ADDENDUM NO. 2

April 10, 2026

TRI-TOWNSHIP WANATAH SCHOOL
RENOVATION AND RELATED WORK
Wanatah, IN 46390

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated March 20, 2026 by Gibraltar Design, Inc. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2-2, and attached Addendum No. 2 from Gibraltar Design dated April 9, 2026 and consisting of 2 pages, replacement Specification Section 04 20 00 - Unit Masonry, added Specification Sections 07 13 53 - Elastomeric Sheet Waterproofing and 07 46 00 Vinyl Siding, and 6 drawings.

A. SPECIFICATION SECTION 00 00 20 - TABLE OF CONTENTS

1. **ADD:**

   Specification Section 00 20 00 - Information Available to Bidders
   Specification Section 01 23 00 - Alternates

   Specification Section 07 13 53 - Elastomeric Sheet Waterproofing
   Specification Section 07 46 00 - Vinyl Siding

B. SPECIFICATION SECTION 00 31 00 - BID FORM

2. **REPLACE:**

   Specification Section 00 31 00 - Bid Form, with the attached section.

C. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

Under 3.02 GENERAL REQUIREMENTS

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

1. **ADD:**

Specification Section 01 23 00 - Alternates

Under 3.03 Bid Categories

D. BID CATEGORY NO. 1 - GENERAL TRADES

2. **ADD:**

Specification Section 07 13 53 - Elastomeric Sheet Waterproofing
Specification Section 07 46 00 - Vinyl Siding

SECTION 00 20 00 - INFORMATION AVAILABLE TO BIDDERS

A. Subsurface Investigation Information: The Soils Exploration Report and Soil Boring Logs were prepared for the Owner by **Advanced Engineering Services Inc. (AES), 844 169th Street, Hammond, IN 46324, (219) 933-7888, www.adv-engrs.com**, for use in design. The following Subsurface Investigation Report is not a part of the construction Contract Documents and is enclosed within this document for informational use only. The Architect/Engineer and Construction Manager do not accept responsibility for the information contained in the report.

1. The enclosed report and Log of Borings, and any interpolations of conditions between test borings is not a warrant or guarantee by the Owner or Architect/Engineer of subsurface conditions.
2. The Contractor should visit the site and acquaint himself with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to the site and subsurface conditions, but such subsurface investigations shall be performed only under the time schedules and arrangements approved in advance by the Owner. Any additional information, needed by the Contractor, shall be obtained by the Contractor at no cost to the Owner.
3. Structural design has been based on the report and assumes that existing soils are clean and can be compacted and will achieve the densities specified in the earthwork section. It shall be the Contractor's responsibility to determine for himself existing Site and or soil conditions.

B. Existing Site Survey Information: A Site survey can be found within the construction drawings. It is not however, part of the Construction Contract Documents and is for informational use only. Information found is not a warrant or guarantee by the Owner or Project Consultant. The Contractor should visit the site and acquaint himself with all existing conditions. Any additional information, needed by the Contractor, shall be obtained by the Contractor at no cost to the Owner.

C. Asbestos Report: The Asbestos Report (if applicable), prepared for the Owner, is not part of the Construction Documents, and is on file at the Owner's Office and is available for review upon written request. The Architect and Construction Manager do not accept responsibility for the information contained in the report.

D. Lead Based Paint: Lead Based Paint Report (if applicable), prepared for the Owner, is not part of the Construction Documents, and is on file at the Owner's Office and is available for review upon written request. The Architect and Construction Manager do not accept responsibility for the information contained in the report.

END OF SECTION 00 20 00

REPORT OF GEOTECHNICAL EXPLORATION
Proposed Facilities Improvements
Wanatah JR/SR/ES School
309 School Dr, Wanatah, Indiana
Tiger Deb Gymnasium
11 N. Michigan St., La Crosse, Indiana
AES Project No. 2025-1162G

Prepared For

Dr. Paige McNulty
Superintendent
Tri-Township Schools
309 School Drive
Wanatah, Indiana 46390

January 14, 2026

Advanced Engineering Services Inc. (AES)
844 169th Street I Hammond, IN 46324
219.933.7888 I www.adv-engrs.com

January 14, 2026

Dr. Paige McNulty
Superintendent
Tri-Township Schools
309 School Drive
Wanatah, Indiana 46390

C/O Mr. Scott Cherry, The Skillman Corporation, Sent via email: svcherry@skillman.com

Re: Report of Geotechnical Engineering Exploration
Proposed Facility Improvements
Tri-Township JR/SR/ES School — Tiger Den Gymnasium
309 School Dr., Wanatah, IN — 11 N. Michigan St., La Crosse, IN
AES Project No. 2025-1162G

Dear Dr. McNulty:

Advanced Engineering Services (AES) is pleased to submit herewith a report of a geotechnical engineering exploration for the proposed improvements at the JR/SR/ES School in Wanatah, Indiana and the Tiger Den Gymnasium in La Crosse, Indiana. This study was performed in accordance with AES Proposal No. 2025-387G dated November 6, 2025, and was authorized by you on December 8, 2025.

This report contains field and laboratory test results, an engineering interpretation of the data with respect to the available project characteristics and our recommendations to aid design and construction of the proposed improvements and other earth-related phases of this project.

AES appreciates the opportunity to be of service to you on this project. If we can be of any further assistance, or if you have any questions regarding this report, please do not hesitate to contact us at your convenience.

Respectfully submitted,
Advanced Engineering Services Inc. (AES)

Eric K. Morphis, EIT
Team Engineer
ekm@adv-engrs.com

AKHTAR ZAMAN REGISTERED No. 10001091 STATE OF INDIANA PROFESSIONAL ENGINEER

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TABLE OF CONTENTS

APPENDIX

1.0 INTRODUCTION

This report presents the results of a geotechnical engineering exploration for the proposed improvements at the JR/SR/ES School in Wanatah, Indiana and the Tiger Den Gymnasium in La Crosse, Indiana. This study was performed in accordance with AES Proposal No. 2025-387G dated November 6, 2025.

1.1 Purpose and Scope

The purpose of the study was to: obtain subsurface soil and groundwater information present at the test boring locations, evaluate the suitability of the materials encountered to support the proposed construction, provide design recommendations based on the field and laboratory tests for the proposed improvements and earth-related phases of the project.

The scope of this exploration includes: a limited site reconnaissance, field soil borings, field and laboratory testing, and an engineering evaluation of the encountered subsurface conditions based on the soil borings.

Please note that our recommendations are prepared solely based on the results of the field test borings and in accordance with generally accepted geotechnical engineering principles and practices. It is important to understand that the subsurface soil conditions at other locations may be different and hence no warranties are expressed or implied in this report. We are not responsible for independent conclusions, opinions or recommendations made by others.

1.2 Site and Project Description

Various improvements are planned at the JR/SR/ES School and the Tiger Den Gymnasium located at the referenced addresses in Wanatah and La Crosse, Indiana. While no drawings are available at the time of this study, we were informed that the improvements will include ball courts, playgrounds, athletic fields, and parking areas.

The JR/SR/ES School is located on the southeast side of Wanatah, Indiana. The test locations were spread across various locations around the south portion of the site. Borings were requested near existing playgrounds, courts, and athletic fields. The property is adjacent to farmland to the south and east, residential properties to the west, and predominantly greenspace with a smaller commercial petroleum facility to the north.

The Tiger Den Gymnasium is centrally located within the Town of La Crossa and is within a developed residential and commercial area. The site covers the eastern half of an approximately 1.5-acre parcel. Two existing buildings occupy much of the western half of the lot. Borings were requested within a playground, a paved ball court, and a paved parking area. Residential properties are located on the adjacent lots to the south, west, and north of the site. A church is located on the adjacent parcel east of the site. While no topographic drawings were available, both sites, and the surrounding areas, appear to be relatively flat.

2.0 FIELD AND LABORATORY EXPLORATIONS

2.1 Field Exploration

The field exploration program at the consisted of nine (9) borings to 10 ft below the existing grade. Borings B-1 through B-5 were completed at the JR/SR/ES School, and B-6 through B-9 were completed at the Tiger Den Gymnasium. The approximate test locations are shown on the Boring Location Plans in the Appendix.

The test boring locations were established in the field by AES representatives by estimating distances from various site features, adjusting test locations due to existing utilities and based on the available drawings. Since these measurements are not precise, the boring locations shown on the attached Boring Location Plan should be considered approximate. Ground elevations reported on the test boring logs (see appendix) were estimated from topographic data available from Google Earth®.

All soil borings were completed using an all-terrain vehicle (ATV)-mounted drill-rig. Conventional hollow-stem augers were used to advance the boreholes through the soil. Standard Penetration Tests (SPT) were performed in accordance with applicable ASTM standards. Representative split-spoon samples were obtained at 2.5 ft to 5 ft intervals. The SPT (N) value corresponding to each split-spoon sample provides general information about the strength and consistency of the naturally occurring materials. The Soil Classification Sheet provided in the Appendix explains the SPT test procedure briefly.

Groundwater observations were made during and immediately after completion of the drilling operations. SPT values and groundwater observations are noted on the Test Boring Logs. All bore holes were backfilled and patched where applicable after completion of field drilling and sampling.

2.2 Laboratory Explorations

Samples from the field were placed in sealed containers and brought to the laboratory for further analysis. The laboratory program included a supplementary visual classification on all samples and the field log was edited accordingly. Moisture and organic content tests were completed on selected samples. The test results are included on the test boring logs and in the appendix of the report.

The Test Boring Logs in the Appendix describe visual classifications of all soil strata encountered using the Unified Soil Classification System (USCS). Soil classification explaining terms and symbols used on the logs is provided in the Appendix. Please note that we will store the samples for sixty (60) days after which they will be discarded unless you request otherwise.

3.0 GENERAL SUBSURFACE CONDITIONS

3.1 General

The subsurface materials encountered and groundwater observations at each boring are described in detail on the Test Boring Logs provided in the Appendix. It should be noted that stratification lines shown on the logs represent approximate transitions between material types. In-situ strata changes could occur gradually or at slightly different levels. Also, it should be noted that the logs depict conditions at the test locations only and the subsurface conditions at other locations may vary. Some conditions, such as groundwater conditions, could change with time.

3.2 Subsurface Soil Profile

Borings B-1 through B-5 were located at the Tiger Den Gymnasium in La Crosse. Boring B-4 encountered about 3 inches of asphalt at the existing surface. At Borings B-1, B-2, and B-3, about 2 inches of gravel was encountered at the surface. Boring B-4 encountered about 3 inches of asphalt at the existing surface. Boring B-5, located within the basketball court, encountered about 3 inches of asphalt underlain by 2 inches of sand which was followed by a second 3-inch layer of asphalt. Below the asphalt or gravel, old fill materials consisting of black sandy clay or clayey sand with trace organics were noted to at all borings to a depth of about 3 ft below the existing grade. Moisture and organic contents within the fill samples were as high as 17.0% and 2.8%, respectively. Borings B-1 through B-5 then noted either brown clayey sand (SC) or brown poorly graded sand (SP) was encountered at all borings to the termination depth of 10 ft below existing ground elevation. Based on the SPT values, the native sandy soils were very loose to loose. Moisture contents of the native material were between about 15.4% and 18.2%.

Borings B-6 through B-9 were performed at the JR/SR/ES School in Wanatah. Borings B-6 and B-7 encountered about 1 ft of black Sandy topsoil at the present grade. Boring B-8 encountered 2 inches of asphalt underlain by a sand and gravel fill to about 1 ft below the current grade. Borings B-6, B-7, and B-8 then all had similar subsurface profiles with very soft to medium stiff brown sandy clay (CL) encountered to about 3 ft transitioning to brown clayey sand (SC) to a depth of about 6 ft below the current grade. Boring B-9 encountered about 1 ft of black clayey sand fill underlain by black sandy clay fill with trace organics to about 6 ft below the existing surface. Moisture and organic contents within the fill samples were as high as 18.4% and 6.6%, respectively. Borings B-6 through B-9 then encountered brown poorly graded sand from about 6 ft to the termination depth of 10 ft below the present ground surface. Based on the SPT values, the native sandy soils were very loose to medium dense, and the native cohesive soils were very soft to medium dense. Moisture contents of the native material were between about 17.7% and 22.3%.

3.3 Groundwater Profile

Groundwater observations were recorded during and immediately after completion of drilling at each hole. Free water was noted at all boring locations at a depth of about 6 ft below grade during or immediately after drilling. While short-term groundwater observations in granular soils generally provide accurate groundwater information at the time of drilling, groundwater

conditions may change due to precipitation, water level at the nearby water bodies and other hydro-geologic factors.

4.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

4.1 General

Based upon our analysis of the soil conditions revealed by the test borings and the available project information, the following recommendations were developed. Please note that if the project characteristics are changed from those assumed herein, our recommendations must be reviewed to see whether any modifications are needed.

The subsurface exploration identified actual subsurface conditions only at the test locations. It was necessary to extrapolate these conditions to characterize the entire project sites. For this reason, the subsurface conditions encountered during construction may vary somewhat from the boring results and may, in the extreme case, differ to the extent that modifications to the recommendations become necessary. Therefore, we suggest that AES be retained as the geotechnical consultant throughout the earth-related phases to correlate actual soil conditions with the test boring data, identify variations, conduct additional tests that may be needed and recommend solutions to earth-related problems that may develop during construction.

4.2 Site Preparation

All structural areas should be prepared properly for long-term performance. It is important to note that improper earthwork may deteriorate the otherwise suitable subgrade. This is especially important for this project as old fills containing organics were found at the Tiger Den Gymnasium and at the JR/SR/ES School. The period between late spring and early fall is typically favorable for earthwork in the project area. Earthwork activities undertaken during late fall and winter often encounter substantial difficulties associated with snow, rain, and cold temperatures. The contractor must take adequate precautions to minimize deterioration of an otherwise suitable subgrade, especially from construction traffic.

Remnants of all previous development, existing vegetation, organic material (more than 5%), topsoil, or otherwise unsuitable materials, as well as frozen, wet, soft or loose soils should be removed from the structural areas. The mass grading operation should be performed in a manner consistent with good erosion and sediment control practice. The contractor must maintain the construction area in a well-drained condition both during and after construction. Positive drainage is an important part of successful earthwork operations and long-term performance. Improper site drainage can increase the need for remedial treatment of excessively wet soils. Disturbed areas should be sealed off with a smooth drum roller at the end of each workday and prior to anticipated inclement weather to minimize infiltration of rainwater.

After rough grade has been established in cut areas and prior to placement of new engineered fill, the exposed subgrade should be carefully observed by an AES representative by probing or other methods of testing. The exposed subgrade should furthermore be observed by proof-rolling with a tandem-axle dump truck loaded with at least 20 tons or similar, where practical. The purpose of the proof-rolling is to locate soft, weak, or excessively wet soils present at the surface or beneath

a thin crust of relatively stronger soil during the construction. The proof-roll should cover the entire area in two perpendicular directions. If an area is too small to be proof rolled, it must be observed by an AES representative, to establish its suitability. All unsuitable materials observed during the evaluation should be replaced or stabilized appropriately. Suitable exposed granular subgrade should be surface compacted prior to the placement of new fills, aggregate base or concrete.

The near surface materials encountered in the borings at both sites consists of black clayey old fills or very soft to medium dense sandy clay (CL). Depending on the weather conditions, these soils may become loose, soft and unstable under construction traffic, rain, and poor drainage. It is very important for the contractor to realize that construction traffic must be controlled within the structural areas (slab on grade areas) to minimize disturbance and deterioration of the subgrade. The extent to which this may be a problem is difficult to determine beforehand since it is dependent upon several factors including cut and fill depths, weather conditions, drainage provisions, variations in soil conditions across the site, sequencing and scheduling of the earthwork and construction traffic, etc. Proper crowning of subgrade soil helps to minimize water ponding and reduces the possibility of deteriorating subgrade and underlying soils.

In general, yielding subgrade problems are more prominent in cut areas (where saturated or nearly saturated clayey soils are exposed by the excavation) or where little or no fill is placed. Depending on these factors, it may be possible to stabilize some yielding subgrade soils by disking, aerating and then re-compacting the soils. However, this is often unsuccessful, particularly when the weather conditions do not permit drying of wet soil. In such cases it may be necessary to undercut and replace with coarse aggregate with geo-grid or to use chemical modification (such as lime, fly-ash, cement, etc.). An AES representative should be present during the earthwork to identify areas where special stabilization may be necessary and verify that these recommendations are implemented during construction.

4.3 Excavation and Slope Stability

Based on the subsurface materials encountered at test locations, there should not be significant difficulty in excavating soil at this site with conventional equipment. Unless specified otherwise, all permanent cut slopes should be no steeper than 3 (horizontal) to 1 (vertical). All temporary excavations for the construction should be properly laid back or braced in accordance with Occupational Safety and Health Administration (OSHA) requirements. Flatter cut slopes may be required in cases where there is ground water seepage or soils are particularly poor.

Where new engineered fill is placed against existing slopes that are steeper than 4 (horizontal) to 1 (vertical), it will be necessary to bench (at least 10 ft wide) the new fill into the existing slope in order to provide a good bond between the existing soil and the new fill and to prevent the development of a zone of weak soil at the interface. If spatial constraints will not permit an open cut, bracing will be required for any excavation deeper than 5 ft.

Care must be exercised when excavating near existing streets, underground utilities, etc., to protect the integrity of existing facilities. Bracing may be required if it becomes necessary to excavate below and near such facilities. All temporary bracing for excavations should be designed and installed by an experienced specialty contractor.

4.4 Engineered Fill

Once the subgrade has been properly prepared, new fills may be placed to attain desired final grades. In general, any non-organic, naturally occurring, non-expansive soil can be used for structural fill. The existing fill materials may be used as engineered fill provided; they meet the following criteria. However, it is recommended that only sand and gravel or preferably crushed limestone (INDOT 53 gradation or similar) or lean concrete be used in the structure areas.

The proposed soil fill materials should consist of soil with the following characteristics:

- Organic content is less than 5% by dry weight of soil,
- Liquid Limit less than 50 and Plasticity Index less than 30,
- Free of large rock fragments (no particles larger than 3 inches in diameter), debris, roots, rubble, wood or any other deleterious materials,
- The amount retained on a ¾ inch sieve should be less than 30%,
- The maximum dry density (ASTM D-698) should be at least 100 pcf,
- The soil fill should meet the requirements of the Unified Soil Classification System (USCS) (ASTM D-2487) as either CL, CL-ML, SM, SC, SP, SW, SP-SM, SC-SM, SP-SC, SW-SM, SW-SC, GW, GW-GM or GW-GC,
- The use of essentially one-size material should not be permitted.

All engineered fill with fines should be placed in about 8 to 10 inches loose horizontal lifts and compacted to at least 95% of the maximum dry density determined by the standard Proctor test (ASTM D-698). The new fill should be placed and compacted at moisture contents within 3% of the optimum moisture content as determined by the specified Proctor test. Suitable equipment for either aerating or adding water should be available as the soil moisture and weather conditions dictate. In general, smooth-wheel vibratory rollers or skid-plates are suitable for compacting non-cohesive gravel and sand fill type soils.

It is recommended that AES should perform continuous review of the soil-related phases of this project. Otherwise, AES can assume no responsibility for construction compliance with the design concepts, specifications, or our recommendations. As part of this review, field density tests should be performed as frequently as necessary to assist in the evaluation of the fill with respect to the above recommendations.

4.5 Pavement Subgrade Recommendations

The materials revealed by the test borings generally appear to be suitable to support the proposed pavement, provided they are prepared as discussed in Section 4.2. Please note that improper earthwork may deteriorate an otherwise suitable subgrade especially in clayey soils, as noted at the site.

In the new pavement areas, all existing pavement, vegetation, highly organic (over 5%) and otherwise unsuitable materials should be either replaced with suitable granular material or stabilized prior to the placement of new fill, aggregate base. It should be noted that the existing subgrade may deteriorate and become unstable if they are left exposed to moisture. Once the subgrade elevation is reached, it should be proof rolled as discussed earlier. Any unsuitable materials revealed by the proof-roll should be replaced or adequately stabilized, as discussed earlier in Section 4.2. An AES representative should be present to verify that the subgrade is prepared properly as prescribed in this report.

The pavement surface should be sloped to facilitate positive drainage and prevent surface water ponding on the pavement. The edges of the pavement should provide a means of water outlet by extending the aggregate base through side ditches or drainpipes. The subgrade surface should be uniformly sloped to facilitate drainage through the granular base and to avoid any ponding of water beneath the pavement. Subsurface drains without filter fabric are recommended, if needed. Please note that inadequate surface and subsurface drainage often result in premature pavement failure.

In the absence of any California Bearing Ratio (CBR) tests, we recommend a CBR value of 3 for the pavement design. The aggregate base materials should be well-graded granular materials conforming to INDOT Coarse Aggregate No. 53 in accordance with the Indiana Department of Transportation (INDOT) Standard Specifications. The asphaltic concrete pavement should be constructed in accordance with the INDOT Standard Specifications Section 401-Hot Mix Asphalt, HMA, Pavement.

4.6 Ground Supported Slabs

Ground supported slabs (like sidewalks) can be supported on existing soils after removing remnants of previous construction, material with organic content more than 5%, or otherwise unsuitable materials and provided they appear suitable under proof-roll observation or on new compacted structural fill. The slab subgrade should be surface compacted and prepared as described in Section 4.2 of this report.

It is recommended that the ground supported slabs be supported on at least 6 inches of compacted granular materials such as sand and gravel or crushed stone. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab.

The slab should be appropriately reinforced to support the loads proposed and should include control joints to preclude random cracking. Please note that inadequate compaction of the backfill may cause subsidence, which may result in cracking of the slab edges and corners.

4.6 Drainage

Adequate drainage must be provided at the site to minimize any increase in moisture content of the load bearing soils. Exterior grades should be sloped away from the structure to prevent ponding of water within the construction area.

4.7 Groundwater Control

Since groundwater was noted in the soil borings as shallow as about 6 ft and groundwater condition may change, the contractor must be prepared to handle both surface and groundwater during the construction activities.

If water accumulates or ponds in the construction area, it should be promptly and properly removed. Water should not be pumped directly from an excavation terminating in saturated sandy soil. Typically, well-points or cased wells installed outside the excavation limits are necessary to lower groundwater in saturated sandy soils. We recommend that water be lowered by at least 2 ft below the lowest excavation point in such a case.

Discharge from dewatering should be closely monitored during dewatering. If excessive fine particles like silty soils are noted with discharged water, the dewatering operation must be halted until unsatisfactory conditions are remedied.

Any dewatering should be performed with caution as improper dewatering may deteriorate the subgrade as well as nearby structures. An experienced dewatering contractor should be hired to design and install the dewatering system.

5.0 LIMITATIONS OF STUDY

Differing Site Conditions
Geotechnical engineering recommendations were developed based on the information obtained from the test borings. Please note that soil test borings only depict the subsurface soil and groundwater conditions at the specific locations and time at which they were made. The soil conditions at other locations at the site may differ from those occurring at the soil boring locations. Groundwater condition may change over time. If deviations from the noted subsurface conditions are encountered during construction, please notify us immediately for recommendations.

Not Final Design
This report and the recommendations included in the report are not a final design, but rather as a basis for the final design to be completed by others (architect, civil or structural engineers, etc.). It is the client's responsibility to ensure that the recommendations are properly integrated into the design, and that the geotechnical engineer is provided the opportunity for design input and comment, as needed. We recommend that this firm be retained to review the final construction documents to confirm that the proposed project design sufficiently reflects the recommendations presented in the report. We also suggest that our firm be represented at pre-bid and/or pre-construction meetings regarding this project to offer any needed clarification of the geotechnical information to all involved.

Changes in Plans
The recommendations presented herein are based on the preliminary design details furnished by the client and/or as assumed herein. Any revision in the plans for the proposed construction from those anticipated in this report should be brought to the attention of the geotechnical engineer to determine whether any changes in the foundation or earthwork recommendations are necessary.

Construction Issues
Although general constructability issues have been considered in this report, the means, methods, techniques, sequences and operations of construction, safety procedure, and all items incidental thereto and consequences of, are the responsibility of parties to the project other than AES. Please contact us if additional guidance is needed.

Report Interpretation
AES is not responsible for the conclusions, opinions, or recommendations made by others based upon the data included herein. It is the client's responsibility to seek any guidance and clarifications from the geotechnical engineer needed for proper interpretation of this report.

Environmental Considerations
The scope of our services does not include any environmental assessment or exploration for the presence or absence of hazardous or toxic materials in the soil, surface or groundwater, water within or beyond the site studied. Unless complete environmental information regarding the site is already available, an environmental assessment is recommended prior to the development of this site.

Standard of Care
Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This statement is made in lieu of all other warranties either expressed or implied.

APPENDIX

BORING LOCATION PLANS

TEST BORING LOGS

LABORATORY TEST RESULTS

FIELD CLASSIFICATION SYSTEM

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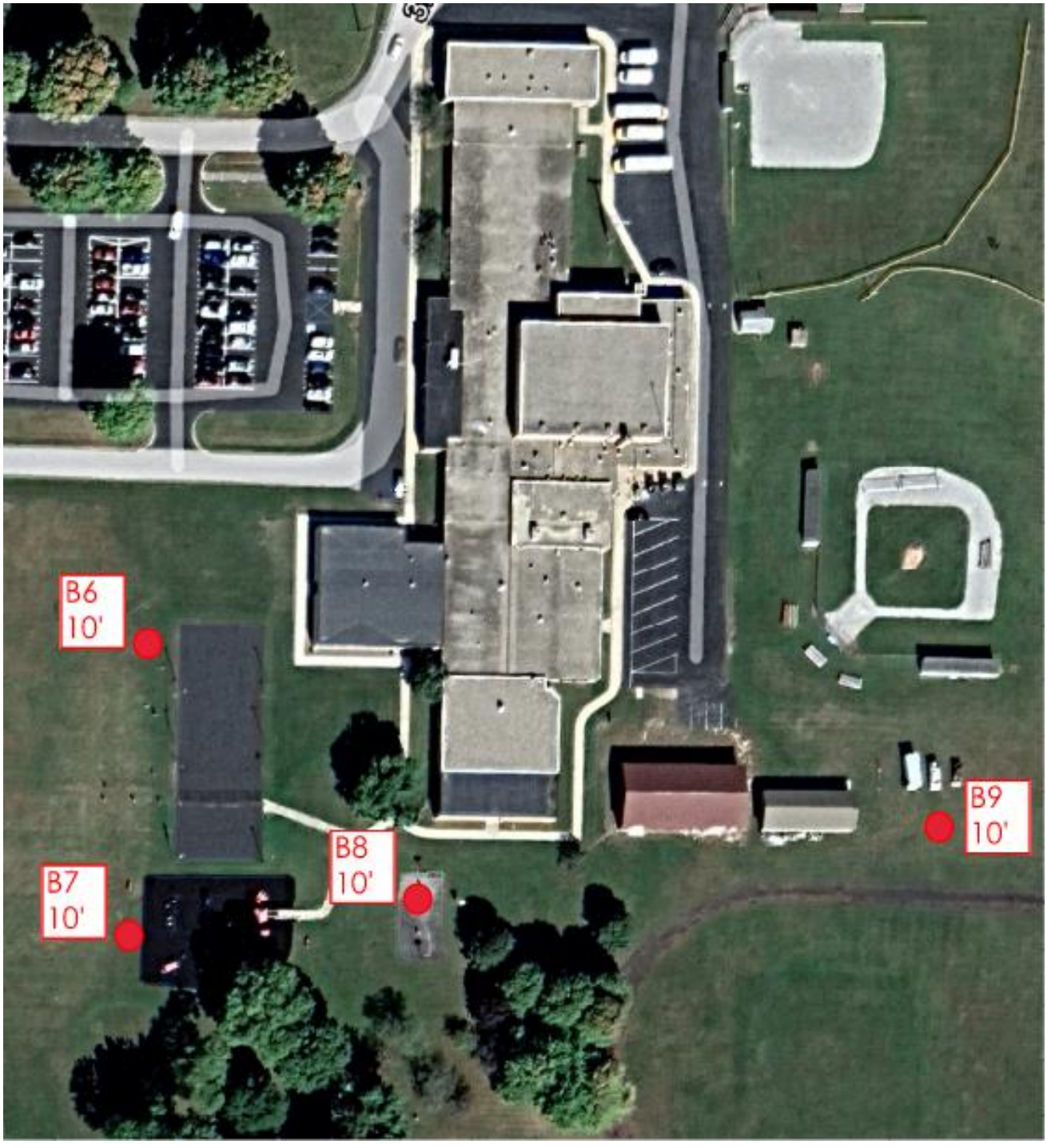
S

ALL TEST LOCATIONS ARE APPROXIMATE
ORIGINAL DRAWING PROVIDED BY THE SKILLMAN CORPORPATION

BORING LOCATION PLAN

PROPOSED FACILITY IMPROVEMENTS
TIGER DEN GYMNASIUM
11 NORTH MICHIGAN STREET
LA CROSSE, INDIANA
CLIENT: TRI-TOWNSHIP SCHOOLS

PROJECT NUMBER: 2025-1162G		DRAWN BY: EM
DATE: 12/10/25	SCALE: NONE	APPROVED: AZ
aes advanced engineering services		FIGURE 1



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ALL TEST LOCATIONS ARE APPROXIMATE
ORIGINAL DRAWING PROVIDED BY THE SKILLMAN CORPORPATION

BORING LOCATION PLAN

PROPOSED FACILITY IMPROVEMENTS
JR/SR/ES SCHOOL
309 SCHOOL DRIVE
WANATAH, INDIANA
CLIENT: TRI-TOWNSHIP SCHOOLS

PROJECT NUMBER: 2025-1162G		DRAWN BY: EM
DATE: 12/10/25	SCALE: NONE	APPROVED: AZ
aes advanced engineering services		FIGURE 2

Advanced Engineering Services
844 169th St.
Hammond, IN 46324
Telephone: 219-933-7888

BORING NUMBER B-01

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - Tiger Den Gymnasium
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 11 N. Michigan St., La Crosse, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 676 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 670.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 669.00 ft Wet Cave at 7 ft
NOTES Ground Elevation from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 669.00 ft Wet Cave at 7 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Gravel - 2 inch										
		(FILL) Dark Brown Sand, Trace Organics, Moist										
		(FILL) Dark Brown to Black Sandy Clay, Trace Organics, Moist	SS 1		2-3-4 (7)			16.0				
2.5		SS#1 Organic Content 1.8%										
		(SC) Brown Clayey Sand, Moist, Very Loose	SS 2		2-2-2 (4)			15.4				
5.0												
		(SP) Brown Poorly Graded Sand, Moist to Wet, Loose	SS 3		2-3-4 (7)							
7.5												
			SS 4		3-5-4 (9)							
10.0												

Bottom of borehole at 10.0 feet.

Advanced Engineering Services
844 169th St.
Hammond, IN 46324
Telephone: 219-933-7888

BORING NUMBER B-02

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - Tiger Den Gymnasium
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 11 N. Michigan St., La Crosse, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 677 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 671.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 670.00 ft Wet Cave at 7 ft
NOTES Ground Elevation from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 670.00 ft Wet Cave at 7 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Gravel - 2 inch (FILL) Dark Brown Sand, Trace Organics, Moist										
		(FILL) Black Sandy Clay, Trace Organics, Moist SS#1 Organic Content 1.8%	SS 1		2-2-1 (3)			15.3				
2.5		(SC) Brown Clayey Sand, Moist, Very Loose										
			SS 2		1-1-3 (4)			17.4				
5.0		(SP) Brown Poorly Graded Sand, Moist to Wet, Very Loose to Loose										
			SS 3		2-3-2 (5)							
7.5												
			SS 4		2-3-5 (8)							
10.0		Bottom of borehole at 10.0 feet.										

Advanced Engineering Services
844 169th St.
Hammond, IN 46324
Telephone: 219-933-7888

BORING NUMBER B-03

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - Tiger Den Gymnasium
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 11 N. Michigan St., La Crosse, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 676 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 670.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 669.00 ft Wet Cave at 7 ft
NOTES Ground Elevation from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 669.00 ft Wet Cave at 7 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Gravel - 2 inch (FILL) Dark Brown Sand, Trace Organics, Moist										
		(FILL) Black Sandy Clay, Trace Organics, Moist SS#1 Organic Content 1.9%	SS 1		3-5-4 (9)			16.7				
2.5		(SC) Brown Clayey Sand, Moist, Very Loose										
			SS 2		2-2-3 (5)			15.8				
5.0		(SP) Brown Poorly Graded Sand, Moist to Wet, Loose										
			SS 3		2-4-4 (8)							
7.5												
			SS 4		2-3-4 (7)							
10.0		Bottom of borehole at 10.0 feet.										

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BORING NUMBER B-04

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - Tiger Den Gymnasium
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 11 N. Michigan St., La Crosse, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 676 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 670.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 669.00 ft Cave at 7.5 ft
NOTES Ground Elevation from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 669.00 ft Cave at 7.5 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Asphalt - 3 inch										
		(FILL) Dark Brown to Black Clayey Sand, Trace Organics, Moist										
		(FILL) Black Sandy Clay, Trace Organics, Moist	SS 1		1-1-3 (4)			17.0				
		SS#1 Organic Content 1.2%										
2.5		(SC) Brown Clayey Sand, Moist, Loose										
			SS 2		2-3-3 (6)			18.2				
5.0												
		(SP) Brown Poorly Graded Sand, Moist to Wet, Very Loose to Loose	SS 3		2-2-3 (5)							
7.5												
			SS 4		3-4-6 (10)							
10.0		Bottom of borehole at 10.0 feet.										

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BORING NUMBER B-05

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - Tiger Den Gymnasium
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 11 N. Michigan St., La Crosse, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 676 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 670.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 669.00 ft Cave at 8 ft
NOTES Ground Elevation from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 669.00 ft Cave at 8 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Asphalt - 3 inch Sand and Gravel - 2 inch Asphalt - 3 inch										
		(FILL) Black Sandy Clay, Trace Brown Sand, Organics, Moist	SS 1		2-2-3 (5)			15.5				
2.5		SS#1 Organic Content 2.8%										
		(SP) Brown Poorly Graded Sand, Moist to Wet, Loose	SS 2		2-3-3 (6)							
5.0												
		▽	SS 3		3-3-5 (8)							
		▼										
7.5												
			SS 4		3-3-4 (7)							
10.0												

Bottom of borehole at 10.0 feet.

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BORING NUMBER B-06

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - JR/SR/ES School
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 309 School Dr., Wanatah, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 729 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 723.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 722.00 ft
NOTES Ground Elevation Estimated from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 722.00 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Black Sandy Clay, Trace Organics, Moist										
		(CL) Brown Sandy Clay, Moist, Very Soft	SS 1		2-1-2 (3)	0.5		17.7				
2.5		(SC) Brown Clayey Sand, Moist, Loose	SS 2		2-3-4 (7)							
5.0		(SP) Brown Poorly Graded Sand, Wet, Very Loose	SS 3		2-2-2 (4)							
7.5			SS 4		1-1-1 (2)							
10.0		Bottom of borehole at 10.0 feet.										

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BORING NUMBER B-07

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - JR/SR/ES School
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 309 School Dr., Wanatah, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 729 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 723.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 722.00 ft Cave at 7.5 ft
NOTES Ground Elevation Estimated from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 722.00 ft Cave at 7.5 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Black Sandy Clay, Trace Organics, Moist										
		(CL) Brown Sandy Clay, Moist, Medium Stiff	SS 1		3-3-3 (6)	1.25		18.5				
2.5		(SC) Brown Clayey Sand, Trace Gravel, Moist to Wet, Loose	SS 2		3-4-5 (9)							
5.0		(SP) Brown Poorly Graded Sand, Wet, Loose to Medium Dense	SS 3		3-6-5 (11)							
7.5			SS 4		3-3-4 (7)							
10.0		Bottom of borehole at 10.0 feet.										

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BORING NUMBER B-08

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - JR/SR/ES School
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 309 School Dr., Wanatah, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 729 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 723.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 722.00 ft Cave at 7.5 ft
NOTES Ground Elevation Estimated from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 722.00 ft Cave at 7.5 ft

DEPTH (ft)	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0	(FILL) Asphalt - 2 inch (FILL) Sand and Gravel										
	(CL) Brown to Gray Sandy Clay, Moist, Soft	SS 1		1-2-2 (4)	0.5		22.3				
2.5	(SC) Brown Clayey Sand, Moist, Loose	SS 2		2-3-4 (7)							
5.0	(SP) Brown Poorly Graded Sand, Trace Gravel, Moist to Wet, Very Loose	SS 3		2-2-2 (4)							
7.5	Thin Layer of Gray Clay at about 7 ft.	SS 4		2-2-2 (4)							
10.0	Bottom of borehole at 10.0 feet.										

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BORING NUMBER B-09

CLIENT Tri-Township Schools
PROJECT NAME Proposed Facilities Improvements - JR/SR/ES School
PROJECT NUMBER 2025-1162G
PROJECT LOCATION 309 School Dr., Wanatah, IN
DATE STARTED 1/8/26 **COMPLETED** 1/8/26
GROUND ELEVATION 728 ft **HOLE SIZE** 4 inches
DRILLING CONTRACTOR AES
GROUND WATER LEVELS:
DRILLING METHOD HSA
AT TIME OF DRILLING 6.00 ft / Elev 722.00 ft
LOGGED BY JA **CHECKED BY** EM
AT END OF DRILLING 7.00 ft / Elev 721.00 ft Cave at 7.5 ft
NOTES Ground Elevation Estimated from Google Earth ®
AFTER DRILLING 7.00 ft / Elev 721.00 ft Cave at 7.5 ft

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	STD. PEN. TEST SPT (N VALUE)	HAND PEN. (TSF)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	UNCONF. COMP STRENGTH (TSF)
0.0		(FILL) Black Clayey Sand, Trace Organics, Moist										
		(FILL) Black Sandy Clay, Moist	SS 1		2-2-3 (5)			17.9				
2.5		SS#1 Organic Content 4.4%										
		SS#2 Organic Content 6.6%	SS 2		2-6-4 (10)			18.4				
5.0												
		(SP) Brown Poorly Graded Sand, Moist to Wet, Loose to Medium Dense	SS 3		7-6-7 (13)							
7.5												
			SS 4		2-3-3 (6)							
10.0		Bottom of borehole at 10.0 feet.										

FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

NON-COHESIVE SOILS
(Silt, Sand, Gravel and Combinations)

Density	
Very Loose	5 blows/ft or less
Loose	6 to 10 blows/ft
Medium Dense	11 to 30 blows/ft
Dense	31 to 50 blows/ft
Very Dense	51 blows/ft or more

Relative Proportions	
Descriptive	Percent
Trace	1 to 10
Little	11 to 20
Some	21 to 35
And	36 to 50

Particle Size Identification		
Boulders	12 inch diameter or more	
Cobbles	12 to 3 inch diameter	
Gravel	Coarse	3 to 3/4 inch
	Fine	3/4 inch to 4.75mm (No. 4)
Sand	Course	4.75mm to 2mm (No. 10) (dia. Of pencil lead)
	Medium	2.00mm to 0.425mm (No.40) (Dia. of broom straw)
	Fine	0.425mm to 0.075mm (No.200) (dia. of human hair)
Silt/Clay		0.075mm or Smaller (cannot see particles)

COHESIVE SOILS
(Clay, Silt and combinations)

Consistency	
Very Soft	3 blows/ft or less
Soft	4 to 5 blows/ft
Medium Stiff	6 to 10 blows/ft
Stiff	11 to 15 blows/ft
very Stiff	16 to 30 blows/ft
Hard	31 blows/ft or more

Plasticity	
Degree of Plasticity	Plasticity Index
None to slight	0 to 4
Slight	5 to 7
Medium	8 to 22
High to Very High	over 22

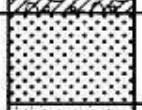
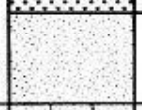
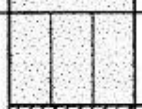
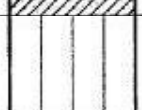
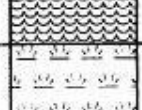
Classification on logs are made by visual inspection of samples.

Standard Penetration Test (SPT)- Driving a 2.0" O.D. 1-3/8" I.D. sampler a distance of 1ft into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary for ATC to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the test are recorded for each 6.0 inches of penetration on the drill log (Example-6/8/9). The standard penetration test result can be obtgained by adding the last two figures (i.e., 8+9=17 blows/ft). (ASTM D-1586-08).

Stara Changes - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (____) represents an actually observed change. A dashed line (_ _ _ _) represents an estimated change.

Groundwater observations were made at the times indicated. Porosity of soil strata, weather conditions, site topographjy, etc,, may cause changes in the water levels indicated on the logs.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS: GRAPH	SYMBOLS: LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS — LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS — LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 PURPOSE

A. The Bids for the Alternates described herein are required in order for the Owner to obtain information necessary for the proper consideration of the Project in its entirety.

1.03 ALTERNATES

A. Definitions: Alternates are defined as alternate products, materials, equipment, installations or systems for the Work, which may, at Owner's option and under terms established by Instructions to Bidders, be selected and recorded in the Owner-Contractor Agreement to either supplement or displace corresponding basic requirements of Contract Documents. Alternates may or may not substantially change scope and general character of the Work; and must not be confused with "allowances", "unit prices", "change orders", "substitutions", and other similar provisions.

1.04 SCHEDULE OF ALTERNATES

A. ALTERNATE NO. 1: State the cost to provide labor and material to install the front entrance platform concrete curbs, planting beds, stone caps, and slabs as detailed on the drawings. **Base Bid**: Install concrete curb and planting bed as detailed on the drawings.

PART 2 - PRODUCTS, PART 3 - EXECUTION (Not Used)

END OF SECTION 01 23 00

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013)
(Amended for TTCSC)

Tri-Township Wanatah School Renovation and Related Work

(Tri-Township Consolidated School Corporation)
(LaPorte County)

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year):_____

BIDDER (Firm) _____

Address _____ P.O. Box _____

City/State/Zip _____

Telephone Number: _____ Email Address: _____

Person to contact regarding this Bid_____

Pursuant to notices given, the undersigned offers to furnish labor and/or materials necessary to complete the public works project of:

_____
Insert Category No. (s) and Name(s)

Of public works project, ***Tri-Township Wanatah School Renovation and Related Work***, in accordance with Plans and Specifications prepared by ***Gibraltar Design, 4030 Vincennes Rd., Ste #100, Indianapolis, IN 46268***, as follows:

BASE BID

For the sum of _____
(Sum in words)

_____DOLLARS ($_____)
(Sum in figures)

The undersigned acknowledges receipt of the following Addenda:
Receipt of Addenda No. (s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO_____

Has visited the jobsite YES _____ NO_____

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent Of the schedule can be met. YES _____ NO_____

Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6. YES _____ NO_____

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:
DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit bases, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder, or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 – Labor and Material to Install Front Entrance Platform Curbs, Planting Beds, Stone Caps, and Slabs

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

PART II

(For projects of $150,000 or more – IC 36-1-12-4)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)

2. Please list the names and addresses of all subcontractors (i.e. persons or firms outside your own firm who have performed part of the work) that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and addresses of each subcontractor, equipment to be used by the subcontractor, and whether you will required a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed Project? Any equipment used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which corroborate the process listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of Bidder's financial statement is mandatory. Any Bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the Contract must be specific enough in detail so that said governing body can make a proper determination of the Bidder's capability for completing the Project if awarded.

SECTION IV CONTRACTOR NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such contract.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT

Dated at _____this _____ day of _____, 20

_____
(Name of Organization)

By

_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named

_____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____,

_____
(Title)

_____
Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 31 00

ADDENDUM TWO

Addendum Two (AD.02) to the drawings and specifications prepared by Gibraltar Design for **Tri-Township Wanatah School Renovation and Related Work** for Tri-Township Consolidated School Corporation, Wanatah, Indiana.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original contract documents. All Contractors shall acknowledge on their bid form that they have received Addendum #1 and this Addendum and include the appropriate content of same within their bid proposal.

SPECIFICATIONS

1. **Specification Section 00 01 10 Table of Contents**
   A. Add two new specification sections to Division 07 as follows:
      1. Section 07 13 53, Elastomeric Sheet Waterproofing.
      2. Section 07 46 00, Vinyl Siding.
2. **Specification Section 04 20 00 Unit Masonry**
   A. Replace Specification Section 04 20 00, Unit Masonry, with updated Section included in this Addendum.
3. **Specification Section 07 13 53 Elastomeric Sheet Waterproofing**
   A. Add new Specification Section 07 13 53, Elastomeric Sheet Waterproofing, included in this Addendum.
4. **Specification Section 07 46 00 Vinyl Siding**
   A. Add new Specification Section 07 46 00, Vinyl Siding, included in this Addendum.

DRAWINGS

5. **Sheet G-101**
   A. Added "Sheet C-202 Civil Detail" to Civil Drawings Group. (No full-size drawing included).
6. **Sheet CD101**
   A. Refer to revised, full-size drawing, included in this Addendum, for clarifications.
      1. Note 9 revised.
      2. Notes 15-20 have been added.
      3. Parking lot notes added and modified.
7. **Sheet C-103**
   A. Refer to revised, full-size drawing, included in this Addendum, for clarifications.
      1. Added and modified sections.
      2. Dimensions added to parking area by new platform near front.
      3. Notes 15-29 have been added.
      4. Trench drain has been modified.

8. **Sheet C-104**
   A. Refer to revised, full-size drawing, included in this Addendum, for clarifications.
      1. Hatch area has been removed.
9. **Sheet C-202**
   A. Refer to added full-size drawing, included in this Addendum.
10. **Sheet ES102**
    A. Refer to revised, full-size drawing, included in this Addendum, for clarifications.
11. **Sheet E-501**
    A. Refer to revised, full-size drawing, included in this Addendum, for clarifications.

Page 1 inclusive, Three (3) Specification Sections, and Six (6) Full-Size Drawings, constitute the total makeup of **Addendum Two**.

GIBRALTAR DESIGN

Joseph P. Briggs

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SECTION 04 20 00
UNIT MASONRY

1 General

1.1 Section Includes

A. Masonry Units:

1. Concrete masonry units.
2. Face brick.
3. Cut Stone (Alternate).

B. Flashing, reinforcement, anchorages, and accessories.

C. Insulation and air barrier system.

1.2 Products Installed But Not Furnished Under This Section

A. Section 05 12 00 - Structural Steel: Items to be embedded in masonry, including anchor bolts, bearing plates and bearing plate assemblies, steel lintels, etc.

B. Section 05 50 00 - Miscellaneous Metals: Fabricated steel items required to be built into masonry.

1.3 Related Sections

A. Division 1: Testing laboratory services.

B. Section 03 30 00 – Concrete.

C. Section 07 11 00 - Bituminous Dampproofing: Dampproofing masonry surfaces.

D. Section 07 90 00 - Joint Sealants: Rod and sealant at expansion joints.

1.4 References

A. ASTM A82 – Steel Wire, Plain, for Concrete Reinforcement.

B. ASTM A153 - Zinc Coating (Hot Dip) on Iron and Steel Hardware.

C. ASTM A615 - Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.

D. ASTM A641 - Zinc Coated (Galvanized) Carbon Steel Wire.

E. ASTM A653 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

F. ASTM C90 - Load-Bearing Concrete Masonry Units.

G. ASTM C144 - Aggregate for Masonry Mortar.

H. ASTM C150 - Portland Cement.

I. ASTM C207 - Hydrated Lime for Masonry Purposes.

J. ASTM C216 - Facing Brick.

K. ASTM C270 - Mortar for Unit Masonry.

L. ASTM C404 - Aggregates for Masonry Grout.

M. ASTM C476 - Grout for Masonry

N. ASTM D2000 – Standard Classification System for Rubber Products in Automotive Applications.

O. ASTM D4637 – EPDM Sheet Used in Single-Ply Roof Membrane.

P. UL 618 - Standard for Concrete Masonry.

1.5 Submittals

A. Submit shop drawings and product data under provisions of Division 1.

1. Indicate setting, bonding, anchoring, and joining of cut limestone work, including dimensions and setting numbers for each piece of stone.

2. Submit wall elevations showing sizes, locations, and spacing of all reinforcing in reinforced masonry.

3. Submit wall elevations showing locations and spacing of all expansion joints in masonry.

4. Submit product data on all mortar admixtures proposed for use.

B. Submit samples under provisions of Division 1.

1. Submit a minimum of four samples of face brick, to illustrate color, texture, and extremities of color range.

2. Submit sample of mortar colors available.

C. Mortar Mix Design: Include description of type and proportions of ingredients. Include test reports, per ASTM C780, for mortar mixes required to comply with property specification.

D. Submit proposed mix design for grout, including description of aggregates, proportions of materials, compressive strength, anticipated slump, air content, and admixtures to the Architect for review prior to commencement of work.

1.6 Mockup

A. Construct face brick panel to 4 foot by 4 foot size, including mortar, backing, and accessories specified.

B. Obtain approval of mockup from the Architect prior to ordering brick and proceeding with the work.

C. Remove the panel when directed by the Architect or Construction Manager.

1.7 Quality Assurance

A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each product required.

1.8 Delivery, Storage, And Handling

A. Deliver products to site under provisions of Division 1.

B. Store and protect products under provision of Division 1.

C. Deliver and store manufactured materials in original packages plainly marked with brand manufacturer's name.

D. Materials in broken containers or in packages showing water marks or other evidence of damage will be rejected.

E. Unload steel lintels delivered by the Structural Steel Contractor and place on substantial blocks of sufficient size and strength to prevent any metal work touching the ground after piling.

1. Place each piece so that water cannot stand thereon, and so that it will not be bent, twisted, or damaged.

1.9 Environmental Requirements

A. Do not erect masonry when ambient temperature is below 32 degrees F on a rising temperature or below 40 degrees F on a falling temperature, or when there is a probability of such condition existing within 48 hours, unless approved special provisions are made for heating the materials and protecting the work.

1.10 Extra Stock

A. Provide a minimum of 100 of the face brick used on the building under the provisions of Division 1.

2 Products

2.1 Mortar And Grout Materials

A. Portland Cement: ASTM C150, Type 1.

1. Provide natural color or white cement as required to produce required mortar color.

B. Hydrated Lime: ASTM C207, Type S.

C. Aggregate for Mortar: ASTM C144.

D. Aggregate for Grout: ASTM C404.

E. Water: Clean potable water.

F. Admixtures: Containing no salts or calcium chloride; may be used only as approved in writing by the Architect after review of product data submittal.

G. Mortar Coloring : Color Flamingo Masonry cement, utilizing a hydrated hydraulic lime base, as manufactured by Riverton Corporation, Riverton, Virginia, or as approved by the Architect; mill mixed and prepacked, meeting ASTM C270, Type N.

1. Submit sample of existing colored mortar to the manufacturer to assist in matching the color.

2.2 Mortar Mix Proportions

A. Mortar for Unit Masonry: Comply with ASTM C 270, Property Specification. Provide the following types of mortar for applications stated unless another type is indicated.

1. For masonry below grade or in contact with earth, use Type M.

2. For reinforced masonry, use Type S.

3. For exterior, above-grade, load-bearing and non-load-bearing walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N.

2.3 Grout Mix Proportions

A. By Volume (Comply with Table 1, ASTM C476):

1. Coarse Grout: One part portland cement, 0 to 1/10 part hydrated lime or lime putty, 2-1/4 parts fine aggregate, 1 to 2 parts coarse aggregate.

B. Grout mixes shall be plant mix factory blended, dry mix with water added at site. Field mixed grout designs are not acceptable.

C. ASTM C476, coarse grout with a minimum compressive strength of 2500 psi at 28 days; slump between 8 inches and 10 inches.

2.4 Damp Course And Masonry Flashing

A. Manufacturer's standard EPDM flashing product formed from a terpolymer of ethylene-propylene diene, complying with ASTM D4637; 0.040 inch thick.

2.5 Concrete Masonry Units

A. Concrete Block: Normal weight concrete block meeting the requirements of ASTM C90; weight classification, more than 125 pounds per cubic foot; minimum net area compressive strength of 1900 pounds per square inch.

B. Use approved two core masonry units.

1. Use bull nosed block at outside corners, door jambs, window jambs, etc.

2. Provide header block, pilaster block, and other shapes where required and as approved.

2.6 Brick Units

A. Face Brick: Vitrified fire clay or shale type face brick, ASTM C216, Standard Modular size, as approved by the Architect and Owner from required samples. Intent is to provide Brick that matches existing brick as close as possible. Contractor is to reuse as much existing brick as possible, however, if not sufficient, provide the brick below.

1. Brick: Belden Brick, #505 Vertical Modular.
2. Bond: Running. (confirm with location).

2.7 Cut Stone

A. Cut Stone: Standard type stone, buff color, smooth planer finish, uniform in color, free from rust spots, seams, and other imperfections with washes and drips where required.

1. Refer to Drawings for size, shape, and locations (Alternate).

B. Use stone in conformance with the latest standards established by the Indiana Limestone Institute.

2.8 Cleaning Agent

A. Cleaning Agent: As appropriate, use Sure-Klean No. 600 Detergent or Vana Trol as manufactured by ProSoCo, Inc., Kansas City, Kansas; 202 New Masonry Detergent or 202V Vana-Stop as manufactured by Diedrich Technologies Inc., Oak Creek, Wisconsin; or equal as approved by the Architect and the brick manufacturer.

2.9 Waterproofing

A. Clear Waterproofing for Face Brick: White Roc W as manufactured by Sonneborn; Enviroseal Double 7 For Brick as manufactured by Hydrozo; Chem-Trete BSM-40D as manufactured by Degussa; or approved equal.

B. Clear Waterproofing for Cut Stone: White Roc W as manufactured by Sonneborn; Enviroseal Double 7 For Brick as manufactured by Hydrozo; Chem-Trete BSM-40 as manufactured by Huls America; or approved equal.

2.10 Reinforcement And Anchorages

A. Acceptable Manufacturers:

1. Dur-O-Wall Company, Baltimore, Maryland.

2. Heckmann Building Products, Chicago, Illinois.

3. Hohmann and Barnard, Inc., Hauppauge, New York.

4. Wire-Bond, Charlotte, North Carolina.

B. Single Wythe Walls: 9 gage, galvanized, two wire, ladder type horizontal wall reinforcement.

C. Multi-Wythe Walls: 9 gage, galvanized, three wire, ladder type horizontal wall reinforcement.

D. Anchors and Ties:

1. Dovetail-Type Anchors or Wire Ties: Galvanized for use in embedded slots or inserts, not less than 16 gage for anchors, and not less than 9 gage for wire ties.

2. Reinforcing Steel Bars and Rods: ASTM A615, Grade 60, deformed bars, uncoated finish.

3. Brick Steel Bars and Rods: ASTM A615, Grade 60, deformed bars, uncoated finish.

4. Brick Veneer Wall Ties: Type DW-10X, 14 gage stainless steel anchors with 3 inches stainless steel Vee type ties as manufactured by Hohmann and Barnard, Inc.; stainless steel fasteners.

   a. If using optional insulation specified in this Section, provide Heckmann Pos-I-Tie anchors and ties.

5. Firewall Anchors: Type #342 L-Anchor with Slot as manufactured by Heckmann Building Products:

   a. 4" x 2" x 1 ½" wide x 1/8" thick w/ slotted hole to receive 3/8" diameter anchors.

   b. Materials: Rolled Strip Zinc Alloy 710.

E. Finishes: As follows, unless specified otherwise.

1. Joint Reinforcement in Interior Walls: ASTM A641, Class 1.

2. Joint Reinforcement, Wire Ties, or Anchors in Exterior Walls or in Interior Walls Exposed to Moist Environment: ASTM A153, Class B2.

3. Sheet Metal Ties or Anchors in Completely Embedded in Mortar or Grout: ASTM A653, Class G60.

4. Sheet Metal Ties or Anchors in Exterior Walls or in Interior Walls Exposed to Moist Environment: ASTM A153, Class B2.

2.11 Lintels

A. Masonry Lintels: Prefabricated or built-in-place masonry lintels made from bond beam concrete masonry units with reinforcing bars placed as indicated on Drawings and filled with course grout.

2.12 Insulation and Air Barrier System

A. Contractor's Option: Provide cavity wall insulation and air barrier system specified in this Section or cavity wall insulation and air barrier system specified in Section 07 21 27 – Enclosed Cavity Foamed Insulation. This includes all areas indicating cavity foamed insulation.

B. Cavity Wall Insulation and Air Barrier System: ASTM C578, Type IV, extruded polystyrene with carbon black technology for increased R-Value with ship lap edges and butyl-rubber self adhesive membrane at all joints.

1. Product: Dow Chemical Company; Styrofoam Cavitymate Ultra SL or Owens-Corning; High-R CW Plus.

2. Minimum Aged R-Value for Thickness Indicated:

   a. R-12 at CMU back up.

   b. R-10 at Metal Stud back up.

3. Thickness: 2-1/8 inches.

4. Size: 4 by 8 feet adhered vertically.

5. Provide required products to pass air barrier testing.

2.13 Accessories

A. Cavity Wall Vents:

1. For Use in Face Brick: Injection molded PVC, T-shaped, Williams-Goodco Brick Vent as manufactured by Williams Products, Inc., Troy, Michigan; #343 louvered weep hole as manufactured by Hohmann and Barnard, Inc., Hauppauge, New York.

B. Weep Holes: Polyethylene plastic tubes, 3/8 inch in diameter, 4 inches long.

C. Cavity Drainage Material: Free-draining mesh, made from polymer strands that will not degrade within the wall cavity.

1. Provide strips full-depth of cavity and 10 inches high designed to prevent mesh from being clogged with mortar droppings.

2. Products:

   a. Advanced Building Products, Inc.; Mortar Break.

   b. Archovations, Inc.; CavClear Masonry Mat.

   c. Dayton Superior Corporation; Polytite Mortarstop.

   d. Mortar Net USA, LTD.; Mortar Net.

3 Execution

3.1 Preparation

A. Supply metal anchors to Section 03 30 00 for placement.

B. Direct correct placement.

C. Verify items provided by other Sections of work are properly sized and located.

D. Establish lines, levels, and coursing; protect from disturbance.

E. Provide temporary bracing during erection of masonry work.

   1. Maintain in place until building structure provides permanent bracing.

F. Dampen units with absorption rate greater than 12 percent before laying.

G. Clean dirt from the top of concrete footings and concrete foundation walls prior to laying any block.

3.2 Coursing

A. Place masonry to lines and levels indicated.

B. Maintain masonry courses to uniform width.

C. Make vertical and horizontal joints equal and of uniform thickness.

D. Lay concrete masonry units in running bond.

E. Course one block unit and one mortar joint to equal 8 inches.

F. Form mortar joints of approximately 3/8 inch.

G. Lay Modular brick in running bond.

H. Course three brick units and three mortar joints to equal 8 inches.

I. Minimum size for cut brick is 3 inches.

   1. Use a brick saw for all cuts.

J. Form concave mortar joints.

K. Rake the joint above the counter flashing 1/2 inch deep for future caulking by others.

L. Lay cut stone with uniform joint widths of 1/4 inch in exterior locations and 1/16 inch in interior locations.

1. Rake mortar joints 3/4 inch and fill with polyurethane sealant.

2. After completion of finish work, point with a concave joint as approved..

3.3 Placing And Bonding

A. General:

1. Erect masonry backing and facing materials simultaneously.

2. Fully bond intersections, and external and internal corners.

3. Do not shift or tap masonry units after mortar has taken initial set.

a. Where adjustment must be made, remove mortar and replace.

4. Remove excess mortar.

5. Perform jobsite cutting with proper tools to provide straight unchipped edges.

6. Take care to prevent breaking masonry unit corners or edges.

7. Install through wall flashings using longest practical length and seal watertight to back-up.

a. Use supplier's recommended procedure.

8. Keep the area around steel columns, joists, trusses, and beams free from mortar.

9. Isolate masonry partitions from vertical structural framing members with a expansion joint as indicated.

10. At bearing points, fill the cores of block solid with grout for three courses in depth as approved, unless shown otherwise.

B. Block:

1. Lay block with full buttered ends and shove to a bearing on a bed of mortar.

a. Provide full mortar bedding, including face shells and unit webs, at the following locations.

1) For laying the first or starting course on footings or foundations.

2) For laying solid units such as concrete brick and solid block.

3) For laying columns, piers, and pilasters that will carry heavy loads.

4) Fully mortar webs around each grouted core in reinforced masonry and where vertical cores are to be solidly grouted.

b. Provide face shell bedding at all other locations.

c. Apply mortar to face shell ends of block at head joints.

2. Bond and tooth block walls into adjoining walls every other course with cuts not less than 6 inches.

3. Extend partition walls and masonry around columns to the roof deck above, unless shown otherwise on the Drawings.

4. Fill voids, between the top of wall and roof deck with unfaced blanket insulation or foamed-in-place insulation.

5. Rod bed and head joints for all block, including foundation walls.

6. Minimum size for cut block is 6 inches.

7. Use a masonry saw for all cuts.

8. Step back unfinished work for joining the new work.

C. Brick:

1. Thoroughly wet brick before laying, except in cool weather.

2. Fill openings between brick with mortar, each course, except where shown otherwise on Drawings and where approved otherwise.

3. Mark plumb lines on brick walls every 4 feet and adjust the bond accordingly by selecting or cutting brick as approved.

4. Rod bed and head joints for all brick.

D. Cut Stone:

1. Erect stone in accordance with stone supplier's instructions.

2. Arrange stone pattern to provide consistent joint work throughout.

3. Place setting buttons in full mortar setting bed to support stone and establish joint dimension.

4. Fill dowel, lewis, and lifting holes with mortar.

5. Waterproof the back and sides of cut stone, to within 1 inch of the face, with an approved brush applied bituminous waterproofing compound before setting.

3.4 Reinforced Masonry

A. Lay masonry with core cells vertically aligned clear of mortar and unobstructed.

B. Place mortar in masonry unit with bed joints 1/4 inch from edge of unit grout spaces, bevel back and upward.

C. Reinforce masonry unit cores with reinforcement bars and grout as indicated.

D. Retain vertical reinforcement in position at top and bottom of cells and at intervals not exceeding 192 bar diameters.

E. Splice reinforcement in accordance with the drawings.

F. Wet masonry unit surfaces in contact with grout just prior to grout placement as required for proper curing.

G. When grouting is stopped for more than one hour, terminate grout 1 1/2 inches below top of upper masonry unit to form a positive key for subsequent grout placement.

H. Low Lift Grouting: Place first lift of grout to a height of 16 inches and rod for grout consolidation.

1. Place subsequent lifts in 8 inches increments and rod for grout consolidation.

I. High Lift Grouting:

1. Provide cleanout opening for all pours over 5 feet in height, no less than 4 inches high at bottom of each cell to be grouted by cutting one face shell of masonry unit.

a. When clean outs are not provided, make provisions to keep grout spaces clean and inspect with Architect's Field Representative prior to grouting.

2. Clean out masonry cells with high pressure water spray.

3. Permit complete water drainage.

4. After cleaning and cell inspection seal openings with masonry units.

5. Pump grout into spaces.

6. Maintain water content in grout to intended slump without aggregate segregation.

7. Units may be laid to the full height of the grout pour, but grout shall be placed in a continuous pour in grout lifts not to exceed 6 feet.

8. Consolidate grout by mechanical vibration during placing before loss of plasticity.

9. Reconsolidate grout pours greater than 12 inches by mechanical vibration to minimize voids due to water loss.

3.5 Cavity Wall and Weep Holes

A. Do not let mortar fall into cavity air space or plug weep holes; clean out promptly.

B. Install cavity vents in veneer at 48 inches on center horizontally at floor level or damp course, and above through-wall flashing.

1. Verify locations of cavity wall vents and weep holes with Architect's Field Representative prior to installation.

C. Install cavity vents at top of cavity space at same spacing.

D. Insulation and Air Barrier System: If using optional insulation specified in this Section, install cavity wall insulation and air barrier system in accordance with insulation manufacturer's requirements and as indicated in this Section.

1. Seal around all projections for a complete insulated and sealed air barrier system.

2. Locations: Areas on Drawings indicating cavity foamed insulation.

3. Optional Insulation and Air Barrier System: Specified Section 07 21 27 – Enclosed Cavity Foamed Insulation.

3.6 Tolerances

A. Alignment of Columns and Pilasters: Maximum 1/4 inch from true line.

B. Variation from Unit to Adjacent Unit: 1/32 inch maximum.

C. Variation from Plane of Wall: 1/4 inch in 10 feet and 1/2 inch in 20 feet or more.

D. Variation from Plumb: 1/4 inch per story noncumulative; 1/2 inch in two stories or more.

E. Variation from Level Coursing: 1/8 inch in 3 feet; 1/4 inch in 10' feet; 1/2 inch maximum.

F. Variation of Joint Thickness: 1/8 inch in 3 feet.

G. Maximum Variation from Cross Sectional Thickness of Walls: Plus or minus 1/4 inch.

3.7 Reinforcement And Anchorages

A. Install continuous horizontal joint reinforcement at 16 inches on center vertically, except provide at 8 inches on center vertically at all joints below grade.

B. Place masonry joint reinforcement in first horizontal joints above and below openings.

1. Extend 16 inches minimum each side of opening.

C. Place joint reinforcement continuous in first joint below top of walls.

D. Lap joint reinforcement ends minimum 6 inches.

E. Lap joint reinforcement at corners.

F. Position ties between wythes over block webs at 16 inches on center horizontally and vertically, alternating in courses with horizontal wall reinforcement.

G. Place reinforcing bars supported and secured against displacement with caging devices and centering clips.

1. Space vertically such that every section of vertical reinforcing steel bar is restrained by 2 clips or devices, one near the top and one near its bottom.

2. Locate placement of horizontal reinforcing steel bars for bond beams and masonry lintels within the bottom one-third of the gross beam depth, at a minimum.

H. Verify that anchorages embedded in concrete or attached to structural steel members are properly placed.

1. Embed anchorages in every second joint.

I. Provide brick veneer wall ties at 16 inches on center horizontally and vertically, fastened through sheathing into steel studs with stainless steel screws.

1. Place at maximum 8 inches on center each way around perimeter of openings and at all edges, within 12 inches of openings and edges.

3.8 Lintels

A. Install loose steel lintels as scheduled.

B. Masonry Lintels: Provide masonry lintels where shown and wherever openings of more than 8 inches for brick size units and 16 inches for block size units are shown without structural steel or other supporting lintels.

1. Temporarily support formed-in-place lintels.

2. Match bond pattern of adjacent walls unless noted otherwise.

3.9 Grouted Components

A. Reinforce bond beams with minimum of two No. 6 bars, 1 inch from bottom web, unless shown or noted otherwise on Drawings.

B. Lap splices minimum 40 bar diameters or 24 inches.

C. Place and consolidate grout fill without disturbing reinforcing.

D. Fill cores of block with grout with a minimum compressive strength of 2,500 psi at 28 days as required.

E. At bearing points, fill masonry cores with grout minimum 12 inches from opening.

F. Grout in all structural anchors as masonry work is installed.

3.10 Built-In Work

A. As work progresses, build-in metal door frames, fabricated metal frames, anchor bolts, plates, and other items to be built in the work, supplied by other Sections.

B. Build-in items plumb and level.

C. Bed anchors of metal door and glazed frames in mortar joints.

1. Fill frame voids solid with grout.

2. Fill masonry cores with grout minimum 12 inches from framed openings.

D. Do not build-in organic materials subject to deterioration.

E. Install flashing at window sash, louvers, and exterior doors in masonry walls.

3.11 Cutting And Fitting

A. Cut and fit for chases, conduit, sleeves, ductwork, and grounds.

1. Coordinate with other Sections of work to provide correct size, shape, and location.

B. Obtain approval prior to cutting or fitting any area not indicated or where appearance or strength of masonry work may be impaired.

3.12 Field Quality Control

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections indicated below and prepare test reports:

1. Payment for these services will be made by Owner.

2. Allow access to scaffolding and work areas, as needed to perform inspections and tests.

3. Retesting of materials failing to comply with specified requirements shall be done at Contractor's expense.

B. Testing Frequency: One set of tests for each 5000 sq. ft. of wall area or portion thereof.

C. Mortar Test (Property Specification): For each mix provided, per ASTM C780.

3.13 Sheathing

A. Attach sheathing to metal studs with self-tapping stainless steel screws long enough to penetrate metal studs a minimum of 3/8 inch.

3.14 Pointing And Cleaning

A. Remove excess mortar and smears.

B. Replace defective mortar. Match adjacent work.

1. Cut out and point any joints that have the finish surface burned off or damaged.

2. If corrective pointing of new face brick is required, clean and waterproof the entire area of exterior walls in question, until a stopping point in the building has been reached, with clear waterproofing as approved.

3. Waterproofing of new face brick is not required unless corrective pointing is required.

C. After pointing and after masonry has been in place a minimum of 60 days, unless written approval is received from the Architect, wet and clean all exposed masonry surfaces.

1. Clean face brick with cleaning agent as recommended by the manufacturer.

a. Leave surfaces free of mortar daubs and with tight mortar joints.

b. Immediately after cleaning, rinse brick surfaces with clean water.

c. Use non-metallic tools in cleaning face brick.

D. Use pieces of block or metal lath to hone down and clean blockwork.

1. Leave interior block walls in a suitable condition to receive the wall finish.

2. Apply waterproofing to exposed exterior concrete block as recommended by the manufacturer.

E. Cut Stone: After installation clean the exposed face of cut stone and waterproof with clear waterproofing.

1. Protect adjacent surfaces, including roof surfaces, from overspray of water repellent.

3.15 Protection

A. Protect finished installation under provisions of Division 1.

B. Maintain protective boards at exposed external corners which may be damaged by construction activities.

C. Provide protection without damaging completed work.

D. At day's end, cover unfinished walls to prevent moisture infiltration.

END OF SECTION

SECTION 07 13 53
ELASTOMERIC SHEET WATERPROOFING

1 General

1.1 Section Includes

A. Self-adhesive elastomeric sheet membrane waterproofing for Platform Planter Bed and Stone Slab Platform alternate scope for below grade.

B. Counterflash membrane termination.

C. Protection board.

1.2 Related Sections

A. Section 03 30 00 - Concrete: Concrete substrate.

1.3 References

A. ASTM D412 - Rubber Properties in Tension.

B. ASTM D781 - Polyethylene Film Puncture Resistance.

C. ASTM D1228 - Water Absorption.

D. ASTM E96 - Water Vapor Transmission of Materials.

E. ASTM E154 - Membrane Puncture Resistance.

1.4 Quality Assurance

A. Membrane Manufacturer: Company specializing in waterproofing sheet membranes with five (5) years experience.

B. Applicator: Company specializing in application of specified waterproofing with five (5) years documented experience and who is approved by manufacturer to install waterproofing system.

1.5 Submittals

A. Submit shop drawings and product data under provisions of Division 1.

B. Submit shop drawings detailing special joint or termination conditions and conditions of interface with other materials.

C. Submit product data for surface conditioner, flexible flashing, joint cover sheet, and joint and crack sealants, with temperature range for application of waterproofing membrane.

D. Submit manufacturer's installation instruction under provisions of Division 1.

1.6 Environmental Requirements

A. Do not apply waterproofing during inclement weather or when air temperature is below manufacturer's recommendations.

1.7 Warranty

A. Provide ten (10) year manufacturer's warranty under provisions of Division 1.

B. Warranty: Include coverage of materials and installation and resultant damage from failure of installation to resist penetration of moisture.

2 Products

2.1 Elastomeric Sheet Waterproofing - Acceptable Manufacturers

A. Carlisle Corporation, Carlisle Coatings & Waterproofing Div.

B. W. R. Grace & Co.

C. W. R. Meadows, Inc.

D. Basis-of-Design Product: W. R. Grace & Co.; Bituthene 4000, or a comparable product by one of the other manufacturers specified.

2.2 Membrane Materials

A. Rubberized-Asphalt Sheet: 60-mil-thick, self-adhering sheet consisting of 56 mils of rubberized asphalt laminated to a 4-mil-thick, polyethylene film with release liner on adhesive side and formulated for application with primer or surface conditioner that complies with VOC limits of authorities having jurisdiction.

1. Physical Properties: As follows, measured per standard test methods referenced:

   a. Tensile Strength: 250 psi minimum; ASTM D 412, Die C, modified.

   b. Ultimate Elongation: 300 percent minimum; ASTM D 412, Die C, modified.

   c. Low-Temperature Flexibility: Pass at minus 20 deg F; ASTM D 1970.

   d. Crack Cycling: Unaffected after 100 cycles of 1/8-inch movement; ASTM C 836

   e. Puncture Resistance: 40 lbf minimum; ASTM E 154.

   f. Hydrostatic-Head Resistance: 150 feet minimum; ASTM D 5385.

   g. Water Absorption: 0.15 percent weight-gain maximum after 48-hour immersion at 70 deg F; ASTM D 570.

   h. Vapor Permeance: 0.05 perms; ASTM E 96, Water Method.

B. Seaming Materials: As recommended by membrane manufacturer.

2.3 Auxiliary Materials

A. General: Furnish auxiliary materials recommended by waterproofing manufacturer for intended use and compatible with sheet waterproofing.

1. Furnish liquid-type auxiliary materials that comply with VOC limits of authorities having jurisdiction.

B. Primer: Liquid waterborne primer recommended for substrate by manufacturer of sheet waterproofing material.

C. Surface Conditioner: Liquid, waterborne surface conditioner recommended for substrate by manufacturer of sheet waterproofing material.

D. Sheet Strips: Self-adhering, rubberized-asphalt composite sheet strips of same material and thickness as sheet waterproofing.

E. Liquid Membrane: Elastomeric, two-component liquid, cold fluid applied, trowel grade or low viscosity.

F. Substrate Patching Membrane: Low-viscosity, two-components, asphalt modified coating.

G. Mastic, Adhesives, and Tape: Liquid mastic and adhesives, and adhesive tapes recommended by waterproofing manufacturer.

H. Protection Board: As recommended by waterproofing manufacturer.

3 Execution

3.1 Inspection

A. Verify items which penetrate surfaces to receive waterproofing are rigidly installed.

B. Verify surfaces are free of cracks, depressions, waves, or projections which may be detrimental to successful installation.

C. Do not apply waterproofing to damp, frozen, dirty, dusty, or deck surfaces unacceptable to manufacturer applicator.

D. Beginning of installation means acceptance of existing and substrate surfaces.

E. At footing-to-wall intersections, extend liquid membrane each direction from corner or install membrane strip centered over corner.

3.2 Preparation

A. Protect adjacent surfaces not designated to receive waterproofing.

B. Seal cracks and joints with recommended material and sealant.

1. Use proper depth-width ratio as recommended by sealant manufacturer.

C. Clean surfaces of foreign matter detrimental to installation of membrane.

1. Vacuum substrate clean.

D. Apply surface conditioner as recommended by manufacturer.

3.3 Installation

A. Install membrane waterproofing in accordance with manufacturer's installation instructions.

B. Overlap edges and ends minimum 3 inches.

1. Apply uniform bead of sealant to joint edge.

C. Seal to adjoining surfaces.

D. Continue membrane up vertical surfaces as indicted on drawings.

E. Seal items penetrating membrane with counterflashing membrane material.

F. Install flashings.

1. Seal watertight to membrane.

G. Reinforce membrane with multiple thickness of membrane material over joints, whether joints are static or moving.

3.4 Field Quality Control

A. Perform field inspection and testing under provisions of Division 1.

B. On completion of installation of membrane, dam installation in preparation for flood testing.

C. Flood to minimum depth of one foot with clean water.

1. After 48 hours, check for leaks.

2. If leaking is found, patch using new waterproofing materials; repeat flood test.

3. Repair damage to wall construction.

D. When area is proved watertight, drain water and remove dam.

3.5 Protection

A. Protect finished installation under provisions of Division 1.

B. Install protection board with lappedbutt joints and retain in place for vertical surfaces.

C. After installation, close off area to prevent unauthorized traffic.

END OF SECTION

SECTION 07 46 00
VINYL SIDING

1 General

1.1 Section Includes

A. Factory fabricated vinyl siding and vinyl soffit, attachment system components, and accessory trim.

1. Replacement siding for the Garage Building, refer to drawings for exact location.

1.2 References

A. ASTM D7793 – Standard Specification for Insulated Vinyl Siding.

B. ASTM D 5206 - Standard Windload Resistance Test.

C. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.3 Submittals

A. Submit shop drawings and product data under provisions of Division 1.

B. Indicate materials, dimensions, panel layout, supports, construction details, method of anchorage, method of installation, and closures.

C. Submit manufacturer's available color samples for selection under provisions of Division 1.

D. Submit manufacturer's installation instructions under provisions of Division 1.

1.4 Delivery, Storage, And Handling

A. Handle all materials carefully to avoid damage.

B. Protect materials from traffic, dirt, and stains.

C. Cover materials at job site until installed. Comply with manufacturer's written instructions.

1.5 Warranty

A. Provide manufacturer's standard lifetime limited warranty on siding products.

2 Products

2.1 Acceptable Manufacturers

A. Vinyl Siding:

1. CertainTeed LLC, Siding Products Group, Monogram Series, Double 4-inch Clapboard.

2. Or Approved Equal.

2.2 Materials

A. Vinyl Siding, Soffit and Components: Provide products made of extruded polyvinyl chloride as specified in this section and manufactured to comply with requirements of ASTM D 3679.

1. Provide elongated nailing slots on nailing flanges to allow for movement.
2. Factory-notch ends of horizontal panels to form overlapping joints.
3. Provide products that meet weathering requirements of ASTM D 3679.

B. Siding and Trim Color: Tuxedo (Black).

C. Soffit and Fascia Color: Colonial White.

2.3 Miscellaneous Materials

A. Fasteners: Stainless steel fasterners installed per manufacturers instructions.

B. Standard Accessories:

1. J-Channel: Standard width, 12 feet, 6 inches (3.81 m) length.
2. Undersill trim: 3/4-inch face, 12 feet, 6 inch (3.81 m) length.
3. 2-1/2 inch (64 mm) Metal Starter Strip. (No Color)
4. 2-1/4 inch (57 mm) Vinyl Starter Strip. (No Color)
5. Color: refer to Product Catalog for color availability of accessories, match siding color as default..

3 Execution

3.1 Inspection

A. Contractor is to remove all of the existing vinyl siding complete.

B. Beginning of installation means acceptance of existing conditions.

3.2 Installation, General

A. Coordinate installation with flashings and other adjoining construction to ensure proper sequencing.

B. Comply with siding manufacturer's written installation instructions unless more stringent requirements apply.

C. Install products with all components true and plumb.

D. Nail horizontal panels by placing nail in center of slot. Nail vertical panels by placing first nail at top of top slot and remaining nails in center of slots. Drive nails straight, leaving 1/16 inch (1.6 mm) space between nail head and flange of panel.

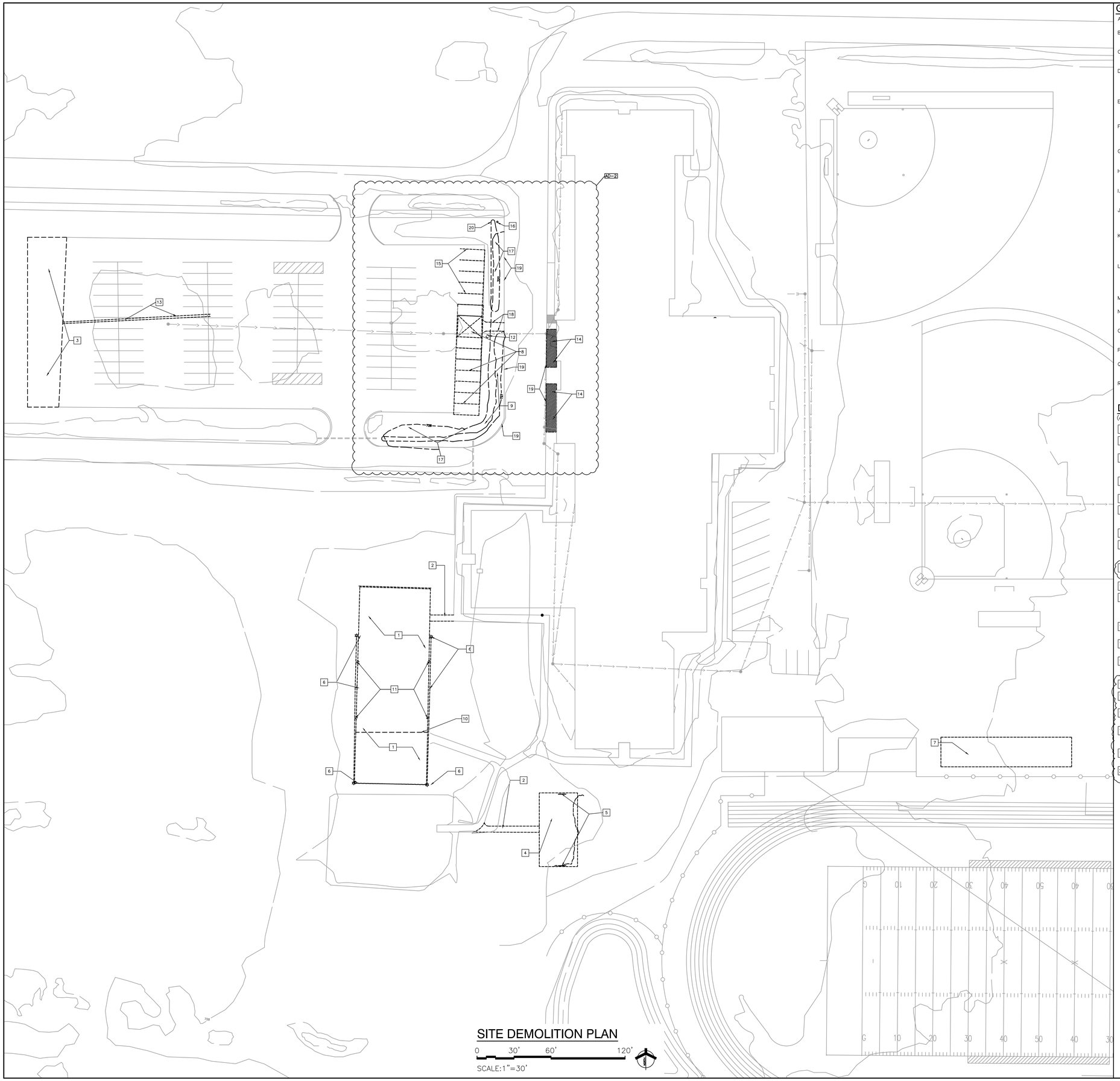
3.3 Protection and Cleaning

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion Coordinate installation with flashings and other adjoining construction to ensure proper sequencing.

C. At completion of work, remove debris caused by siding installation from project site.

END OF SECTION



GENERAL DEMOLITION NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO GI SERIES SHEETS.

B. UNLESS NOTED OTHERWISE ON THIS SHEET, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL WORK INDICATED ON THIS SHEET.

C. CONTRACTORS ENCOUNTERING EXISTING MATERIAL WHICH IS SUSPECTED OF CONTAINING ASBESTOS SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND THE OWNERS REPRESENTATIVE.

D. BOLD DASHED LINES INDICATE EXISTING ITEMS TO BE REMOVED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE EXTENT OF DEMOLITION WORK PRIOR TO BIDDING AND FOR COORDINATING THE EXTENT OF DEMOLITION WITH THE INSTALLATION OF NEW SYSTEMS.

E. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION APPLICABLE TO THEIR SCOPE OF WORK AND AS REQUIRED FOR INSTALLATION OF NEW WORK WHETHER OR NOT IT IS SPECIFICALLY INDICATED OR NOTED IN THESE DOCUMENTS.

F. REMOVE ALL ITEMS AND FINISHES MADE OBSOLETE BY NEW CONSTRUCTION. VERIFY ITEMS DEEMED OBSOLETE WITH ARCHITECT PRIOR TO REMOVAL. REFER TO NEW CONSTRUCTION DRAWINGS FOR DEMOLITION REQUIRED NOT SHOWN ON DEMOLITION PLANS.

G. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR OFF SITE REMOVAL OF ALL DEMOLITION MATERIALS AND/OR ITEMS UNLESS NOTED OTHERWISE OR DIRECTED BY THE OWNER.

H. PRIOR TO STARTING DEMOLITION, CONSTRUCT DUST CONTROL BARRIERS AS REQUIRED TO PREVENT THE SPREAD OF DUST INTO SURROUNDING AREAS (WHERE APPLICABLE).

I. WHERE BUILDING EGRESS IS REQUIRED TO PASS THROUGH DEMOLITION AREAS, PROVIDE APPROVED BARRIERS, ETC. TO ENSURE SAFETY OF THE PUBLIC.

J. RELOCATED ITEMS SHALL BE CLEANED AND PLACED IN STORAGE, PER OWNERS' DIRECTION, UNTIL ITEMS ARE READY TO BE INSTALLED. IF ITEMS ARE DAMAGED DURING DEMOLITION OR RELOCATION, THEY SHALL BE REPAIRED OR REPLACED WITH NEW ITEMS AS APPROVED.

K. DEMOLITION SHALL BE PERFORMED WITHOUT DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. WHERE SUCH DAMAGE OCCURS, PATCH, REPAIR, OR RESTORE WALLS, FLOORS, CEILING, ETC. NEATLY TO MATCH EXISTING ADJACENT SURFACE. PROVIDE SHORING, BRACING, OR SUPPORT AS REQUIRED TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.

L. EACH CONTRACTOR IS RESPONSIBLE FOR CUTTING, PATCHING, AND DISCONNECTION OF ITEMS APPLICABLE TO THEIR SCOPE OF WORK. WHERE EXISTING SERVICES ARE ABANDONED, CAP AT LEAST 1" BEHIND NEW FINISHES AND/OR EXISTING SURFACE AND PATCH AS REQUIRED TO RECEIVE NEW FINISHES OR MATCH EXISTING FINISH.

M. ALL EQUIPMENT AND FURNITURE WHICH ARE CONSIDERED LOOSE FURNISHING SHALL BE REMOVED BY THE OWNER PRIOR TO DEMOLITION.

N. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL REVIEW OF DEMOLITION NOTES AND GENERAL DEMOLITION NOTES AS THEY APPLY TO THEIR SCOPE OF WORK.

O. THE OWNER SHALL RESERVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE.

P. REFER TO THE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND TECHNOLOGY DOCUMENTS FOR COMPLETE SCOPE OF DEMOLITION WORK.

Q. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKING, ADHESIVES, AND BASES DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS UNLESS NOTED OTHERWISE.

R. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. REFER TO SPECIFICATIONS AND DRAWINGS FOR REQUIREMENTS AND SPECIAL CONDITIONS.

DEMOLITION PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. REMOVE EXISTING ASPHALT SURFACE AND STONE BASE IN ITS ENTIRETY.
2. REMOVE EXISTING SUBGRADE FOR NEW CONCRETE SIDEWALK AND STONE BASE.
3. SAW CUT ASPHALT PARKING LOT EDGE FOR CLEAN EDGE FOR EXPANDED PARKING LOT. EXCAVATE AND REMOVE EXISTING SUBGRADE FOR NEW ASPHALT PARKING AND STONE BASE.
4. REMOVE ASPHALT BASKETBALL COURT COMPLETE, SUB-STONE BASE TO REMAIN,
5. REMOVE EXISTING BASKETBALL BACKSTOP AND POLE IN ITS ENTIRETY.
6. CAREFULLY REMOVE EXISTING LIGHTING POLE AND LIGHT FIXTURE AND WIRING TO NEAREST CONNECTION POINT. COORDINATE WITH ELECTRICAL DRAWINGS.
7. REMOVE EXISTING SUBGRADE FOR NEW CONCRETE SLAB AND STONE BASE.
8. REMOVE EXISTING ASPHALT AND STONE BASE AS REQUIRED FOR NEW CONSTRUCTION. COMPACT SUBGRADE FOR NEW CONCRETE SLAB, STONE BASE AND BRICK PAVERS.
9. EXCAVATE SURFACE TO RECEIVE NEW TRENCH DRAIN, CONCRETE CURBS AND CONCRETE WALK.
10. REMOVE FENCE POSTS AND FENCING COMPLETE.
11. REMOVE EXISTING BASKETBALL POSTS AND BACKSTOPS COMPLETE, REMOVE ANY CONCRETE FORM BASE OF POSTS AND STORE FOR REINSTALLATION. NOTE CONTRACTOR IS TO REPAIR A COUPLE OF THE POSTS PRIOR TO STORAGE.
12. REMOVE EXISTING FLAG POLE FROM SUBGRADE. REINSTALL IN NEW LOCATION.
13. REMOVE PARTIAL ASPHALT FOR NEW ELECTRICAL CONNECTION TO NEW LIGHT POST.
14. REMOVE EXISTING CONCRETE WALK, LEAVING CURB IN PLACE TO GREATEST EXTENT POSSIBLE. REMOVE SUB-BASE AND STONE TO ALLOW FOR COLUMN FOUNDATION AND STORM PIPING CONNECTIONS TO STORM MANHOLES.
15. REMOVE PARKING STRIPING IN ITS ENTIRETY, PREPARE FOR NEW STRIPING.
16. REMOVE EXISTING STREET SIGN AND REINSTALL SIGN PER NEW CONSTRUCTION WORK IN SIMILAR LOCATION.
17. REMOVE EXISTING SUBGRADE FOR NEW CONCRETE SIDEWALK STONE BASE AND TRENCH DRAIN.
18. REMOVE EXISTING CONCRETE WALKWAY, STONE BASE, HEAD WALLS AND DRAINAGE PIPING COMPLETE AND PREPARE LOCATION FOR NEW CONSTRUCTION.
19. REMOVE AND REPAIR EXISTING ASPHALT EDGE AS REQUIRED DUE TO NE CONSTRUCTION WORK – INTENT IS TO MINIMIZE IMPACT.
20. REMOVE CONCRETE HEAD WALL AND PREPARE EXISTING STORM PIPE FOR CONNECTION TO NEW TRENCH DRAIN.

AD-2

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT:

TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

TRI-TOWNSHIP SCHOOLS
309 SCHOOL DRIVE
WANATAH, IN 46390

100% CD Set

GIBRALTAR DESIGN
4030 Vincennes Rd, Ste. 100
Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
25-185
DATE
03/24/2026
COORDINATED BY
JPB
DRAWN BY
CED
CHECKED BY
JPB

JOSEPH P. BRIGGS
REGISTERED
NO.
11600109
STATE OF
INDIANA
ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM 02

DRAWING
SITE DEMOLITION PLAN

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

SHEET
CD101

Thursday, 4/9/2026 - 8:34 AM - LAST SAVED BY:CDICE
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ENLARGED SITE PLAN

SCALE: 1" = 10'

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO BE RUNNING BOND UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL

L. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

M. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. NEW CONCRETE WALK. — 6 C-201
2. NEW BASKETBALL BALL COURT LINES. — 9 C-201, 10 C-201
3. NEW HARDPLAY ASPHALT PLAYGROUND. — 13 C-201
4. RELOCATE EXISTING FLAG POLE TO NEW LOCATION.
5. EXISTING SOFT SURFACE PLAY AREA TO REMAIN.
6. RELOCATED BASKETBALL BACKSTOPS.
7. PROVIDE 3" OF DECORATION STONE ON TOP OF 18" OF TOP SOIL.
8. NEW CONCRETE PLATFORM FOR FUTURE GRANDSTAND. — 11 C-201, 12 C-201
9. INSTALL NEW 8X8 AND 4X8 BRICK PAVERS AROUND STRUCTURE. REFER TO DETAIL. — 8 C-201
10. PLAYGROUND EQUIPMENT – BY OWNER.
11. CONTRACTOR IS TO INCLUDE PLAYGROUND PLAY LINE PAINTING.
12. REMOVE AND REPLACE VINYL SIDING AND TRIM ON EXISTING GARAGE.
13. CONTRACTOR IS TO CLEAN AND PAINT METAL SIDING AND TRIM – COLOR TO BE SELECTED BY OWNER. CONTRACTOR IS TO PAINT SOFFIT AND ROOF EDGE A SECOND COLOR TO BE SELECTED BY OWNER.
14. CONTRACTOR IS TO PAINT EXTERIOR SIDES OF MASONRY DUGOUTS ONE COLOR AND INTERIOR OF DUGOUTS A SECOND COLOR. CONTRACTOR IS TO PAINT THE WOOD TRIM ON ROOF FASCIA A THIRD COLOR. OWNER TO SELECT COLORS.
15. NEW ASPHALT PAVING SYSTEM AND INCLUDE ALL NEW PAINTED LINE WORK. — 4 C-201
16. NEW LIGHT POST FOR NEW PARKING AREA.
17. NEW ASPHALT TRENCH INFILL – MATCH EXISTING ASPHALT SYSTEM (ASSUME SIMILAR TO MEDIUM DUTY DETAIL).
18. NEW ADA PARKING STRIPING LINES. — 2 C-201, 3 C-201
19. NEW HANDICAP PARKING SIGN. — 14 C-201
20. NEW PLANTING AREA – BASE BID.
21. NEW PLANTING AREA – BASE BID / CONCRETE AND STONE PLATFORM ALTERNATE BID – REFER TO SHEET C-202 FOR DETAILS.
22. NEW 6" PVC STORM DRAIN CONNECTED TO DOWNSPOUT BOOT ON WALL.
23. 12" TRENCH DRAIN SET IN CONCRETE.
24. 6" TRENCH DRAIN SET IN CONCRETE SIDEWALK.
25. 8" PVC STORM PIPE – CONNECT TO TRENCH DRAIN.
26. 8" PVC STORM PIPE – CONNECT TO CATCH BASIN.
27. VERIFY PIPE SIZE AND CONNECT DRAIN PIPE TO TRENCH DRAIN.
28. RELOCATED TRAFFIC SIGN.
29. SQUARE CUT STONE CAP AND 4" CUT STONE SLABS SET ON COMPACTED STONE BASE.

AD-2

GIBRALTAR DESIGN
ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

PROJECT:

TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

TRI-TOWNSHIP SCHOOLS
309 SCHOOL DRIVE
WANATAH, IN 46390

100% CD Set

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Indianapolis, IN 46260
Homepage www.GibraltarDesign.com
Email info@GibraltarDesign.com
Phone 317.580.5777 Fax 317.580.5778

PROJECT
25-185
DATE
03/24/2026
COORDINATED BY
JPB
DRAWN BY
CED
CHECKED BY
JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM 02

DRAWING
ENLARGED SITE PLAN

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

SHEET
C-103

Thursday, 4/9/2026 – 11:49 AM – LAST SAVED BY:CDICE
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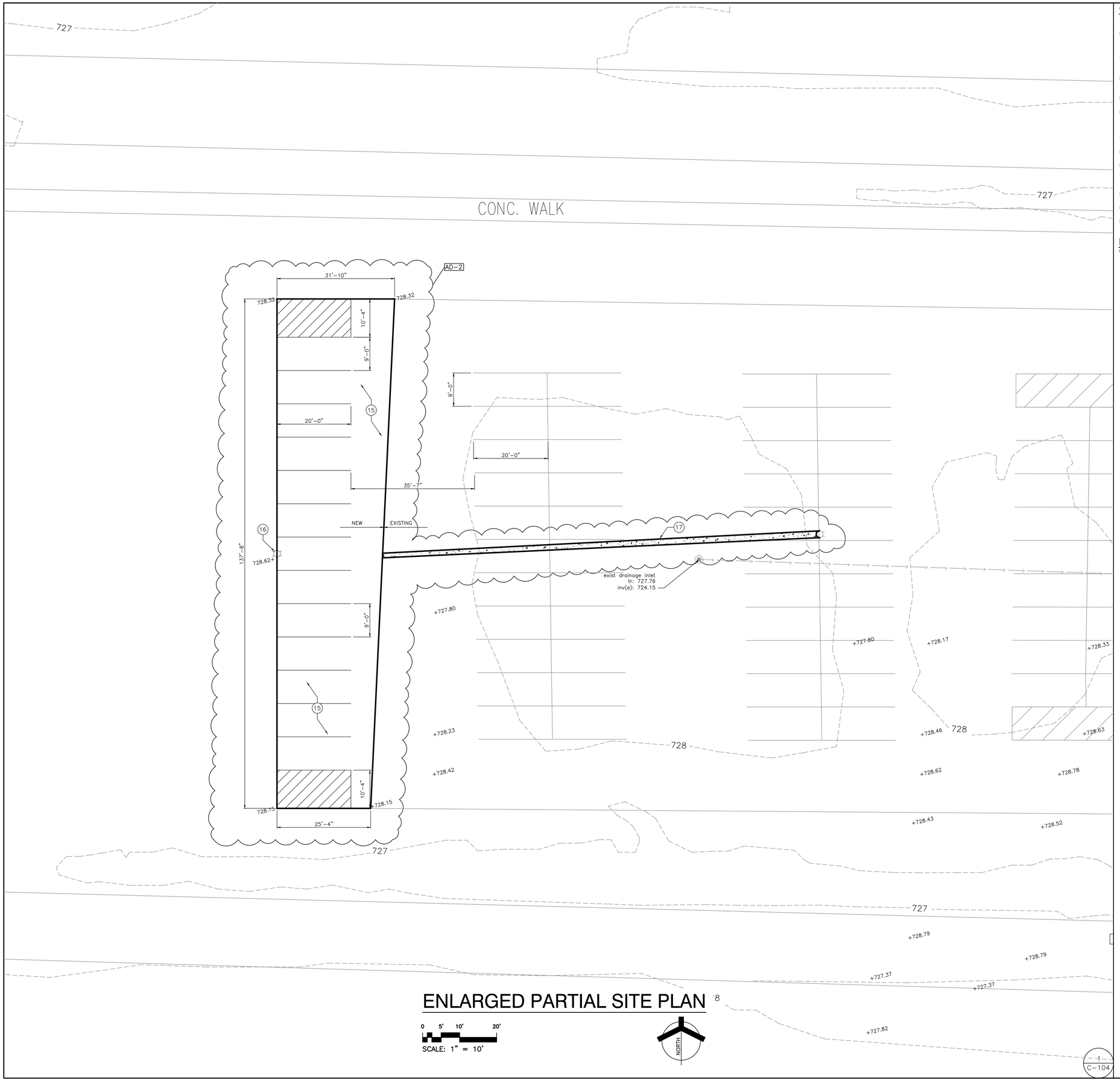

ENLARGED PARTIAL SITE PLAN

0 5' 10' 20'

SCALE: 1" = 10'

NORTH

1
C-104

GENERAL PLAN NOTES:

A. FOR GENERAL PROJECT NOTES, MATERIAL INDICATIONS LEGEND, SYMBOL LEGEND, ABBREVIATIONS, ETC., REFER TO G SERIES SHEETS.

B. PLAN DIMENSIONS TO MASONRY WALLS ARE TO FACE OF ROUGH MASONRY. PLAN DIMENSIONS TO STUD WALLS ARE TO FACE OF FINISHED GYPSUM BOARD OR PLASTER. PLAN DIMENSIONS TO STUD WALLS WITH CERAMIC TILE FINISH ARE TO THE FACE OF TILE BACKER BOARD.

C. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED TO VIEW.

D. MASONRY WALLS BEARING ON A THICKENED SLAB AT SLAB DEPRESSIONS REQUIRE CUT MASONRY UNITS SO THAT COURSING BEGINS AT THE FLOOR LINE.

E. THE BASE FIRST FLOOR ELEVATION INDICATED FOR THE PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USGS DATUM.

F. HINGE SIDE OF DOOR JAMB AT CMU WALLS SHALL BE LOCATED 8" MINIMUM FROM ADJACENT WALL AND HINGE SIDE OF DOOR JAMB AT GYPSUM BOARD WALLS SHALL BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS NOTED OTHERWISE.

G. PROVIDE WOOD BLOCKING (OR METAL STRAPPING WHERE APPLICABLE) AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS.

H. REFER TO LIFE SAFETY PLANS REGARDING FIRE RATED WALL LOCATIONS AND OTHER CODE INFORMATION.

I. INTERIOR CMU WALLS ARE TO BE RUNNING BOND UNLESS NOTED OTHERWISE.

J. ALL EXPOSED CONCRETE MASONRY UNITS (CMU) CORNERS ARE TO BE BULLNOSED, EXCEPT AT MASONRY BULKHEADS AND EXTERIOR WINDOW JAMBS.

K. REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS, LOCATION AND EXTENT OF FINISHED FLOOR AND WALL MATERIAL

L. REFER TO EQUIPMENT PLANS FOR CASEWORK, DISPLAY BOARDS, LOCKERS, AND OTHER ADDITIONAL TYPICAL EQUIPMENT NOTES AND INFORMATION.

M. REFER TO EQUIPMENT PLANS FOR REFERENCE TO ENLARGED TOILET ROOM PLANS AND TOILET ACCESSORIES.

PLAN NOTES:

(ALL PLAN NOTES MAY NOT BE INDICATED ON THIS SHEET.)

1. NEW CONCRETE WALK. — 6 C-201
2. NEW BASKETBALL BALL COURT LINES. — 9 C-201, 10 C-201
3. NEW HARDPLAY ASPHALT PLAYGROUND. — 13 C-201
4. RELOCATE EXISTING FLAG POLE TO NEW LOCATION.
5. EXISTING SOFT SURFACE PLAY AREA TO REMAIN.
6. RELOCATED BASKETBALL BACKSTOPS.
7. PROVIDE 3" OF DECORATION STONE ON TOP OF 18" OF TOP SOIL.
8. NEW CONCRETE PLATFORM FOR FUTURE GRANDSTAND. — 11 C-201, 12 C-201
9. INSTALL NEW 8X8 AND 4X8 BRICK PAVERS AROUND STRUCTURE. REFER TO DETAIL. — 8 C-201
10. PLAYGROUND EQUIPMENT – BY OWNER.
11. CONTRACTOR IS TO INCLUDE PLAYGROUND PLAY LINE PAINTING.
12. REMOVE AND REPLACE VINYL SIDING AND TRIM ON EXISTING GARAGE.
13. CONTRACTOR IS TO CLEAN AND PAINT METAL SIDING AND TRIM – COLOR TO BE SELECTED BY OWNER. CONTRACTOR IS TO PAINT SOFFIT AND ROOF EDGE A SECOND COLOR TO BE SELECTED BY OWNER.
14. CONTRACTOR IS TO PAINT EXTERIOR SIDES OF MASONRY DUGOUTS ONE COLOR AND INTERIOR OF DUGOUTS A SECOND COLOR. CONTRACTOR IS TO PAINT THE WOOD TRIM ON ROOF FASCIA A THIRD COLOR. OWNER TO SELECT COLORS.
15. NEW ASPHALT PAVING SYSTEM AND INCLUDE ALL NEW PAINTED LINE WORK. — 4 C-201
16. NEW LIGHT POST FOR NEW PARKING AREA.
17. NEW ASPHALT TRENCH INFILL – MATCH EXISTING ASPHALT SYSTEM (ASSUME SIMILAR TO MEDIUM DUTY DETAIL).
18. NEW ADA PARKING STRIPING LINES. — 2 C-201, 3 C-201
19. NEW HANDICAP PARKING SIGN. — 14 C-201
20. NEW PLANTING AREA – BASE BID.
21. NEW PLANTING AREA – BASE BID / CONCRETE AND STONE PLATFORM ALTERNATE BID – REFER TO SHEET C-202 FOR DETAILS.
22. NEW 6" PVC STORM DRAIN CONNECTED TO DOWNSPOUT BOOT ON WALL.
23. 12" TRENCH DRAIN SET IN CONCRETE.
24. 6" TRENCH DRAIN SET IN CONCRETE SIDEWALK.
25. 8" PVC STORM PIPE – CONNECT TO TRENCH DRAIN.
26. 8" PVC STORM PIPE – CONNECT TO CATCH BASIN.
27. VERIFY PIPE SIZE AND CONNECT DRAIN PIPE TO TRENCH DRAIN.
28. RELOCATED TRAFFIC SIGN.
29. SQUARE CUT STONE CAP AND 4" CUT STONE SLABS SET ON COMPACTED STONE BASE.

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PROJECT:

TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

TRI-TOWNSHIP SCHOOLS
309 SCHOOL DRIVE
WANATAH, IN 46390

100% CD Set

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PROJECT
25-185
DATE
03/24/2026
COORDINATED BY
JPB
DRAWN BY
CED
CHECKED BY
JPB

JOSEPH P. BRIGGS
REGISTERED
NO.
11600109
STATE OF
INDIANA
ARCHITECT

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM 02

DRAWING
ENLARGED PARTIAL SITE PLAN

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

SHEET
C-104

Thursday, 4/9/2026 - 12:03 PM - LAST SAVED BY:CDICE
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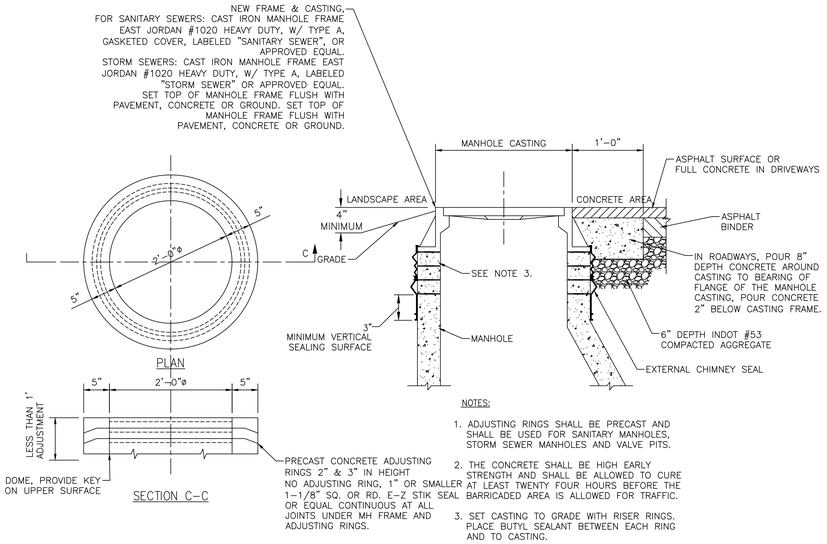
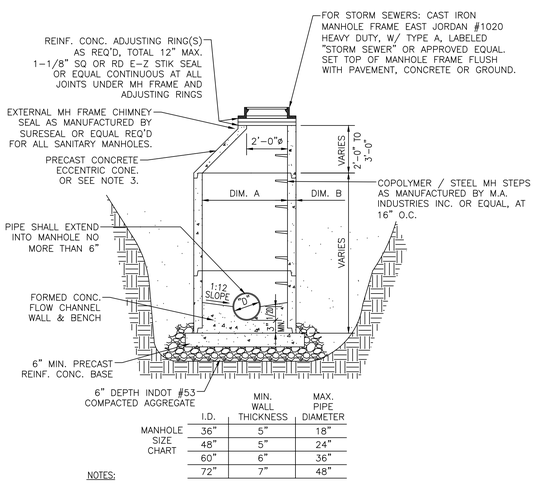


NOTES:

1. ADJUSTING RINGS SHALL BE PRECAST AND SHALL BE USED FOR SANITARY MANHOLES, STORM SEWER MANHOLES AND VALVE PITS.
2. THE CONCRETE SHALL BE HIGH EARLY STRENGTH AND SHALL BE ALLOWED TO CURE AT LEAST TWENTY FOUR HOURS BEFORE THE BARRICADED AREA IS ALLOWED FOR TRAFFIC.
3. SET CASTING TO GRADE WITH RISER RINGS. PLACE BUTYL SEALANT BETWEEN EACH RING AND TO CASTING.

CASTING ADJUSTMENT DETAIL

NOT TO SCALE



	I.D.	MIN. WALL THICKNESS	MAX. PIPE DIAMETER
MANHOLE SIZE CHART	36"	5"	18"
	48"	5"	24"
	60"	6"	36"
	72"	7"	48"

NOTES:

1. PRECAST REINFORCED CONCRETE MANHOLE BASE SECTIONS, RISER SECTIONS AND APPURTENANCES SHALL MEET ASTM C478 SPECIFICATIONS
2. BACKFILL WITH COMPACTED STRUCTURAL FILL IN PAVED AREAS.
3. WHERE DEPTH FROM TOP OF CASTING TO INVERT IS LESS THAN 5'-0", USE FLAT TOP MANHOLE IN LIEU OF ECCENTRIC CONE.
4. WATERTIGHT SEAL IS REQ'D BETWEEN PRECAST RISER AND SEWER PIPE.
5. THE BOTTOM MAY BE PRECAST OR CAST IN PLACE.
6. THE CONCRETE FOR THE WALL SHALL BE 4000 PSI
7. NEW STRUCTURES INCLUDE THE COST OF NEW FRAME AND LID.

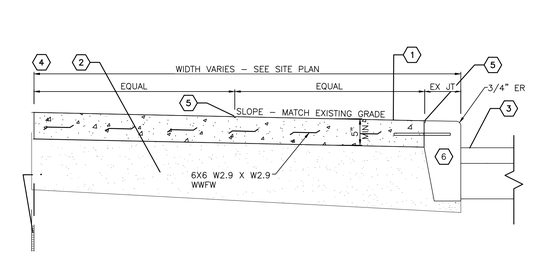
STORM SEWER MANHOLE DETAIL

NOT TO SCALE

TYPICAL MANHOLE DETAILS

SCALE: NTS

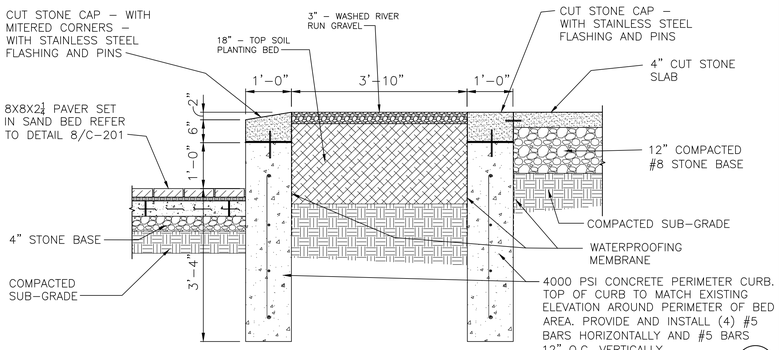
8 / C-202



TYPICAL TURNED-DOWN EDGE/CURB SIDEWALK

SCALE: NTS

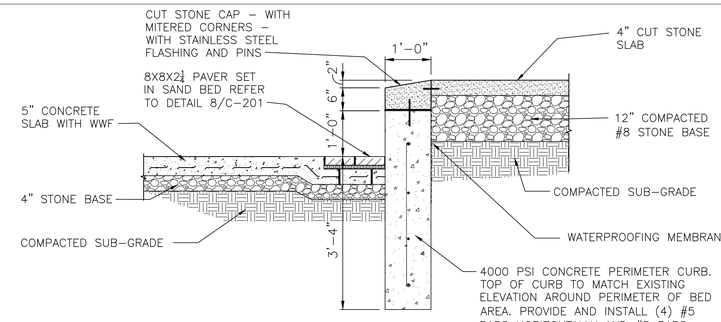
5 / C-202



PLATFORM CROSS SECTION - ALTERNATE

SCALE: 3/4" = 1'-0"

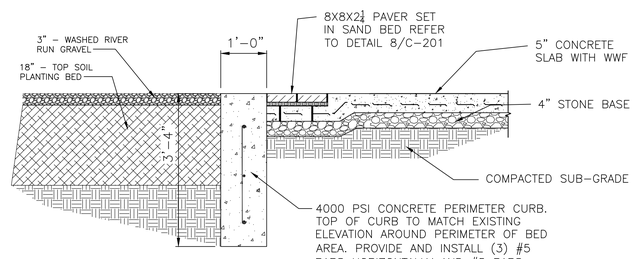
4 / C-202



PERIMETER PLATFORM SECTION - ALTERNATE

SCALE: 3/4" = 1'-0"

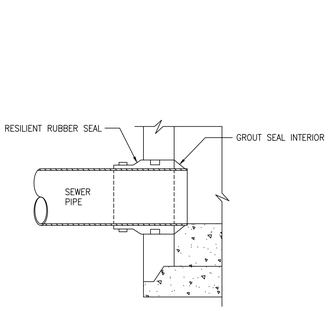
3 / C-202



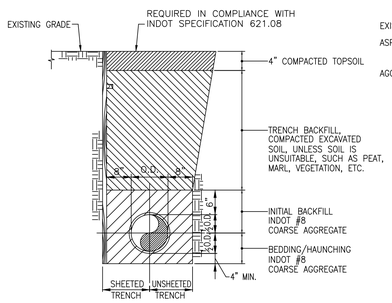
PERIMETER CURB PLANTER BED SECTION

SCALE: 3/4" = 1'-0"

2 / C-202



BOOT DETAIL



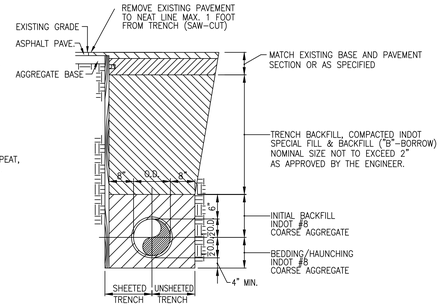
PIPE BEDDING DETAIL

NOT TO SCALE

FOR TRENCH IN GRASS AREAS

NOTES:

1. OPEN-CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY OSHA (29CFR 1926/1910), AND AS NECESSARY TO PROTECT LIFE, PROPERTY, AND THE WORK.



PIPE BEDDING DETAIL

NOT TO SCALE

FOR TRENCH IN PAVED AREAS

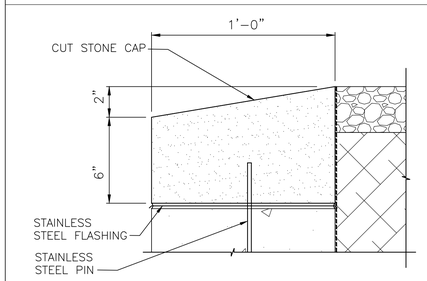
NOTES:

1. OPEN-CUT TRENCHES SHALL BE SHEETED AND BRACED AS REQUIRED BY OSHA (29CFR 1926/1910), AND AS NECESSARY TO PROTECT LIFE, PROPERTY, AND THE WORK.

TYPICAL UTILITY TRENCH DETAILS AND PIPE PENETRATION DETAIL

SCALE: NTS

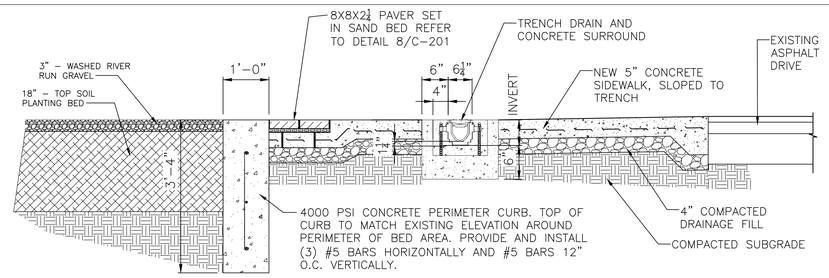
7 / C-202



CUT STONE CAP DETAIL

SCALE: 3/4" = 1'-0"

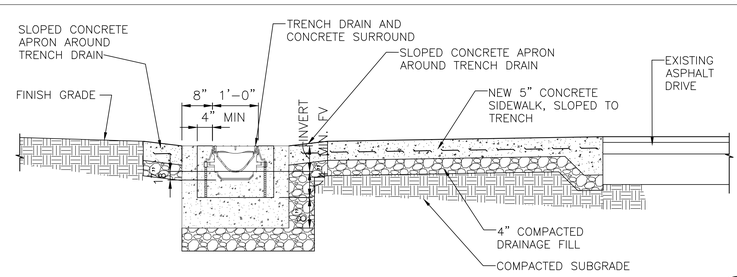
9 / C-202



6-INCH TRENCH DRAIN ALIGNED WITH SIDEWALK

SCALE: 3/4" = 1'-0"

6 / C-202



12-INCH TRENCH DRAIN ALIGNED WITH SIDEWALK

SCALE: 3/4" = 1'-0"

1 / C-202

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PROJECT:

TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

TRI-TOWNSHIP SCHOOLS
309 SCHOOL DRIVE
WANATAH, IN 46390

100% CD Set

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PROJECT 25-185
DATE 03/24/2026
COORDINATED BY JPB
DRAWN BY CED
CHECKED BY JPB

JOSEPH P. BRIGGS REGISTERED NO. 11600109 STATE OF INDIANA ARCHITECT

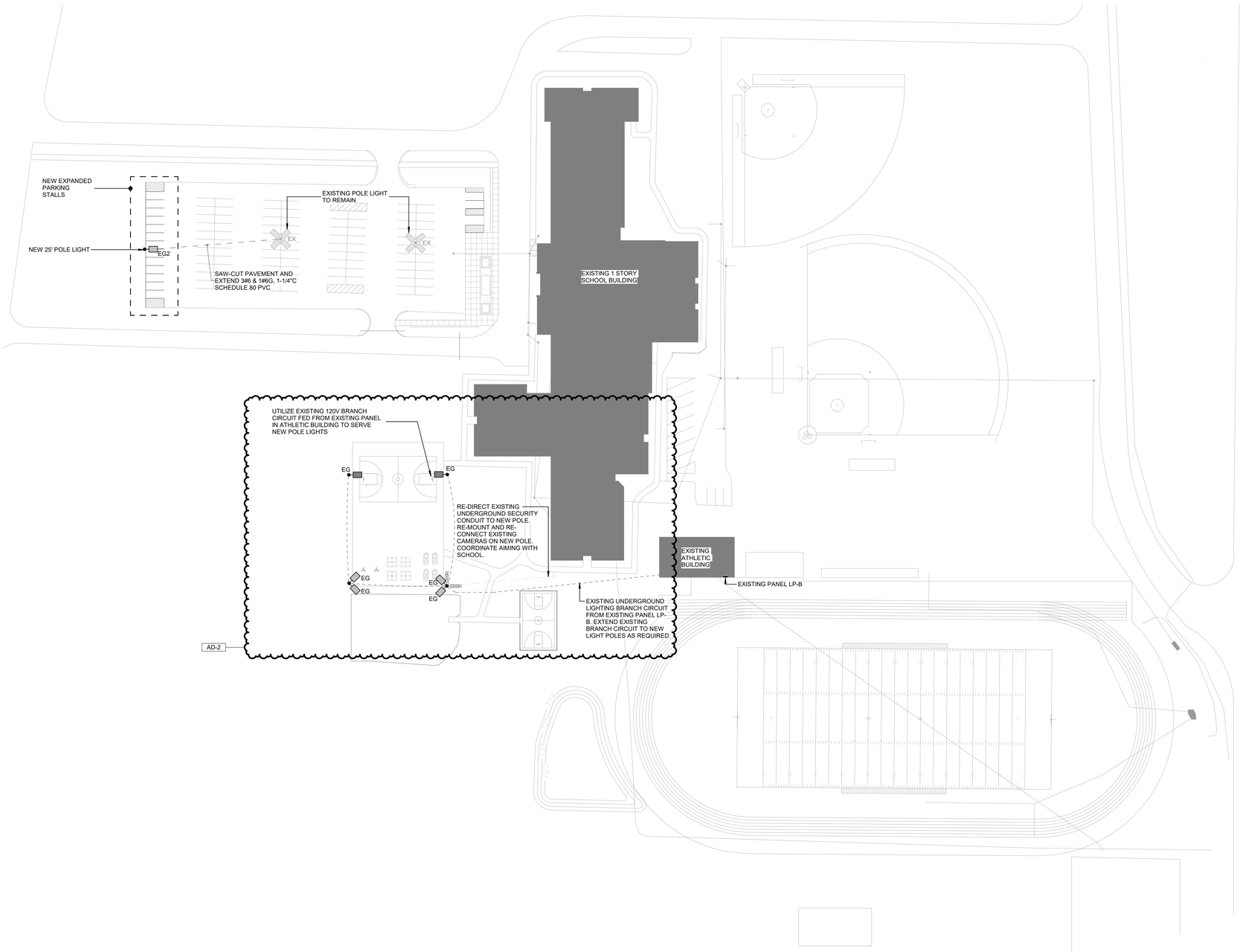
REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM 02

DRAWING
CIVIL DETAILS

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

SHEET
C-202



1 ES102 ELECTRICAL SITE PLAN
1" = 50'-0"

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DESIGN
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MILLIES
ENGINEERING GROUP
(219) 924-8400
www.milliesengineeringgroup.com

PROJECT:

TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

TRI-TOWNSHIP SCHOOLS
309 SCHOOL DRIVE
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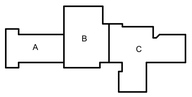

KEY PLAN

NORTH

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PROJECT
25-185
DATE
03/24/2026
COORDINATED BY
JFC
DRAWN BY
JFC
CHECKED BY
DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM NO. 2

DRAWING
ELECTRICAL SITE PLAN

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

SHEET
ES102

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INTERIOR LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	SERIES OR CATALOG NUMBER	LAMP	COLOR TEMP	MIN LUMENS	MAX WATTS	VOLTS	CONTROL	MOUNTING TYPE	MOUNTING HEIGHT	REMARKS
AA1	2'X4' RECESSED VOLUMETRIC LED FIXTURE WITH CURVED SMOOTH SHIELDING	LITHONIA METALUX WILLIAMS DAY-BRITE	2BLT4-30L-ADSM-GZ1-LP835 24CZ2-30-S-UNV-L835-HCD1 PT-24-L38/835-RA-DIM-UNV 2FGXG-38L-835-4-RS-UNV-DIM	LED	3500K	3000 LM	23 W	120/277V	0-10V	RECESSED LAY-IN	- -	---
AC1	1'X4' RECESSED VOLUMETRIC LED FIXTURE WITH CURVED SMOOTH SHIELDING	LITHONIA METALUX WILLIAMS DAY-BRITE	BLT4-30L-ADSM-GZ1-LP835 14CZ2-35-S-UNV-L835-HCD1 PT-14-L45/835-RA-DIM-UNV 1FGXG-30L-835-4-RS-UNV-DIM	LED	3500K	3000 LM	23 W	120/277V	0-10V	RECESSED LAY-IN	---	---
BA1	2'X4' RECESSED FLAT PANEL LED FIXTURE	LITHONIA METALUX WILLIAMS DAY-BRITE	CPX-2X4-3000LM-80CRI-35K-SWL-MIN1-ZT-MVOLT 24CGTX-30-L835-HCD BP-24-LS/8CS-QS-DIM-UNV 2FPZ-30L-835-4-DS-UNV-DIM	LED	3500K	3000 LM	25 W	120/277V	0-10V	SURFACE	---	ORDER WITH SURFACE MOUNTING ACCESSORY 2X4SMKSH
BC1	1'X4' SURFACE MOUNTED FLAT PANEL LED FIXTURE	LITHONIA METALUX WILLIAMS DAY-BRITE	CPX-1X4-2000LM-80CRI-35K-SWL-MIN1-ZT-MVOLT 14CGTX-40-L835-HCD BP-14-LS/8CS-QS-DIM-UNV 1FPZ-15L-835-4-DS-UNV-DIM	LED	3500K	2000 LM	16 W	120/277V	0-10V	SURFACE	---	ORDER WITH SURFACE MOUNTING BRACKET 1X4SMKSH IF INSTALLED BEFORE PAINTING. ORDER 1X4SMKSHP PAF IF INSTALLED AFTER PAINTING THE CEILING.
BC2	1'X4' WET LOCATION LISTED RECESSED FLAT PANEL LED FIXTURE	LITHONIA	WRTL-F-L48-3000LM-OAW-AFL-MD-MVOLT-35K-80CRI-WH OR APPROVED EQUAL	LED	3500K	3000 LM	26 W	120/277V	---	RECESSED DRYWALL	---	VERIFY DOOR FRAME SELECTION WITH ARCHITECT
CA1	6" DIAMETER LED OPEN DOWNLIGHT WITH SEMI-SPECULAR REFLECTOR AND WHITE FLANGE	LITHONIA HALO WILLIAMS LIGHTOLIER	LDN6-35-10-L06-AR-LSS-TRW-MVOLT-GZ1 HC610D010-HM612835-61WDHWF 6DR-TL-L10/835-DIM1-UNV-FW-OF-CS-MWT-N-F1 6RN-P6R-DL-10-935-M-CL-Z10-U	LED	3500K	1000 LM	11 W	120/277V	0-10V	RECESSED LAY-IN/ DRYWALL	---	---
CE1	6" DIAMETER LED DOWNLIGHT. WET LOCATION LISTED	LITHONIA HALO WILLIAMS LIGHTOLIER	LDN6-35-10-L06-AR-LSS-TRW-MVOLT-GZ1 HC610D010-HM612835-61WDHWF 6DR-TL-L10/835-DIM1-UNV-AWW-OF-CS-MWT-WET/CC-N-F1 6RN-P6R-SL-10-935-M-CL-Z10-U	LED	3500K	1000 LM	11 W	120/277V	0-10V	RECESSED DRYWALL	---	WET LOCATION LISTED
ID1	WALL MOUNTED LED VAPORTIGHT FIXTURE	LITHONIA	OLVTWM OR APPROVED EQUAL	LED	4000K	600 LM	15 W	120/277V	0-10V	WALL	---	---
XG	LED THERMOPLASTIC SINGLE FACE COMBINATION EXIT/EMERGENCY LIGHTING FIXTURE, RED LETTERING, WHITE FINISH, NICAD BATTERY.	LITHONIA SURELITES	ECRG RD APC7RG	LED	---	---	5 W	120/277V	---	WALL SURFACE	---	ENGINEER - CONFIRM LETTER COLOR, FINISH, BATTERY VS AC ONLY
EM	FIXTURE ON EMERGENCY CIRCUIT WITH 90 MINUTE, HIGH OUTPUT (MIN 1400LM) BATTERY UNIT OR INVERTER		BODINE FACTORY INSTALLED BATTERY, OR, AT CONTRACTOR'S DISCRETION, MYERS LV SERIES INVERTER (SIZE AND QUANTITY AS REQUIRED)				0 W	120/277V		---		- PROVIDE TEST SWITCH AND CHARGING INDICATOR - INTEGRAL BATTERIES NOT ALLOWED IN FIXTURES WITH GREATER THAN 10000 LUMENS
NL	CONSTANT HOT, UNSWITCHED NIGHT LIGHT FIXTURE						0 W					---

AD-2

EXTERIOR LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	SERIES OR CATALOG NUMBER	LAMP	COLOR TEMP	MIN LUMENS	MAX WATTS	VOLTS	CONTROL	MOUNTING TYPE	MOUNTING HEIGHT	REMARKS
EG	LED POLE MOUNTED AREA LIGHITNG FIXTURE WITH INTEGRAL PHOTOCELL AND MOTION SENSORS	LITHONIA VIPER CREE LIGHTING LSI	DSX1-P6-40K-80CRI-T4M-MVOLT-SPA-NLTAIR2 PIRHN-DBLXD VP-2-80L-130-4K8-4F-UNV-ASQU-BLT-BC-BTS-40F OSQ-L-C-22L-40K7-4M-UL-ML-C-DA-BBML VALS-21L-4M-UNV-40K8-BLK-SA-ALSCS2	LED	4000K	20000 LM	165 W	120/277V	0-10V	POLE	20'	VERIFY FINISH AND COLOR WITH ARCHITECT PRIOR TO ORDERING FIXTURES. VERIFY INTEGRAL PHOTOCELL AND MOTION SENSOR FOR FIXTURE.
EG2	LED POLE MOUNTED AREA LIGHITNG FIXTURE WITH INTEGRAL PHOTOCELL AND MOTION SENSORS	LITHONIA VIPER CREE LIGHTING LSI	DSX1-P7-40K-80CRI--TFTM-MVOLT-SPA-NLTAIR2 PIRHN-DBLXD VP-2-80L-130-4K8-4W-UNV-ASQU-BLT-BC-BTS-40F OSQ-L-C-22L-40K7-4M-UL-ML-C-DA-BBML VALS-21L-4M-UNV-40K8-BLK-SA-ALSCS2	LED	4000K	21778 LM	184 W	120/277V	0-10V	POLE	25'	VERIFY FINISH AND COLOR WITH ARCHITECT PRIOR TO ORDERING FIXTURES. FIELD VERIFY COLOR TEMPERATURE OF EXISTING LIGHT POLES IN PARKING LOT TO MATCH. VERIFY INTEGRAL PHOTOCELL AND MOTION SENSOR FOR FIXTURE.

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

		LOAD									FEEDER			DISCONNECT SWITCH				STARTER			
															PROV. BY				PROV. BY:		
TAG	DESCRIPTION	WATTS	HP	MCA	FLA	MOCP	VOLT	PHASE	EXISTING	EXISTING	CABLE	CONDUIT	SIZE	FUSE	M.C.P. C.	E.C.	TYPE	M.C./P.C.	E.C.	REMARKS
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-1	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-2	CABINET HEATER	330		2.75		15	120	1	EX	EX	EXISTING	EX	EX		X			X		
CH-2	CABINET HEATER	330		2.75		15	120	1			EXISTING	EX	EX		X			X		
GEF-1	GENERAL EXHAUST FAN	336			2.8	15	120	1	1L1		EXISTING	EX	EX						X	
HP-1	HEAT PUMP	5200		25		42	208	1	1L7		3 #8 & 1 #10 GRD.	1"	60A		X			X		PROVIDE NEW CONDUIT AND WIRING FOR NEW CIRCUIT. REMOVE EXISTING 3 POLE 50 AMP CIRCUIT BREAKERS FROM IL1. REPLACE WITH 2 POLE 40 AMP CIRCUIT BREAKER. SEE SHEET EP102 FOR EXISTING PANEL LOCATION.
HP-2	HEAT PUMP	2912		14		15	208	1	1L1		3 #12 & 1 #12 GRD.	3/4"	30A		X			X		PROVIDE NEW CONDUIT AND WIRING AS REQUIRED FROM EXISTING SPACE IN PANEL IL7. PROVIDE 2 POLE 15 AMP CIRCUIT BREAKER. SEE SHEET EP103 FOR EXISTING PANEL LOCATION.
RT-1	ROOFTOP UNIT	22696.794		63		90	208	3	1LD1		4 #3 & 1 #8 GRD.	1-1/4"	100A		X			X		PROVIDE CUSTOM FIT 3-POLE 90 AMP CIRCUIT BREAKER IN EXISTING SPACE OF EXISTING SWITCHBOARD ILD1. SEE EP102 FOR EXISTING SWITCHBOARD LOCATION.
RT-2	ROOFTOP UNIT	22696.794		63		90	208	3	EX EX	EX EX	4 #3 & 1 #8 GRD.	1-1/4"	100A		X			X		PROVIDE CUSTOM FIT 3-POLE 90 AMP CIRCUIT BREAKER IN EXISTING SPACE OF EXISTING SWITCHBOARD ILD1. SEE EP102 FOR EXISTING SWITCHBOARD LOCATION.
UH-1	UNIT HEATER	600			5	15	120	1	EX	EX	EXISTING	EX	EX		X			X		
UH-2	UNIT HEATER	600			5	15	120	1	EX	EX	EXISTING	EX	EX		X			X		
UH-3	UNIT HEATER	600			5	15	120	1	EX	EX	EXISTING	EX	EX		X			X		
WH-1	WATER HEATER	600			5	15	120	1			EXISTING	EX	EX		X					
WH-2	WATER HEATER	600			5	15	120	1			EXISTING	EX	EX		X					

FIXTURE GENERAL NOTES

1. INTERIOR FIXTURES, EXTERIOR FIXTURES AND POLE FINISHES AND COLORS TO BE SELECTED BY ARCHITECT. THE ARCHITECT MAY, AT THEIR DISCRETION, CHOOSE A CUSTOM COLOR AT NO ADDITIONAL CHARGE.
2. LED FIXTURES (LESS THAN 10000 LUMENS) SHALL BE PROVIDED WITH FACTORY INSTALLED INTEGRAL EMERGENCY BATTERY UNITS BATTERY UNITS SHALL PROVIDE A MINIMUM OF 1400 LUMENS.
3. SHADED FIXTURES SHALL HAVE AN EMERGENCY SOURCE OF POWER AS SPECIFIED.
4. EXTERIOR LIGHTING POLES SHALL BE PROVIDED WITH STRAIGHT SQUARE STEEL POLES WITH CAST BASE COVERS AND VIBRATION DAMPENERS. THE POLES SHALL BE SIZED PROPERLY TO SUPPORT FIXTURE WEIGHT AT 100 MPH WIND WITH A 1.3 GUST FACTOR. MINIMUM POLE SIZE TO BE 5" SQUARE. PROVIDE ADDITIONAL MOUNTING ACCESSORIES AS REQUIRED FOR A COMPLETE AND PROPER INSTALLATION.
5. FOR EXTERIOR POLE MOUNTED LIGHTING, PROVIDE FACTORY MOUNTED HOUSE SIDE SHIELDS INTEGRAL TO THE FIXTURE AS SPECIFIED. ADDITIONALLY, PROVIDE CUSTOM FABRICATED POLE MOUNTED HOUSE SIDE SHIELDING AS REQUIRED TO CONTROL LIGHT TRESPASS AND COMPLY WITH LOCAL REQUIREMENTS.
6. FIXTURES WITH EMERGENCY BATTERIES SHALL BE PROVIDED WITH CONSTANT HOT SENSING WIRE SO THAT FIXTURE CAN BE SWITCHED ON AND OFF WITHOUT ACTIVATING EMERGENCY BALLAST. UPON LOSS OF POWER, THE FIXTURE SHALL BE ILLUMINATED FOR A MINIMUM OF 90 MINUTES REGARDLESS OF THE LIGHT SWITCH POSITION. PROVIDE TEST SWITCH AND CHARGING INDICATOR FOR EMERGENCY BATTERY AS SPECIFIED.
7. ALL INTEGRAL EMERGENCY BATTERIES USED IN EXTERIOR APPLICATIONS SHALL HAVE A MINIMUM STARTING TEMPERATURE OF -20 DEGREES F UNLESS OTHERWISE SPECIFIED.
8. CAREFULLY COORDINATE MOUNTING REQUIREMENTS FOR FIXTURES WITH CONTRACT DOCUMENTS AND FIXTURE MANUFACTURER. PROVIDE APPROPRIATE MOUNTING FRAMES FOR LAY-IN OR GYPSUM CEILINGS. VERIFY CEILING REQUIREMENTS WITH FINAL ARCHITECTURAL REFLECTED CEILING PLAN.
9. COMPLETE PHOTOMETRICS OF THE INTERIOR AND EXTERIOR LIGHTING SHALL BE SUBMITTED ALONG WITH THE LIGHTING SHOP DRAWINGS FOR REVIEW. FOR FINISHED SPACES, 80/50/20 REFLECTANCES SHALL BE UTILIZED. FOR UNFINISHED SPACES 50/50/20 REFLECTANCE SHALL BE UTILIZED. THE LLD VALUE THAT SHALL BE UTILIZED FOR LED IS .81. EXTERIOR CALCULATIONS SHALL ACCOUNT FOR HOUSE SIDE SHIELDING AND SHALL CONFORM TO LOCAL REQUIREMENTS.
10. VERIFY FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO ROUGH-IN.
11. VERIFY VOLTAGES OF EXISTING LIGHTING CIRCUITRY PRIOR TO ORDERING FIXTURES.
12. COORDINATE LOCATIONS OF INTERIOR AND EXTERIOR LIGHTING FIXTURES WITH FINAL ARCHITECTURAL DRAWINGS. FIXTURES THAT ARE NOT INSTALLED IN THE CORRECT LOCATION SHALL BE RELOCATED AND REINSTALLED IN THE CORRECT LOCATION AT NO ADDITIONAL CHARGE.
13. FIXTURES SHALL BE PROVIDED WITH ESCUTCHEON PLATES AS REQUIRED TO COVER EXISTING HOLES FROM REMOVED FIXTURES. CANOPY CEILING AROUND NEW FIXTURES SHALL BE REFINISHED TO MATCH EXISTING SURROUNDING CANOPY CEILING SURFACES.
14. FIXTURES SHALL BE CAREFULLY COORDINATED WITH MANUFACTURER TO DELIVER THE SPECIFIED PRODUCT IN SUFFICIENT TIME TO MEET PROJECT DEADLINES. EQUIPMENT DELIVERY LEAD TIME SHALL NOT BE HELD AS A VALID REASON FOR REQUESTING LUMINAIRE SUBSTITUTION UNLESS LUMINAIRE LEAD TIME FROM SPECIFIED MANUFACTURER IS IN EXCESS OF 14 WEEKS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO DETERMINE NECESSARY EQUIPMENT LEAD TIMES, DELIVER SUBMITTALS FOR REVIEW IN A TIMELY FASHION, AND PLACE ORDERS ACCORDINGLY TO ENSURE TIMELY DELIVERY.
15. EVALUATION OF APPROVED EQUALS SHALL BE AT THE SOLE DISCRETION OF THE ARCHITECT AND ENGINEER. IF THE PRODUCT SUBMITTED DURING THE REVIEW PROCESS IS NOT JUDGED AS AN EQUAL BY THE REVIEWING ENGINEER, THE CONTRACTOR SHALL PROVIDE THE PRODUCT SPECIFIED.
16. LIGHT FIXTURE TRANSFORMERS SHALL BE INTEGRAL STEP DOWN TRANSFORMERS PER NEC 210.6C. IF AN INTEGRAL STEP DOWN TRANSFORMER IS NOT AVAILABLE, PROVIDE A 120V CONNECTION FOR LIGHT FIXTURES AND ADDITIONAL CONTROL DEVICES AS REQUIRED TO PROPERLY CONTROL FIXTURES ALONG WITH OTHER 277 VOLT LIGHTING IN ROOM. VERIFY CONDITIONS AND REQUIREMENTS, COMPLETE AS REQUIRED.
17. CAREFULLY COORDINATE VOLTAGES OF FIXTURES PRIOR TO ORDERING FIXTURES.
18. APPROVED EQUALS WILL BE CONSIDERED FROM THE FOLLOWING VENDORS: KSA LIGHTING (630.307.6955), FORCE CHICAGO (312.986.1515), PG ENLIGHTEN (847.228.1199) OR ARCHIBALD AND MEEK (630.833.7377).
19. CAREFULLY VERIFY COLOR TEMPERATURE OF FIXTURES WITH ARCHITECT PRIOR TO ORDERING.

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PROJECT
25-185
DATE
03/24/2026
COORDINATED BY
JFC
DRAWN BY
JFC
CHECKED BY
DJ

DAVID G. JANNEY REGISTERED NO. 10302590 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS

MARK	DATE	ISSUED FOR
AD-2	04/09/26	ADDENDUM NO. 2

DRAWING
ELECTRICAL SCHEDULES

PROJECT
TRI-TOWNSHIP WANATAH SCHOOL RENOVATION AND RELATED WORK

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