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CSP 25-010 South Texas ISD Athletic Field Edinburg Site
Architect Project NO: S2000724

Addendum #2

We are issuing this addendum to address the following:

This addendum is issued for the purpose of modifying the plans and specifications for South Texas ISD Athletic Fields – Edinburg Site CSP 25-010. Please see pages 2-57.

Please, sign, date, and submit this addendum with your proposal response. We look forward to hearing from you.

Thank you.

South Texas ISD – Purchasing Department

June 19, 2024
South Texas ISD Athletic Fields – Edinburg Site CSP 25-010

GOMEZ MENDEZ SAENZ, INC.
1150 PAREDES LINE RD.
BROWNSVILLE, TEXAS 78526
(956) 546-0110

ADDENDUM NO. 2

A. PURPOSE AND INTENT
This addendum is issued for the purpose of modifying the plans and specifications for *South Texas ISD Athletic Fields – Edinburg Site CSP 25-010.*

This addendum shall become part of the contract and all CONTRACTORS shall be bound by its content. All aspects of the specifications and drawings not covered herein shall remain the same. The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this Addendum.

B. SCOPE

I. CLARIFICATIONS:

1. Track Sports Surface – Contractors can also provide *Plexitrac Accelerator by California Sports Surfaces.* Contact Gary Heffers, ICP Building Solutions Group gherrers@icpgroup.com

II. SPECIFICATIONS:

1. Section 003132 Geotechnical Data
    a. Section 003132 Geotechnical Data attached to this Addendum shall be ADDED to Construction Documents.

2. Section 321800 Athletic Surface Coating System for Concrete Tennis Court
    a. Subject to compliance with this section: *California Sports Surfaces, a division of ICP Group, Plexipave System* shall be an approved manufacturer and product. Contact Gary Heffers, ICP Building Solutions Group gherrers@icpgroup.com

II. PLANS:

1. Sheet A1.07 – Site Detail Enlargement
    a. Sheet A1.07 - Site Detail Enlargements attached to this Addendum shall be ADDED to Construction Documents.

2. Edinburg Civil Sheets
    a. DELETE previously issued C1, C2, C3, C4 and C5 sheets and REPLACE with Sheets C1, C2, C3, C4 and C5 Sheets attached to this Addendum.

3. Edinburg Landscape Sheets
    a. REVISIONS to Sheet L1.01, L1.02, L2.01 and L3.01.
    b. DELETE previously issued Sheet L2.02 and REPLACE with Sheet L2.02 attached to this Addendum.

End of Addendum 2

DOCUMENT 003132 - GEOTECHNICAL DATA

1.1 GEOTECHNICAL DATA

A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information. This Document and its attachments are not part of the Contract Documents.

B. Because subsurface conditions indicated by the soil borings are a sampling in relation to the entire construction area, and for other reasons, the Owner, the Architect, the Architect's consultants, and the firm reporting the subsurface conditions do not warranty the conditions below the depths of the borings or that the strata logged from the borings are necessarily typical of the entire site. Any party using the information described in the soil borings and geotechnical report shall accept full responsibility for its use.

C. Soil-boring data for Project, obtained by MEG Engineering, dated June 19, 2024 is available for viewing as appended to this Document.

D. A geotechnical investigation report for Project, prepared by MEG Engineering, dated June 19, 2024 is available for viewing as appended to this Document.

1. The opinions expressed in this report are those of a geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by a geotechnical engineer. Owner is not responsible for interpretations or conclusions drawn from the data.
2. Any party using information described in the geotechnical report shall make additional test borings and conduct other exploratory operations that may be required to determine the character of subsurface materials that may be encountered.

END OF DOCUMENT 003132

MEG GEOTECHNICAL ENGINEERING REPORT

PROPOSED
SOUTH TEXAS ISD WORLD SCHOLARS
NEW SPORTS FIELDS

EDINBURG, HIDALGO COUNTY, TEXAS

Geotechnical Engineering • Construction Materials Engineering & Testing
Environmental • Consulting • Forensics

GEOTECHNICAL ENGINEERING REPORT
FOUNDATION RECOMMENDATIONS
PROPOSED SOUTH TEXAS ISD WORLD SCHOLARS
NEW SPORTS FIELDS
EDINBURG, HIDALGO COUNTY, TEXAS

Prepared For
David Monreal
GMS Architects

MEG Report No. 01-24-29128

June 19, 2024

MILLENNIUM ENGINEERS GROUP, INC.
TBPE FIRM NO. F-3913
5804 N. GUMWOOD AVENUE
PHARR, TEXAS 78577
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June 19, 2024

David Monreal, AIA
GMS Architects
1150 Paredes Line Road
Brownsville, TX 78521
(956)546-0110
dmonreal@gmsarchitects.com

Subject: **Geotechnical Engineering Report**
MEG Report No. 01-24-29128
Foundation Recommendations
Proposed South Texas ISD World Scholars
New Sports Fields
Edinburg, Hidalgo County, Texas

Dear Mr. Monreal(CLIENT):

Millennium Engineers Group, Inc. is pleased to submit the enclosed geotechnical engineering report that was prepared for the above subject project. This report addresses the procedures and findings of our geotechnical engineering study. Our recommendations should be incorporated into the design and construction documents for the proposed development.

We want to emphasize the importance that all our recommendations presented in this report and/or addendums to this report be followed. We look forward to continuing our involvement in the project by providing construction monitoring in accordance with the report recommendations and materials testing services during construction. We strongly recommend that we be a part of the preconstruction meeting to address any specific issues that are pertinent to this project.

Thank you for the opportunity to be of service to you in this phase of the project and we would like the opportunity to assist you in the upcoming phases of the project. If you have any questions, please contact our office at the address, telephone, fax or electronic address listed below.

Cordially,
Millennium Engineers Group, Inc.
TBPE Firm No. F-3913

STATE OF TEXAS
QUYET THANG PHAM
131836
LICENSED PROFESSIONAL ENGINEER

Amos Emerson, P.E.
Geotechnical Department Manager

Quyet Thang Pham, Ph.D., P.E.
Geotechnical Engineer

The seal appearing on this document was authorized by Quyet Thang Pham, P.E. 131836 on June 19, 2024. Alteration of a sealed document without proper notification to the responsible engineer is an offence under the Texas Engineering Practice Act

Cc: 1 Original and PDF Document

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APPENDIX

1.0 INTRODUCTION

Millennium Engineers Group, Inc. (MEG) has completed and is pleased to submit this document that presents our findings as a result of a geotechnical engineering study of this project to our client. The project site is located at 510 S Sugar Road in Edinburg, Hidalgo County, Texas. The project location is shown on the Project Location Map, found in the Appendix section of this report. This report briefly describes the procedures utilized during this study and presents our findings along with our recommendation, for foundation design and construction considerations.

Our scope of services for the project was outlined in MEG proposal No. 01-24-143G, dated May 17, 2024 and approved by David Monreal, AIA on May 20, 2024.

2.0 PROJECT DESCRIPTION

It is our understanding that the proposed site will accommodate the construction of a new 400-meter athletic track, natural turf areas, and a new tennis court. It is also our understanding that the site construction for the proposed Tennis Court slab is anticipated to be on a shallow slab-on-grade, on-fill foundation, or post tension slab supported by fill provided expansive, soil-related movements will not impair the performance of the slab.

3.0 SCOPE AND LIMITATIONS OF STUDY

This engineering report has been prepared in accordance with accepted geotechnical engineering practices currently exercised by geotechnical engineers in this area. No warranty, expressed or implied, is made or intended. This report is intended for the exclusive use by the client and client's authorized project team for use in preparing design and construction documents for this project only. This report may only be reproduced in its entirety for inclusion in construction documents. This report in its entirety shall not be reproduced or used for any other purposes without the written consent of our firm. This report may not contain sufficient information for purposes of other parties or other uses and is not intended for use in determining construction means and methods.

The recommendations presented in this report are based on data obtained from the soil borings drilled at this site and our understanding of the project information provided to us by our client and other project team members, and the assumption that site grading will result in only minor changes in the existing topography. Subsurface soil conditions have been observed and interpreted at the boring locations only.

This report may not reflect the actual variations of the subsurface conditions across the subject site. It is important to understand that variations may occur due to real geologic conditions or previous uses of the site. The nature and extent of variations across the subject site may not become evident until specific design locations are identified and/or construction commences. The construction process itself may also alter subsurface conditions. If variations appear evident at the time during the design phase and/or construction phase, we should be notified immediately to determine if our opinions, conclusions and recommendations need to be reevaluated. It may be necessary to

perform additional field and laboratory tests and engineering analyses to establish the engineering impact of such variations. These services are additional and are not a part of our project scope.

The engineering report was conducted for the proposed project site described in this report. The conclusions and recommendations contained in this report are not valid for any other project sites. If the project information described in this report is incorrect, is altered, or if new information becomes available, we should be retained to review and modify our recommendations. These services are additional and are not a part of our project scope.

Our scope of services was limited to the proposed work described in this report, and did not address other items or areas. The scope of our geotechnical engineering study does not include environmental assessment of the air, soil, rock or water conditions on or adjacent to the site. No environmental opinions are presented in this report. If the client is concerned with environmental risk at this project site, the client should perform an environmental site assessment.

If final grade elevations are significantly different from existing grades at the time of our field activities (more than plus or minus one (1) foot), our office should be informed about these changes. If desired, we will reexamine our analyses and make supplemental recommendations.

4.0 FIELD EXPLORATION PROCEDURES

Subsurface conditions at the subject site were evaluated by three (3) 10-foot soil borings and four (4) 12-inch soil grab samples. The Borings were drilled at the locations shown on the Borings Location Map, found in the Appendix section of this report. This location is approximate and distances were measured using a measuring wheel, tape, angles, and/or pacing from existing references. The structural soil borings were drilled in general accordance with American Society of Testing Materials (ASTM) D 420 procedures.

As part of our sampling procedures, the samples were collected in general conformance with ASTM D 1586 procedures. Representative portions of the samples were sealed in containers to reduce moisture loss, identified, packaged, and transported to our laboratory for subsequent testing. In the laboratory, each sample was evaluated and visually classified by a member of our Geotechnical Engineering staff. The geotechnical engineering properties of the strata were evaluated by a series of laboratory tests. The results of the laboratory and field-testing are tabulated on the boring logs and Summary of Soil Sample Analyses which are found in the Attachments section of this report.

Standard penetration test results are noted on the boring logs as blows per 12 inches of penetration. Two 6 inch increments are performed for each standard penetration test. The sum of the blows for the two 6 inch increments is considered the “standard penetration resistance value” or “N-value.” Where hard or very dense materials were encountered, the tests are terminated as follows: (1) when a total of 50 blows have been applied in any of the 6 inch increments, or (2) when a total of 100 blows have been

applied, or (3) when there is no observed advance of the sampler in the application of 10 successive blows. The boring logs in the case of hard or very dense materials will be noted as follows: 50/3", where 50 is the number of blows applied in 3 inches of penetration, or 100/7½" where 100 is the number of blows applied in a total of 7 ½ inches of penetration, or 10/0", where 10 is the number of blows applied in 0 inches of penetration.

Samples will be retained in our laboratory for 30 days after submittal of this report. Other arrangements may be provided at the request of the Client.

5.0 GENERAL SITE CONDITIONS

5.1 Site Description

The project site is located at 510 S Sugar Road in Edinburg, Hidalgo County, Texas. The project location is shown on the Project Location Map, found in the Appendix section of this report. At the time of our field operations, the subject site can be described as a developed tract of land. The general topography of the site is relatively flat sloping down to the southeast with a visually estimated vertical relief of less than 3 feet. Surface drainage is visually estimated to be poor to fair.

5.2 Site Geology

According to the Soil Survey of Hidalgo County, Texas, published by the United States Department of Agriculture – Soil Conservation Service, the project site appears to be located within the Hidalgo soil association.

- The Hidalgo series consist of nearly level to gently sloping soil. Boundaries commonly coincide with the outer limits of subdivisions, built up areas, and cities. Slopes range from 0 to 3 percent. Areas are broad and irregular in shape and range from 10 to 900 acres or more. The corresponding soil symbol is 31, Hidalgo-Urban land complex.

5.3 Subsurface Conditions

On the basis of our borings, three (3) generalized strata that possess similar physical and engineering characteristics can describe the subsurface stratigraphy at this site. Table 5.1 summarizes the approximate strata range in our boring logs. These were prepared by visual classification and were aided by laboratory analyses of selected soil samples. The lines designating the interfaces between strata on the boring logs represent approximate boundaries. Transitions between strata may be gradual details for each of the borings can be found on the boring logs in the appendix of this report.

Table 5.1. Approximate Subsurface Stratigraphy Depths.

Stratum	Range in Depth, ft[1]	Stratum Description[1]
I[2]	0 – 2	sandy lean CLAY, brow, dry, med. stiff to stiff
II[2]	2 – 10	sandy fat CLAY to fat CLAY, brown, dry to moist, stiff to very hard
III[3]	0 – 10	sandy lean CLAY to lean CLAY, brown, dry, soft to stiff

Note 1: The stratum thickness and depths to strata interfaces are approximate. Our measurements are rounded off to the nearest foot increment and are referenced from ground surface at the time of our drilling activities. Subsurface conditions may vary between the boring locations.
Note 2: Stratum I & Stratum II were only encountered in bores B-1 & B-2.
Note 3: Stratum III was only encountered in bore B-3.

5.4 Groundwater Conditions

The dry auger drilling technique was used to complete the soil borings in an attempt to observe the presence of subsurface water. During our drilling operations we did not encounter the groundwater table below natural ground elevation for short term conditions. Moisture content test exhibited high moisture content at four (4) feet below natural ground elevation. Table 5.2 summarizes the approximate groundwater and cave in depths measured in our explorations. It should be noted that the groundwater level measurements recorded are accurate only for the specific dates on which measurement were obtained and does not show fluctuations throughout the year.

Fluctuations in Groundwater levels are influenced by variations in rainfall and surface water run-off from season to season. The construction process itself may also cause variations in the groundwater level. If the subsurface water elevation is critical to the construction process the contractor should check the subsurface water conditions just prior to construction excavation activities.

Table 5.2. Approximate Groundwater and Cave-in Depths.

Boring No.	Depth to Subsurface Water, Ft[1]	Depth to Cave-In, Ft[1]
	Time of Drilling	Time of Drilling
B-1	None	10
B-2	None	10
B-3	None	10

Note 1: Subsurface water levels and cave-in depths have been rounded to the nearest foot.

Based on the findings in our borings and on our experience in this region, we believe that groundwater seepage may not be encountered during site earthwork activities. If groundwater seepage is encountered during site earthwork activities, it may be controlled

using temporary earthen berms and/or conventional sump-and-pump dewatering methods.

5.5 Top Soil Evaluation for the Natural Turf Areas

Bulk Samples were taken at four (4) locations in order to perform an analysis of the available macronutrients and micronutrients within the soil samples for the TPSL® Soil Test for Turfgrass, Lawns & Athletic Fields. The locations are denoted on the bore location map presented in APPENDIX B Project Maps. The tests results are presented in APPENDIX F Plant Natural Soils & Soil Composts.

6.0 LABORATORY TESTING ANALYSIS

6.1 General

The analyses presented in this report are applicable specifically to the proposed project. The data gathered from both the field and laboratory testing programs on soil samples obtained from the borings was utilized to establish geotechnical engineering parameters for the proposed project.

6.2 Moisture Content Testing

The moisture content of a soil is defined as the ratio of the weight of the water in the sample to the dry weight of the soil sample expressed as a percentage. The moisture contents for the samples obtained as part of our geotechnical study were performed in accordance with ASTM D2216. The results varied from eleven (11) percent to twenty-two (22) percent. The boring and corresponding soil samples exhibited dry to moist field moisture conditions. A list of all the moisture contents by corresponding depth can be found on the boring log.

6.3 Plasticity Index Testing

The Plasticity Index (PI) is known as the difference between the liquid limit and the plastic limit of a soil. These limits are commonly referred to as the Atterberg limits, which describe the consistency of soils with respect to their varying moisture contents. The liquid limit is defined as the moisture content at which soil begins to transition from a plastic to a liquid state, and begins to behave as a liquid material. The plastic limit refers to the water content of a soil at the point of transition from a semisolid to a plastic state where soil starts to exhibit plastic behavior. The plasticity index testing performed in accordance with ASTM D4318 shows the range in which a soil acts in a plastic state. Plasticity Index values for the soils samples performed for this report were found to have a value of nineteen (19) to fifty-four (54) percent with a moderate to high plasticity rate.

6.4 Particle Size Analysis Testing (Determination of Fines Content)

Standard grain size analysis is used to determine the relative proportions of different grain sizes as they are distributed along a range of different sized sieves. The minus 200 sieve

analysis is used commonly as a tool for soil classification and identification using the Unified Soil Classification System. Results for this test are reported as a percentage of soil passing the No. 200 sieve, which has openings 0.075mm wide. This test is also used to determine the suitability of soil for construction purposes and to estimate probable seepage through soils. Generally a %- 200 less than 50% indicates a granular non-cohesive to cohesive soil with large amounts of varying sized grains in the soil composition having high seepage potential. Sieve analysis testing was performed in accordance with ASTM D1140. The % -200 soil values for the samples collected ranged from 58% passing to 87% passing (cohesive fine grained materials such as clays).

7.0 ENGINEERING ANALYSIS AND RECOMMENDATIONS

7.1 General

The analysis and recommendations presented in this report are applicable specifically to the proposed foundation structure. The data gathered from both the field and laboratory testing programs on soil samples obtained from the borings was utilized to establish geotechnical engineering parameters to develop recommendations for the proposed structure. The foundation system(s) considered in this report to provide support for the proposed structure must meet two independent criteria. One of the criteria is that the movement below the foundation structure due to compression (consolidation) or expansion (swell) of the underlying soils must be within tolerable limits. This criterion is addressed in the Soil Related Movements section of this report. The other criterion is that the dead and live loads must be distributed appropriately and the foundation structure designed with an acceptable factor of safety to minimize the potential for bearing capacity failure of the underlying soils.

Geotechnical and structural engineers in this general area consider soil movements or Potential Vertical Rise (PVR) of approximately one (1) inch or less to be within acceptable structural design tolerances for most structures but may be different depending on structure use and the desired performance of the foundation. Therefore, movements of the underlying soils are not eliminated and thus one should expect a slab foundation structure to exhibit differential vertical movements. However, structural engineers design slab foundations for the expected magnitude of soil movements without failure of the structure. More stringent soil movement criteria may be established but the owner should consider the exponential increase in cost required to design and construct a structure for such soil movements. Data obtained in this study indicate that the soils at this site have strength characteristics capable of supporting the foundation and structure if designed appropriately. Stratum I is composed of sandy lean clay and has a moderate potential to exhibit volumetric changes (contraction and expansion). Stratum II is composed of sandy fat clay to fay clay and has a high potential to exhibit volumetric changes. Stratum III is composed of sandy lean clay to lean clay and has a moderate potential to exhibit volumetric changes. The potential for soil volumetric changes is dependent on variations in moisture contents of the underlying soils. Based on this data, this site is suitable for a slab foundation provided the subgrade is modified in accordance with the recommendations established in this report to reduce the potential for these soil volumetric changes.

7.2 Soil-Related Movements

The anticipated ground movements due to swelling of the underlying soils at this site were estimated for slab foundation construction using the Texas Department of Transportation (TxDOT) procedures of test method TEX-124-E for determining Potential Vertical Rise (PVR). A PVR value of one and a half (1 ½) inches was estimated for the stratigraphic conditions encountered in our subsurface borings. A surcharge of 1 pound per square inch for the concrete slab, an active zone of 15 feet, and dry subsurface moisture conditions were assumed in estimating the above PVR values.

The following methods are generally acceptable for use in modifying the subgrade to reduce the potential for soil movements and volumetric changes below the foundation structure.

Excavate expansive clay soils and replace with select fill.
Chemical injection of expansive clay soils.
A combination of methods 1 and 2.

The method to be used is dependent on specific site conditions. At this site the grade will most likely need to be raised to obtain the proposed Finished Floor Elevation (FFE). As of the date of this report the CLIENT/OWNER has not provided the proposed FFE. We recommend that the project civil engineer evaluate the proposed FFE with our recommendations to ensure that the subgrade modifications presented in the report are not diminished or compromised. Adding select fill is generally the most cost effective method for reducing the potential for soil related movements. Therefore, we only discuss this method in this report but we can provide details for the other methods if requested.

Based on the data obtained, the assumed FFE of two (2) feet above natural ground elevation, information provided by our client and our analysis of the site, we recommend the following modification (Table 6.1. Subgrade Modifications) of the subgrade at this area to accomplished finish floor elevation of the subgrade at this site. This method will maintain the potential for soil related movements to an approximate PVR value of less than one (1) inch, which is generally desired for projects of this type.

Table 7.1. Subgrade Modifications (Tennis Courts)

Item	Description
1	See and adhere to the Site Preparation Recommendations section of this report.
2	Excavate existing soils to a depth of one and a half (1 ½) feet below natural ground elevation in accordance with the Site Preparation Recommendations section of this report.
3	Condition and compact twelve (12) inches of subgrade below excavated soils in accordance with the Site Preparation Recommendations section of this report.
4	Place **select fill,** (a minimum of one and a half (1 ½) feet above natural ground, for a total of three (3) feet select fill) condition and compact up to the proposed FFE in accordance with the Select Fill Recommendations section of this report.

The PVR method of estimating expansive, soil-related movements is based on empirical correlations utilizing the measured plasticity indices and assuming typical seasonal fluctuations in moisture content. If desired, other methods of estimating expansive, soil-related movements are available, such as estimations based on swell tests and/or soil-suction analyses. However, the performance of these tests and the detailed analyses of expansive, soil-related movements were beyond the scope of the current study. It should also be noted that actual movements can exceed the calculated PVR values as a result of isolated changes in moisture content (such as leaks, landscape watering, etc.) or if water seeps into the soils to greater depths than the assumed active zone depth due to deep trenching and/or excavations.

7.3 Conventional Shallow Slab-on-Grade Foundation Design Criteria

As indicated previously a slab foundation may be used at this site in conjunction with the subgrade modifications listed under the Soils Related Movements section. We recommend the following soil bearing pressures, and dimensional criteria for the slab grade beams. These recommendations ensure proper utilization of soil bearing capacity of continuous beam sections in the slab-on-grade foundation and reduce the potential of water migration from the outside to beneath the slab foundation. For structural considerations the beams may need to be greater and should be evaluated and designed by the structural engineer. Where concentrated load areas are present the grade beams or slab may be thickened and widened to serve as spread footings. Soil bearing pressures and beam dimensional criteria are as follows:

Table 7.2. Bearing Criteria (Tennis Courts)

Grade Beams and Continuous Footings	
Minimum depth below finished grade:	24 inches
Maximum depth below finished grade:	36 inches
Maximum width:	30 inches
Maximum allowable bearing pressure:	1,800 psf
Spread Footings (square)	
Minimum depth below finished grade:	24 inches
Maximum depth below finished grade:	36 inches
Maximum width:	60 inches
Maximum allowable bearing pressure:	2,100 psf

The above-presented maximum allowable bearing pressures will provide a factor of safety of 3 with respect to the design soil strengths. For a slab foundation structure designed and constructed in accordance with the recommendations of this report, it is anticipated that total settlements will be in the order of one (1) inch or less. If lower anticipated total settlements are required for this project further mitigation may be required and MEG must be consulted for further recommendations.

Furthermore, the above design parameters are contingent upon the fill materials (if utilized) being selected and placed in accordance with the recommendations presented in the Select Fill Recommendations section of this report. Should select fill selection and placement differ from the recommendations presented herein, MEG should be informed of the deviations in order to reevaluate our recommendations and design criteria.

Excavations for slab on grade and spread footing foundations should be performed relatively clean and with an undisturbed bearing area. The bottom 6 inches of the excavation should be performed using a flat plate excavation bucket. The excavations should be neatly excavated. No foreign debris or undisturbed soil should be left in the footing bottom. Should there be any abundance of foreign debris or disturbed soil found, it may be necessary to re-assess the fill site of its bearing capacity suitability. If the bearing area is found to be disturbed, the bearing area will require preparation and compaction for the entire depth of the disturbance in accordance with the Site Preparation and/or the Select Fill sections of this report.

The bearing surface of the grade beams and spread footings should be evaluated after excavation and immediately prior to concrete placement. We recommend that footing inspections be performed by a representative of MEG. The required inspections shall include inspecting for clean, dry (The moisture content should be within limits specified by the appropriate section in this report.) and undisturbed footing bottom, depth of footing, clearances from sides and size and spacing of reinforcing steel. Test results shall comply

with the recommendations of this geotechnical report and shall be verified by an on-site representative of MEG.

Over excavation, if necessary, for compacted backfill placement below footings should extend laterally beyond all edges of the footings at least 8 inches per foot of over excavation depth below footing base elevation. The over excavation should then be backfilled up to the footing base elevation select fill placed in lifts of 8 inches or less in loose thickness and prepared and compacted in accordance with the Site Preparation and/or the Select Fill sections of this report. Equipment should not be operated and materials should not be placed or stockpiled within a horizontal distance equal to the excavation depth from the edge of the excavation. Excavations should not be placed next to existing structures or buried utilities/structures closer than a horizontal distance equal to the excavation depth unless some form of protection for the facilities is provided.

Water should not be allowed to accumulate at the bottom of the foundation excavation. Proper barriers such as berms or swales should be placed to divert any surface runoff away from excavations. To reduce the potential for groundwater seepage into the excavations and to minimize disturbance to the bearing area, we recommend that steel and concrete be placed as soon as possible after the excavations are completed, properly prepared and cleaned. Excavations should not be left open overnight.

7.4 BRAB Design Criteria for Slab-on-Grade Foundations

Table 6.3 list the values for criteria developed by the Building Research Advisory Board (BRAB) for the design of shallow slab-on-grade foundations. On the basis of stratigraphy encountered and the anticipated site modifications discussed earlier, the design criteria are as follows:

Table 7.3. BRAB Values (Tennis Courts)

For Existing Conditions	
Effective Plasticity Index	23
Climatic Rating Cw.	15
Soil Support Index, (c)	0.91
For Proposed Conditions	
Effective Plasticity Index	21
Climatic Rating Cw.	15
Soil Support Index, (c)	0.93

Note 1: Subgrade Modifications as outlined in the recommendations of this report;

7.5 Post Tension Institute Design Parameters (Tennis Courts)

The structural design procedure as recommended by the Post Tension Institute (PTI) in their design manual "Design of Post Tensioned Slabs on Ground," Third Edition dated 2004 should be used in the design. The Post Tension Institute (PTI) provides design standards for post tensioned slabs on grade. The PTI foundation parameters are selected based on the predominant soil type, type of clay, and percentage of clay. The recommended PTI foundation parameters are applicable to climate controlled soil conditions only. The soil movements are affected by non-climate related factors such as grading, drainage, irrigation, vegetation, landscaping, trees, downspouts, plumbing line leaks, construction methods, land use and other factors. Consideration of these items should be taken into account to mitigate these factors influencing soil movement. If non-climate related factors are present in the project, the CLIENT should contact MEG to evaluate the effect of non-climate related factors. Assuming that the recommendations are followed from the Subgrade Modification section of this report, the recommended foundation design parameters based on information published by the Post Tension Institute (PTI) are as follows:

Table 7.4.a. Soil Criteria, Post Tension Institute Design Parameters (Tennis Courts)[1]

Design criteria	
Predominant Soil Type	CLAY (CL-CH)
Continuous Grade Beams / Footings	1,800 psf
Thornthwaite Moisture Index (I_m)	-30
Depth to Constant Soil Suction (assumed)	14.5 feet
Constant Soil Suction (pF)	4.0
Coefficient of Slab-Subgrade Friction (u)	0.75 to 1.00
For Proposed Conditions[2]	
Edge Moisture Variation Distance (e_m)	
Center Lift (shrink)	8.7 feet
Edge Lift (swell)	4.5 feet
Differential Soil Movement (Y_m)	
Center Lift (shrink)	0.90 inches
Edge Lift (swell)	1.76 inches

Note 1: For beam dimensional criteria and depth of footings see Section 7.3 Conventional Shallow Slab Foundation Design Criteria of this report.

Note 2: Proposed condition with site preparation in accordance with Section 7.2 Soil Related Movements of this report, referencing Subgrade Modification Table.

8.0 CONSIDERATIONS DURING CONSTRUCTION

8.1 Site Grading Recommendations

Site grading plans can result in changes in almost all aspects of foundation recommendations. We have prepared the foundation recommendations based on the existing ground surface; there is a one and half (1 ½) foot surcharge addition for the stratigraphic conditions encountered at the time of our study. If site grading plans differ from existing grades by more than plus or minus 1 foot, we must be retained to review the site grading plans prior to bidding the project for construction. This will enable us to provide input for any changes in our original recommendations that may be required as a result of site grading operations or other considerations.

8.2 Site Drainage Recommendations

Drainage is one of the most important aspects to be addressed to ensure the successful performance of any foundation. Positive surface drainage should be implemented prior to, during and maintained after construction to prevent water ponding at or adjacent to the building facilities. It is recommended that the building and site design include rain gutters, downspouts and concrete gutters to channel runoff to paving or storm drains.

8.3 Site Preparation Recommendations

Building areas and all area to support select fill should be stripped of all vegetation and organic topsoil up to a minimum of 5 ft. beyond the building perimeters. After stripping, remove at least six (6) inches of on-site soil as measured from existing grade when excavation of existing subgrade is not recommended in other sections of this report. The excavated material, if free of organic and/or deleterious material, may be stockpiled for use in the non-structural areas of the site. Where excavation of the subgrade is recommended in this report, the bottom of the excavation will extend at least five (5) feet beyond the limits of the planned building perimeter including canopies and sidewalks. Exposed subgrades should be thoroughly proof rolled in order to locate and compact any weak, compressible and soft spots. Proof rolling shall be in accordance with TxDOT 2014 Specification Item 216. Proof rolling operations should be observed by the Geotechnical Engineer or his representative to document subgrade condition and preparation. Weak or soft areas identified during proof rolling or areas where large tree roots have been removed within the limits of excavation should be removed and replaced with a suitable, compacted select fill in accordance with the recommendations presented under the Select Fill Recommendations section of this report. Proof rolling operations and any excavation/backfill activities should be observed by **MEG** representatives to document subgrade preparation.

Prior to fill placement, the exposed subgrade shall be prepared based on what option is selected from the foundation and pavement recommendations. The exposed subgrade should be prepared, moisture-conditioned by scarifying to a minimum depth as recommended in the foundation and pavement recommendations and recompacting to a

minimum 98 percent of the maximum dry density as determined in accordance with ASTM D 698, moisture-density relationship. The moisture content of the subgrade should be maintained within the range of minus two (-2) percentage points below optimum to plus two (+2) percentage points above the optimum moisture content until the fill is permanently covered. The soil should be properly compacted in accordance with these recommendations and tested by **MEG** personnel for compaction as specified.

8.4 Select Fill Recommendations

Materials used for select fill shall meet the following requirements:

1. Material shall conform to TxDOT 2014 Specification Item 247, Flexible Base; Type A, Grades 1 through 3.
2. Material shall conform to TxDOT 2014 Specification Item 247, Flexible Base, Types B or C, Grades 1 through 5 with a minimum plasticity index of 7.
3. Material shall conform to TxDOT 2014 Specification Item 247, Flexible Base, Type E, Grade 4 with a plasticity index between and inclusive of 7 and 15. Type E material shall be defined as Caliche (argillaceous limestone, calcareous or calcareous clay particles) and may contain stone, conglomerate, gravel, sand or granular materials when these materials are in situ with the caliche. Flexible Base (Type E, Grade 4) shall conform to the following requirements:

Table 8.1. Type E, Grade 4 Requirements

Retained on Sq. Sieve	Percent Retained
2”	0
½”	20-60
No. 4	40-75
No. 40	70-90
Max. PI:	15
Max. Wet Ball PI:	15
Wet Ball Mill Max Amount:	50
Wet Ball Increase, Max Passing No. 40 sieve	20

4. Soils classified according to USCS as SM, SC, GM, GC, CL, ML and combinations of these soils. The soils shall be relatively free of organic matter. In addition to the USCS classification, select materials shall have a liquid limit of less than 40 and a plasticity index between and inclusive of 10 and 17.
5. Soils classified, as CH, MH, OH, OL and PT, under the USCS are not considered suitable for use as select fill materials at this site.

Select fill shall be placed in loose lifts not to exceed 8 inches (6 inches compacted) and compacted to a minimum 98 percent of the maximum dry density as determined in accordance with ASTM D 698. The moisture content of the fill shall be maintained within

the range of minus two (-2) percentage points below optimum to plus two (+2) percentage points above the optimum moisture content until the fill is permanently covered. The select fill should be properly compacted in accordance with these recommendations and tested by **MEG** personnel for compaction as specified.

8.5 Site Fill Recommendations

Site fill shall be placed in loose lifts not to exceed 8 inches (6 inches compacted) and compacted to a minimum 98 percent of the maximum dry density as determined in accordance with ASTM D 698. The moisture content of the fill shall be maintained within the range of minus two (-2) percentage points below optimum to plus two (+2) percentage points above the optimum moisture content until the fill is permanently covered. The site fill should be properly compacted in accordance with these recommendations and tested by **MEG** personnel for compaction as specified.

8.6 Back Fill Recommendations

Back fill shall be placed in loose lifts not to exceed 8 inches (6 inches compacted) and compacted to a minimum 98 percent of the maximum dry density as determined in accordance with ASTM D 698. The moisture content of the fill shall be maintained within the range of minus two (-2) percentage points below optimum to plus two (+2) percentage points above the optimum moisture content until the fill is permanently covered. The back fill should be properly compacted in accordance with these recommendations and tested by **MEG** personnel for compaction as specified.

8.7 Utility Considerations

Utilities that project through the slab-on-grade, slab-on-fill, floating floor slabs, or any other rigid unit should be designed with some degree of flexibility or with sleeves. Such features will help reduce the risk of damage to utility facilities from soil movements related to shrinkage and expansion.

8.8 Utility Trench Recommendations

Bedding and initial backfill are buried around utility lines to support and protect the utility. The secondary backfill above the initial backfill also helps protect and support the foundation and/or pavement above. To ensure that settlement is not excessive in this secondary backfill we recommend the following:

1) If possible, trench and install utilities prior to work such as lime treatment and/or compaction of subgrade or placement of other fills or bases.
2) Place, moisture condition and compact the secondary backfill in accordance with the pertinent project requirements. Within the footprint of a building pad the secondary backfill should meet the same compaction requirements for select fill. Within the footprint of a pavement structure the secondary backfill should meet the same compaction requirements for the subgrade. When compaction of the subgrade is not specified it should meet the same compaction level of the adjacent

natural ground. An alternative to compaction of secondary backfill is the use of flowable fill where secondary backfill is to be placed. If properly designed, the flowable fill can be excavated easily at a later date if necessary. No compaction and no testing is required when properly designed flowable fill is used.

8.9 Excavation, Sloping and Benching Considerations

If trenches are to extend to or below a depth of five (5) ft., the contractor or persons doing the trenching should adhere to the current Occupational Health and Safety Administration (OSHA) guidelines on trench excavation safety and protection measures. Other industry standards may be applicable. The collection of specific geotechnical data and development of a plan for trench safety, sloping, benching or various types of temporary shoring, is beyond the scope of this study.

8.10 Shallow Foundation Excavation Considerations

The Geotechnical Engineer or his representative prior to the placement of reinforcing steel and concrete should observe shallow foundation excavations. This is necessary to verify that the bearing soils at the bottom of the excavations are similar to those encountered during the subsurface soil exploration phase and that excessive loose materials and water are not present in the excavations. If soft pockets of soil are encountered in the foundation excavations, they should be removed and replaced with a compacted non-expansive fill material or lean concrete up to the design foundation bearing elevation.

8.11 Landscaping Considerations

Even though landscaping is a vital aesthetic component of any project, the owner, client and design team should be aware that placing trees or large bushes adjacent to any structure may distress the structure in the future. It is recommended that if any landscaping is to be placed adjacent to the structure in this project, it should be limited to small plants and shrubs. Trees and large bushes should be placed at a distance such that at their mature height, their canopy or “drip line” does not extend over the structures. The owner, client and design team should also be aware that if any watering is to be done in connection with the landscaping for this project it should be controlled, consistent and timely. Excessive or prolonged watering is not recommended. If watering is part of the landscaping plan, termination of watering for any extended period of time may also be detrimental to the structure. It is important that the moisture level in the subsurface soils remain constant so that shrinking and swelling of soils may be mitigated.

8.12 Perimeter Foundation Cap

We recommend that a cap of impervious fill be placed around the perimeter of the foundation to mitigate the intrusion of moisture into the soils surrounding the foundation. The top eighteen inches of fill around the foundation structure should be a low permeance clay cap to keep surface water away from the foundation. The low permeance clay cap should be sloped away from the foundation at a minimum slope of 2% and the surrounding

areas should have positive drainage. The low permeance clay shall meet the USCS classification of CL and meeting the requirements in Tables 7.2 Gradation Requirements and Table 7.3 Atterberg Limits Requirements. The low permeance clay shall be compacted to minimum of 98 percent of the maximum dry density as determined in accordance with ASTM D 698. The moisture content of the subgrade should be maintained within the range of optimum to four (4) percentage points above the optimum moisture. If plantings are intended, add 4 to 6 inches of loam on top of the clay cap.

Table 8.2. Gradation Requirements

Sieve Size	Percent Passing (by dry weight)
1/2 inch	100
No 4	70-100
No. 200	50 – 100

Table 8.3. Atterberg Limits Requirements

Test / ASTM	Requirement
Atterberg Limits D4318	LL ≤ 45 20 ≤ PI ≤ 30

9.0 PROJECT REVIEW AND QUALITY CONTROL

Each project site is unique and it is important that the appropriate design data, construction drawings, specifications, change orders and related documents be reviewed by the respective design and construction professionals participating in this project. The performance of foundations, construction building pads and/or parking areas for this project will depend on correct interpretation of our geotechnical engineering report and proper compliance of and adherence to our geotechnical recommendations and to the construction drawings and specifications.

It is important that **MEG** be provided the opportunity to review the final design and construction documents to check that our geotechnical recommendations are properly interpreted and incorporated in the design and construction documents. We cannot be responsible for misinterpretations of our geotechnical recommendations if we have not had the opportunity to review these documents. This review is an additional service and not part of our project scope.

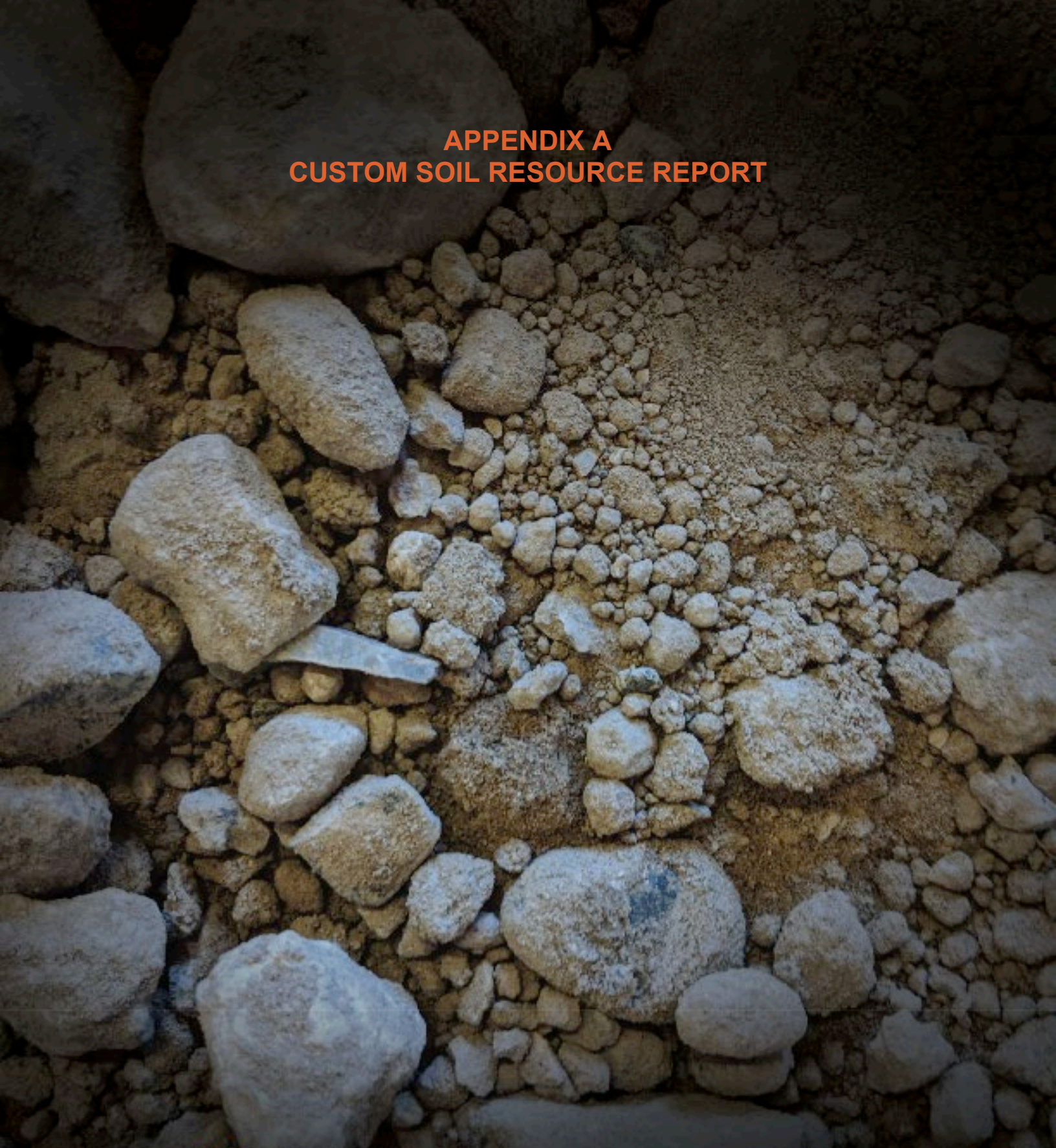
MEG should be retained to provide construction materials testing and observation services during all phases of the construction process of this project. As the Geotechnical Engineer of Record, it is important to let our technical personnel provide these services to make certain that our recommendations are interpreted properly and to ensure that actual field conditions are those described in our geotechnical report. Since our personnel are familiar with this project, **MEG**'s participation during the construction phase of this project would help mitigate any problems resulting from variations or anomalies in

subsurface conditions, which are among the most prevalent on construction projects and often lead to delays, changes, costs overruns, and disputes. If the client does not follow all of our recommendations presented in this report and/or addendums to this report, the client assumes the responsibility and liability of such actions and will hold our firm harmless and without responsibility and liability for client's actions.

A construction testing frequency plan and budget needs to be developed for the required construction materials engineering and testing services for this project. Before construction, we recommend that **MEG**, the project design team members and the project general contractor meet and jointly develop the testing plan and budget, as well as review the testing specifications as it pertains to this project. **A failure to implement a complete testing plan will negate the recommendations provided in this report.**

MEG looks forward to the opportunity to provide continued support on this project.

APPENDIX A
CUSTOM SOIL RESOURCE REPORT



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Soil Map—Hidalgo County, Texas
(01-24-29128 Proposed World Scholars Edinburg)

Map Scale: 1:2,340 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 30 60 120 180

Feet
0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hidalgo County, Texas
Survey Area Data: Version 22, Sep 5, 2023

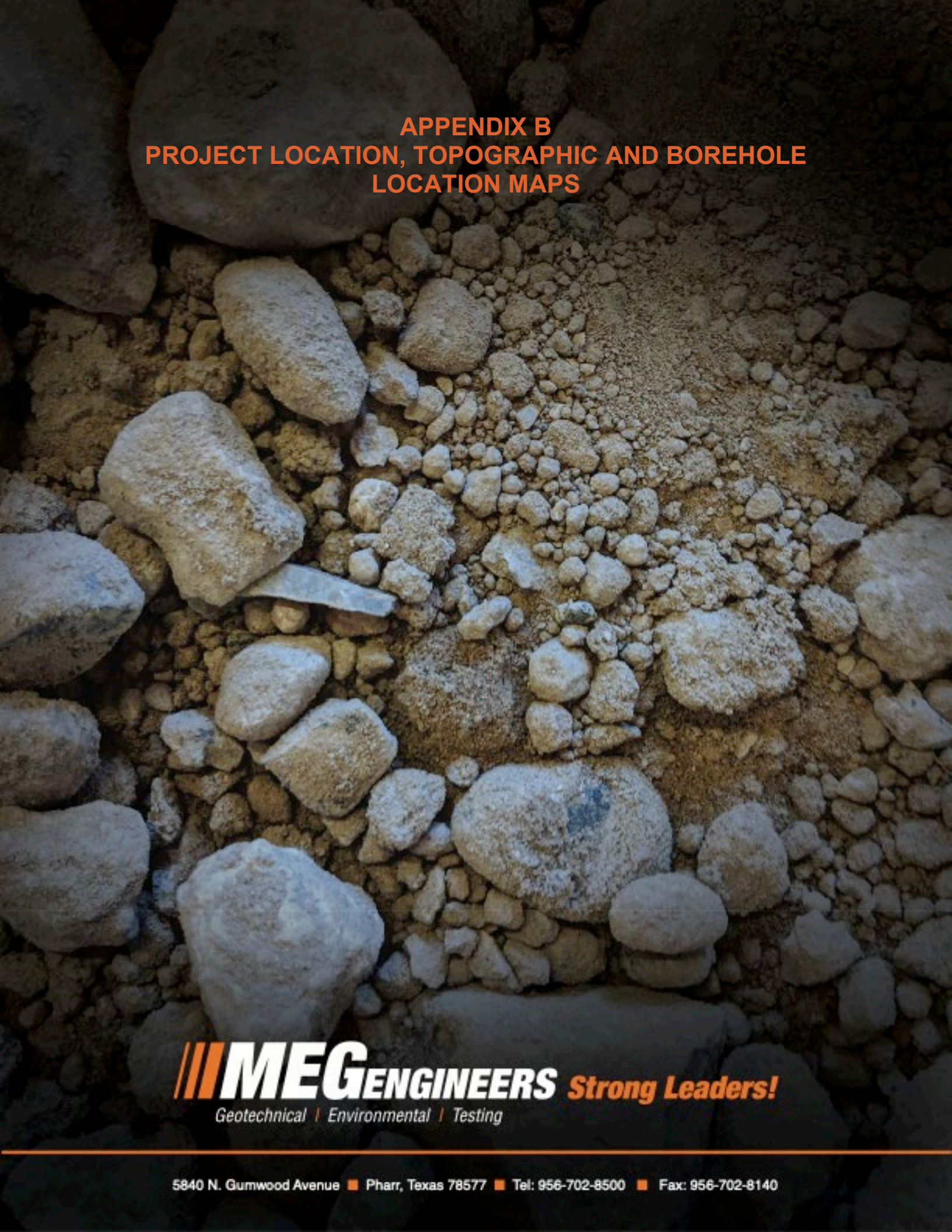
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 7, 2021—Jan 14, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
31	Hidalgo-Urban land complex, 0 to 1 percent slopes	20.5	100.0%
Totals for Area of Interest		**20.5**	**100.0%**



APPENDIX B
PROJECT LOCATION, TOPOGRAPHIC AND BOREHOLE LOCATION MAPS

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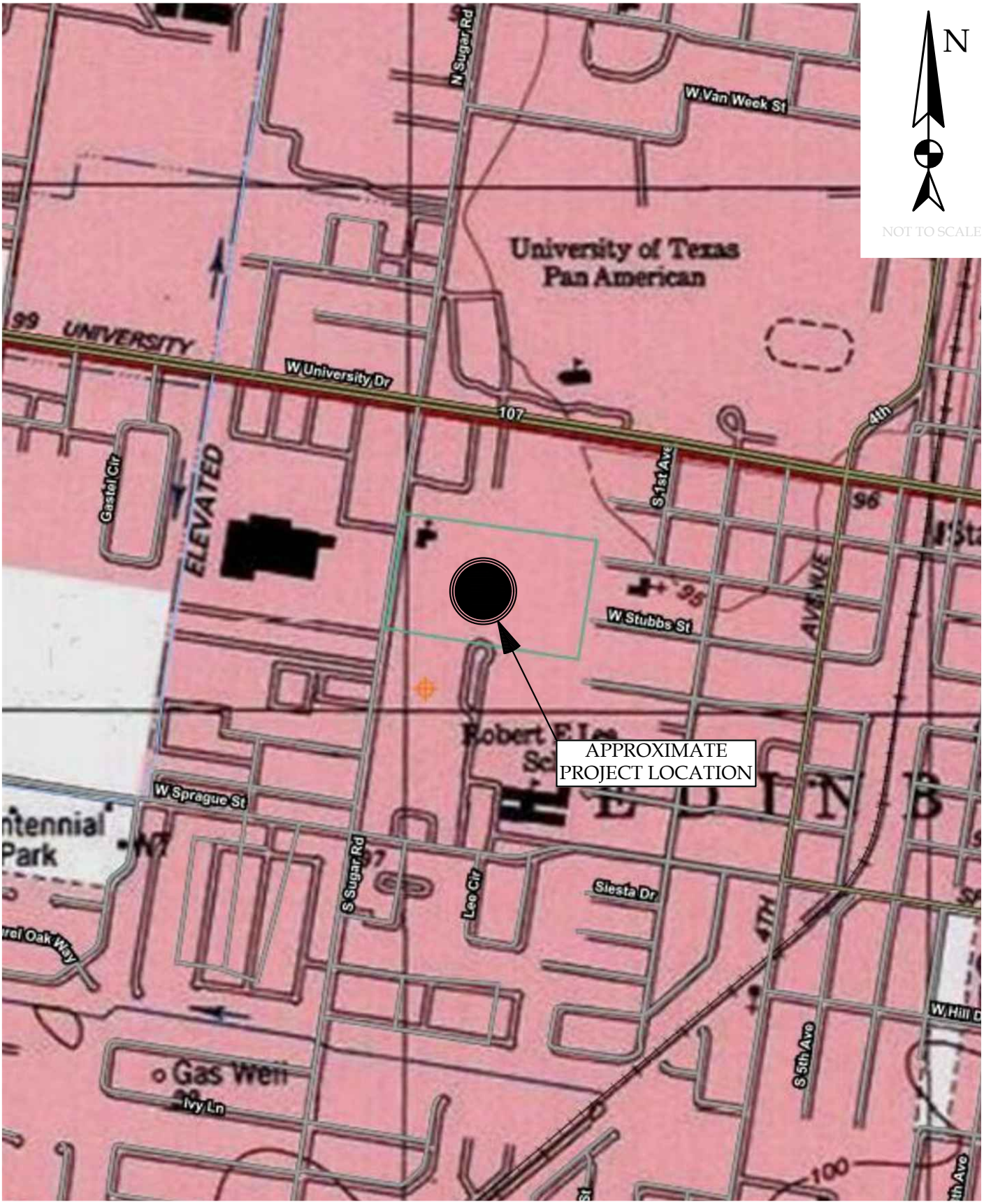
PROJECT SITE LOCATION MAP

PROPOSED
WORLD SCHOLARS EDINBURG

EDINBURG, HIDALGO COUNTY, TEXAS

MILLENNIUM ENGINEERS GROUP, INC.
5804 N. GUMWOOD AVENUE
PHARR, TEXAS 78577
WWW.MEGENGINEERS.COM
TEL: 956-702-8500
FAX: 956-702-8140

MEG PROJECT: 01-24-29128 / DATE: 6/14/2024 / APPROVED BY: A. PALMA / DRAWN BY: L. PUENTES



PROJECT TOPOGRAPHY MAP

PROPOSED
WORLD SCHOLARS EDINBURG

EDINBURG, HIDALGO COUNTY, TEXAS

MILLENNIUM ENGINEERS GROUP, INC.
5804 N. GUMWOOD AVENUE
PHARR, TEXAS 78577
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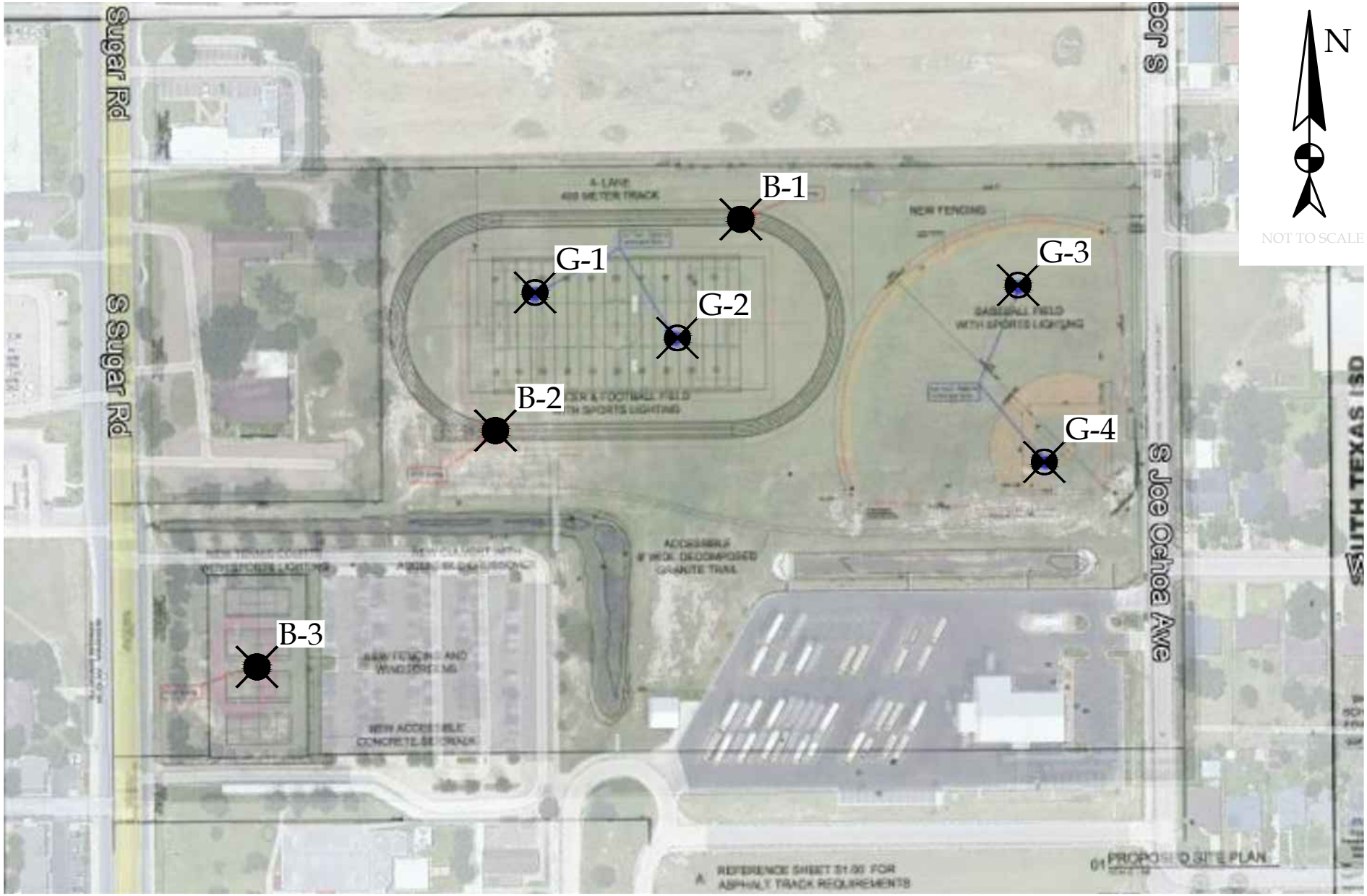
TEL: 956-702-8500
FAX: 956-702-8140

MEG PROJECT: 01-24-29128 / DATE: 6/14/2024 / APPROVED BY: A. PALMA / DRAWN BY: L. PUENTES



PROJECT BOREHOLE LOCATION MAP

PROPOSED
WORLD SCHOLARS EDINBURG

EDINBURG, HIDALGO COUNTY, TEXAS

MILLENNIUM ENGINEERS GROUP, INC.
5804 N. GUMWOOD AVENUE
PHARR, TEXAS 78577
WWW.MEGENGINEERS.COM
TEL: 956-702-8500
FAX: 956-702-8140

BOREHOLE DEPTH

= 10'

= 12"

MEG PROJECT: 01-24-29128 / DATE: 6/14/2024 / APPROVED BY: A. PALMA / DRAWN BY: L. PUENTES

APPENDIX C
PROJECT BORING LOGS AND PROFILE

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Project: **Proposed World Scholars Edinburg**
Project Location: **Edinburg, Hidalgo County, Texas**
Project Number: **01-24-29128**

Log of Boring B-1
Sheet 1 of 1

Date(s) Drilled **5/23/2024**	Logged By **Ayme Guerrero**	Checked By **Raul Palma**
Drilling Method **Straight Flight**	Drill Bit Size/Type **4" soil bit**	Total Depth of Borehole **10 feet bgs**
Drill Rig Type **Simco 2800**	Drilling Contractor **MEG Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **SPT**	Hammer Data **140 lb., 30 in. drop, auto trip**
Borehole Backfill **Subgrade Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	LL, %	PI, %	Percent Fines	UC, ksf
	0				CL		sandy lean CLAY, brown, dry, med. stiff to stiff					
	1		1	12				11	46	31		
	2				CH		sandy fat CLAY to fat CLAY, brown, dry to moist, stiff to very hard					
	3		2	21				15			77	
	4											
	5		3	12				19				
	6											
	7		4	14				21				
	8											
	9		5	11				20	59	42	58	
	10						BORE TERMINATION					
	11											
	12											
	13											
	14											
	15											
	16											
	17											
	18											
	19											
	20											
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	29											
	30											

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Project: **Proposed World Scholars Edinburg**

Project Location: **Edinburg, Hidalgo County, Texas**

Project Number: **01-24-29128**

Log of Boring B-2

Sheet 1 of 1

Date(s) Drilled **5/23/2024**	Logged By **Ayme Guerrero**	Checked By **Raul Palma**
Drilling Method **Straight Flight**	Drill Bit Size/Type **4" soil bit**	Total Depth of Borehole **10 feet bgs**
Drill Rig Type **Simco 2800**	Drilling Contractor **MEG Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **SPT**	Hammer Data **140 lb., 30 in. drop, auto trip**
Borehole Backfill **Subgrade Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	LL, %	PI, %	Percent Fines	UC, ksf
	0				CL		sandy lean CLAY, brown, dry, med. stiff to stiff					
	1		1	6				19			62	
	2				CH		sandy fat CLAY to fat CLAY, brown, dry to moist, stiff to very hard					
	3		2	13				20	51	38		
	4											
	5		3	12				19			80	
	6											
	7		4	22				20	70	54		
	8											
	9		5	14				21				
	10						BORE TERMINATION					
	11											
	12											
	13											
	14											
	15											
	16											
	17											
	18											
	19											
	20											
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	26											
	27											
	28											
	29											
	30											

Project: **Proposed World Scholars Edinburg**

Project Location: **Edinburg, Hidalgo County, Texas**

Project Number: **01-24-29128**

Log of Boring B-3

Sheet 1 of 1

Date(s) Drilled **5/23/2024**	Logged By **Ayme Guerrero**	Checked By **Raul Palma**
Drilling Method **Straight Flight**	Drill Bit Size/Type **4" soil bit**	Total Depth of Borehole **10 feet bgs**
Drill Rig Type **Simco 2800**	Drilling Contractor **MEG Drilling**	Approximate Surface Elevation
Groundwater Level and Date Measured **Not Encountered**	Sampling Method(s) **SPT**	Hammer Data **140 lb., 30 in. drop, auto trip**
Borehole Backfill **Subgrade Cuttings**	Location **See Boring Location Map**	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	LL, %	PI, %	Percent Fines	UC, ksf
	0				CL		sandy lean CLAY to lean CLAY, brown, dry, soft to stiff					
	1		1	4				15	32	19		
	2											
	3		2	7				22			61	
	4											
	5		3	7				21	36	23		
	6											
	7		4	11				19				
	8											
	9		5	13				19			87	
	10						BORE TERMINATION					
	11											
	12											
	13											
	14											
	15											
	16											
	17											
	18											
	19											
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	24											
	25											
	26											
	27											
	28											
	29											
	30											

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Project: **Proposed World Scholars Edinburg**
Project Location: **Edinburg, Hidalgo County, Texas**
Project Number: **01-24-29128**

Key to Log of Boring

Sheet 1 of 1

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	Material Type	Graphic Log	MATERIAL DESCRIPTION	Water Content, %	LL, %	PI, %	Percent Fines	UC, ksf
1	2	3	4	5	6	7	8	9	10	11	12	13

COLUMN DESCRIPTIONS

1 Elevation (feet): Elevation (MSL, feet).
2 Depth (feet): Depth in feet below the ground surface.
3 Sample Type: Type of soil sample collected at the depth interval shown.
4 Sample Number: Sample identification number.
5 Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
6 Material Type: Type of material encountered.
7 Graphic Log: Graphic depiction of the subsurface material encountered.
8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.
9 Water Content, %: Water content of the soil sample, expressed as percentage of dry weight of sample.
10 LL, %: Liquid Limit, expressed as a water content.
11 PI, %: Plasticity Index, expressed as a water content.
12 Percent Fines: The percent fines (soil passing the No. 200 Sieve) in the sample. WA indicates a Wash Sieve, SA indicates a Sieve Analysis.
13 UC, ksf: Unconfined compressive strength, in kips per square foot.

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity
COMP: Compaction test
CONS: One-dimensional consolidation test
LL: Liquid Limit, percent
PI: Plasticity Index, percent
SA: Sieve analysis (percent passing No. 200 Sieve)
UC: Unconfined compressive strength test, Qu, in ksf
WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS

Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)

Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler
Bulk Sample
3-inch-OD California w/ brass rings
CME Sampler
Grab Sample
Hand auger sampler
2.5-inch-OD Modified California w/ brass liners
Pitcher Sample
2-inch-OD unlined split spoon (SPT)
Texas Cone Penetrometer
Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

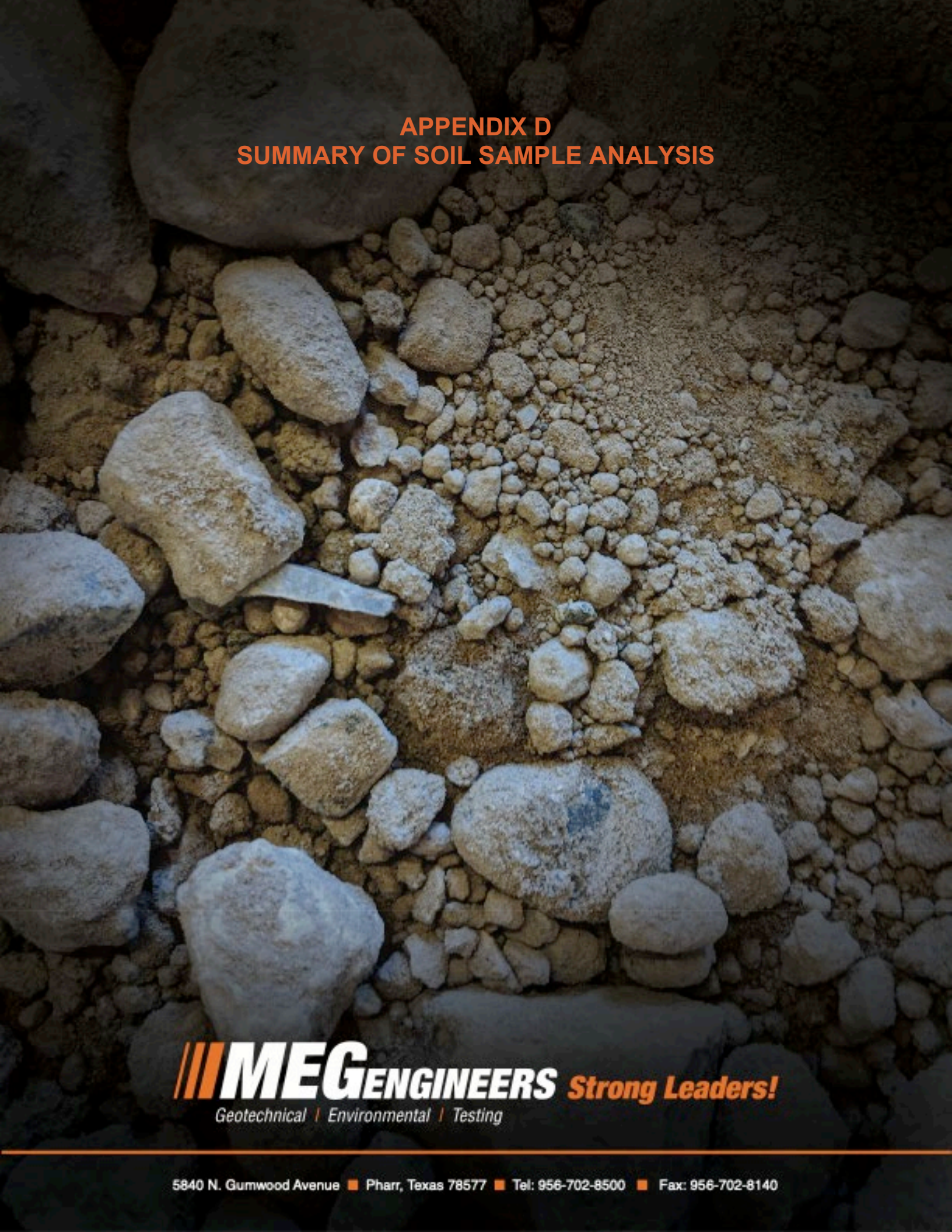
Water level (at time of drilling, ATD)
Water level (after waiting, AW)
Minor change in material properties within a stratum
Inferred/gradational contact between strata
Queried contact between strata

GENERAL NOTES

1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

MEG ENGINEERS

Figure B-1



APPENDIX D
SUMMARY OF SOIL SAMPLE ANALYSIS

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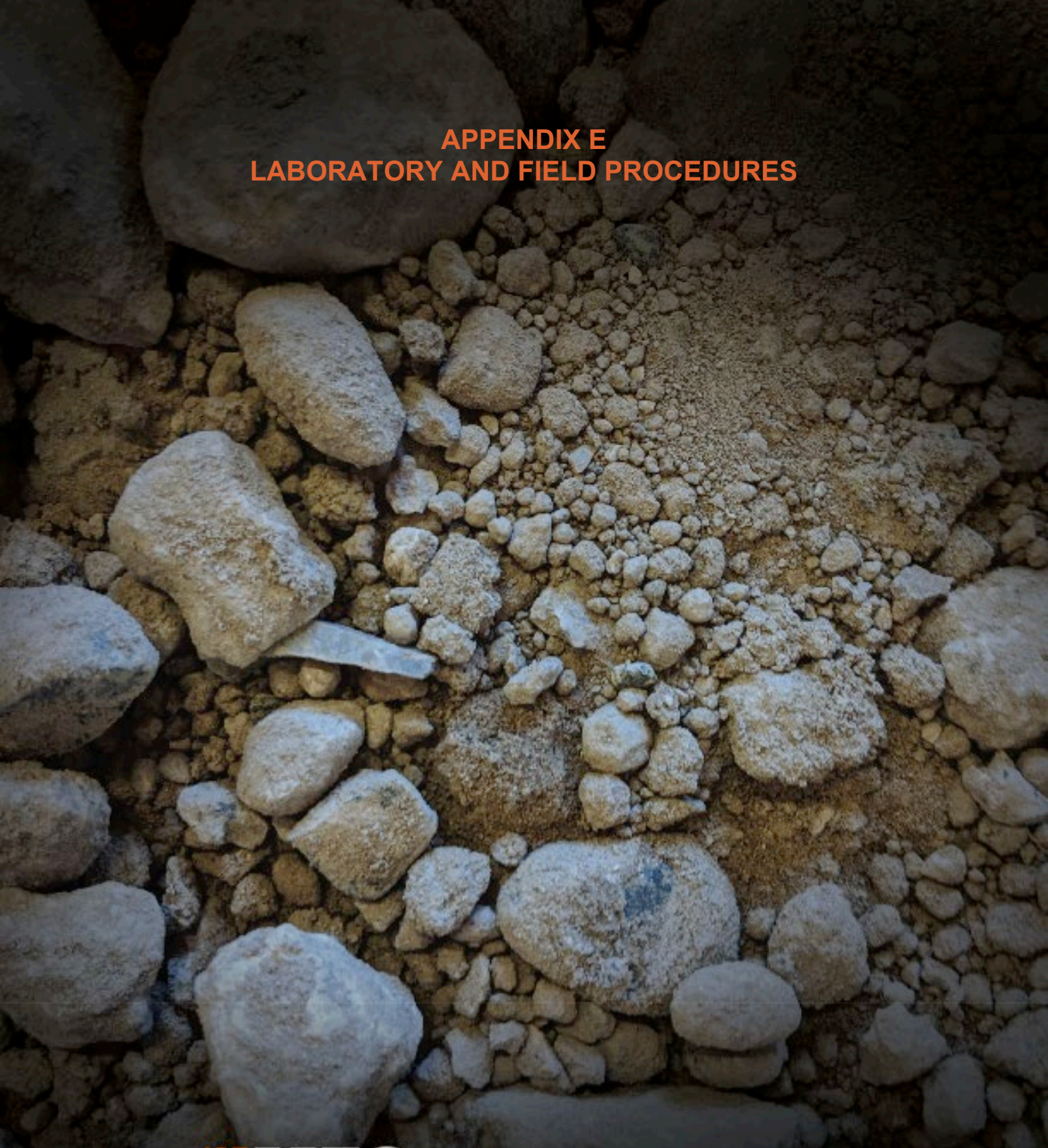
Summary of Soil Sample Analyses

Project Name: Proposed South Texas ISD World Scholars New Sports Fields

Boring No.	Sample Depth (ft)	Blows Per (ft)	Moisture Content	Liquid Limit	Plastic Limit	Plasticity Index	-200% Sieve	Shear Strength (tsf)	Dry Unit Weight (pcf)	USCS
B-1	.5 - 2	12	11	46	15	31				CL
	2.5 - 4	21	15				77			
	4.5 - 6	12	19							
	6.5 - 8	14	21							
	8.5 - 10	11	20	59	16	42	58			CH
B-2	.5 - 2	6	19				62			
	2.5 - 4	13	20	51	14	38				CH
	4.5 - 6	12	19				80			
	6.5 - 8	22	20	70	16	54				CH
	8.5 - 10	14	21							
B-3	.5 - 2	4	15	32	13	19				CL
	2.5 - 4	7	22				61			
	4.5 - 6	7	21	36	12	23				CL
	6.5 - 8	11	19							
	8.5 - 10	13	19				87			

APPENDIX E
LABORATORY AND FIELD PROCEDURES



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5840 N. Gumwood Avenue ■ Pharr, Texas 78577 ■ Tel: 956-702-8500 ■ Fax: 956-702-8140

Laboratory and Field Test Procedures

Soil Classification Per ASTM D2487-93:

This soil-testing standard was used for classifying soils according to the Unified Soil Classification System. The soil classifications of the earth materials encountered are as noted in the attached boring logs.

Soil Water Content Per ASTM D2216-92:

This test determines the water content of soil or rock expressed as a percentage of the solid mass of the soil. The test results are listed under **MC** in the attached boring logs.

Soil Liquid Limit Per ASTM D4318-93:

The soil Liquid Limit identifies the upper limit soil water content at which the soil changes from a moldable (plastic) physical state to a liquid state. The Liquid Limit water content is expressed as a percentage of the solid mass of the soil. The test results are listed under **LL** in the attached boring logs.

Soil Plastic Limit Per ASTM D4318-93:

The soil Plastic Limit identifies lower limit soil water content at which the soil changes from a moldable (plastic) physical state to a non-moldable (semi-solid) physical state. The Plastic Limit water content is expressed as a percentage of the solid mass of the soil. The test results are listed under **PL** in the attached boring logs.

Plasticity Index Per ASTM D4318-93:

This is the numeric difference between the Liquid Limit and Plastic Limit. This index also defines the range of water content over which the soil-water system acts as a moldable (plastic) material. Higher Plasticity Index (PI) values indicate that the soil has a greater ability to change in soil volume or shrink and swell with lower or higher water contents, respectively. The test results are listed under **PI** in the attached boring logs.

Standard Penetration Test (SPT) and Split Spoon Sampler (SS) per ASTM D 1586:

This is the standard test method for both the penetration test and split-barrel (spoon) sampling of soils. This sampling method is used for soils or rock too hard for sampling using Shelby Tubes. The method involves penetration of a split spoon sampler into the soil or rock through successive blows of a 140-pound hammer in a prescribed manner.

Blow Counts (N) per ASTM D 1586:

This is the number of blows required to drive a Split Spoon Sampler by means of a 140 pound hammer for a distance of 12 inches in accordance with the variables stated in the test procedures.

Shelby Tube (ST) per ASTM D 1587:

This procedure is for using a thin-walled metal tube to recover relatively undisturbed soil samples suitable for laboratory tests of physical properties.

Dry Density (DD) per ASTM D 2937:

This procedure is for the determination of in-place density of soil. The test results are measured in pounds per cubic foot, pcf.

Unconfined Compression Test (Uc) per ASTM D 2166:

This test method covers the determination of the unconfined compressive strength of cohesive soil in the undisturbed, remolded, or compacted condition, using strain-controlled application of the axial load.

Minus No. 200 Sieve per ASTM D 1140:

This test method covers determination of the amount of material finer than a Number 200 sieve by washing. The results are stated as a percent of the total dry weight of the sample.

Pocket Penetrometer (PP):

This test method is an accepted modification of ASTM D 1558 test method for establishing the moisture-penetration resistance relationships of fine-grained soils. The test results are measured in tons per square foot, tsf. The strength values provided by this method should be considered qualitatively.

Rock Quality Designation (RQD):

The measure of the quality of a rock mass defined by adding intact rock core pieces greater than four inches in length by the total length of core advance.

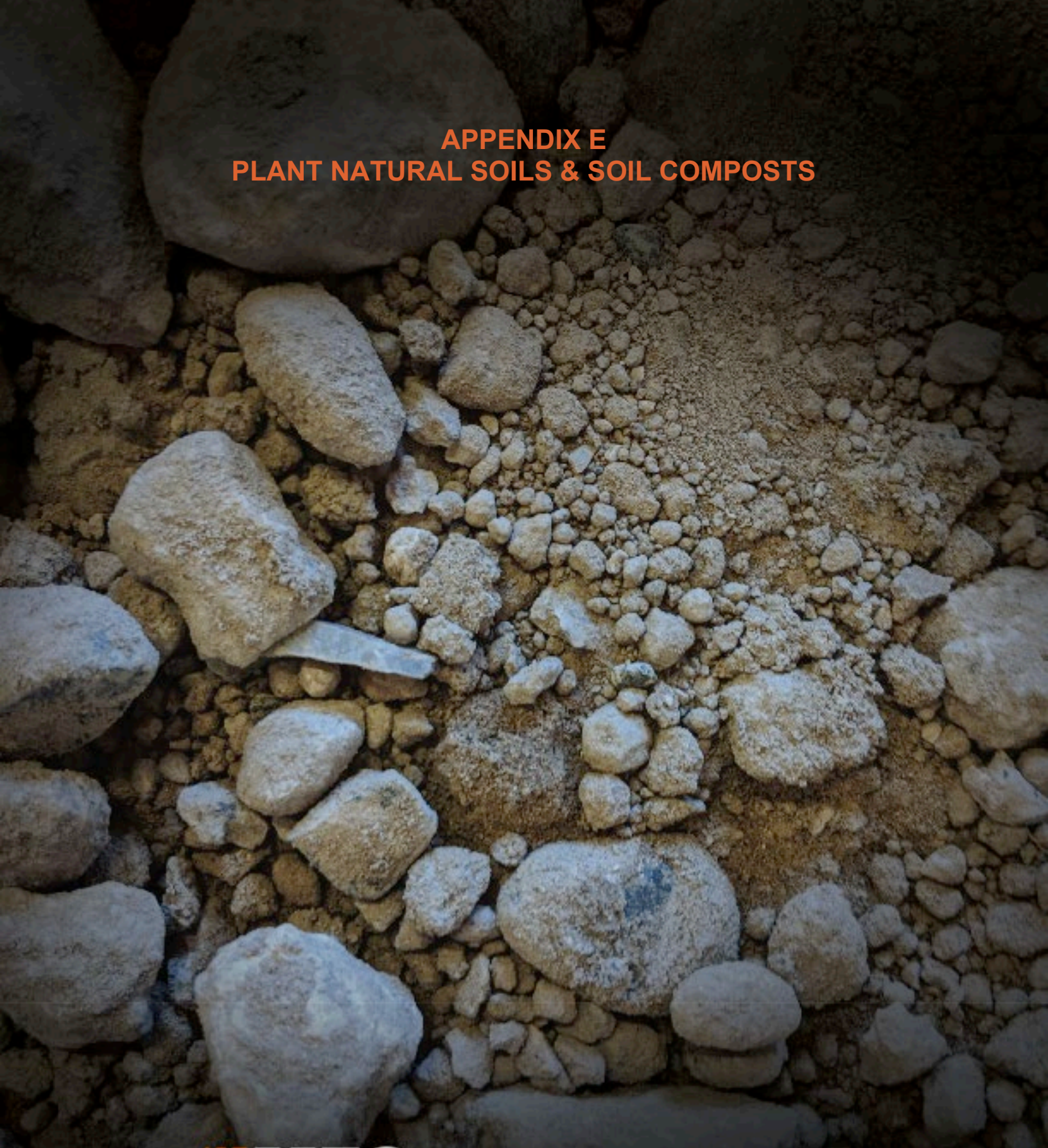
Recovery Ratio (REC):

The Recovery Ratio is equal to the total length of core recovered divided by the total length of core advance.

Boring Logs:

This is a summary of the above-described information at each boring location.

APPENDIX E
PLANT NATURAL SOILS & SOIL COMPOSTS



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Client #: 4564

Lab #: 73380 - 73383

Client: Millennium Engineers Group, Inc
Leticia Puentes
Field: World Scholars Edinburg, Texas
Crop: Grasses-Turf ,
Date: June 7, 2024

PLANT NATURAL®
Soil & Compost Tests

Low	Marginal
Optimal	High

TPSL
Your Crop's Dieticians®
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Edinburg, Texas 78541
956-383-0739
TPSLab.com • AskThePlant.com

* *Carbon Dioxide (CO2) Mimics plant roots natural extraction*

Sample Identification		Refer to guide Text.	Free Lime CO_3	Percent - (%) Organic Matter Total	Organic Matter Active	pH Std Unit	Salts E.C. mmhos/cm	Ammonium NH_4-N lbs/ac	Nitrate NO_3-N lbs/ac	Phosphate P_2O_5 lbs/ac	Parts Per Million (ppm) Potassium K H_2O	K CO_2 *	Sodium Na H_2O	Na CO_2 *	Calcium Ca H_2O	Ca CO_2 *	Magnesium Mg H_2O	Mg CO_2 *	Water Soluble - W.S. Bicarbonates HCO_3	Sulfates SO_4 - S	Ratios Na:Ca	Na:Mg
1	G-1	4	M		2.82	8.13	1.20		2	6	25	103	247	291	41	1329	9	113		26	7	34
2	G-2	5	M		1.23	8.02	0.71		1	4	20	75	61	63	61	1463	11	121		4	1	6
3	G-3	5	L		1.86	8.09	0.78		6	6	18	86	146	178	31	1384	7	115		5	6	24
4	G-4	5	L		4.23	7.50	13.61		85	12	127	137	445	506	1478	2238	157	160		67	0	3
	Optimal-General			2.8-4.8	2.8-4.8	6.3-6.8	0.18-1.00		35-90	50-100	75-100	80-125	< 100	< 175	60-120	300-800	13-20	60-100	< 150	25-55	2 - 6	5 - 8

SALT CATIONS:** **H_2O** = ***Immediately Available (water soluble extract); **CO_2** [Plants' roots give off CO_2] = ***Available Reserve*** (carbonic acid extract). Plant Natural™ Extraction calibrates well to plant uptake (availability). These values are the nutrients available in the sample provided to our lab. Availability ratings have been calibrated by multiple plant analyses (crop logging) during a growing season by numerous crops on hundreds of fields both domestic and foreign. TPS Lab is guided by ***ASK THE PLANT***® with precision sampling and lab methods. Was this a **COMPOSITE SAMPLE**, representative of your plants' major root zone provided? Rev032118

Sample Identification		Parts Per Million (ppm) MICRONUTRIENTS - DTPA Extraction Zinc Zn	Iron Fe	Manganese Mn	Copper Cu	Cobalt Co	Molybdenum Mo	Selenium Se	Nickel Ni	Hot Water Boron B	Calcium Chloride Silicon Si	Aluminum Al	W.S. Chlorides Cl	Solvita Burst $C\text{-}CO_2$	SLAN
1	G-1	0.59	8.18	5.80	1.01					0.96					
2	G-2	0.52	9.44	6.62	0.95					1.05					
3	G-3	0.85	7.36	5.36	0.93					1.93					
4	G-4	1.00	6.73	3.27	0.83					1.70					
	Optimal-General	3.10 - 6.10	11.10 - 18.10	10.10 - 15.10	2.60 - 3.60	15.00 - 40.00	1.50 - 2.00	1.50 - 2.00	5.00 - 7.00	1.30 - 2.00	60 - 100	< 6	20 - 200	> 82	

Client #: 4564

Lab #: 73380 - 73383

Client: Millennium Engineers Group, Inc
Leticia Puentes
Field: World Scholars Edinburg, Texas
Crop: Grasses-Turf ,
Date: June 7, 2024

PLANT NATURAL® Soil & Compost Tests

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4915 West Monte Cristo Road
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		Most crop nutrient removal rates are from International Plant Nutrition Institute.						These fertilizer guidelines are ANNUAL RATES to be applied in multiple split applications over the entire growing season.																
Sample Identification		Plant Removal Rates		Total Nutrient Plant Uptake lbs/1000 sqft				Fertilizer Guidelines For Maximum Economic Yields Recommendations lbs/1000 sqft											Ounces per Acre					
		Plant/Crop	Yield	N	P_2O_5	K_2O	Mg	Gypsum	Lime	Sulfur	N	P_2O_5	K_2O*	Mg	Zn♦	Fe♦	Mn♦	Cu♦	B♦	Co	Mo	Se	Ni	Si
1	G-1	Grasses-Turf	4.05 lbs	5.06	1.35	4.05	0.34			2-3X	5.24	1.62			0.14	0.05	0.07	0.07	0.02					
2	G-2	Grasses-Turf	4.05 lbs	5.06	1.35	4.05	0.34			2-3X	6.01	1.66	0.72		0.14	0.05	0.07	0.07	0.02					
3	G-3	Grasses-Turf	4.05 lbs	5.06	1.35	4.05	0.34			2-3X	5.68	1.62	0.15		0.09	0.07	0.07	0.07						
4	G-4	Grasses-Turf	4.05 lbs	5.06	1.35	4.05	0.34				3.06	1.48			0.09	0.07	0.09	0.09						

Fertilizer Recommendations (N-P-K) are adjusted to reflect efficiency of recovery by plant and Estimated Nitrogen Release from Organic Matter. ENR estimates a 60% mineralization with optimum microbial activity, moisture and temperature.

♦ Micronutrient recommendations may have to be adjusted according to method of application and chleation of products. Ask The Plant® can determine actual plant uptake of these nutrients during the growing season.

* Potassium recommendations are for a rebuilding program and should be applied in split applications over a few years. We dorecommend at least a 1:1 ratio of N:K2O each year during the rebuilding phase.

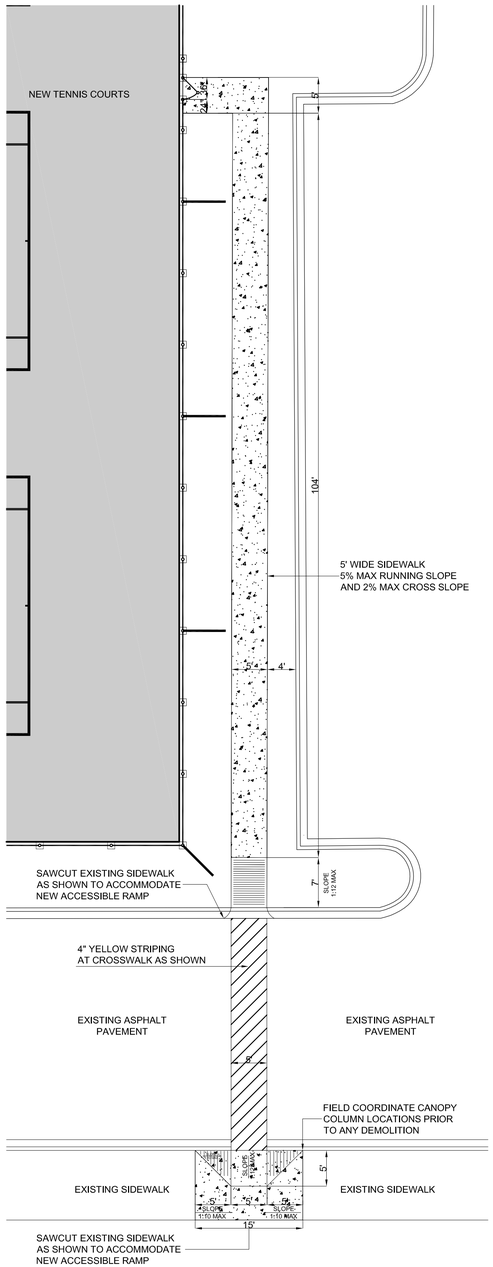
Subsoils: While most plant roots feed in the 4 to 12 inch depth, the next 12-24 inches may also be a major contributor. For the most accurate soil test recommendations, sample topsoil and subsoil separately in 12 inch increments.

A detailed write-up of interpretations and recommendations for this soil report is available upon request of item SAO-00. Refer to fee schedule for current price.

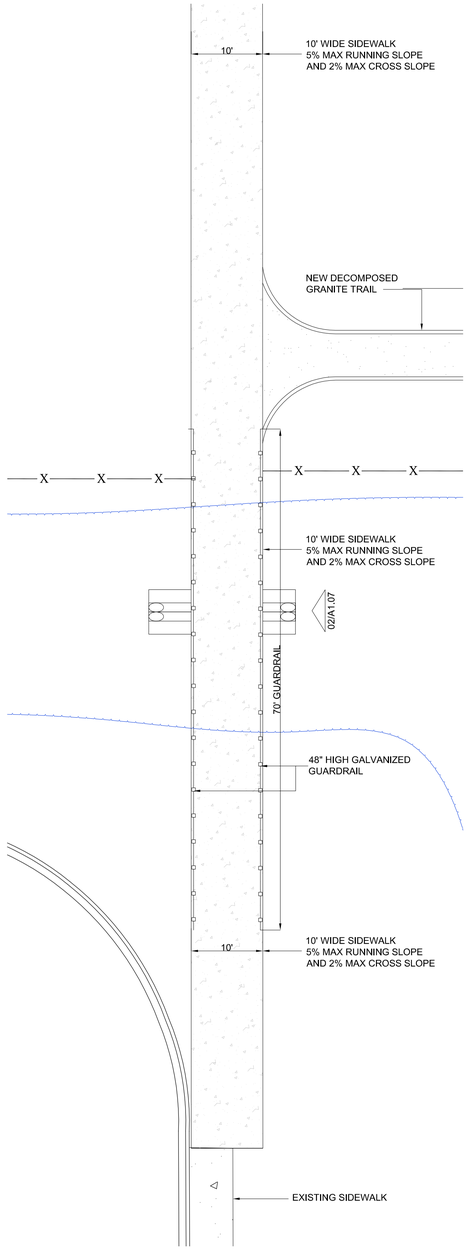
SOIL INOCULANTS - Activators (in the absence of adequate soil humus or in sterile conditions) of soil inoculants/ compost teas containing naturally occurring beneficial soil micro-organisms and/or enzymes, hormones, polymers, wetting agents and carboxyl's may improve nutrient uptake and the soil's physical condition (tilth) for better plant performance, possibly disease resistance and salt leaching. Feeding microbes with humic substances, carbohydrates, and other organic materials aid soil tilth and releases soil nutrients while helping some bacteria fix atmospheric N. [A combination of products may be best – follow product labels on your own test plots for the most effective products.]

CALCIUM - Samples 1, 2, 3, 4: SULFUR use recommended rate at least 2 or 3 times a year. (S effect lasts only 45-90 days in most cases.) Sulfur improves the physical condition (tilth) of the soil for better water and root penetration and increase nutrient availability. Sulfur activates Ca and Mg by solubilizing them to the available water (H2O) soluble form. Soluble Ca helps sodium to leach. S can also release P and Micronutrients.

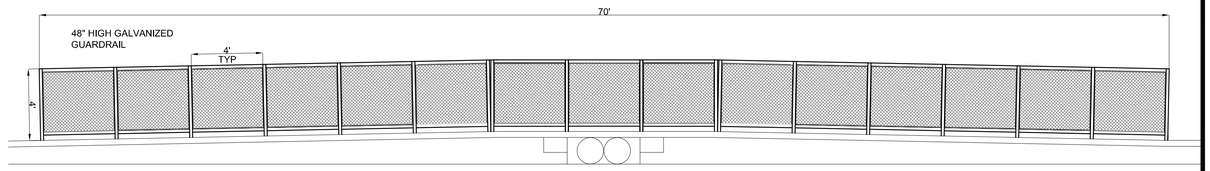
SODIUM - Samples 1, 4: Soil analysis excessively high extractable (CO2 Na) Sodium that needs soil treatment and thorough leaching of harmful Sodium. Irrigation water may be the source – a water analysis is recommended to verify. INTERNAL DRAINAGE is the major requirement for leaching salts. Take an in depth 4 foot soil profile in 1 foot increments for soil suitability determination for natural percolation or if drainage tiles are needed. An outlet is needed for drain water. Apply a Soil Inoculant (Microbes) at the label recommended rate for the 1st application + 1 qt/A Humic Acid + 1 qt/A Molasses (energy) and/or fish follow on a 4-6 week schedule with ½ or ¼ of above rates. Use Good Water Management by soaking thoroughly but as infrequently as possible to physically push salts down away from the major root zone. Deep watering can help prevent surface salt build up by leaching soluble salts from previous irrigation.



04 SITE PLAN ENLARGEMENT
SCALE : 1:10



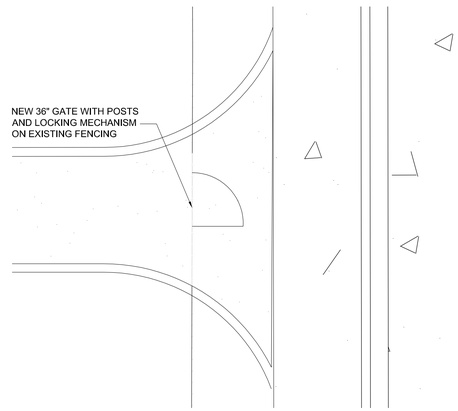
03 SITE PLAN ENLARGEMENT
SCALE : 1:10



* Factory welded rail constructed of 2" x 2" x 14 ga. square tubing and 1/2" square vertical rods welded on 4" centers.
* Extra heavy duty universal rail posts constructed of 3" x 3" x 3/16" structural tubing.

2" X 2" SQUARE INFILL MESH GALVANIZED

02 SITE PLAN ENLARGEMENT
SCALE : 1:10



01 SITE PLAN ENLARGEMENT
SCALE : 1/4"=1'-0"

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1	ADDENDUM #1 08-19-2024	IO

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texas 78526
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fax (956) 546-0196

SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

WORLD SCHOLARS
EDINBURG
CSP 25-010

REGISTERED ARCHITECT
DAVID A. MONREAL
79556
STATE OF TEXAS
03/14/2024

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: A1.07

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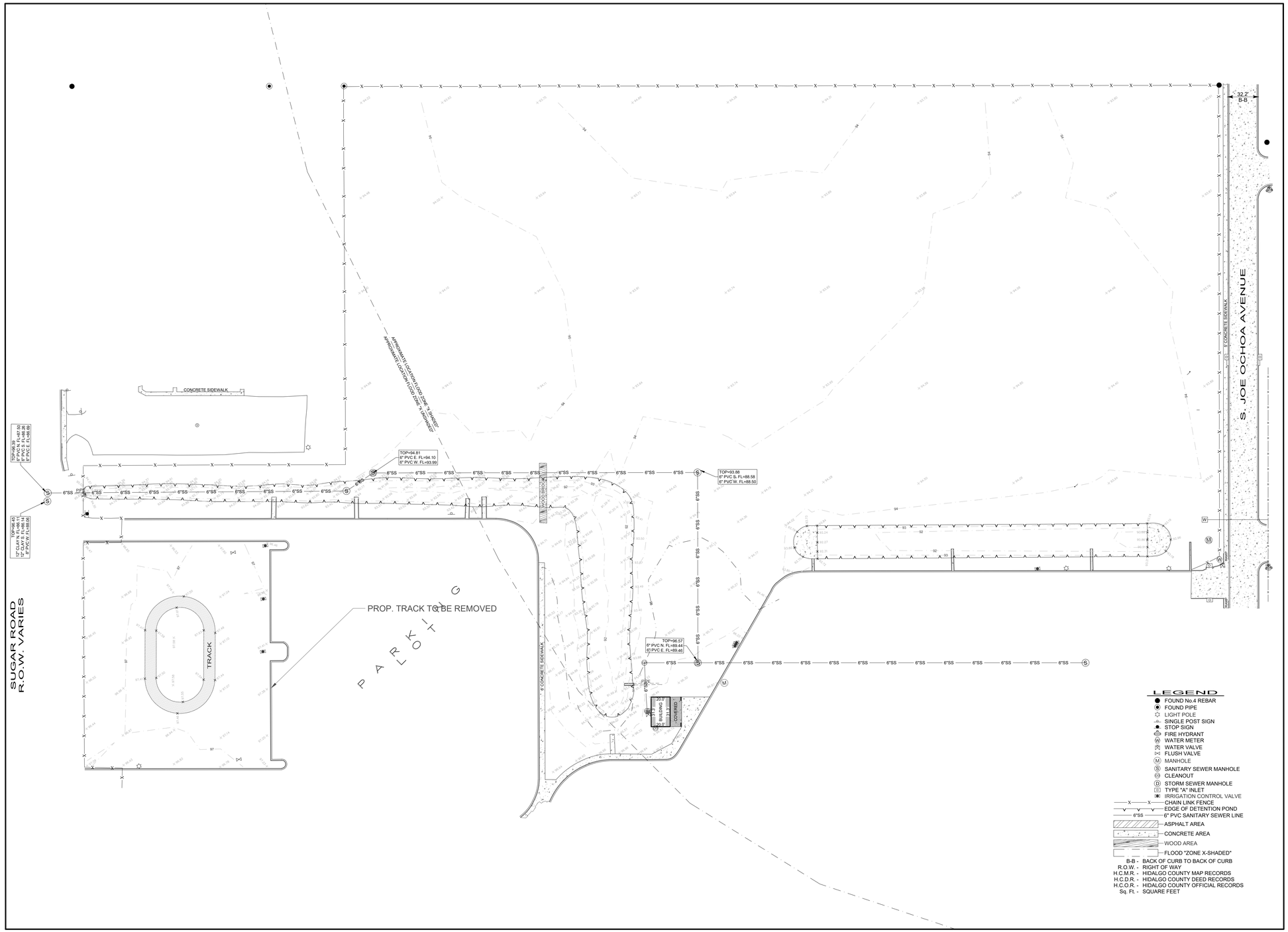

LEGEND

- FOUND No.4 REBAR
- FOUND PIPE
- LIGHT POLE
- SINGLE POST SIGN
- STOP SIGN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- FLUSH VALVE
- MANHOLE
- SANITARY SEWER MANHOLE
- CLEANOUT
- STORM SEWER MANHOLE
- TYPE "A" INLET
- IRRIGATION CONTROL VALVE
- CHAIN LINK FENCE
- EDGE OF DETENTION POND
- 6" PVC SANITARY SEWER LINE
- ASPHALT AREA
- CONCRETE AREA
- WOOD AREA
- FLOOD "ZONE X-SHADED"

B-B - BACK OF CURB TO BACK OF CURB
R.O.W. - RIGHT OF WAY
H.C.M.R. - HIDALGO COUNTY MAP RECORDS
H.C.D.R. - HIDALGO COUNTY DEED RECORDS
H.C.O.R. - HIDALGO COUNTY OFFICIAL RECORDS
Sq. Ft. - SQUARE FEET

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

EDINBURG
CSP 25-010

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

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KELLEY A. HELLER-VELA
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Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: **EXISTING CONDITIONS**

C1

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texas 78526
(956) 546-0110
fax (956) 546-0196

SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

EDINBURG
CSP 25-011

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
KELLEY A. HELLER-VELA
97421
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Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: **SITE PLAN**

C2

Y:\Miscellaneous Engineering\Educational Institutions\STISD\24036 - World Scholars - Edinburg\Autocad Files\24036-1.dwg, 6/18/2024 8:41:01 AM, DWG To PDF.pc3

PROP. TYPE "C" INLET
TOP: 94.40
FL: 91.77

PROP. TYPE "C" INLET
TOP: 94.40
FL: 91.64

PROP. 12" x 226' RCP PIPE
AT 0.05% SLOPE

PROP. 12" x 226' RCP PIPE
AT 0.05% SLOPE

PROP. TYPE "C" INLET
TOP: 94.40
FL: 91.66

PROP. TYPE "C" INLET
TOP: 94.40
FL: 91.53

PROP. 12" x 277' RCP PIPE
AT 0.05% SLOPE

PROP. 12" x 107' RCP PIPE
AT 0.05% SLOPE

PROP. TYPE "C-C" INLET
TOP: 93.50
FL: 91.31

PROP. 15" x 173' RCP PIPE
AT 0.10% SLOPE

PROP. 15" x 105' RCP PIPE
AT 0.10% SLOPE

PROP. TYPE "C-C" INLET
TOP: 93.90
FL: 91.48

PROP. TOP OF BANK TO BE
MODIFIED TO THE PROPOSED
SAFETY END TREATMENTS
AS SHOWN

FL: 91.20

FL: 91.20

PROP. DISCHARGE
STRUCTURE
FL: 91.20

PROP. 2-18" CULVERTS
UNDER SIDE WALK WITH
2-SAFETY END TREATMENT

FL: 92.90

FL: 93.30

FL: 92.40

FL: 92.00

PROP. 15" x 235' RCP PIPE
AT 0.22% SLOPE

JOE OCHOA AVENUE

6' CONCRETE SIDEWALK

PROP. TYPE "C" INLET
TOP: 94.40
FL: 91.12

PROP. 12" x 90' RCP PIPE
AT 0.15% SLOPE

PROP. TYPE "C-C" INLET
TOP: 93.95
FL: 90.99

PROP. 12" x 86' RCP PIPE
AT 0.15% SLOPE

PROP. TYPE "C" INLET
TOP: 94.40
FL: 90.87

PROP. DISCHARGE
STRUCTURE
FL: 90.80

PROP. 12" x 47' RCP PIPE
AT 0.15% SLOPE

CONCRETE SIDEWALK

SUGAR ROAD
R.O.W. VARIES

PARKING

6' CONCRETE SIDEWALK

FG: 97.00
FG: 97.25
FG: 97.00
FG: 96.90
TW: 96.85
FG: 96.90
FG: 97.15
TW: 96.65
TW: 96.75
TW: 96.65
TW: 96.75
FG: 96.80
FG: 97.00
FG: 96.80
MATCH EXIST.
TW: 96.65

BUILDING
31.3'
COVERED
20.0'
20.0'

SECTION "A-A"
N.T.S.

SCALE:1"=50'

No.	REVISIONS	BY
#1	Addendum #1	C.P.

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texas 78526
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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

EDINBURG
CSP 25-011

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

STATE OF TEXAS
KELLEY A. HELLER-VELA
97421
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Project Architect: David Monreal, AIA
Drawn By: IO
Job No.: STISD SPORTS FIELDS
Sheet:
DRAINAGE AND GRADING

C3

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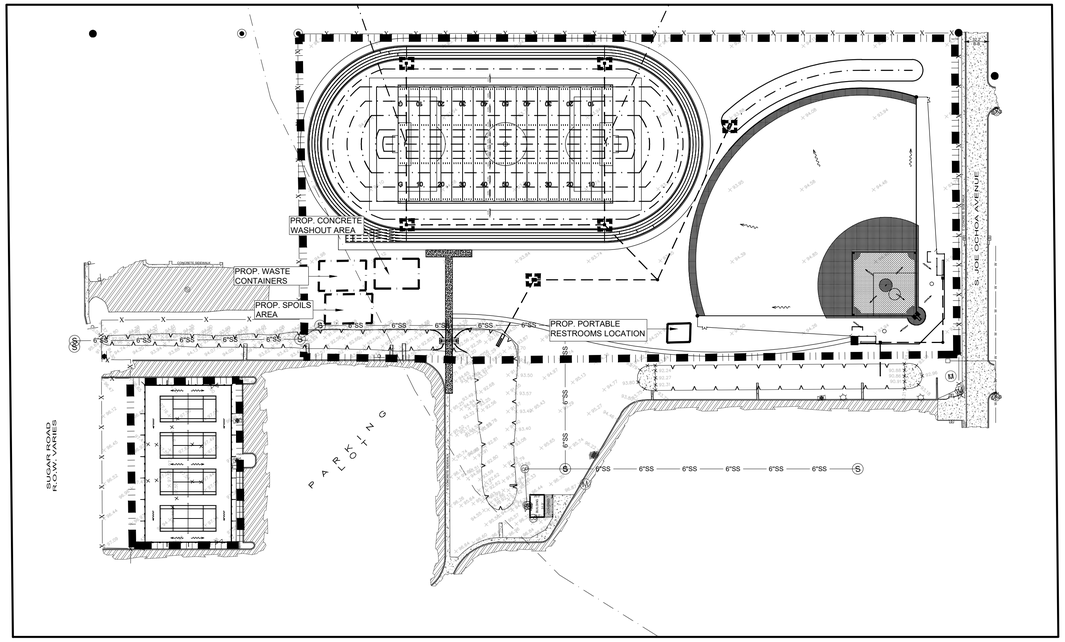
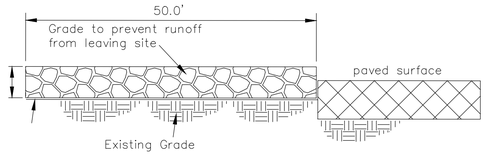
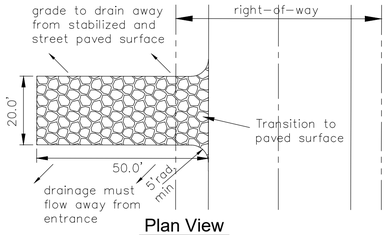




Profile View



Plan View

LEGEND

- SEDIMENT CONTROL FENCE
- CONSTRUCTION ENTRANCE
- -SOCK FOR INLET
- SEDIMENT CONTROL FENCE FOR OUTFALLS

2/C5 STABILIZED CONSTRUCTION ENTRANCE

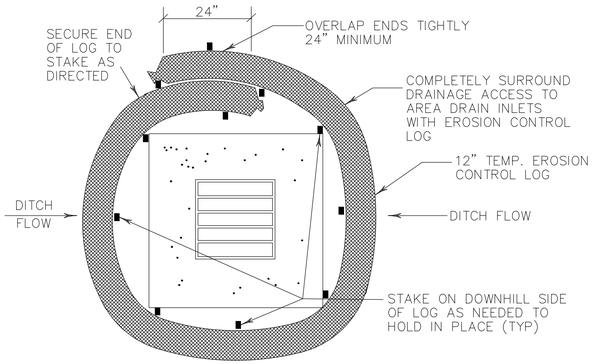
SCALE: NOT TO SCALE

Notes :

1. Contruction entrance(s) shall be locted at the time of pre-contruction meeting.
2. Stone shall be 4 to 6 inch diameter crushed rock or acceptable crushed Portland Cement Concrete.
3. When necessary, vehicles shall be cleaned to remove sediment prior to entrance onto a public roadway. When washing is required, it shall be done on a area stabilized with crushed stone with drainage flowing away form both the street and the stabilized entrance. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
4. The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. This may require periodic top dressing with additional stone as conditions demand. All sediment spilled, dropped, washed or tracked onto paved surfaces, must be removed immediately.
5. The entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

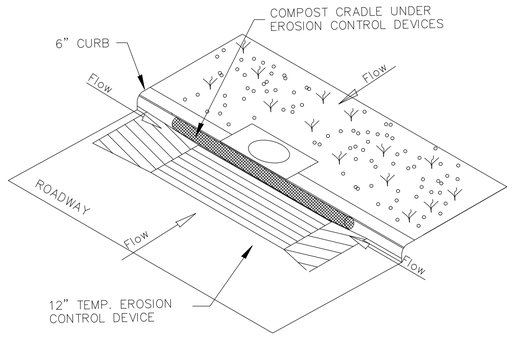
GENERAL NOTES

1. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED. MAXIMUM LENGTH OF LOGS SHALL BE 30' FOR 12" DIAMETER LOGS.
2. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
3. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION.
4. STAKES SHALL BE 2" X 2" WOOD 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG.
5. COMPOST CRADLE MATERIAL IS INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.



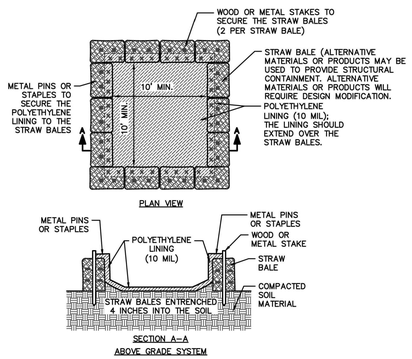
DROP INLET SEDIMENT TRAP

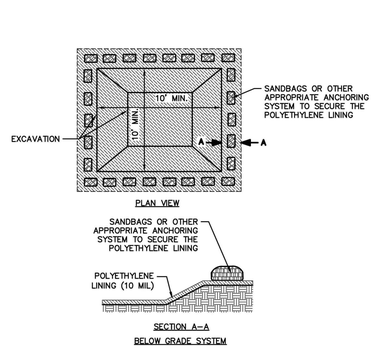
NTS



CURB INLET SEDIMENT TRAP

NTS





CONCRETE WASH OUT

*CONTRACTOR SHALL PRESENT SWP3 INSPECTION SCHEDULE TO ENGINEER AT PRE CONSTRUCTION MEETING.

*CONTRACTOR SHALL MAINTAIN SWPPP (SWP3) ON-SITE AT CONTRACTOR'S EXPENSE.

*CONTRACTOR SHALL SUBMIT N.O.I. TO T.C.E.Q. AND KEEP ON SITE AT ALL TIMES.

*"NOI" SHALL ALSO BE ONSITE AT ALL TIMES.

*CONTRACTOR SHALL ABIDE BY TPDES REQUIREMENTS.

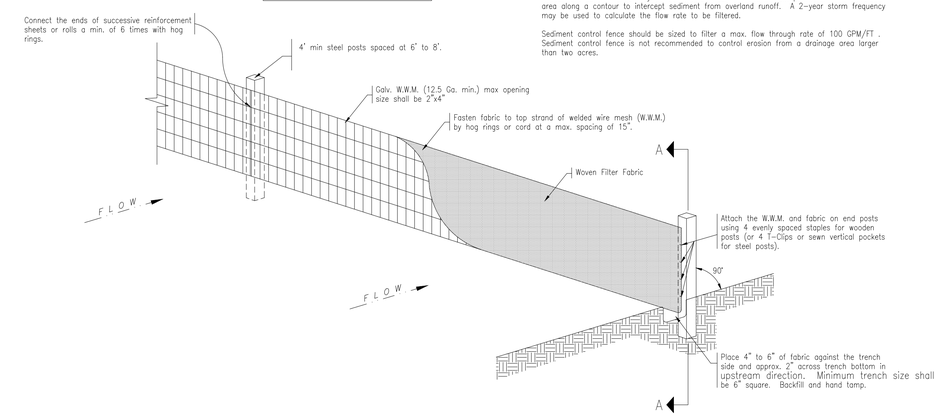
GENERAL NOTES :

1. The guidelines shown hereon are suggestions only and may be modified by the engineer.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2-year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT . Sediment control fence is not recommended to control erosion from a drainage area larger than two acres.



TEMPORARY SEDIMENT CONTROL FENCE

No.	REVISIONS	BY
#1	Addendum #1	C.P.

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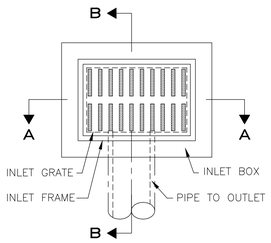
SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

EDINBURG
CSP 25-011

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435
STATE OF TEXAS
KELLEY A. HELLER-VELA
97421
LICENSED
PROFESSIONAL ENGINEER
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KELLEY A. HELLER-VELA, P.E. 97421
JUNE 18, 2024

Date: JUNE 18, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: **EROSION CONTROL**

C4



PLAN

NOTE:

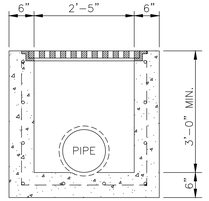
ALL STEEL TO BE No. 4 BARS @ 12" SPACING IN BOTH DIRECTIONS

INLET GRATE and FRAME TO BE "ALAMO" PATTERN 847-02

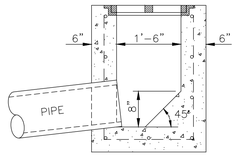
CLEAR OPEINING LENGTH OF FRAME - 29 1/4"

CLEAR OPENING WIDTH OF FRAME - 17"

TOTAL WEIGHT FRAME AND GRATE - 240 lbs.

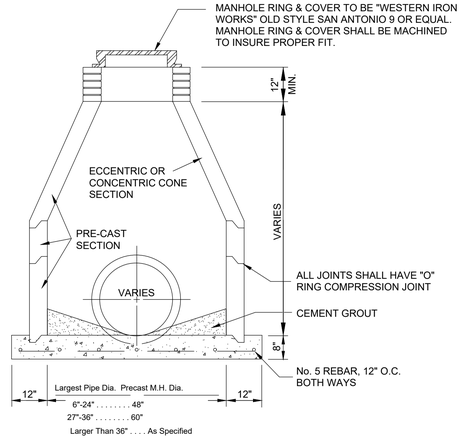


SECTION "A-A"



SECTION "B-B"

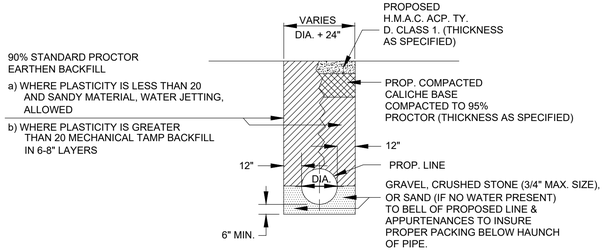
TYPE "B" INLET



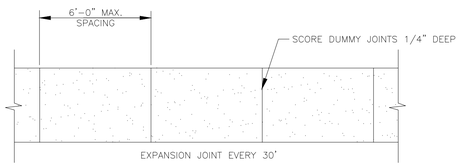
STANDARD STORM SEWER PRE-CAST CONCRETE MANHOLE

FIELD DRAINAGE NOTES

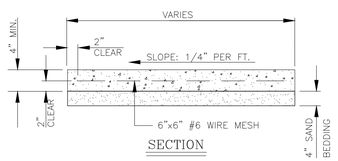
1. AFTER EXCAVATION OF EXISTING SOIL TO THE PROPER ELEVATIONS REQUIRED THE NEW SUBGRADE WILL BE SHAPED AND COMPACTED TO DESIGNED DENSITY WITH A 0.5% SLOPE TO ALLOW FOR DRAINAGE.
2. A NEW CONCRETE CURB AND NAILER WILL BE INSTALLED AROUND THE PERIMETER TO PROVIDE A SECURE EDGE FOR FASTENING THE SYNTHETIC TURF. IN ALL CASES THE NAILER AND STONE ARE AT THE SAME ELEVATION.
3. A GEOTEXTILE FABRIC WILL BE PLACED OVER THE SUBGRADE, AND COMPOSITE DRAINS WILL BE INSTALLED AT 30 FEET ON CENTER AT A 45 DEGREE ANGLE TO THE FIELD. REFER TO THE FIELD DRAINAGE PLAN. (HERRINGBONE DESIGN)
4. THE COMPOSITE DRAINS WILL DRAIN TO AN 8" (MIN) PERIMETER COLLECTOR WHICH WILL BE CONNECTED TO THE EXISTING DRAINAGE SYSTEM.
5. FREE DRAINING AGGREGATE SHALL BE PLACED OVER THE COMPOSITE DRAINS AND THE PERIMETER COLLECTORS AND FINE GRADED FOR A FIELD WITH A 0.5% SLOPE.
6. ALL PIPE SIZING SHALL BE COMPLETED BY A QUALIFIED CIVIL ENGINEER.



PIPE BEDDING DETAILS



PLAN



SECTION

SIDEWALK DETAILS

SIDEWALK NOTES:

MINIMUM 5'-0" WIDE SIDEWALK.

SIDEWALK GRADIENT SHALL NOT EXCEED 1:20.

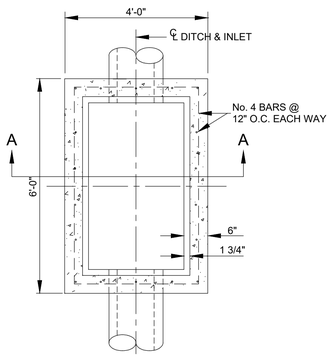
SIDEWALK CONCRETE SHALL BE 5 SACK CEMENT MIX AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.

CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF EXISTING UTILITY LINES WITH APPROPRIATE COMPANIES TO AVOID PLACING SIDEWALKS ON TOP OF LINES.

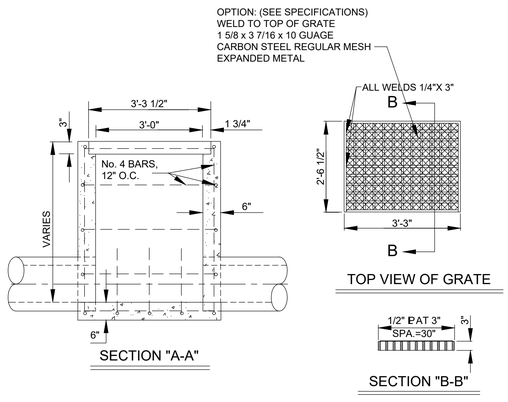
PROVIDE DROP CURBS AT INTERSECTIONS.

4" SAND BEDDING

CONTRACTOR SHALL COMPLY WITH LATEST REGULATIONS AS SET FORTH IN AMERICANS WITH DISABILITIES ACT (ADA).



TOP VIEW OF INLET



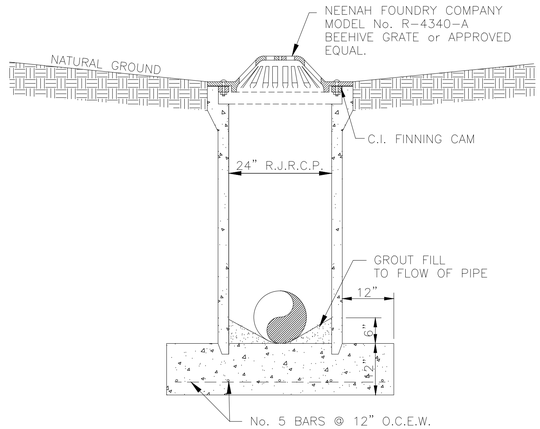
SECTION "A-A"

TOP VIEW OF GRATE

SECTION "B-B"

TYPE "C-C" GRATED INLET

(TWO GRATES PER INLET)



BEEHIVE INLET DETAIL

No.	REVISIONS	BY
#1	Addendum #1	C.P.

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

EDINBURG
CSP 25-011

MELDEN & HUNT, INC.
TEXAS REGISTRATION F-1435

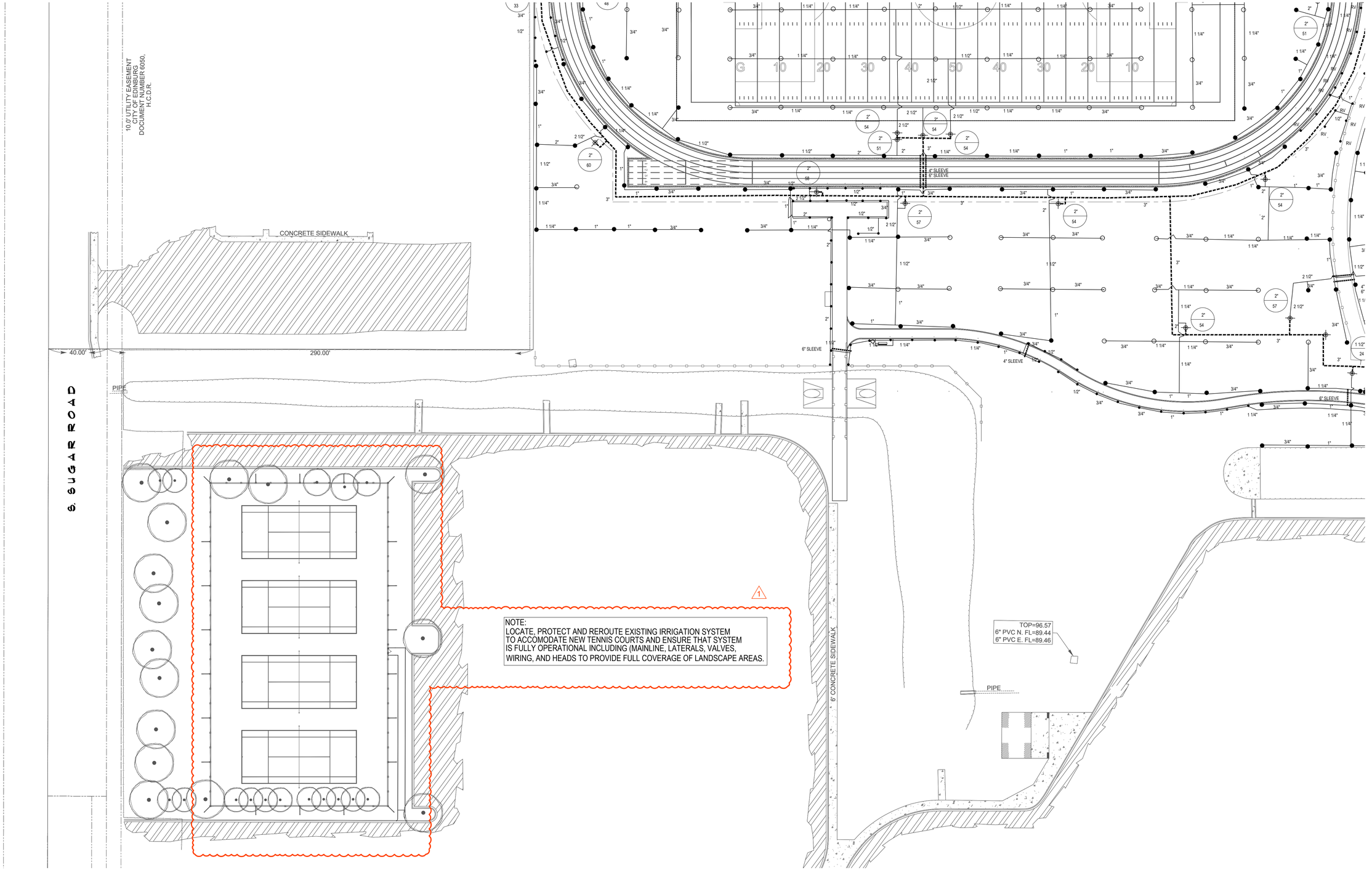
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY KELLEY A. HELLER-VELA, P.E. 97421

JUNE 18, 2024

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

Date: JUNE 18, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: **DETAILS**

C5



IRRIGATION PLAN (1 OF 2)

SCALE: 1" =30' - 0"

W – E

No.	REVISIONS	BY
1	ADDENDUM # 1 JUNE 19, 2024	

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

WORLD SCHOLARS
EDINBURG
CSP 25-010

STATE OF TEXAS
JOHN A. WINFIELD
LICENSED IRRIGATOR

5/30/24

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: L1.01

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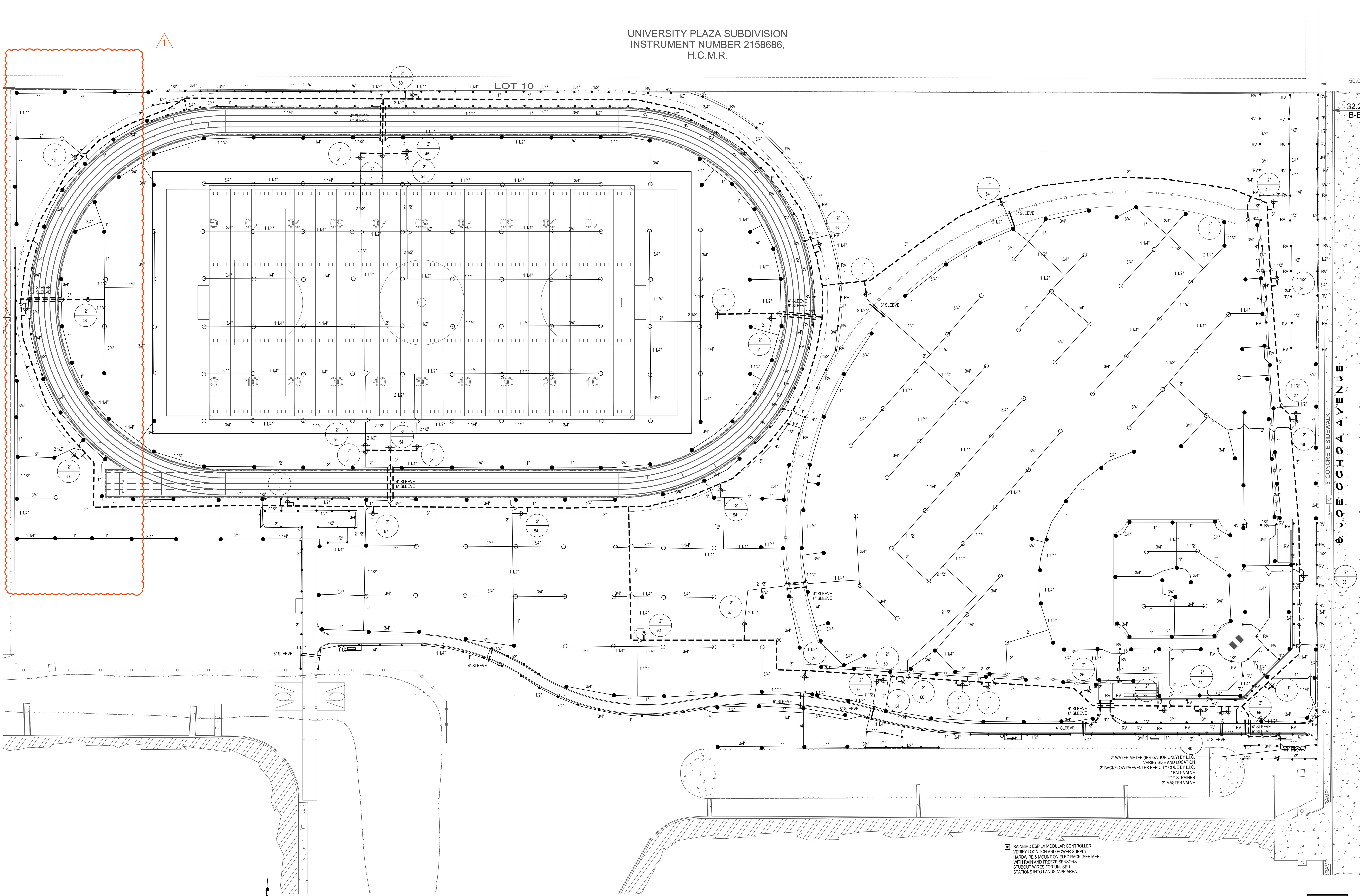

IRRIGATION PLAN (2 OF 2)

SCALE: 1" =30' - 0"

No.	REVISIONS	BY
1	ADDENDUM # 1 JUNE 19, 2024	

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

WORLD SCHOLARS
EDINBURG
CSP 25-010

JOHN A. WINGFIELD — LICENSED IRRIGATOR
5/30/24

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: L1.02

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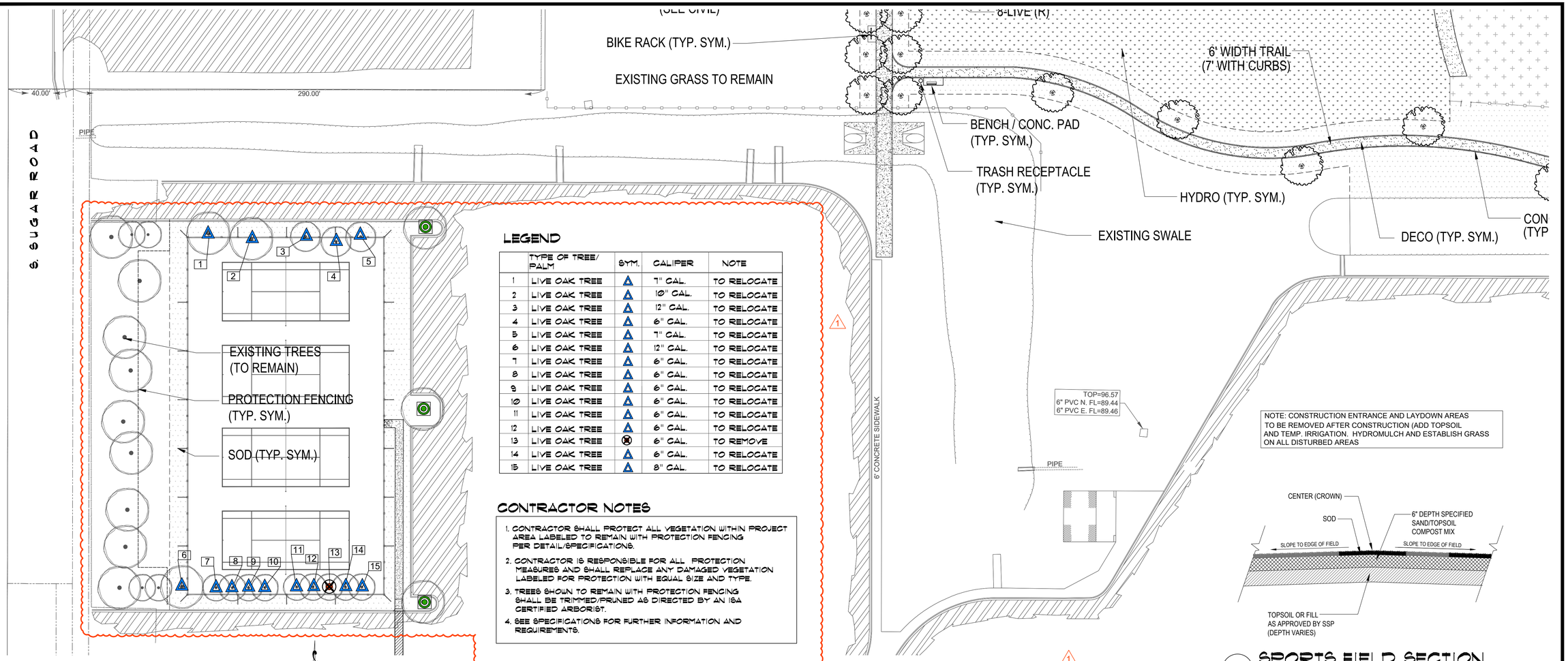


1 LANDSCAPE PLAN (1 OF 2)
SCALE: 1" =30' - 0"

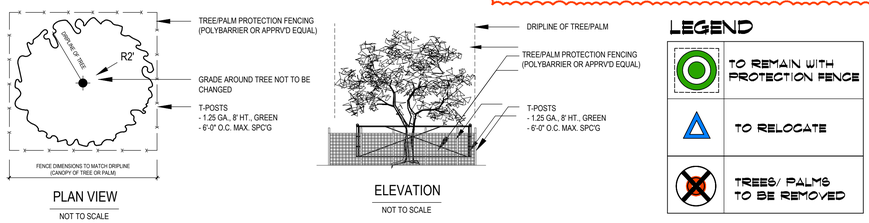
W — E

LEGEND

	TYPE OF TREE/ PALM	SYM.	CALIPER	NOTE
1	LIVE OAK TREE	△	7" CAL.	TO RELOCATE
2	LIVE OAK TREE	△	10" CAL.	TO RELOCATE
3	LIVE OAK TREE	△	12" CAL.	TO RELOCATE
4	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
5	LIVE OAK TREE	△	7" CAL.	TO RELOCATE
6	LIVE OAK TREE	△	12" CAL.	TO RELOCATE
7	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
8	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
9	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
10	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
11	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
12	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
13	LIVE OAK TREE	⊗	6" CAL.	TO REMOVE
14	LIVE OAK TREE	△	6" CAL.	TO RELOCATE
15	LIVE OAK TREE	△	8" CAL.	TO RELOCATE

CONTRACTOR NOTES

1. CONTRACTOR SHALL PROTECT ALL VEGETATION WITHIN PROJECT AREA LABELED TO REMAIN WITH PROTECTION FENCING PER DETAIL/SPECIFICATIONS.
2. CONTRACTOR IS RESPONSIBLE FOR ALL PROTECTION MEASURES AND SHALL REPLACE ANY DAMAGED VEGETATION LABELED FOR PROTECTION WITH EQUAL SIZE AND TYPE.
3. TREES SHOWN TO REMAIN WITH PROTECTION FENCING SHALL BE TRIMMED/PRUNED AS DIRECTED BY AN ISA CERTIFIED ARBORIST.
4. SEE SPECIFICATIONS FOR FURTHER INFORMATION AND REQUIREMENTS.



PLAN VIEW
NOT TO SCALE

ELEVATION
NOT TO SCALE

LEGEND

◎	TO REMAIN WITH PROTECTION FENCE
△	TO RELOCATE
⊗	TREES/ PALMS TO BE REMOVED

2 TREE/PALM PROTECTION FENCING
NOT TO SCALE

SPORTS FIELD NOTES

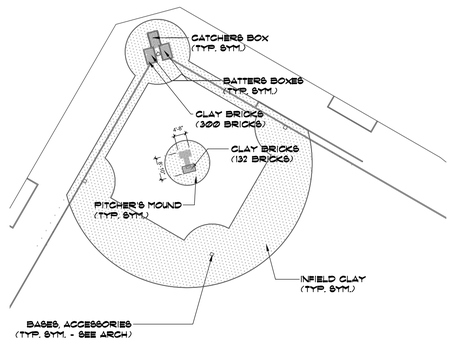
1. APPLY HERBICIDE/ROUNDUP TO ENTIRE FIELD AREA UNTIL ALL VEGETATED MATTER IS ERADICATED
2. CLEAR AND GRUB (REMOVE ALL DEBRIS) FROM FIELD AREAS
3. RIP/TILL SOIL WITH AN AGRICULTURAL CULTIVATOR TO A DEPTH OF 6" ON FOOTBALL FIELD, 3" ON BASEBALL OUTFIELD
4. ROUGH GRADE INFIELDS TO PREPARE FOR 6" LAYER OF INFIELD MIX
5. APPLY/INSTALL INFIELD CLAY. TILL IN CONDITIONER INTO TOP 2". FINE GRADE TO FINISHED ELEVATIONS ON CIVIL PLANS. WATER IN/COMPACT WITH PLATE COMPACTOR. DRAG TO LOOSEN AND EXPOSE CONDITIONER.
6. CONTRACTOR TO GRADE SPORTS FIELDS WITH SPECIFIED CROWN/SLOPES UTILIZING FULLY AUTOMATED COMPUTERIZED DUAL GPS SYSTEM WITH LASER AUGMENTATION TO ACHIEVE GRADES WITHIN 1/4" TOLERANCE. FIELD MUST DRAIN SMOOTHLY WITH NO BIRD BATHS OR LOW SPOTS
7. INSTALL IRRIGATION PER PLANS/SPECS. THOROUGHLY WATER IN WITH MULTIPLE WATERINGS
8. FIELD DRAINAGE WILL BE TESTED AND REVIEWED BY SSP PRIOR TO SOD OR HYDORMULCH.
9. INSTALL SOD OR HYDROMULCH AS PER PLANS AND SPECIFICATIONS. SOD TO BE LARGE 42" ROLLS.
10. ROLL/COMPACT/LEVEL FIELDS WITH 2 OR 3 TON MECHANICAL ROLLER/VIBRATOR. TOP DRESS WITH CLEAN SAND ALL LOW SPOTS OR DIVOTS. ALL JOINTS TO BE TIGHT AND SAND FILLED.
11. MONITOR WATERING FOR CONTINUOUS MOISTURE ON HYDROMULCH (MULTIPLE SHORT CYCLES UNTIL FULL GERMINATION).
12. COMMENCE MOWING USING A REEL TYPE MOWER ONLY. MOWING SHALL BE AT LEAST ONCE PER WEEK AND CLIPPINGS REMOVED/BLOWN. DOCUMENT/PHOTO EACH CYCLE FOR REVIEW, CHECK AND APPROVAL BY SSP. 4 FERTILIZATION APPLICATIONS REQUIRED INCL. STARTED FERTILIZER FOR HYDRO AND REMAINDER SHALL BE TURF BUILDER AND PRE-EMERGENT BLENDS SUCH AS HJ 25-0-0 WITH WOLFTRAX OR APPROVED EQUAL AT MANUFACTURERS RATES

MATERIAL SCHEDULE - SPORTS FIELDS

DESCRIPTION	NOTES	QUANTITY
HERBICIDE	ALL LANDSCAPE AREAS (ROUNDUP OR APPROVED EQUAL)	110,000 S.F.
CLEAR/GRUB/SITE PREP	CLEAR ALL DEBRIS FROM TOP LAYER OF SPORTS FIELD AREA	110,000 S.F.
GRADING	GRADING & LASER LEVELING OF SPORTS FIELD PER PLANS	110,000 S.F.
SCREENED TOP SOIL	SCREENED TOPSOIL FOR SOCCER FIELDS (35% of 6" MIX - TO FINISHED GRADES)	490 C.Y.
SAND *	MASONRY SAND FOR SOCCER FIELDS (50% OF 6" MIX - TO FINISHED GRADES)	700 C.Y.
COMPOST **	PREMIUM COMPOST (9 KIDS COMPOST MIX (15% OF 6" MIX - TO FINISHED GRADES)	210 C.Y.
FIELD STRIPING	SHERWIN-WILLIAMS 'SHERSTRIPE' 4" WIDTH FIELD STRIPING PER PLANS (FOOTBALL & SOCCER)	1
FIELD MARKERS	PIONEER ATHLETICS 'PLEEPIX' FIELD MARKERS (4 CORNERS)	4
SOD TYPE 'A' ***	TIFWAY '419' BERMUDA LARGE ROLLS 42", TIGHT SEAMS, SAND FILLED JOINTS, TOP DRESS	21,900 S.Y.
MAINTENANCE	90 DAY MAINTENANCE OF FIELDS WITH REEL MOWERS & FERTILIZATION PER SPECS	1

* MASONRY SAND - WRIGHT MATERIALS PLANT 3 (361) 387-0293
** NINE KIDS COMPOST (985) 432-4983 OR CITY OF MCALLEN COMPOST (956) 681-4000
*** KING RANCH TURFGRASS (830) 665-6290

3 SPORTS FIELD SECTION
NOT TO SCALE



4 INFIELD DETAIL PLAN
NOT TO SCALE

No.	REVISIONS	BY
1	ADDENDUM # 1 JUNE 19, 2024	

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

WORLD SCHOLARS
EDINBURG
CSP 25-010

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: L2.01

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UNIVERSITY PLAZA SUBDIVISION
INSTRUMENT NUMBER 2158686,
H.C.M.R.

LOT 10

FOOTBALL/SOCCER FIELD

SOD TYPE 'A' (TYP. SYM.)

SOD TYPE 'A' (TYP. SYM.)

SOD (TYP. SYM.)

SOD LIMITS

DECO (TYP. SYM.)
(WARNING TRACK)

INFIELD CLAY

MOUND CLAY

HOME PLATE CLAY BRICKS

CONC. SIDEWALK
(SEE CIVIL)

BIKE RACK (TYP. SYM.)

EXISTING GRASS TO REMAIN

8-LIVE (R)

6' WIDTH TRAIL
(7' WITH CURBS)

BENCH / CONC. PAD
(TYP. SYM.)

TRASH RECEPTACLE
(TYP. SYM.)

HYDRO (TYP. SYM.)

EXISTING SWALE

DECO (TYP. SYM.)

CONCRETE CURB
(TYP. SYM.)

7-LIVE (R)

TREE RINGS (TYP. SYM.)

2-SABL

5' CONCRETE SIDEWALK

S. JOE OCHOA AVENUE

RAMP

RAMP

NOTE: CONSTRUCTION ENTRANCE AND LAYDOWN AREAS TO BE REMOVED AFTER CONSTRUCTION (ADD TOPSOIL AND TEMP. IRRIGATION. HYDROMULCH AND ESTABLISH GRASS ON ALL DISTURBED AREAS

W — E

LANDSCAPE PLAN (2 OF 2)
SCALE: 1" =30' - 0"

No.	REVISIONS	BY
1	ADDENDUM # 1 JUNE 19, 2024	

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SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

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CSP 25-010

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: L2.02

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SSPDESIGN.COM

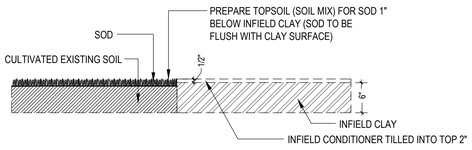
PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	SPACING	QTY
	PALMS					
SABL	SABAL TEXANA	TEXAS SABAL PALM	B/B	6-8' TRUNK	AS.	2
	TREES					
LIVE (R)	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK (RELOCATED)	B/B	SEE SHEET L2.01	AS.	15
	GRASS					
HYDRO	CYNODON DACTYLON	COMMON BERMUDA GRASS (HYDROMULCH)			64,900 SQUARE FEET	
SOD	CYNODON DACTYLON 'TIFWAY'	# 1 CERTIFIED TIFWAY '419' HYBRID BERMUDA SOD			5,325 SQUARE YARDS	

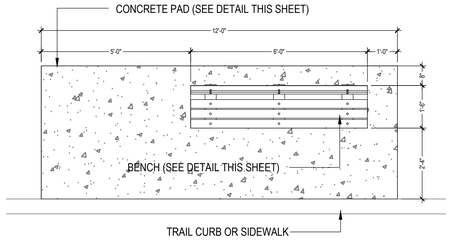
MATERIAL SCHEDULE

DESCRIPTION	NOTES	QUANTITY
PREMIUM COMPOST	MIX WITH BACKFILL ON ALL TREES/PALMS	1/2 C.Y.
SCREENED TOP SOIL	AS REQUIRED TO FILL LOW SPOTS, LEVELING OF OUTFIELD (ALLOWANCE)	50 C.Y.
MULCH (HARDWOOD)	2" MIN. FOR ALL TREE/PALM WATERING BASINS (TEXAS NATIVES SHREDDED HARDWOOD MULCH)	32 BAGS (2 C.F.)
HERBICIDE	ERADICATION OF ALL EXISTING WEEDS/GRASSES PRIOR TO GRADING/LEVELING	---
FERTILIZER	PER DETAILS / AS SPECIFIED	-
PLANTING TABLETS	PER DETAILS / AS SPECIFIED	--
PRE-EMERGENT	PER DETAILS / AS SPECIFIED	---
GUYING / STAKING	ALL TREES/PALMS WITH SAFE-T CAPS ON POSTS PER DETAILS	---
TREE RINGS	36" DIA. 5" COMMERCIAL GRADE ALUMINUM EDGE 'DREAMSCAPE' TREE RINGS PER PLAN/DETAILS	16
CONCRETE PADS	4" THICK CONCRETE PADS FOR PARK BENCHES AS PER PLANS/DETAILS	162 S.F.
INFIELD MIX	6" LAYER OF INFIELD CLAY - 60% SAND, 20% SILT, 20 % CLAY 1/4" MINUS RED COLOR	210 C.Y.
INFIELD CONDITIONER	1/2" MIXED/TILLED DIAMOND PRO RED INFIELD CONDITIONER (11,300 S.F.)	20 C.Y.
INFIELD GRADING	COMPLETE INFIELD LASER GRADING PER NOTES BELOW	
CLAY BRICKS	4 X 8" HOME PLATE/MOUND CLAY BRICKS (DIAMONDPRO.COM TEL. # 1-800-228-2987)	432 BRICKS
CONCRETE CURB	6 x 6 " EXTRUDED CONCRETE CURB FOR TRAIL AREAS PER PLANS/DETAILS	1,520 L.F.
DECO	4" DEPTH COMPACTED DECOMPOSED GRANITE 'FINES' 1/4" MINUS PER PLANS (TRAIL & WARNING TRACK)	9,780 S.F.
BENCHES	DU MOR 6' LENGTH 138-6PL RECYCLED PLASTIC SLATS (GREY) S-1 EMBEDMENT MOUNT WITH POWDER COATED POST (BLACK)	4
TRASH RECEPTACLES	DU MOR 41-32PL, BLACK POWDER COATED, RECYCLED PLASTIC (GREY), S-1 EMBEDMENT	6
BIKE RACK	DU MOR 130-4P, BLACK POWDER COATED, S-1 EMBEDMENT	1
TREE PROTECTION	TREE DEMO/PROTECTION FENCING AS PER PLANS/DETAILS	--
IRRIGATION SYSTEM	COMPLETE AUTOMATIC IRRIGATION SYSTEM PER PLANS/DETAILS BY LICENSED CONTRACTOR	1

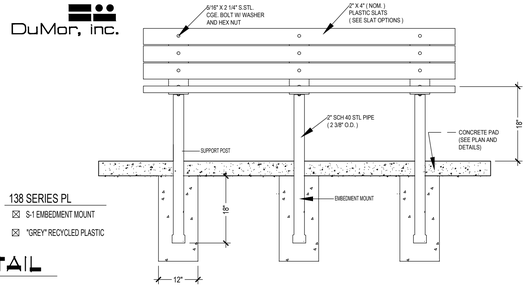
NOTE: CONTRACTORS MUST REVIEW TECHNICAL SPECIFICATIONS FOR ADDITIONAL PROJECT INFORMATION AND REQUIREMENTS.
* NINE KIDS COMPOST (365) 432-4983 OR CITY OF MCALLEN COMPOST (956) 681-4000
** SOUTHERN STONE AND SOIL - DONNA, TEXAS (956) 464-0777



1 FIELD CLAY/SOD TRANSITION DETAIL
NOT TO SCALE



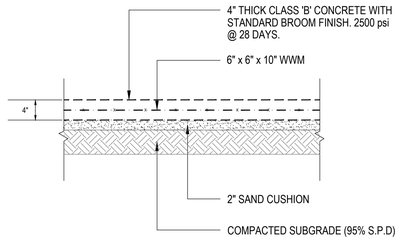
2 CONCRETE PAD/BENCH PLAN
NOT TO SCALE



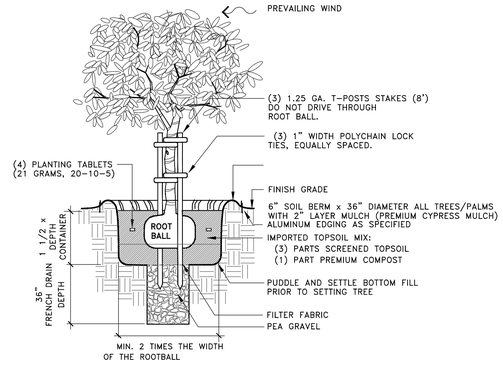
3 BENCH DETAIL
NOT TO SCALE

SPORTS FIELD NOTES

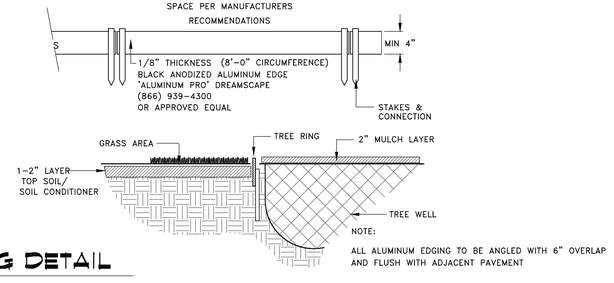
1. APPLY HERBICIDE/ROUNDUP TO ENTIRE FIELD AREA UNTIL ALL VEGETATED MATTER IS ERADICATED
2. CLEAR AND GRUB (REMOVE ALL DEBRIS) FROM FIELD AREA
3. RIP/TILL SOIL WITH AN AGRICULTURAL CULTIVATOR TO A DEPTH OF 6" ON FIELD, 3" ON OUTFIELD
4. ROUGH GRADE INFIELDS TO PREPARE FOR 6" LAYER OF INFIELD MIX
5. APPLY INFIELD MIX/TILL IN CONDITIONER INTO TOP 2". FINE GRADE TO FINISHED ELEVATIONS ON CIVIL PLANS. WATER IN/COMPACT WITH PLATE COMPACTOR. DRAG TO LOOSEN AND EXPOSE CONDITIONER.
6. CONTRACTOR TO GRADE FIELD WITH SPECIFIED CROWN/SLOPES UTILIZING FULLY AUTOMATED COMPUTERIZED DUAL GPS SYSTEM WITH LASER AUGMENTATION TO ACHIEVE GRADES WITHIN 1/4" TOLERANCE. FIELD MUST DRAIN SMOOTHLY WITH NO BIRD BATHS OR LOW SPOTS
7. INSTALL IRRIGATION PER PLANS/SPECS. THOROUGHLY WATER IN WITH MULTIPLE WATERINGS
8. FIELD DRAINAGE WILL BE TESTED AND REVIEWED BY SSP PRIOR TO SOD OR HYDORMULCH.
9. INSTALL SOD OR HYDROMULCH AS PER PLANS AND SPECIFICATIONS
10. ROLL FIELDS WITH 2 OR 3 TON MECHANICAL ROLLER/VIBRATOR. TOP DRESS WITH CLEAN SAND ALL LOW SPOTS OR DIVOTS. ALL JOINTS TO BE TIGHT AND SAND FILLED.
11. MONITOR WATERING FOR CONTINUOUS MOISTURE ON HYDROMULCH (MULTIPLE SHORT CYCLES UNTIL FULL GERMINATION).
12. COMMENCE MOWING USING A REEL TYPE MOWER ONLY. MOWING SHALL BE AT LEAST ONCE PER WEEK AND CLIPPINGS REMOVED/BLOWN. DOCUMENT/PHOTO EACH CYCLE FOR REVIEW, CHECK AND APPROVAL BY SSP. 4 FERTILIZATION APPLICATIONS REQUIRED INCL. STARTER FERTILIZER FOR HYDRO AND REMAINDER SHALL BE TURF BUILDER AND PRE-EMERGENT BLENDS SUCH AS HJ 25-0-0 WITH WOLFTRAX OR APPROVED EQUAL AT MANUFACTURERS RATES



4 CONCRETE PAD DETAIL
NOT TO SCALE



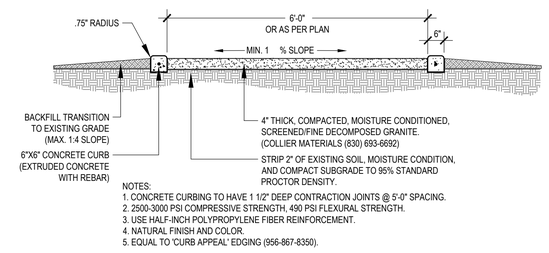
5 TREE PLANTING DETAIL
NOT TO SCALE



6 TREE RING DETAIL
NOT TO SCALE

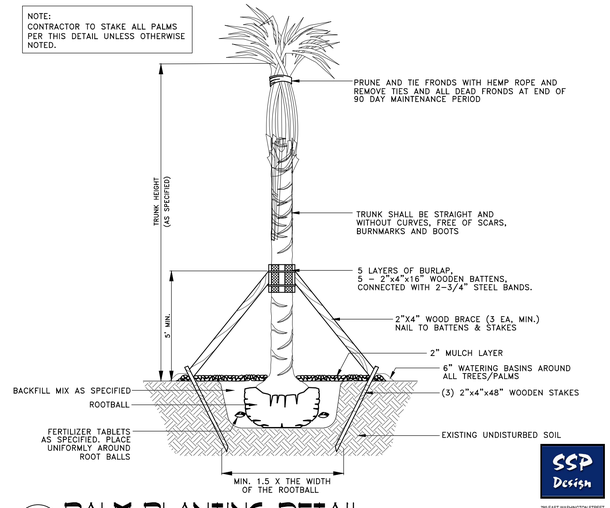
CONSTRUCTION NOTES

1. WORK UNDER THIS CONTRACT INCLUDES SITE REVIEW AND COORDINATION WITH EXISTING CONDITIONS, SITE CLEANUP, EXCAVATION, BED PREP, TILLING, PLANTING, STAKING, EDGING, IRRIGATION, TREE RINGS, INFIELD CLAY, SITE FURNITURE, MAINTENANCE, AND GUARANTEE.
2. LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND DIMENSIONS PRIOR TO BIDDING. QUANTITIES SHOWN IN SCHEDULE ARE FOR CONVENIENCE ONLY.
3. NOTIFY SSP DESIGN OF ANY DISCREPANCIES IN DRAWINGS/DETAILS OR INSUFFICIENT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
4. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. SPOTTING OF ALL UTILITIES IS REQUIRED.
5. NOTIFY AND MEET WITH SSP DESIGN PRIOR TO ANY CONSTRUCTION FOR VERIFICATION/INTERPRETATION OF PLANS.
6. LANDSCAPE CONTRACTOR SHALL STAKE OUT ALL BEDS, TREES, PALM LOCATIONS PRIOR TO INSTALLATION FOR APPROVAL BY SSP DESIGN.
7. CONTRACTOR TO COORDINATE WITH SSP DESIGN TO ENSURE PROPER PLACEMENT OF PLANT MATERIAL AND IRRIGATION EQUIPMENT.
8. CONTRACTOR TO INSTALL EXTRUDED CONCRETE EDGE AND TREE RINGS AS SHOWN ON PLANS.
9. NOTIFY SSP DESIGN/OWNER PRIOR TO PLANTING OPERATIONS FOR APPROVAL OF ALL PLANT MATERIAL ON SITE. ANY PLANT MATERIAL NOT APPROVED BY SSP DESIGN/OWNER WILL BE SUBJECT TO REJECTION.
10. IRRIGATION CONTRACTOR SHALL SUPPLY AND INSTALL COMPLETE AUTOMATIC IRRIGATION SYSTEM INCLUDING WATER METER, BACKFLOW DEVICE, CONTROLLER, MAINLINE, SLEEVES, DRIP, TO COVER ALL LANDSCAPE AREAS PER PLANS/DETAILS. IRRIGATION SYSTEM SHALL BE INSTALLED BY A TEXAS LICENSED IRRIGATOR ONLY.
11. CONTRACTOR SHALL REMOVE ALL EXISTING GRASS/WEEDS IN BEDS BY HERBICIDING PRIOR TO BED PREP AND SOIL REPLACEMENT.
12. CONTRACTOR SHALL PRUNE ALL EXISTING PALMS/TREES BY A CERTIFIED ARBORIST AS DIRECTED BY SSP DESIGN.
13. CONTRACTOR SHALL REMOVE ALL EXISTING GRASS AND WEEDS BY HERBICIDING, DISKING, FLOATING AND LIGHT GRADING OF ENTIRE PROJECT AREA PRIOR TO HYDROMULCHING/SODDING.
14. CONTRACTOR SHALL REMOVE 12" OF EXST'G SOIL WITHIN ALL BED AREAS AND REPLACE WITH IMPORTED TOP SOIL/PREMIUM COMPOST MIX.
15. LANDSCAPE CONTRACTOR SHALL CONSTRUCT 6"x36" WATERING BASINS AROUND ALL TREES/PALMS WITH A MIN. 2" LAYER OF CYPRESS MULCH.
16. LANDSCAPE CONTRACTOR SHALL LOOSEN / GRADE ALL LAWN AREAS PRIOR TO HYDRO-MULCHING/SODDING TO ENSURE PROPER DRAINAGE AND UNIFORM SURFACE.
17. LANDSCAPE CONTRACTOR SHALL ESTABLISH AND MAINTAIN ALL PLANT MATERIAL FOR 90 DAYS AFTER 'SUBSTANTIAL COMPLETION' AND SHALL GUARANTEE ALL TREES/PALMS FOR A PERIOD OF ONE YEAR.
18. IRRIGATION CONTRACTOR SHALL GUARANTEE ALL SYSTEM COMPONENTS FOR A PERIOD OF ONE YEAR.
19. SEE SPECIFICATION FOR FURTHER INSTRUCTIONS/REQUIREMENTS.



NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2. 2500-3000 PSI COMPRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
3. USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
4. NATURAL FINISH AND COLOR.
5. EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

7 TRAIL/CURB DETAIL
NOT TO SCALE



8 PALM PLANTING DETAIL
NOT TO SCALE

No.	REVISIONS	BY
1	ADDENDUM # 1 JUNE 19, 2024	

GMS ARCHITECTS
1150 paredes line rd.
brownsville
texas 78526
(956) 546-0110
fax (956) 546-0196

SOUTH TEXAS ISD
NEW SPORT FIELDS AT EDINBURG CAMPUS

WORLD SCHOLARS
EDINBURG
CSP 25-010

Date: March, 2024
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: IO
Job No. STISD SPORTS FIELDS
Sheet: L3.01

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BROWNSVILLE, TEXAS 78520
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CSP 25-010 South Texas ISD Athletic Field Edinburg Site
Architect Project NO: S2000724

Addendum # 2

ACKNOWLEDGEMENT OF ADDENDUM # 2

Company Name: _____

Company Representative: _____

Company Representative Signature: _____

Phone Number: _____

Date: _____