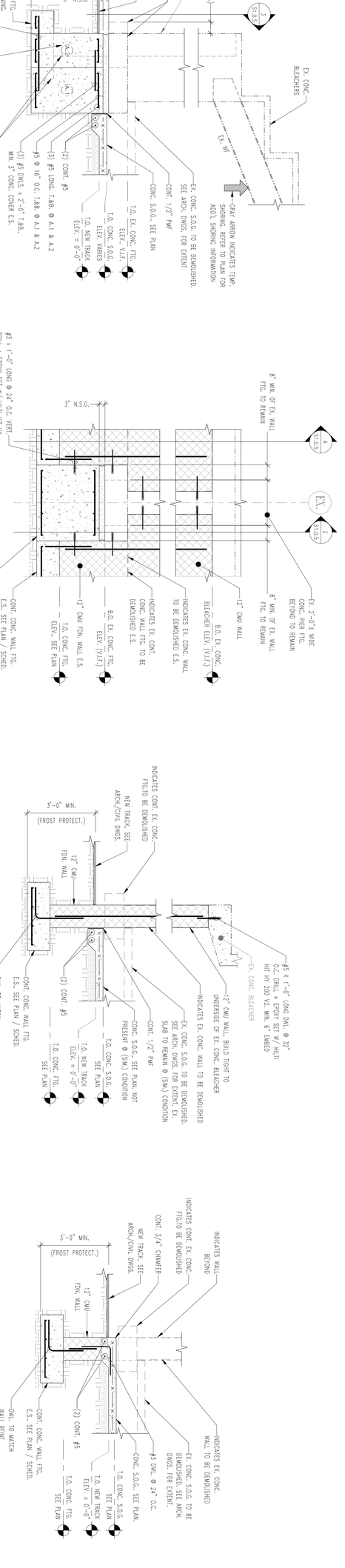
ADDENDUM 2

TYPICAL FOUNDATION PLAN NOTES

1. (#'-#") INDICATES TOP OF FOOTING ELEVATION. TOP OF FOOTING ELEVATION VARIES W.R.T. REF. ELEVATION 0'-0". SEE PLAN FOR TOP OF FOOTING ELEVATIONS W.R.T. REF. ELEVATION 0'-0".
2. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:
   SF/F## FOOTING MARK (SEE FOOTING SCHEDULE)
3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
4. FOR GENERAL STRUCTURAL NOTES, REFER TO S0.0 & S0.1.
5. REFER TO TYPICAL FOUNDATION DETAILS ON DRAWINGS S3.0 & S3.1.
6. ALL WALL FOOTINGS SHALL BE INSTALLED CENTERED ON FOUNDATION WALL U.N.O.
7. TYPICAL MASONRY WALL REINFORCING = #5 @ 32"O.C.. GROUT REINFORCED CORES AND ALL CMU BELOW GRADE SOLID. PROVIDE FOOTING DOWELS TO MATCH SIZE & SPACING OF WALL REINFORCING.
8. G.C. TO SUBMIT C.J. LAYOUT FOR APPROVAL FOR SLAB ON GRADE WORK. REFER TO TYPICAL DETAILS ON S3.0 AND NOTES FOR PREPARATION OF LAYOUT.
9. EXISTING CONSTRUCTION SHOWN IS BASED ON RECORD CONSTRUCTION. — TO BE FIELD VERIFIED BY GENERAL CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF WORK.
10. ALL TEMPORARY SHORING SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF FTG. EXTENSIONS & FTG. UNDERPINNING. ALL FTG. EXTENSIONS & FTG. UNDERPINNING WORK SHALL BE COMPLETED PRIOR TO WORK OF NEW PRESS BOX & MECHANICAL MEZZANINE.



1 S1.0.5 SCALE: 1/8" = 1'-0"
VISITOR BLEACHER – PARTIAL ALT. 04B FDN. PLAN



2 S1.0.5 SCALE: 1/2" = 1'-0"
SECTION

3 S1.0.5 SCALE: 1/2" = 1'-0"
ELEVATION DETAIL

4 S1.0.5 SCALE: 1/2" = 1'-0"
SECTION

5 S1.0.5 SCALE: 1/2" = 1'-0"
SECTION

ISSUE DATES

DATE:	DESCRIPTION:
01/08/2025	PERMIT SET
01/08/2025	BID DOCUMENTS
01/14/2025	ADDENDUM 1
01/17/2025	ADDENDUM 2

PROJ #: MM2410
DRAWN BY: ESR

SHEET TITLE:
ALTERNATE 04B FOUNDATION PLAN & DETAILS

SHEET NUMBER:
S1.0.5

ADDENDUM 2

ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

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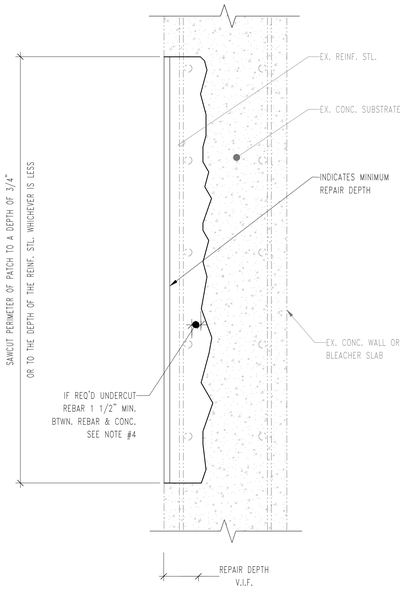


SPALL REPAIR PROCEDURE:

1. SOUND CONCRETE AND LAYOUT AREA TO BE REPAIRED. REPAIRS SHALL BE SQUARE OR RECTANGULAR IN SHAPE.
2. SAWCUT PERIMETER OF PATCH TO A DEPTH OF 3/4" OR TO THE DEPTH OF THE REINFORCING STEEL WHICHEVER IS LESS.
3. CHIP OUT AND REMOVE DETERIORATED AND DELAMINATED CONCRETE TO SOUND CONCRETE.
4. IF REBAR IS EXPOSED AND CORROSION IS PRESENT, CHIP OUT A MINIMUM 1 1/2" CLEARANCE AROUND AND BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE.
5. CONCRETE REMOVALS SHALL EXTEND ALONG REBARS TO LOCATIONS ALONG THE BAR, FREE OF BOND INHIBITING CORROSION, AND WHERE THE BAR IS WELL BONDED TO SURROUNDING CONCRETE.
6. SANDBLAST CLEAN EXISTING CONCRETE AND REBAR TO REMOVE ALL RUST, OXIDES AND SCALE.
7. COAT REBAR W/ 2 COATS OF SIKA ARMATEC 110 EPOCEM.
8. AT THE TIME OF APPLICATION, SATURATE SUBSTRATE SURFACE WITH CLEAN WATER. SUBSTRATE SHOULD BE SATURATED SURFACE DRY (SSD).
9. WHILE THE SURROUNDING CONCRETE IS IN A SSD STATE, INSTALL A SLURRY SCRUB COAT OF THE REPAIR MATERIAL INTO THE PORES AND VOIDS OF THE EXISTING CONCRETE.
10. IMMEDIATELY FOLLOWING THE SCRUB COAT, PLACE THE REPAIR MATERIAL INTO THE PREPARED AREA. REPAIR MATERIAL TO BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS COLOR SELECTION BY OWNER / ENGR.

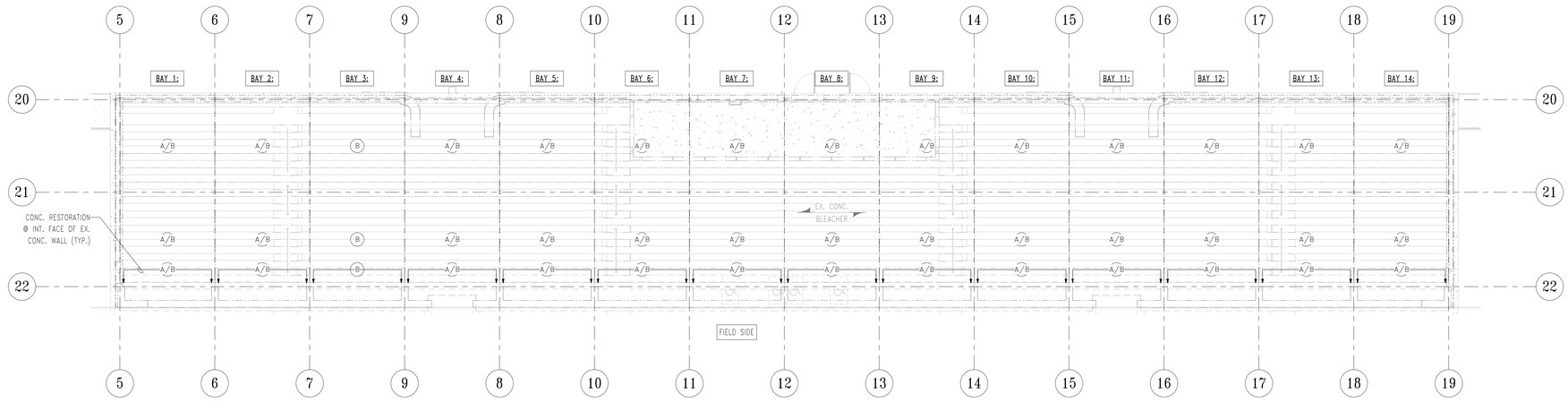
A. HORIZONTAL REPAIRS – SIKAQUICK 1000:
   1. FROM 1/4" TO 2" DEEP – NO ADDED STONE
   2. FROM 2" TO 6" DEEP – 25 LBS OF 3/8" STONE PER BAG CAN ALSO BE USED FOR FORM AND POUR REPAIRS AS NEEDED
B. VERTICAL & OVERHEAD REPAIRS – SIKAQUICK VOH:
   1. FROM 1/8" TO 3" DEEP PER LIFT

A / S1.2 TYPICAL CONCRETE SPALL REPAIR
SCALE: N.T.S.

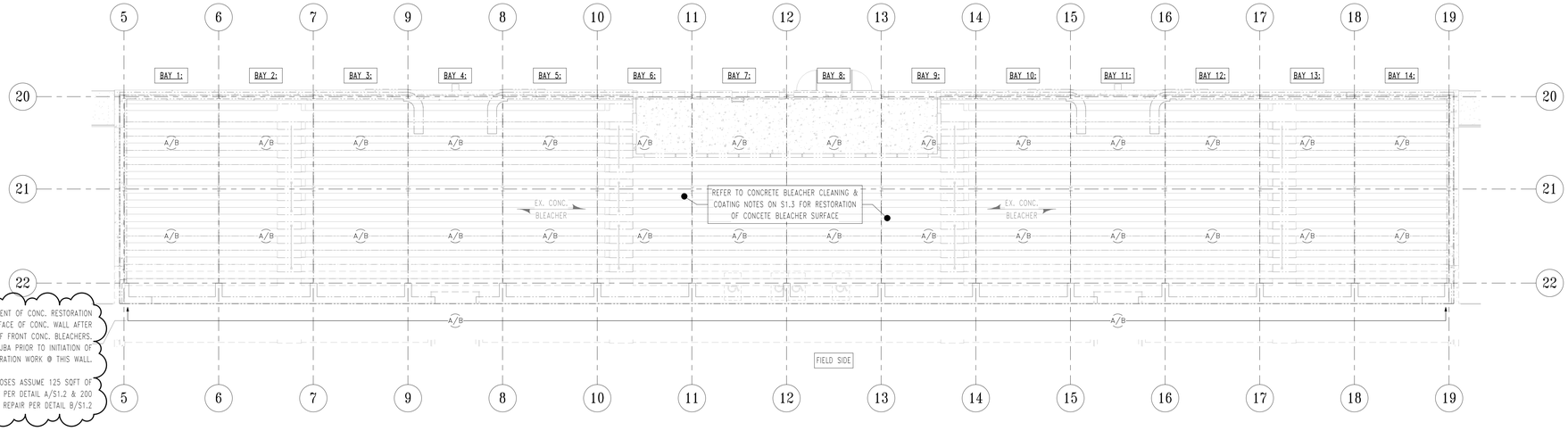
CRACK REPAIR PROCEDURE:

1. ROUT CRACKS OVER 1/16" UP TO 1" WIDE AT CENTER TO FORM A GROOVE, MIN. 1/2" WIDE AND MIN. 1/2" DEEP. GRIND UNEVEN SURFACES. CRACKS LESS THAN 1/16" WIDE SHOULD NOT BE ROUTED AND SEALED AND WILL BE ADDRESSED BY THE DECK COATING.
2. CLEAN JOINT. REMOVE DUST, FOREIGN PARTICLES, AND BOND INHIBITING MATERIAL FROM SURFACE BY AIR OR SAND BLASTING AS REQ'D.
3. INSTALL SIKAFLEX-2C NS EZ MIX EVENLY WITH ADJACENT SURFACE, AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. COLOR TO BE SELECTED BY OWNER / ARCH.
4. CONTRACTOR SHALL SUBMIT CONCRETE REPAIR MATERIALS FOR REVIEW PRIOR TO START OF WORK.

B / S1.2 TYPICAL CONCRETE CRACK REPAIR DETAIL
SCALE: N.T.S.



1 / S1.2 VISITOR BLEACHER – UNDER SIDE CONC. RESTOR. PLAN
SCALE: 1/8" = 1'-0"



VERIFY IN FIELD EXTENT OF CONC. RESTORATION WORK @ EXT. FACE OF CONC. WALL AFTER DEMOLITION OF FRONT CONC. BLEACHERS. CONTACT JBA PRIOR TO INITIATION OF RESTORATION WORK @ THIS WALL.

NOTE: FOR BID PURPOSES ASSUME 125 SQFT OF CONC. SPALL REPAIR PER DETAIL A/S1.2 & 200 LFT OF CONC. CRACK REPAIR PER DETAIL B/S1.2

2 / S1.2 VISITOR BLEACHER – TOP SIDE CONC. RESTOR. PLAN
SCALE: 1/8" = 1'-0"

SCHEDULE OF RESTORATION WORK: 2/S1.2 TOP SIDE OF CONC.

LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:	LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:
BAY 1	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 8	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	111 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2
BAY 2	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 9	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	111 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2
BAY 3	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 10	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	111 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2
BAY 4	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 11	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	100 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	78 LFT	B/S1.2
BAY 5	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 12	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	67 LFT	B/S1.2
BAY 6	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 13	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	67 LFT	B/S1.2
BAY 7	A	CONCRETE SPALL REPAIR	3 SQFT	A/S1.2	BAY 14	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	89 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	67 LFT	B/S1.2
TOTAL REPAIR	A	CONCRETE SPALL REPAIR							38 SQFT
	B	CONCRETE CRACK REPAIR							1246 LFT

SCHEDULE OF RESTORATION WORK: 1/S1.2 UNDER SIDE OF CONC.

LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:	LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:
BAY 1	A	CONCRETE SPALL REPAIR	16 SQFT	A/S1.2	BAY 8	A	CONCRETE SPALL REPAIR	18 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	14 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	28 LFT	B/S1.2
BAY 2	A	CONCRETE SPALL REPAIR	16 SQFT	A/S1.2	BAY 9	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	8 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	31 LFT	B/S1.2
BAY 3	A	CONCRETE SPALL REPAIR	–	A/S1.2	BAY 10	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	12 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	33 LFT	B/S1.2
BAY 4	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2	BAY 11	A	CONCRETE SPALL REPAIR	13 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	25 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	5 LFT	B/S1.2
BAY 5	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2	BAY 12	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	16 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	52 LFT	B/S1.2
BAY 6	A	CONCRETE SPALL REPAIR	2 SQFT	A/S1.2	BAY 13	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	26 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	46 LFT	B/S1.2
BAY 7	A	CONCRETE SPALL REPAIR	7 SQFT	A/S1.2	BAY 14	A	CONCRETE SPALL REPAIR	6 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	35 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	43 LFT	B/S1.2
TOTAL REPAIR	A	CONCRETE SPALL REPAIR							99 SQFT
	B	CONCRETE CRACK REPAIR							374 LFT

TYPICAL PLAN NOTES:

1. RESTORATION QUANTITIES SHOWN ARE FOR AREAS SHOWN ON THE REPAIR PLAN NOTED ONLY.
2. ◯ ITEM NOTED ON PLAN REPRESENTS APPROXIMATE QUANTITY OF REPAIR. CONTRACTOR SHALL SOUND THE CONCRETE SURFACES AND LAY-OUT REPAIR AREAS & IDENTIFY QUANTITIES FOR JBA TO REVIEW AND CONFIRM PRIOR TO START OF WORK.
3. RESTORATIONS CONTRACTOR SHALL VISIT THE SITE TO REVIEW QUANTITIES & SCOPE OF WORK PRIOR TO SUBMITTING BID.

* NOTES ARE APPLICABLE FOR SCHEDULES 1 & 2/S1.2.

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES	DESCRIPTION:
DATE:	
01/08/2025	PERMIT SET
01/08/2025	BID DOCUMENTS
01/14/2025	ADDENDUM 1
01/17/2025	ADDENDUM 2

PROJ # : MM2410 DRAWN BY : ESR

SHEET TITLE:
CONCRETE RESTORATION WORK - VISITOR BLEACHER

SHEET NUMBER:
S1.2

ADDENDUM 2

1/16/2025 10:51:30 AM

SCHEDULE OF RESTORATION WORK: 1/S1.3 UNDER SIDE OF CONC.

LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:	LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:
BAY 1	A	CONCRETE SPALL REPAIR	33 SQFT	A/S1.2	BAY 8	A	CONCRETE SPALL REPAIR	17 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	66 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	58 LFT	B/S1.2
BAY 2	A	CONCRETE SPALL REPAIR	33 SQFT	A/S1.2	BAY 9	A	CONCRETE SPALL REPAIR	42 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	66 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	83 LFT	B/S1.2
BAY 3	A	CONCRETE SPALL REPAIR	33 SQFT	A/S1.2	BAY 10	A	CONCRETE SPALL REPAIR	50 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	83 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	9 LFT	B/S1.2
BAY 4	A	CONCRETE SPALL REPAIR	33 SQFT	A/S1.2	BAY 11	A	CONCRETE SPALL REPAIR	17 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	116 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	50 LFT	B/S1.2
BAY 5	A	CONCRETE SPALL REPAIR	17 SQFT	A/S1.2	BAY 12	A	CONCRETE SPALL REPAIR	25 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	116 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	108 LFT	B/S1.2
BAY 6	A	CONCRETE SPALL REPAIR	33 SQFT	A/S1.2	BAY 13	A	CONCRETE SPALL REPAIR	25 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	75 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	83 LFT	B/S1.2
BAY 7	A	CONCRETE SPALL REPAIR	42 SQFT	A/S1.2	BAY 14	A	CONCRETE SPALL REPAIR	14 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	33 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	132 LFT	B/S1.2
TOTAL REPAIR	A	CONCRETE SPALL REPAIR	414 SQFT						
	B	CONCRETE CRACK REPAIR	1,078 LFT						

SCHEDULE OF RESTORATION WORK: 1/S1.3 TOP SIDE OF CONC.

LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:	LOCATION:	KEY:	REPAIR TYPE:	QUANTITY:	DETAIL:
BAY 1	A	CONCRETE SPALL REPAIR	6 SQFT	A/S1.2	BAY 8	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	213 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2
BAY 2	A	CONCRETE SPALL REPAIR	6 SQFT	A/S1.2	BAY 9	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	213 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2
BAY 3	A	CONCRETE SPALL REPAIR	6 SQFT	A/S1.2	BAY 10	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	213 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2
BAY 4	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2	BAY 11	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	192 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	149 LFT	B/S1.2
BAY 5	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2	BAY 12	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	128 LFT	B/S1.2
BAY 6	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2	BAY 13	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	128 LFT	B/S1.2
BAY 7	A	CONCRETE SPALL REPAIR	5 SQFT	A/S1.2	BAY 14	A	CONCRETE SPALL REPAIR	4 SQFT	A/S1.2
	B	CONCRETE CRACK REPAIR	171 LFT	B/S1.2		B	CONCRETE CRACK REPAIR	128 LFT	B/S1.2
TOTAL REPAIR	A	CONCRETE SPALL REPAIR	69 SQFT						
	B	CONCRETE CRACK REPAIR	2390 LFT						

CONCRETE BLEACHER CLEANING & COATING NOTES:

SURFACE PREPARATION:

- ALL AREAS W/ EXISTING COATING SHALL BE CLEANED BY WATER BLASTING W/ A MINIMUM OF 5000 PSI & PREPARED TO ACHIEVE A LAITANCE & CONTAMINANT-FREE SURFACE. CLEANING MAY BE ACHIEVED W/ EQUIVALENT MECHANICAL MEANS SUCH AS LIGHT CUP WHEEL GRINDING. SURFACES MUST BE THOROUGHLY CLEANED FREE OF ALL LOOSE PARTICULATES THAT MAY INTERFERE W/ BONDING.
- ALL EXPOSED BARE CONCRETE & NEWLY REPAIRED CONCRETE PATCHES SHALL BE CLEANED & PREPARED TO ACHIEVE A LAITANCE, OPEN-TEXTURED, & CONTAMINANT-FREE SURFACE BY MECHANICAL MEANS. THE DESIRED SURFACE TEXTURE OF ALL EXPOSED SIST BARE CONCRETE & NEWLY REPAIRED CONCRETE SHALL HAVE A SURFACE TEXTURE OF CSP 3 PER ICRI GUIDELINES. IN ADDITION, THE SUBSTRATE SURFACE SHALL BE THOROUGHLY CLEANED BY BLOWING/VACUUMING TO REMOVE ALL PARTICULATES THAT MAY INTERFERE W/ BONDING.

DETAILING CRACKS & JOINTS:

- AS PER THE MOST RECENT PRODUCT DATA SHEET FOR THE SIKALASTIC-726 BALCONY ONE SHOT.

PRIMING

- ALL SURFACE AREAS TO BE COATED SHALL BE PRIMED W/ **SIKADUR 22 LOMOD FS.** APPLY W/ A FLAT SQUEEGEE OR ROLLER AT APPROXIMATELY 160 SF/GAL. APPLY EVENLY W/OUT PUDDLING. ALLOW PRIMER TO CURE UNTIL TACK-FREE, TYPICALLY 2-4 HOURS (AT 75°F ~ 50 % R. H). SIKADUR®-22 LO-MOD FS SHALL BE OVERCOATED W/IN 36 HOURS AFTER TACK-FREE.

COATING

- APPLY SIKALASTIC®-726 BALCONY ONE SHOT AT 37 SF/GAL TO YIELD 38 WFT USING A NOTCHED SQUEEGEE OR TROWEL (RECOMMEND: 1/4" V-NOTCHED SQUEEGEE OR TROWEL) & BACKROLL USING A PHENOLIC RESIN CORE ROLLER (3/8"). THE AREA SHALL BE BACK ROLLED (2) TIMES, (1) PERPENDICULAR TO THE OTHER.
- EXTEND COATING OVER ENTIRE AREA INCLUDING PREVIOUSLY DETAILED CRACKS & JOINTS.
- COATING SHALL BE TACK-FREE AFTER ABOUT 6 HOURS AT 70 °F & 50 % RH. ALLOW COATING TO CURE FOR A MINIMUM OF 8 HOURS BEFORE OPENING TO PEDESTRIAN TRAFFIC.

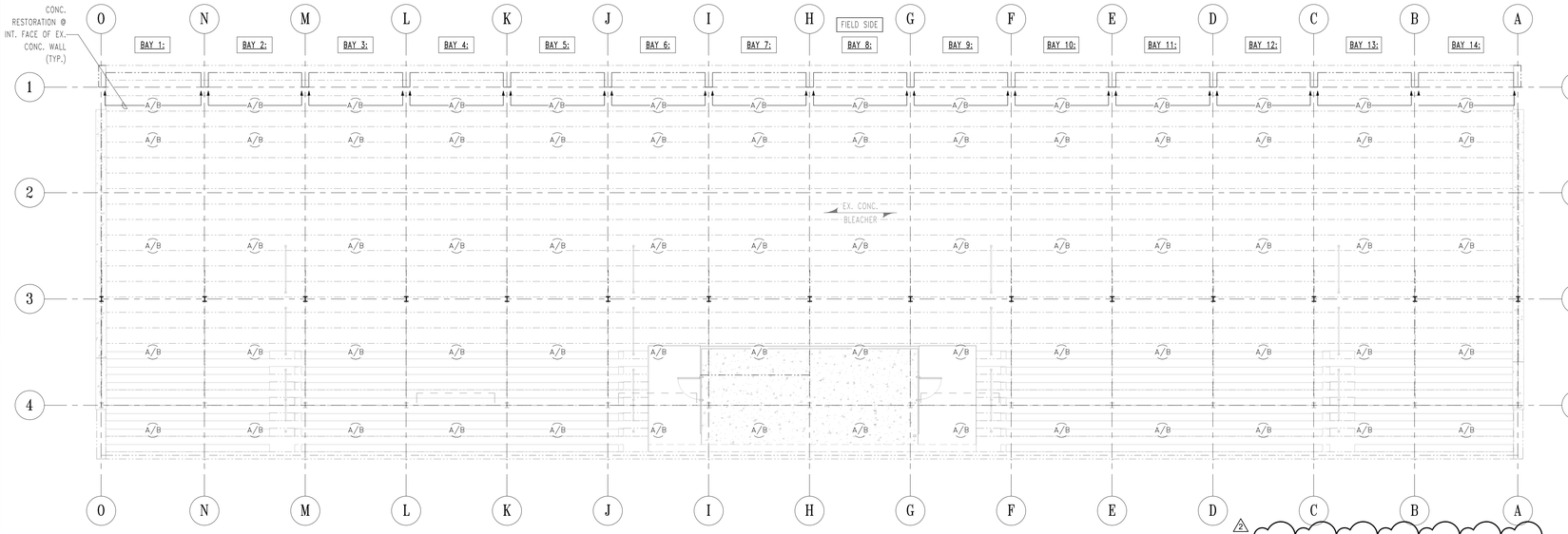
SAMPLE & ADHESIONS TEST

- A MINIMUM 5'-0"X5'-0" SAMPLE OF THE COMPLETE TRAFFIC COATING SYSTEM SHALL BE PROVIDED ON-SITE BY THE INSTALLER PRIOR TO START OF THE COATING INSTALLATION. THE PURPOSE OF THIS SAMPLE IS TO APPROVE THE MEANS & METHODS OF SURFACE PREPARATION THAT WILL BE UTILIZED & TO ENSURE DESIRED APPEARANCE & WORKMANSHIP OF THE OF THE FINISHED PRODUCT.
- THE MANUFACTURER WILL BE PRESENT DURING THE INSTALLATION OF THE SAMPLES & CONDUCT A FIELD ADHESION TEST TO ENSURE THAT THE SYSTEM HAS ACHIEVED ADEQUATE BOND TO THE PREPARED SUBSTRATE.

TYPICAL PLAN NOTES:

1. RESTORATION QUANTITIES SHOWN ARE FOR AREAS SHOWN ON THE REPAIR PLAN NOTED ONLY.
2. ◯ ITEM NOTED ON PLAN REPRESENTS APPROXIMATE QUANTITY OF REPAIR. CONTRACTOR SHALL SOUND THE CONCRETE SURFACES AND LAY-OUT REPAIR AREAS & IDENTIFY QUANTITIES FOR JBA TO REVIEW AND CONFIRM PRIOR TO START OF WORK.
3. RESTORATIONS CONTRACTOR SHALL VISIT THE SITE TO REVIEW QUANTITIES & SCOPE OF WORK PRIOR TO SUBMITTING BID.

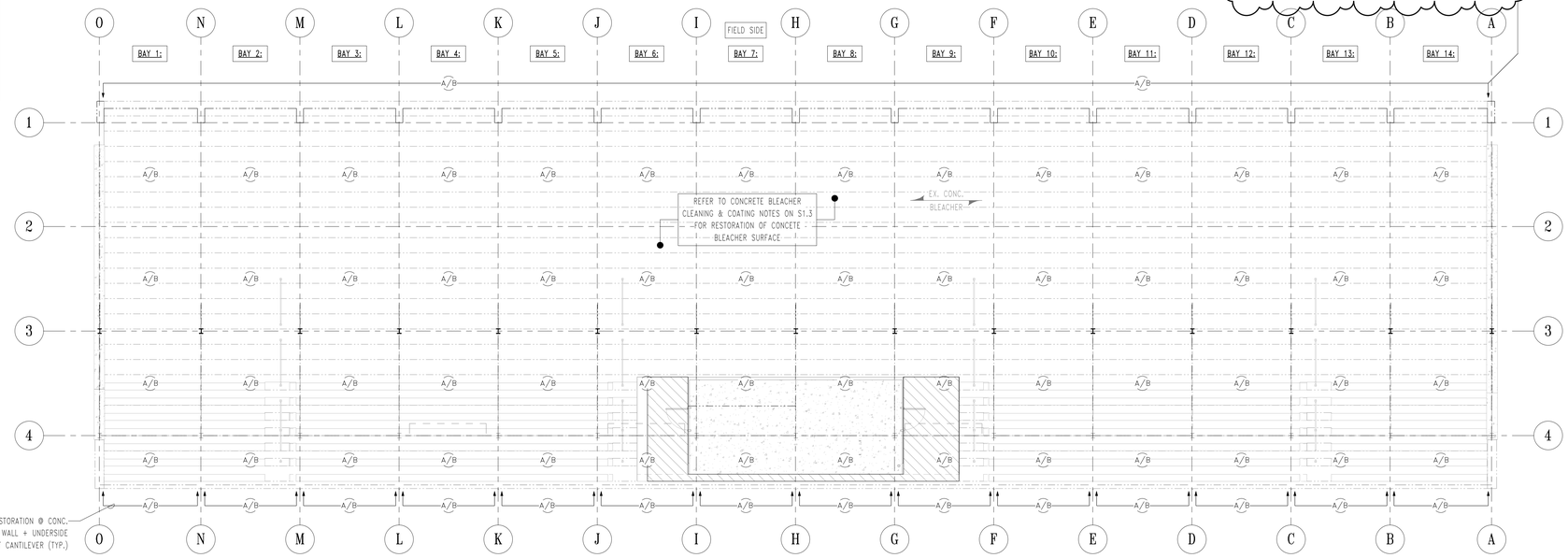
* NOTES ARE APPLICABLE FOR SCHEDULES 1 & 2/S1.3.



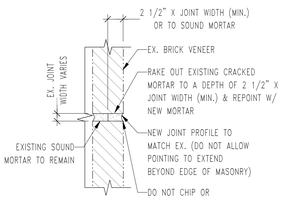
1/S1.3 = HOME BLEACHER - UNDER SIDE CONC. RESTOR. PLAN
SCALE: 1/8" = 1'-0"

2 VERIFY IN FIELD EXTENT OF CONC. RESTORATION WORK @ EXT. FACE OF CONC. WALL AFTER DEMOLITION OF FRONT CONC. BLEACHERS. CONTACT JBA PRIOR TO INITIATION OF RESTORATION WORK @ THIS WALL.

NOTE: FOR BID PURPOSES ASSUME 175 SQFT OF CONC. SPALL REPAIR PER DETAIL A/S1.2 & 200 LFT OF CONC. CRACK REPAIR PER DETAIL B/S1.2

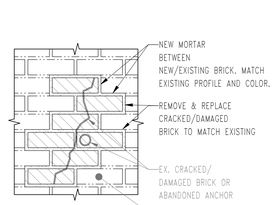


2/S1.3 = HOME BLEACHER - TOP SIDE CONC. RESTOR. PLAN
SCALE: 1/8" = 1'-0"



NOTE: REFER TO ARCH. DWGS. FOR QUANTITY / LOCATION OF BRICK REPOINTING.

A/S1.3 TYP. BRICK REPOINTING DETAIL
SCALE: N.T.S.

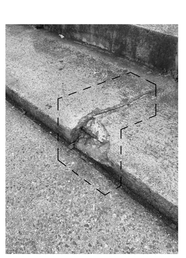


NOTE: REFER TO ARCH. DWGS. FOR QUANTITY / LOCATION OF BRICK REPLACEMENT.

B/S1.3 TYP. BRICK REMOVAL & REPLACE. DETAIL
SCALE: N.T.S.

3/S1.3 TYP. CONC. CRACK COND. ABOVE DECK
SCALE: N.T.S.

4/S1.3 TYP. CONC. CRACK COND. BELOW DECK
SCALE: N.T.S.



5/S1.3 TYP. CONC. SPALL COND. ABOVE DECK
SCALE: N.T.S.

6/S1.3 TYP. CONC. SPALL COND. BELOW DECK
SCALE: N.T.S.

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES	DESCRIPTION:
DATE:	
01/08/2025	PERMIT SET
01/08/2025	BID DOCUMENTS
01/14/2025	ADDENDUM 1
01/17/2025	ADDENDUM 2

PROJ # : MM2410 DRAWN BY : ESR

SHEET TITLE:
CONCRETE RESTORATION WORK - HOME BLEACHER

SHEET NUMBER:
S1.3

ADDENDUM 2

1/16/2025 10:51:33 AM

FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT	COMMENTS
F5.0	5'-0" x 5'-0" x 1'-0"	(6) #5 E.W.B.	COL. FTG.
SF-20	CONT. 1'-8" x 0'-10"	(3) #5 LONG. & #5 @ 48" O.C TRANSV.	CONT. FTG.
SF-21	CONT. 1'-9" x 1'-6"	(3) #5 LONG. & #5 @ 32" O.C TRANSV.	CONT. FTG.
SF-24	CONT. 2'-0" x 1'-0"	(3) #5 LONG. & #5 @ 48" O.C TRANSV.	CONT. FTG.
SF-36	CONT. 3'-0" x 1'-0"	(4) #5 LONG. & #5 @ 24" O.C. TRANSV.	CONT. FTG.

SKETCH SHEET REFERENCE DWG. NUMBER: DRAWING S0.1

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

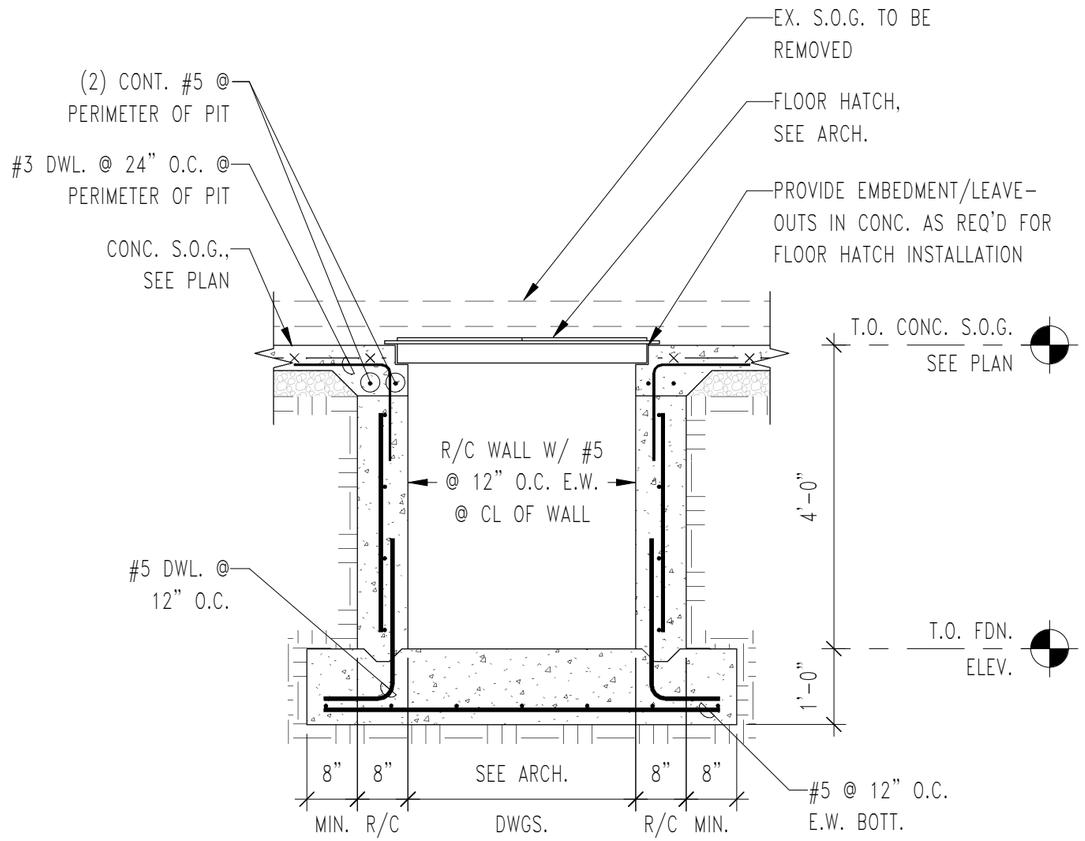
DRAWN BY: ESR

DATE: 01/17/25

SHEET TITLE:
REVISED FTG. SCHEDULE

SHEET NUMBER:
SSK-01

1/17/2025 2:11:23 PM



2

9
S2.3

SECTION @ PIT

SCALE: 1/2" = 1'-0"

SKETCH SHEET REFERENCE DWG. NUMBER: 9/S2.3

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ADDITIONS & RENOVATIONS TO:
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

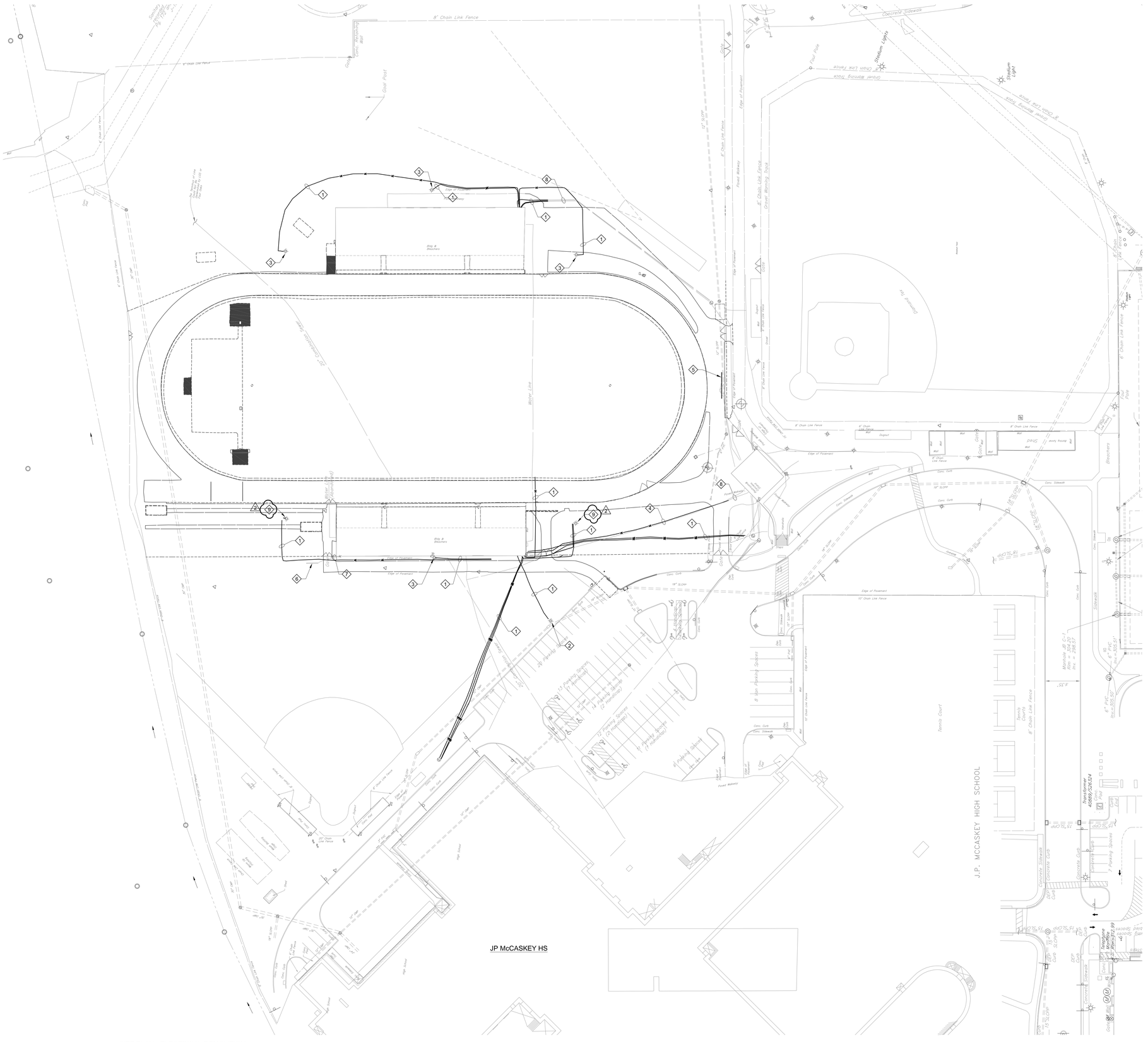
DRAWN BY: ESR

DATE: 01/17/25

SHEET TITLE:
MECH. PIT DETAIL

SHEET NUMBER:
SSK-02

1/16/2025 10:53:26 AM



1 SITE PLAN - ELECTRICAL DEMOLITION
1" = 40'-0"

GENERAL NOTES:

1. PROVIDE THE SERVICES OF A QUALIFIED CONTRACTOR TO IDENTIFY ALL EXISTING UNDERGROUND COMMUNICATION AND ELECTRIC LINES LOCATED IN ALL CONSTRUCTION AND NEW DUCTBANK LOCATIONS. ALL IDENTIFIED AREAS SHALL BE DOCUMENTED ON THE AS-BUILT DRAWINGS.
2. EXERCISE EXTREME CAUTION WHEN EXCAVATING AROUND EXISTING MEDIUM VOLTAGE CABLES AND RACEWAYS.
3. ALL EXISTING DUCTBANKS ARE SHOWN FOR REFERENCE ONLY. EXACT LOCATIONS TO BE DETERMINED PER GENERAL NOTE 1.
4. PATCH AND RESTORE TO MATCH EXISTING CONDITIONS WHERE EXCAVATION DISTURBS EXISTING-TO-REMAIN SURFACES.
5. REMOVE ALL ELECTRICAL CONDUCTORS/CONDUIT FOR ITEMS TO BE DEMOLISHED.
6. COORDINATE ALL SITE WORK WITH PHASING PLANS.
7. THE EC SHALL BE RESPONSIBLE FOR EXCAVATION, TRENCHING, CONCRETE ENCASEMENT AND BACKFILL FOR ALL UNDERGROUND CONDUITS/DUCTBANKS AND ELECTRICAL EQUIPMENT. THE GC SHALL BE RESPONSIBLE TO RESTORE THE FINISHED SURFACE. IN CONCRETE/PAVED AREAS, THE GC SHALL DEMOLISH THE EXISTING SURFACE (ASPHALT PAVING OR CONCRETE) AND STONE SUBBASE AND RESTORE THE FINISHED SURFACE AND STONE SUBBASE WITH STANDARD DUTY PAVING. THE EC SHALL BACKFILL TO THE LIMITS OF SUBGRADE FOR THE STONE BASE OF PAVING.

DRAWING NOTES:

1. REMOVE UNDERGROUND WIRING AND CONDUIT.
2. REMOVE EXISTING POLE MOUNTED LIGHTING FIXTURE, POLE, POLE BASE AND ASSOCIATED WIRING/CONDUIT.
3. EXISTING SPORTS FIELD LIGHTING FIXTURES TO BE DEMOLISHED BY OWNER'S VENDOR. ASSOCIATED POLE AND POLE BASE TO REMAIN. REMOVE ASSOCIATED WIRING/CONDUIT AS INDICATED.
4. REMOVE UNDERGROUND WIRING/CONDUIT TO AREA OUTSIDE OF CONSTRUCTION DISTURBANCE AND MAINTAIN FOR RECONNECTION AS INDICATED ON E1.2.
5. DISCONNECT FOOTBALL SCOREBOARD TO BE DEMOLISHED AND REMOVE ASSOCIATED WIRING/CONDUIT. REMOVE RECEPTACLES AND FLOODLIGHT FIXTURES MOUNTED TO SCOREBOARD AND ASSOCIATED WIRING/CONDUIT.
6. EXISTING SOFTBALL SCOREBOARD TO REMAIN.
7. DISCONNECT BRANCH CIRCUIT SERVING EXISTING SOFTBALL SCOREBOARD AND REFEED FROM NEW PANELBOARD AS INDICATED ON NEW WORK PLANS.
8. EXISTING UNDERGROUND WIRING/CONDUIT TO REMAIN.
9. EXISTING SPORTS FIELD LIGHTING FIXTURES, ASSOCIATED POLE AND POLE BASE TO TO BE DEMOLISHED BY OWNER'S VENDOR. REMOVE ASSOCIATED WIRING/CONDUIT AS INDICATED.

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RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES	DESCRIPTION:
DATE:	
01/03/2025	BID DOCUMENTS
01/17/2025	ADDENDUM # 2

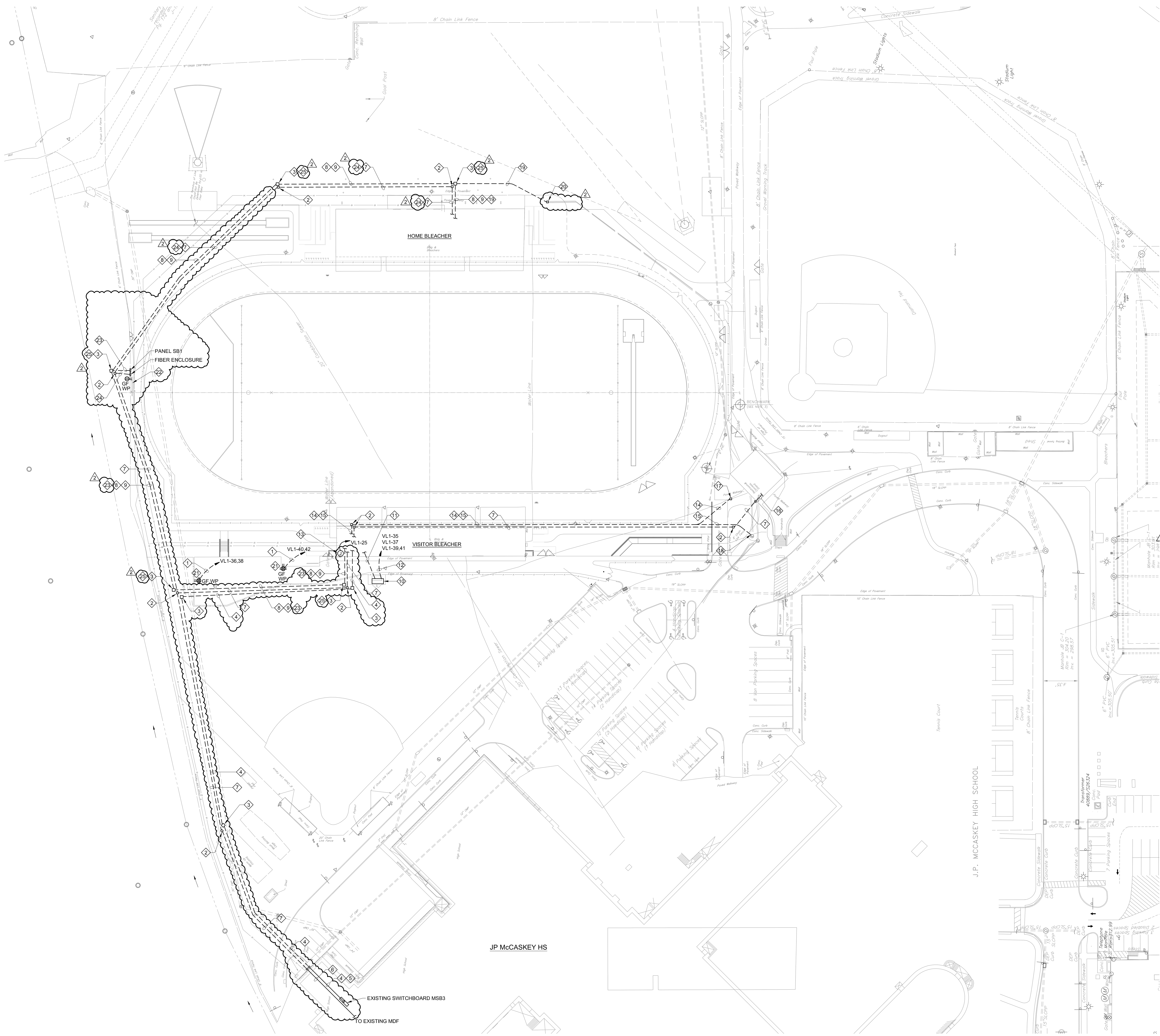
PROJ #: 24-SDL-03 DRAWN BY: A. NOLT

SHEET TITLE:
SITE PLAN - ELECTRICAL DEMOLITION

SHEET NUMBER:
E1.1

BID DOCUMENTS

11/18/2024 10:07:50 AM



① SITE PLAN - ELECTRICAL
1" = 40'-0"

GENERAL NOTES:

1. PROVIDE THE SERVICES OF A QUALIFIED CONTRACTOR TO IDENTIFY ALL EXISTING UNDERGROUND COMMUNICATION AND ELECTRIC LINES LOCATED IN ALL CONSTRUCTION AND NEW DUCTBANK LOCATIONS. ALL IDENTIFIED AREAS SHALL BE DOCUMENTED ON THE AS-BUILT DRAWINGS.
2. ALL EXISTING DUCTBANKS ARE SHOWN FOR REFERENCE ONLY. EXACT LOCATIONS TO BE DETERMINED PER GENERAL NOTE 1.
3. PATCH AND RESTORE TO MATCH EXISTING CONDITIONS WHERE EXCAVATION DISTURBS EXISTING-TO-REMAIN SURFACES.
4. COORDINATE MANHOLE AND HANDHOLE LOCATIONS WITH ARCHITECT, OWNER, NEW WORK PLANS AND EXISTING CONDITIONS.
5. PROVIDE PULLING TAPE IN ALL UNUSED CONDUITS.
6. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUITS SHALL BE INSTALLED SIMILAR TO DETAILS ON DRAWING E8.1.

DRAWING NOTES:

1. 3#8 + 1#8 GND IN 1" CONDUIT.
2. 24" x 24" x 24" DEEP HANDHOLE.
3. 36" x 36" x 30" DEEP HANDHOLE.
4. PANEL DPV FEEDER PER POWER RISER DIAGRAM.
5. ROUTE CONDUIT EXPOSED OVERHEAD IN EXISTING BOILER AND ELECTRICAL ROOMS.
6. FIBER OPTIC CABLING PER TELECOMMUNICATIONS RISER DIAGRAM. EXTEND TO EXISTING MDF XXXX. COORDINATE FINAL ROUTING THROUGH BUILDING WITH OWNER'S IT DEPARTMENT. APPROXIMATE LENGTH OF CABLING RUN WITHIN BUILDING IS XXXX'.
7. 4" CONDUIT WITH (3) 1-1/4" INNERDUCTS AND FIBER OPTIC CABLING PER TELECOMMUNCATIONS RISER DIAGRAM.
8. PANEL HH1 FEEDER PER POWER RISER DIAGRAM.
9. PANEL LS-HH1 FEEDER PER POWER RISER DIAGRAM.
10. PAD MOUNTED GENERATOR G1. SEE POWER RISER DIAGRAM FOR MORE INFORMATION. PROVIDE GENERATOR PAD PER DETAIL 5/E8.1. (2)
11. PANEL LS-VH1 FEEDER (VIA ATS-LS) PER POWER RISER DIAGRAM.
12. PROVIDE 7#10 + 1#10 GND IN 2" CONDUIT PER DETAIL 1/E8.1 FOR GENERATOR BATTERY CHARGER, BATTERY HEATER, AND BLOCK HEATER CIRCUITS.
13. REWORK/EXTEND EXISTING SOFTBALL SCOREBOARD WIRING/CONDUIT AS REQUIRED AND CONNECT TO NEW PANEL.
14. BASEBALL (1ST BASE DUGOUT) PANEL FEEDER PER POWER RISER DIAGRAM.
15. CHRYST PAVILION PANEL CL1 (VIA T-CL1) PER POWER RISER DIAGRAM.
16. FIBER OPTIC CABLING PER TELECOMMUNICATIONS RISER DIAGRAM. EXTEND TO EXISTING IDF RACK IN SECOND FLOOR BASEBALL PRESS BOX.
17. INTERCEPT EXISTING CHRYST PAVILION PANEL CL1 (VIA T-CL1) FEEDER AND PROVIDE 24" x 24" x24" DEEP HANDHOLE TO SPLICE EXISTING FEEDER CABLING WITH NEW AS INDICATED ON POWER RISER DIAGRAM.
18. INTERCEPT EXISTING BASEBALL (1ST BASE DUGOUT) PANEL FEEDER IN EXISTING MANHOLE AND SPLICE EXISTING FEEDER CABLING WITH NEW AS INDICATED ON POWER RISER DIAGRAM.
19. BASEBALL (3RD BASE DUGOUT) PANEL FEEDER PER POWER RISER DIAGRAM.
20. INTERCEPT EXISTING CHRYST PAVILION PANEL CL1 (VIA T-CL1) FEEDER AND PROVIDE 24" x 24" x24" DEEP HANDHOLE TO SPLICE EXISTING FEEDER CABLING WITH NEW AS INDICATED ON POWER RISER DIAGRAM.
21. MOUNT RECEPTACLE 1'-6" AFG ON POLE MOUNTED LIGHTING FIXTURE POLE BASE. SEE E1.3 FOR POLE LOCATION.
22. SCOREBOARD BY OWNER. MOUNT RECEPTACLE AND PANEL ON SCOREBOARD STRUCTURE USING NON CORROSIVE HARDWARE. (2)
23. PANEL SB1 FEEDER PER POWER RISER DIAGRAM.
24. PROVIDE 2" CONDUIT FOR SCOREBOARD FIBER OPTIC CABLE TO HOME BLEACHER PRESSBOX. COORDINATE INSTALLATION WITH OWNER'S SCOREBOARD VENDOR.
25. PROVIDE DIVIDER IN HANDHOLE TO SEPARATE LIFE-SAFETY WIRING FROM NON-LIFE-SAFETY WIRING.

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RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES DATE:	DESCRIPTION:
01/08/2025	BID DOCUMENTS
01/17/2025	ADDENDUM # 2

PROJ #: 24-SDL-03 DRAWN BY: A. NOLT

SHEET TITLE:
SITE PLAN - ELECTRICAL

SHEET NUMBER:
E1.2

11/18/2024 10:07:50 AM

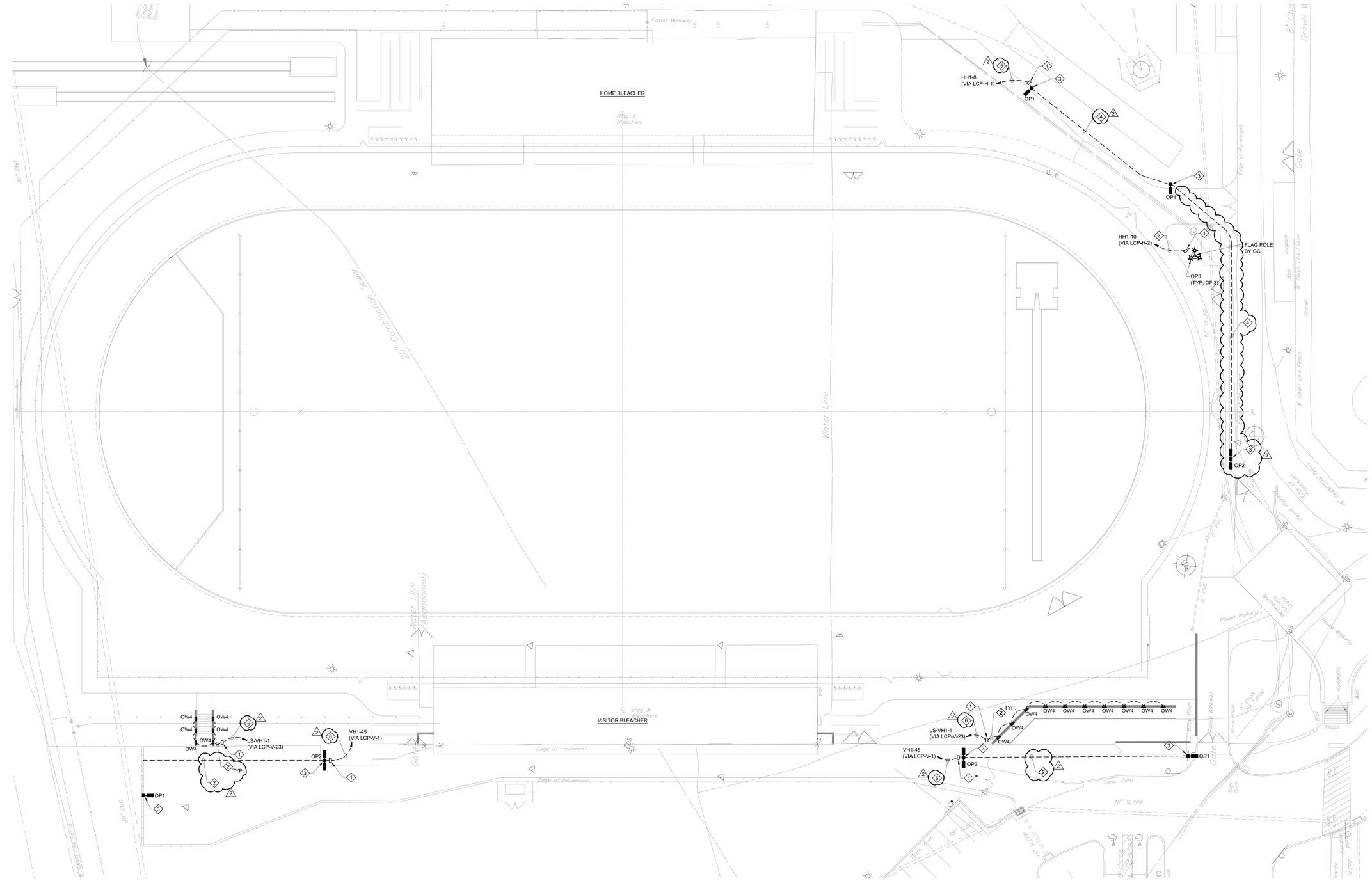
BID DOCUMENTS

GENERAL NOTES:

1. PROVIDE THE SERVICES OF A QUALIFIED CONTRACTOR TO IDENTIFY ALL EXISTING UNDERGROUND COMMUNICATION AND ELECTRIC LINES LOCATED IN ALL CONSTRUCTION AND NEW DUCTBANK LOCATIONS. ALL IDENTIFIED AREAS SHALL BE DOCUMENTED ON THE AS-BUILT DRAWINGS.
2. ALL EXISTING DUCTBANKS ARE SHOWN FOR REFERENCE ONLY. EXACT LOCATIONS TO BE DETERMINED PER GENERAL NOTE 1.
3. PATCH AND RESTORE TO MATCH EXISTING CONDITIONS WHERE EXCAVATION DISTURBS EXISTING-TO-REMAIN SURFACES.
4. COORDINATE MANHOLE AND HANDHOLE LOCATIONS WITH ARCHITECT, OWNER, NEW WORK PLANS AND EXISTING CONDITIONS.
5. PROVIDE PULLING TAPE IN ALL UNUSED CONDUITS.
6. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUITS SHALL BE INSTALLED SIMILAR TO DETAILS ON DRAWING E8.1.

DRAWING NOTES:

1. 13" x 24" x 24" DEEP HANDHOLE.
2. 2#10 + 1#10 GND IN 1" CONDUIT.
3. PROVIDE POLE BASE PER DETAIL 6/E8.1.
4. 2#8 + 1#10 GND IN 1" CONDUIT.
5. 2#8 + 1#10 GND IN 1" CONDUIT AND (1) SPARE 1" CONDUIT.
6. 2#10 + 1#10 GND IN 1" CONDUIT AND (1) SPARE 1" CONDUIT.



1 SITE PLAN - LIGHTING
1" = 20'-0"

11/18/2024 10:07:50 AM

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RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES

DATE:	DESCRIPTION:
01/08/2025	BID DOCUMENTS
01/17/2025	ADDENDUM # 2

PROJ #: 24-SDL-03 DRAWN BY: A. NOLT

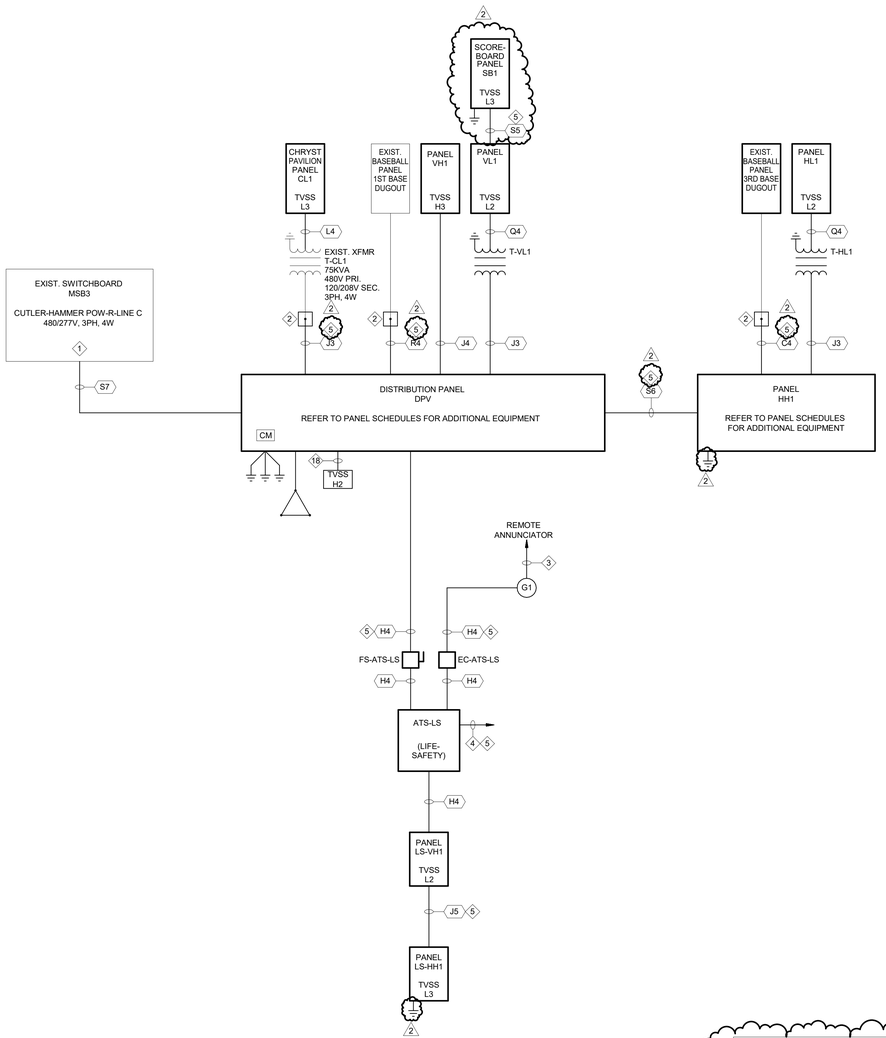
SHEET TITLE:

SITE PLAN - LIGHTING

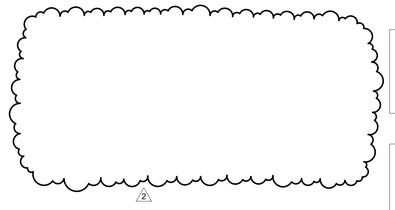
SHEET NUMBER:

E1.3

BID DOCUMENTS



1 POWER RISER DIAGRAM
NO SCALE



GENERAL NOTES:

1. REFER TO SPECIFICATIONS FOR PANELBOARD SCHEDULES.
2. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUITS SHALL BE INSTALLED SIMILAR TO DETAILS ON E.8.1.

DRAWING NOTES:

1. PROVIDE 3P.600A CIRCUIT BREAKER MOUNTED IN EXISTING BUS SPACE. PROVIDE ALL MOUNTING HARDWARE AND LUG KITS REQUIRED FOR BREAKER AND FEEDER INSTALLATION.
2. SPLICE NEW FEEDER CABLES WITH EXISTING IN HANDHOLE. ALL PLICES SHALL BE WEATHERPROOF TYPE.
3. PROVIDE CONDUCTORS AND CABLES PER MANUFACTURER IN 1" CONDUIT.
4. PROVIDE ALL REQUIRED CONTROL/SIGNAL WIRING AND CONNECTIONS BETWEEN GENERATOR AND ATS IN A DEDICATED CONDUIT WITH NO OTHER WIRING.
5. PROVIDE CONCRETE ENCASEMENT SIMILAR TO DETAILS ON DRAWING E8.1.
6. PROVIDE PERMANENTLY FASTENED PAD LOCKABLE HASP ACCESSORY FOR EACH BREAKER.
7. PROVIDE MISSION CRITICAL ELECTRONIC BREAKER WITH 225A MINIMUM SENSOR FOR ATS-LS BREAKER THAT WILL COORDINATE WITH ALL DOWNSTREAM OVERCURRENT DEVICES
8. PROVIDE MISSION CRITICAL ELECTRONIC BREAKER WITH 225A MINIMUM SENSOR FOR EC-ATS-LS BREAKER THAT WILL COORDINATE WITH ALL UPSTREAM AND DOWNSTREAM OVERCURRENT DEVICES.

WIRE AND CONDUIT SCHEDULE

CIRC. MARK	QUAN. SETS	PHASE		NEUTRAL		GND. SIZE	CONDUIT	
		QUAN.	SIZE	QUAN.	SIZE		QUAN.	SIZE
A3	1	3	12	.	.	12	1	3/4"
A4	1	3	12	1	12	12	1	3/4"
B3	1	3	10	.	.	10	1	3/4"
B4	1	3	10	1	10	10	1	3/4"
C3	1	3	8	.	.	8	1	1"
C4	1	3	8	1	8	8	1	3/4"
C5	1	3	8	1	4	10	1	1"
D3	1	3	6	.	.	10	1	1"
D4	1	3	6	1	6	10	1	1"
D5	1	3	6	1	3	10	1	1"
E3	1	3	4	.	.	8	1	1-1/4"
E4	1	3	4	1	4	8	1	1-1/4"
E5	1	3	4	1	4	4	1	1-1/4"
F3	1	3	3	.	.	8	1	1-1/4"
F4	1	3	3	1	3	8	1	1-1/4"
F5	1	3	3	1	3	6	1	1-1/4"
G3	1	3	2	.	.	6	1	1 1/2"
G4	1	3	2	1	2	4	1	1-1/2"
G5	1	3	2	1	2/0	6	1	1-1/2"
H3	1	3	1	.	.	6	1	1-1/2"
H4	1	3	1	1	1	4	1	1-1/2"
H5	1	3	1	1	3/0	6	1	2"
J3	1	3	1/0	.	.	4	1	2"
J4	1	3	1/0	1	1/0	6	1	2"
J5	1	3	1/0	1	1/0	4	1	2"
K3	1	3	2/0	.	.	6	1	2"
K4	1	3	2/0	1	2/0	4	1	2"
K5	1	3	2/0	1	2/0	3	1	2"
L3	1	3	3/0	.	.	6	1	2"
L4	1	3	3/0	1	3/0	6	1	2"
L5	1	3	3/0	1	3/0	3	1	2-1/2"
L6	2	3	3/0	1	3/0	3	2	2-1/2"
M3	1	3	4/0	.	.	4	1	2-1/2"
M4	1	3	4/0	1	4/0	4	1	2-1/2"
M5	1	3	4/0	2	4/0	4	1	2-1/2"
M6	2	3	4/0	.	.	2	2	2-1/2"
N3	1	3	250	.	.	4	1	2-1/2"
N4	1	3	250	1	250	4	1	2-1/2"
N5	2	3	250	.	.	2	2	2-1/2"
N6	1	3	250	1	250	2	1	2-1/2"
P3	1	3	300	.	.	4	1	2-1/2"
P4	1	3	300	1	300	3	1	3"
P5	1	3	300	2	300	4	1	3"
Q3	1	3	350	.	.	4	1	3"
Q4	1	3	350	1	350	2	1	3"
Q5	2	3	350	.	.	1	2	3"
Q6	2	3	350	1	350	2/0	2	3"
Q7	2	3	350	1	350	1	2	3"
Q8	3	3	350	1	350	2/0	3	3"
R3	1	3	400	.	.	3	1	3"
R4	1	3	400	1	400	2	1	3"
R5	1	3	400	2	400	3	1	3-1/2"
R6	3	3	400	.	.	2/0	3	3-1/2"
R7	3	3	400	1	400	3/0	3	3-1/2"
S3	1	3	500	.	.	3	1	3"
S4	1	3	500	1	500	3 /2	1	3-1/2"
S5	1	3	500	1	500	4/0	1	4"
S6	2	3	500	1	500	2/0	2	4"
S7	3	3	500	1	500	4/0	3	4"
T3	1	3	600	.	.	3	1	4"
T4	1	3	600	1	600	1/0	1	4"
T5	2	3	600	.	.	3/0	2	4"
T6	3	3	600	1	600	3/0	3	4"
T7	4	3	600	1	600	3/0	4	4"
T8	5	3	600	1	600	3/0	5	4"

SYMBOL SCHEDULE

- SWITCHBOARD
- PANEL — PANELBOARD. PROVIDE INTEGRAL EQUIPMENT WHEN INDICATED.
- SELF CONTAINED UTILITY METER BASE
- UTILTY CT CABINET — UTILITY CT CABINET
- UTILITY POLE
- UTILITY METER. COORDINATE EXACT LOCATION WITH UTILITY COMPANY REQUIREMENTS
- TRANSFORMER
- MOTOR
- TVSS — TRANSIENT VOLTAGE SURGE SUPPRESSOR VERIFY AND ADJUST BREAKER, WIRE & CONDUIT SIZES TO MATCH RECOMMENDATIONS BY TVSS MANUFACTURER.
- FUSED DISCONNECT SWITCH
- ENCLOSED CIRCUIT BREAKER
- G — GENERATOR
- _TS-X — ATS-X - AUTOMATIC TRANSFER SWITCH; MTS-X - AUTOMATIC TRANSFER SWITCH
- PROVIDE A SEPARATE #3/0 GROUNDING CONDUCTOR TO EACH OF THE FOLLOWING:
  - FOUNDATION FOOTER REBAR
  - UTILITY SIDE OF WATER METER SERVICE
  - BUILDING STEEL
- GROUND CONNECTIONS PER NEC
- GROUNDING COUNTERPOISE SYSTEM PER SPECIFICATIONS
- WIRE/CONDUIT REFERENCE
- FR — 2-HOUR FIRE RATED CONDUCTORS WITH INCREASED CONDUIT SIZE AS REQUIRED TO MEET A LISTED 2-HOUR RATED INSTALLATION, NEC AND MANUFACTURERS REQUIREMENTS.
- EQUIPMENT/FEEDER/WIRING/ETC - TO BE REMOVED
- FEEDER CIRCUIT
- GF — GROUND FAULT RELAY. PROVIDE TESTING AS REQUIRED BY THE AHJ.
- CM — CUSTOMER METERING PER SPECIFICATIONS. PROVIDE CATEGORY 6 CABLE TO LOCAL MDF/IDF IN 3/4" CONDUIT.
- INTEGRAL CONTACTOR

TRANSFORMER SCHEDULE

TYPE/NO.	KVA	TYPE	PRI. VOLTS	SEC. VOLTS	PHASE	WIRES	ENCLOSURE	DEGREE C TEMP RISE	MOUNTING
T-VL1	75	DRY	480	120/208	3	4	NEMA 1	150°	FLOOR
T-HL1	75	DRY	480	120/208	3	4	NEMA 1	150°	FLOOR

TRANSFER SWITCH SCHEDULE

TYPE/NO.	SIZE AMPS	VOLTAGE SYSTEM	SWITCHED POLES	NEUTRAL	NEMA ENCLOSURE	NOTES
ATS-LS	100	277/480V	3	NON OVERLAP	NEMA 12	

ENCLOSED CIRCUIT BREAKER SCHEDULE

TYPE/NO.	VOLT CLASS	AMPS	RATING	POLES	NEUTRAL	AIC	TYPE	NEMA ENCLOSURE	NOTES
EC-ATS-LS	600	70	80%	3	SN	35KAIC	ELECTRONIC TRIP LSI	NEMA 1	6,8

FUSED DISCONNECT SCHEDULE

TYPE/NO.	VOLT CLASS	POLES	SIZE AMPS	SIZE FUSE	NEUTRAL	NEMA ENCLOSURE	FUSE CLASS	NOTES
FS-ATS-LS	600	3	100	70	SN	NEMA 1	CLASS J	

GENERATOR SCHEDULE

TYPE/NO.	NOMINAL KW	SYSTEM VOLTAGE	PHASE	WIRE	ALTERNATOR	ALTERNATOR KW	ALTERNATOR KVA	MAX MOTOR STARTING KVA WITH PMG AT 90% SUSTAINED VOLTAGE	ENGINE	ELECTRONIC TRIP LSI CIRCUIT BREAKERS	ENCLOSURE	FUEL TYPE	BASIS OF DESIGN MODEL NUMBER	NOTES
G1	50	277/480V	3	4	UCD2F	50	62.5	272	QSB5-G13	3P.70A - ATS-LS	OUTDOOR	DIESEL	CUMMINS C50D6C	6,7

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RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: DESCRIPTION:
01/08/2025 BID DOCUMENTS
01/17/25 ADDENDUM #2

PROJ # : 24-SDL-03 DRAWN BY : A. NOLT

SHEET TITLE:

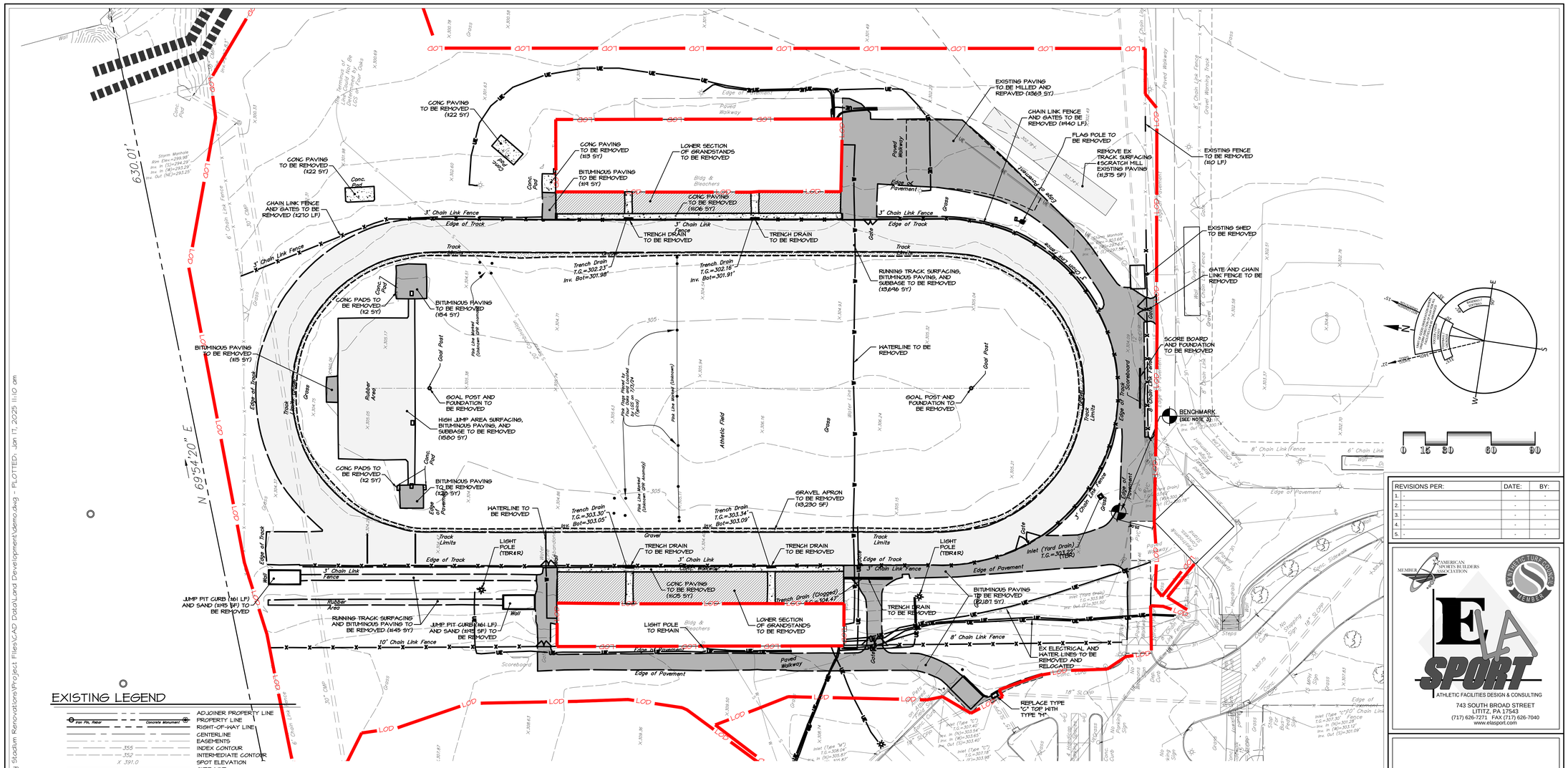
POWER RISER DIAGRAM

SHEET NUMBER:

E7.1

BID DOCUMENTS

1/17/2025 11:57:24 AM



EXISTING LEGEND

- ADJOINER PROPERTY LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- EASEMENTS
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- SPOT ELEVATION
- CURB LINE
- EDGE OF PAVEMENT (E.O.P.)
- MIN. BLDG SETBACK LINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- GAS LINE
- SANITARY SEWER LINE
- SANITARY FORCE MAIN
- WATER LINE
- STORM DRAINAGE PIPING
- FENCE
- ZONING LINE
- GUIDE RAIL
- EDGE OF WATER (STREAM)
- FEMA 100 YEAR FLOODPLAIN
- TREE LINE
- SIGN
- WELL
- LIGHT POLE
- GROUND LIGHT
- ROOF DRAIN
- MAILBOX
- BOLLARD
- REFLECTOR POST
- DECIDUOUS TREES
- CONIFEROUS TREE
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL POLE
- TRAFFIC SIGNAL MAST

DEMOLITION LEGEND

- EXISTING PAVING TO BE MILLED AND REPAVED
- BITUMINOUS PAVING TO BE REMOVED
- SECTION OF GRANDSTANDS TO BE REMOVED
- TRACK SURFACING, BITUMINOUS PAVING, AND SUBBASE TO BE REMOVED
- LOD — LIMIT OF DISTURBANCE
- TPF — TEMPORARY CONSTRUCTION FENCING
- TP-1 — TEST PIT

DEMOLITION NOTES

1. EXISTING PIPING SYSTEM MAY REMAIN IN PLACE WHERE IT DOES NOT AFFECT THE NEW WORK / SYNTHETIC TURF FIELD AGGREGATE BASE AND UNDERDRAIN SYSTEM. ALL EXISTING STORM SEWERS ABANDONED IN PLACE SHALL BE CAPPED / PLUGGED AND SHOWN ON THE CONTRACTOR'S RECORD AS-BUILT DRAWINGS.
2. PROVIDE CLEAN FILL AND BACKFILL ALL VOIDS RESULTING FROM DEMOLITION / REMOVAL TO NEW SYNTHETIC TURF FIELD SUBGRADE ELEVATION. BACKFILL IN LIFTS AND THOROUGHLY COMPACT EACH LIFT TO PREVENT FUTURE SETTLEMENT.
3. STRIP TOPSOIL LAYER SEPARATE FROM UNDERLYING TOPSOIL AND STOCKPILE ON SITE AT A LOCATION OR LOCATIONS, DIRECTED BY OWNER OR AS DESIGNATED ELSEWHERE ON THESE DRAWINGS. REMOVE ALL EXCESS SUBSOIL MATERIALS FROM SITE NOT REQUIRED AS PART OF THE WORK.
4. CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THROUGH THE APPROVED ROCK CONSTRUCTION ENTRANCE. CONTRACTOR SHALL REMOVE (AND REPLACE) EXISTING GATES, GATE POSTS, AND FENCING AS REQUIRED TO GAIN ACCESS FOR CONSTRUCTION EQUIPMENT. RESTORE EXISTING PAVEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES, INCLUDING COMPLETE REPLACEMENT WHEN REQUIRED, AND RESTORE / REPLACE EXISTING LAWN AREAS AND OTHER IMPROVEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES.
5. LIMIT OF FENCE / FENCE POST FOUNDATION REMOVAL SHOWN ON THIS DRAWING IS "GRAPHIC" APPROXIMATE. REMOVE FENCE TO NEAREST POST BEYOND THE LIMIT OF NEW CONSTRUCTION AS PRACTICAL TO MEET THE INTENT AND SCOPE OF THE NEW PAVING WORK.

SOILS LEGEND

- Uc — URBAN LAND

CITY FILE NO.

LCPC FILE NO.

REVISIONS PER:	DATE:	BY:
1. -	-	-
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

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SUBJECT:
EXISTING CONDITIONS / DEMOLITION PLAN
FOR
McCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA
CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	JAN. 17, 2025
ENGINEER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	BLM	SCALE:	1" = 30'

DRAWING NO.
2 OF 5

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RENOVATIONS
J.P. MCCASKEY STADIUM
PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES
DATE: 01/17/2025
DESCRIPTION: ADDENDUM 2

PROJ # : 24-SDL-03
DRAWN BY : ELA/HDC/BLS

SHEET TITLE:
EXISTING CONDITIONS / DEMOLITION PLAN

SHEET NUMBER:
CSK-01

ADDENDUM 02

DRAWING: C:\Users\brent\DCVAECDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\demo.dwg - PLOTTED: Jan 11, 2025 11:10 am
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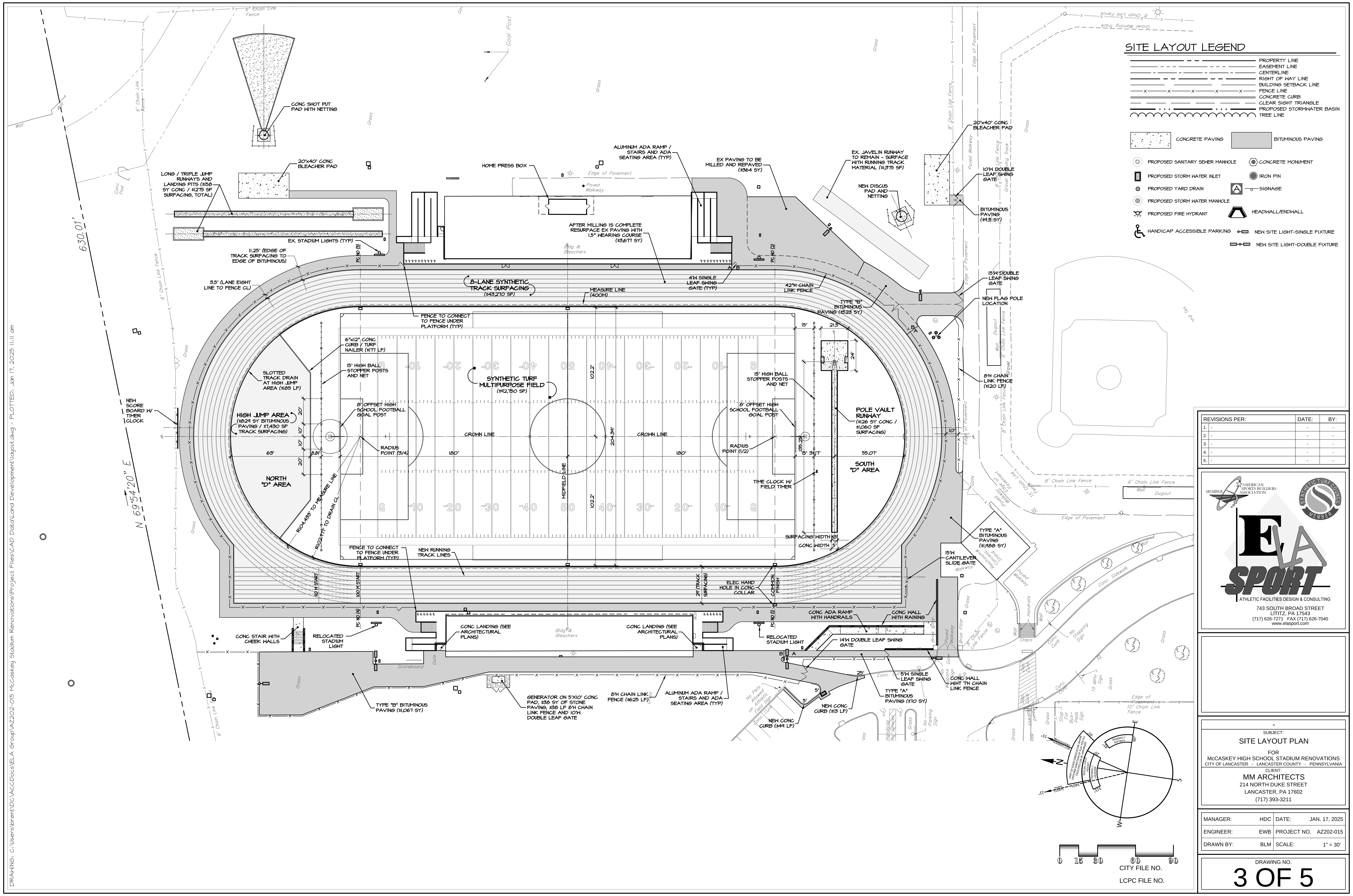

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SUBJECT:
SITE LAYOUT PLAN
FOR
McCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA
CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	JAN. 17, 2025
ENGINEER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	BLM	SCALE:	1" = 30'

DRAWING NO.
3 OF 5

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SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES DATE:	DESCRIPTION:
01/17/2025	ADDENDUM 2

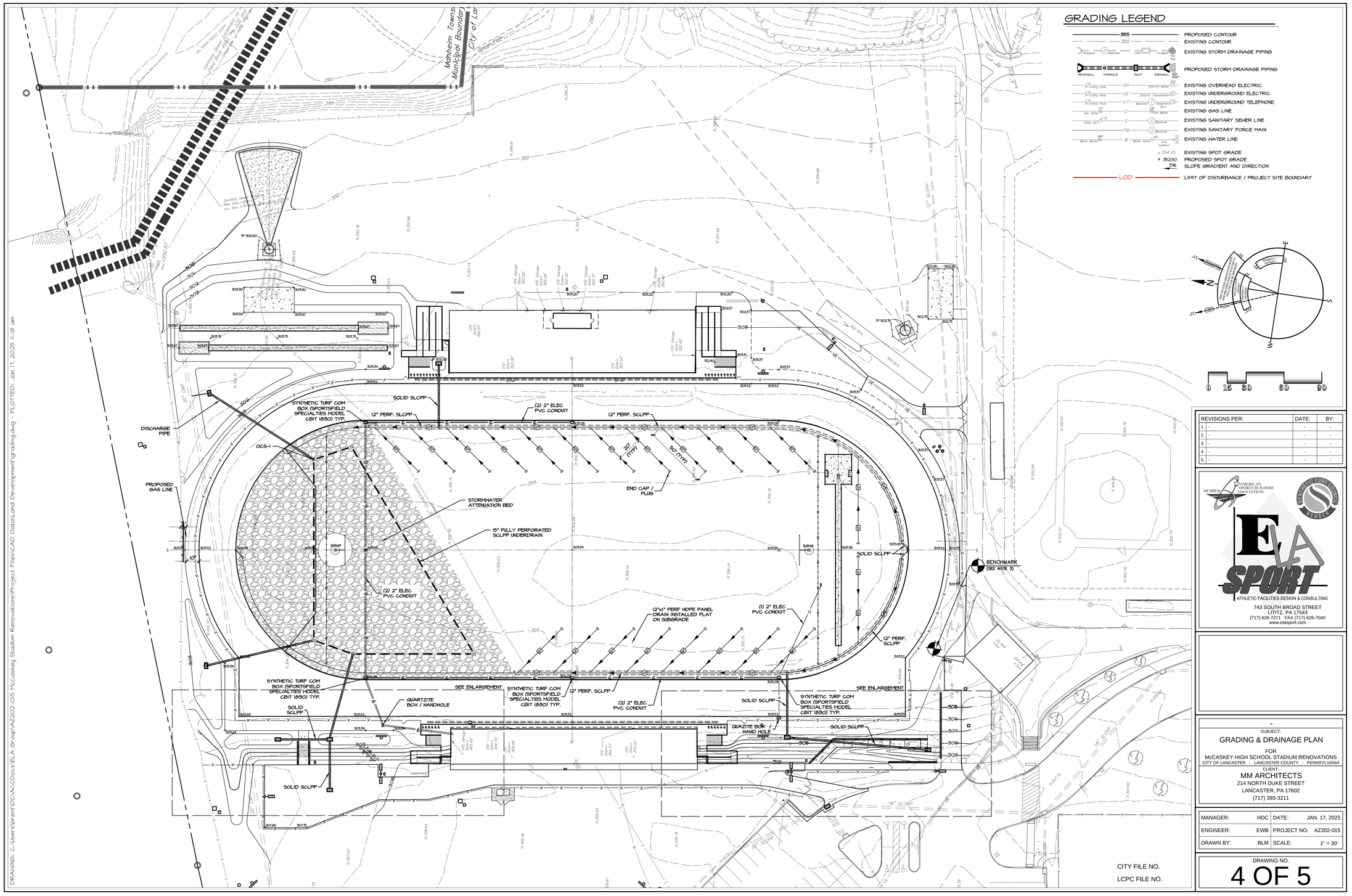
SHEET TITLE:
SITE LAYOUT PLAN

SHEET NUMBER:
CSK-02

ADDENDUM 02

DRAWING: C:\Users\brent\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\Layout.dwg - PLOTTED: Jan 17, 2025 11:11 am

1/16/2025 4:18:52 PM



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3. -	-	-
4. -	-	-
5. -	-	-

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SUBJECT:
GRADING & DRAINAGE PLAN
FOR
McCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA
CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER:	HDC	DATE:	JAN. 17, 2025
ENGINEER:	EWB	PROJECT NO.	AZ202-015
DRAWN BY:	BLM	SCALE:	1" = 30'

DRAWING NO.
4 OF 5

CITY FILE NO.
LCPC FILE NO.

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ISSUE DATES
DATE: 01/17/2025
DESCRIPTION: ADDENDUM 2

PROJ # : 24-SDL-03 DRAWN BY : ELA/HDC/BLS

SHEET TITLE:
GRADING & DRAINAGE PLAN

SHEET NUMBER:
CSK-03

ADDENDUM 02

RENOVATIONS
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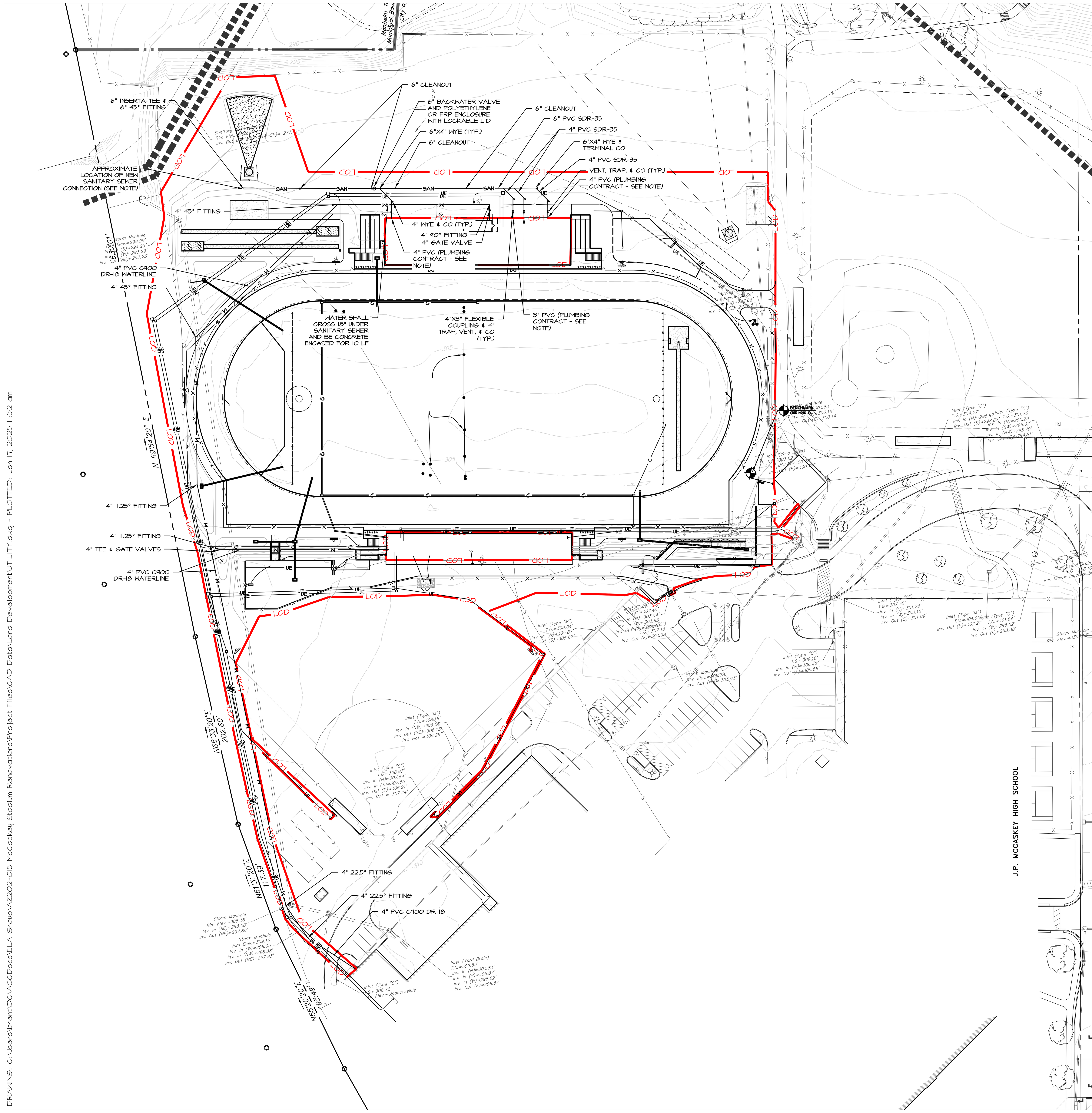
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602



NOTES:

1. NO EQUIPMENT STORAGE, MATERIAL STOCKPILING, OR VIBRATORY ROLLING/COMPACTION WITHIN THE CITY'S SEWER EASEMENT(S).
2. LIMIT OF THE PLUMBING CONTRACT IS WITHIN 5' OF THE BUILDING ENVELOPES. CONTRACTOR RESPONSIBLE FOR SITE WORK SHALL BE RESPONSIBLE FOR WATER AND SANITARY SEWER DEPICTED ON THE PLAN STARTING AT 5' BEYOND THE BUILDING ENVELOPES.
3. CONTRACTOR SHALL FIELD VERIFY DEPTH OF EXISTING SANITARY SEWER MAIN AT PROPOSED POINT OF CONNECTION AND SHALL FIELD ADJUST THE SLOPE OF THE SANITARY SEWER FROM THE MAIN TO THE CLEANOUT ADJACENT TO THE BACKWATER VALVE ACCORDINGLY.

UTILITY LEGEND

- EXISTING STORM DRAINAGE PIPING
- PROPOSED STORM DRAINAGE PIPING
- EXISTING OVERHEAD ELECTRIC
- PROPOSED OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- PROPOSED UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- PROPOSED GAS LINE
- EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER LINE
- EXISTING SANITARY FORCE MAIN
- PROPOSED SANITARY FORCE MAIN
- EXISTING WATER LINE
- PROPOSED WATER LINE

0 25 50 100 150

REVISIONS PER:	DATE:	BY:
1. -	-	-
2. -	-	-
3. -	-	-
4. -	-	-
5. -	-	-

MEMBER AMERICAN SPORTS BUILDERS ASSOCIATION
SYNTHETIC TURF COUNCIL MEMBER

ELA SPORT
ATHLETIC FACILITIES DESIGN & CONSULTING
743 SOUTH BROAD STREET
LITITZ, PA 17543
(717) 626-7271 FAX (717) 626-7040
www.elasport.com

-

SUBJECT:
UTILITY PLAN
FOR
McCASKEY HIGH SCHOOL STADIUM RENOVATIONS
CITY OF LANCASTER - LANCASTER COUNTY - PENNSYLVANIA

CLIENT:
MM ARCHITECTS
214 NORTH DUKE STREET
LANCASTER, PA 17602
(717) 393-3211

MANAGER: HDC	DATE: JAN. 17, 2025
ENGINEER: EWB	PROJECT NO. AZ202-015
DRAWN BY: BLM	SCALE: 1" = 50'

CITY FILE NO.
LCPC FILE NO.

DRAWING NO.
5 OF 5

DRAWING: C:\Users\brent\DC\ACCDocs\ELA Group\AZ202-015 McCaskey Stadium Renovations\Project Files\CAD Data\Land Development\UTILITY.dwg - PLOTTED: Jan 17, 2025 11:32 am

MAROTTA/MAIN ARCHITECTS
WWW.MAROTTAMAIN.COM

SEAL:

THIS DRAWING IS THE PROPERTY OF THE ARCHITECT AND MAY NOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN PERMISSION

School District of Lancaster
Together We Can!

CONSULTANT:

ELA SPORT
ATHLETIC FACILITIES DESIGN & CONSULTING

RENOVATIONS
J.P. MCCASKEY STADIUM PROJECTS
SCHOOL DISTRICT OF LANCASTER
445 N RESERVOIR ST, LANCASTER, PA 17602

ISSUE DATES	
DATE:	DESCRIPTION:
01/17/2025	ADDENDUM 2

PROJ #: 24-SDL-03 DRAWN BY: ELA/HDC/BLS

SHEET TITLE:
UTILITY PLAN

SHEET NUMBER:
CSK-04

ADDENDUM 02

1/16/2025 4:18:52 PM