ADDENDUM #1

PROJECT: The Terraces at Westhills Village Phase 1

DATE: 9/10/2024

BID DATE: **September 26, 2024 at 11:00am MST**

The following changes or modifications are to be incorporated into and become a part of the Contract Documents. The Bidder shall note receipt and make acknowledgment of this Addendum on the Bid Proposal, incorporating these provisions in the bid.

CHANGES TO CONSTRUCTION MANAGER'S BID MANUAL:

1) **Project Bidding Requirement**
    a. Bids **must hand delivered in a sealed envelope** to UDA Architecture and Design - Atten: Jerud Pummel, 50 Minnesota St. Suite 1, Rapid City, South Dakota, 57701
    b. **Bid date September 26, 2024 at 11:00am MST**

2) **UDA Specifications**
    a. Geotech
    b. CM Bid Manual

The Terraces at Westhills Village
Phase 1

Rapid City, South Dakota

Uda Architecture + Design #22062

September 10, 2024

50 Minnesota St. - Suite 1
Rapid City, SD 57701
PH: 605 721-0237

Uda
ARCHITECTURE + DESIGN

SECTION 00 0110

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END OF SECTION

FMG ENGINEERING 3700 Sturgis Road • Rapid City, SD 55702 • **fmgengineering.com** • 605-342-4105

June 24, 2024

Mr. Daryl Reinicke, CEO
Westhills Village
255 Texas St.
Rapid City, SD 57701

Re: Geotechnical Evaluation
Westhills Village Expansion
Rapid City, South Dakota

Dear Mr. Reinicke:

As requested, we have performed a geotechnical evaluation for the referenced project. The purpose of this evaluation was to identify the subsurface characteristics, determine the suitability of the site soils for use as roadway embankment fill and site fill, develop fill placement and compaction recommendations, develop roadway subgrade preparation and surfacing recommendations and recommendations for utility installation.

The findings and recommendations of this report were prepared in accordance with generally accepted professional engineering principles and practices. We make no other warranty, either express or implied.

We trust this information to be sufficient. If you have any questions or desire any additional information, please do not hesitate to contact us.

Respectfully submitted,

FMG Engineering

John Lucas, P.E. **Alex Fisher, P.E., G.E.**

Enclosures

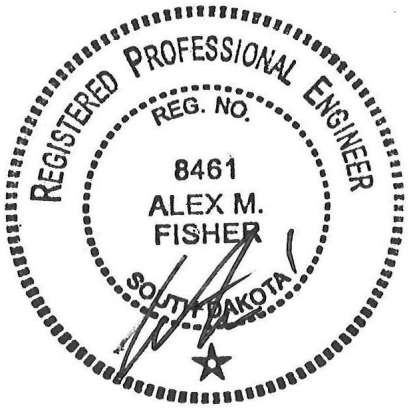
c: Z:\231257.02 Westhills Village Expansion Survey & Geotech\Geotech\231257 Westhills Village Expansion -- FMG Geotech.docx

Geotechnical Evaluation

for

Westhills Village Expansion
Rapid City, South Dakota

June 24, 2024



Prepared for
Mr. Daryl Reinicke, CEO
West Hills Village
255 Texas St.
Rapid City, SD 57701

FMG Project No. 231257.02

Civil Engineering
Geotechnical Engineering
Materials Testing Laboratory
Land Surveying
Environmental Services
Water Resources

FMG Engineering ♦ 3700 Sturgis Road ♦ Rapid City, SD 57702 ♦ 605.342.4105 ♦ fmgengineering.com

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TABLES, FIGURES AND APPENDICES

1. INTRODUCTION

Westhills Village Estates plans to construct a residential development in south Rapid City, South Dakota. The residential area and roadway is proposed to service 20 duplexes and an apartment. Significate grading will be required to accommodate the proposed roadway and residential lots. Cuts and fill of up to 25 feet will be required. Additionally, a storm sewer culvert will be included to remedy the significant grading throughout the site. The current proposed grading site layout is indicated on Figure 1.

FMG Engineering (FMG) was retained by Westhills Village to identify the general subsurface characteristics at the site, determine the suitability of the site soils for use as roadway embankment and site fill, develop fill placement and compaction recommendations, develop roadway subgrade preparation and surfacing recommendations and recommendations for utility installation. If proposed construction or locations differ significantly from that described above or elsewhere described in this report, our office should be contacted to re-evaluate the recommendations contained in this report. Figure 1 illustrates the general project layout and the specific locations of our field explorations.

This report presents our geotechnical evaluation of the project site. Our evaluation included the following general scope of activities:

1. A general review of the regional geology, and related site characteristics.

2. Field exploratory borings, sampling, and testing at representative locations to determine the depth, thickness, orientation, engineering characteristics, and composition of the subsurface conditions.

3. Laboratory tests to identify the soil types, classifications, and engineering properties of the subsurface materials encountered at the site.

4. An analysis of the data obtained, and determination of suitable geotechnical design parameters and other such recommendations as considered applicable to satisfactory design and performance.

Field and laboratory tests were generally accomplished in accordance with current UFC, ASTM, AASHTO, Army Corps of Engineers, and IEEE procedures, where applicable. The evaluation was accomplished under the direction of a registered professional engineer. This report presents the geotechnical engineering evaluation with recommendations for grading design and construction. We have also included a discussion of our field sampling and testing procedures, laboratory analyses, and site conditions. This scope of this report is generally limited to the facility and well pad grading and the grading and embankment fill for the drainage crossing.

2. FIELD SAMPLING AND TESTING PROCEDURES

A total of eleven (11) boreholes were drilled at the locations shown on Figure 1 to identify the subsurface characteristics and obtain soil samples for laboratory testing. The boreholes were observed by the FMG field geologist. Field sampling and testing procedures were conducted in general accordance with ASTM D420.

The boreholes were drilled with a Diedrich D-70 track-mounted drill rig and hollow-stem auger. The number of boreholes and the location were selected by FMG and were adjusted in the field as necessary by FMG for site specific access. The borehole locations were selected to be within the cut areas of the proposed roadway and residential lots and within the bottom of the drainage. If, during subsequent planning, the project locations change significantly from those described in this report and shown on Figure 1, we recommend drilling additional boreholes to verify soil conditions in unexplored areas.

Borehole field testing consisted of obtaining standard penetration test (SPT) and relatively undisturbed Shelby Tube samples from various depths in the boreholes. The SPT testing was performed to identify the relative field strengths of the subsurface materials and to obtain samples for laboratory analyses; the Shelby Tube samples were obtained for laboratory analyses.

Geologic logs of the boreholes were maintained by a field geologist and the materials were classified in accordance with ASTM: D 2487-90 and D 2488-90 (Unified Soil Classification System), Figure 2. The geologic logs include the general drilling method data, depths of major changes in the character of the subsurface materials, visual description of the materials, sample locations, standard penetration data and locations, and groundwater data. In addition, the geologic logs also include the data from certain laboratory classification and physical property analyses. The geologic logs are presented as Appendix A.

The geologic logs and related information depict only the conditions and materials encountered at the specific borehole location and at the time designated on the logs. Soil conditions at other locations may be different from those encountered at the borehole locations. Also, the passage of time may produce a changed soil condition. We have extrapolated the data obtained from the boreholes and our conclusions and recommendations assume that the materials encountered are representative of the soils that exist over the site. Anomalies may be present around the boreholes.

3. LABORATORY ANALYSIS

The laboratory analysis was directed towards the determination of soil types drilled on the site and their engineering properties. The laboratory testing was performed in general conformance with current ASTM and AASHTO procedures, where applicable. The laboratory testing results are provided in Appendix B, and on the borehole logs where applicable.

The laboratory testing results were observed to be generally within expected ranges for the soil types as logged in the field and with respect to our experience with the Fall River Formation materials and soils derived from the Fall River Formation.

3.1 ATTERBERG LIMITS

The Atterberg limits were determined for select samples. These tests allow for more detailed classification of soils and provide information relative to the expected engineering characteristics and properties. (ASTM D4318-05)

3.2 GRAIN SIZE ANALYSIS DATA

Standard grain size analysis determinations were performed to determine the grain size distribution and assist in the determination of the physical characteristics and engineering properties of the subsurface materials. (ASTM D422-63(2007))

3.3 CONSOLIDATION ANALYSES

Consolidation/swell tests were performed on relatively undisturbed samples that were obtained from the soil encountered at the site. The consolidation/swell test allows determination of the soil's swell pressure, percentage of swell, collapse potential, and approximate volume change potential with varying moisture conditions. The data from the consolidation/swell test can be used to develop potential uplift pressures or consolidation characteristics which may affect the performance of the foundation. (ASTM D2435)

3.4 SAMPLE STORAGE

The soil samples obtained during this evaluation will not be stored. If the client wishes to receive the samples arrangements should be made; otherwise, the samples will be discarded.

4. SITE CONDITIONS

The Westhills Village Expansion project is located in south Rapid City, South Dakota. Specifically, the proposed project site is on Lot A of Westhills Village Estates Subdivision. The site can generally be described as steep rugged terrain with a ravine that is located throughout the center of the site. Drainage generally flows to the ravine at an approximate 3:1 or less slope. The site is vegetated by short grass and sage brush, and a grove of ponderosa pines within the drainage crossing.

Desired finished grades will require cuts and fills of up to 25 feet throughout the site. The proposed roadway as the alignment crosses the drainage will require embankment fills of up to 25 feet.

The drainage crossing, separating the proposed site, did not have standing or flowing water at the time of our site explorations and appears to only flow during higher precipitation events.

4.1 MATERIALS PRESENT

The site can be separated into three areas: The western extents of the site (Boreholes 1-4), drainage crossing (Boreholes 5 and 6), and the eastern extents of the site (Boreholes 7-11).

The material encountered within the western extents of the site generally consisted of 2 to 6.5 feet of silty lean clay to silty sand with gravel alluvial soil overlying formational siltstone, shale, and sandstone bedrock of the Fall River Formation. The siltstone, shale, and sandstone were stratified in variably thick layers, ranging from several feet to approximately 13 feet.

Within the drainage crossing, the stratigraphy consisted of approximately 6.5 to 10 feet of alluvial lean to fat clay with gravel and sand alluvial soils underlain by weathered shale bedrock which extended to the total depths explored of 11.5 feet below existing grades.

The materials encountered within the eastern extents of the site generally consisted of 0 to 14 feet of lean to fat clay with gravel fill material overlying 3 to 11.5 feet of silty lean clay to silty gravel with sand alluvial soils overlying formational siltstone bedrock to the total depths explored of 25.9 feet from existing grades.

4.1.1 Material Descriptions

The near surface fill material was encountered in boreholes 7-9 in the eastern extents of the site and was found to consist of lean to fat clay with gravel soils. The fill materials were found to be dark grayish brown, moist to saturated, lean to high plasticity, and soft to very stiff in consistency.

The alluvial soils were found to consist of fine and course material, and generally reflected the underlying formational rock type. The sandy silt to silty lean clay to fat clay fine alluvial soils were found to be red to dark gray, moist to saturated, generally low to high plasticity, and soft to very stiff in consistency. The lean clay soils were found to be moderately expansive, exhibiting up to 5.0% swell against a 100 psf surcharge upon saturation, with a swell pressure of 2,500 psf. The silty gravel with sand course alluvial soils were found to be red, moist to saturated, non-plastic, and medium dense.

The underlying siltstone bedrock was found to be pale brown to gray, fine grained, completely to moderately weathered, and moderately soft rock. The siltstone was found to be hard as indicated by SPT testing.

The underlying weathered shale bedrock was found to be dark gray, moderately weathered to completely weathered, blocky, moist, fine-grained, very soft rock, and hard as indicated by SPT testing.

The underlying sandstone bedrock was found to be brown to yellowish brown, fine to medium grained, completely to moderately weathered, and moderately soft rock. The sandstone was found to be hard as indicated by SPT testing.

The geologic logs indicate the specific soil characteristics observed throughout the profiles in each of the boreholes advanced at the site.

4.2 GROUNDWATER TABLE

A shallow groundwater table was encountered in boreholes 6, 7, 10, and 11 at the site at approximately 3 to 6 feet below existing ground surface with a corresponding elevation of approximately 3,352 to 3,378 feet. However, groundwater presence and levels should be anticipated to vary in response to seasonal changes in precipitation, bedrock fracture patterns, high precipitation events, and snow melt, and may not be accurately delineated within the normal scope of a geotechnical evaluation. A temporary shallow groundwater condition is likely to exist within the site drainage during spring or early summer.

4.3 GEOLOGIC CONDITIONS

The geologic conditions of the project site can be generally described as fill material/alluvial soils overlying siltstone, shale, and sandstone bedrock. The underlying siltstone, shale, and sandstone bedrock are interpreted to be a part of the Fall River Formation, a gray to light brown sandstone interbedded with shale and siltstone. (Fahrenbach, 2018)

Available geologic mapping of the area does not indicted faulting or significant geologic structures which may impact siting, design, or performance of the proposed project. (Fahrenbach, 2018)

5. CONCLUSIONS AND RECOMMENDATIONS

From our subsurface exploration and engineering analysis, we have arrived at the following conclusions and have the following recommendations regarding suitability of the site soils for use as roadway embankment and site fill, fill placement and compaction recommendations, roadway subgrade preparation and utility installation.

The conclusions and recommendations presented in this report do not reflect variations in subsurface conditions that are likely to exist in unexplored areas. Should such variations be revealed during construction, it may be necessary to re-evaluate our recommendations based upon on-site observation of the variations. Also, we should be retained to review the final grading plans, as well as applicable portions of the specifications when they become available.

5.1 MATERIAL SUITABILITY

The materials generated from roadway and residential lot cut areas will be utilized for site fill materials required for the embankment fill for the roadway drainage crossing and other residential lots.

These materials will consist of a mixture of moderately expansive silt and clay soils, gravel and sand soils, and siltstone bedrock and shale bedrock material. In general, these materials are suitable for placement as site fill and embankment material. As indicated by laboratory and field testing, these materials will have moderate to high strength characteristics when properly moisture conditioned and compacted as fill.

The bedrock materials will tend to excavate in a blocky or slabby manner and will likely require processing to smaller dimensions prior to placement as fill. We recommend the bedrock materials be processed to a maximum particle dimension of 6 inches prior to placement as fill. The bedrock materials may require an on-site crusher or a processing pad where heavy equipment traffic can be allowed to break the materials down. Alternatively, and if earthwork balance quantities allow, oversized bedrock materials may be segregated from the fill materials and wasted on-site.

5.2 EXCAVATIONS AND SITE GRADING

5.2.1 Excavations

Excavations at the site will encounter silt, clay, gravel, and sand fill/alluvial soils and weathered siltstone and weathered shale bedrock materials. We do not anticipate excavation difficulties within the surficial soils for properly sized equipment in good working order. However, hard, cemented bedrock material which will require additional effort to excavate will be encountered. The bedrock material may require ripping, stinger hammers, or other aggressive excavation techniques to properly excavate. Although not anticipated, blasting may be required. Prospective contractors should be provided with the geotechnical evaluation report including the borehole logs prior to earthwork bidding.

The excavated bedrock materials will tend to excavate in a block or slabby manner and will likely require additional effort to handle and process to smaller dimensions prior to placement of fill. The earthwork contractor should anticipate the additional effort these materials will require.

Regarding excavations at the sites, we recommend that they be sloped or shored in accordance with OSHA regulations, and to generally maintain adequate safety provisions on the jobsite. The near surface clay soils can be considered OSHA Type B soils. It is the contractor's responsibility to maintain job-site safety, and the occasional or longer-term presence of an FMG representative at the site does not constitute a review or a responsibility regarding safety aspects.

5.2.2 Site Grading

We have the following recommendations about site grading at the residential lots and for the roadway embankment fill.

1. We recommend that all topsoil, root zones, organics, etc. be stripped in areas to receive fill.

2. The existing slopes to receive fill within the site are on the order of 10 to 25 percent and, after proper stripping of topsoil and organics, are suitable to receive and support fill materials. Within the residential lots and roadway, we recommend the initial lift of fill be incorporated into the native subgrade via scarification, discing or other methods.

3. Fill materials obtained from cut areas should be blended to the extents practical to provide a uniform fill material.

4. Fill materials should have a maximum particle dimension of 6 inches. Bedrock materials obtained from on-site cut areas will likely excavate in a slabby or blocky manner and will likely require processing to smaller dimensions prior to placement as fill.

5. The Geotechnical Engineer should be contacted to assess and provide recommendations if coal seams are encountered within the cut materials.

6. To prepare a uniform subgrade for the drainage crossing embankment, we recommend the drainage crossing embankment fill area be undercut a minimum of 2 vertical feet after stripping of all topsoil and organics. The undercut material may be incorporated into the fill materials and replaced in properly moisture conditioned and compacted manner in accordance with Section 5.4 of this report.

7. Should soft, unstable materials be encountered within the drainage crossing embankment fill subgrade, the Geotechnical Engineer should be contacted to provide stabilization recommendations based on on-site observations.

8. To provide a horizontal surface for fill placement, the drainage crossing embankment fill subgrade should be benched. The dimension of the benches may be at the contractor's discretion but should provide horizontal surfaces to receive the embankment fill and should accommodate the minimum 2-foot undercut of the existing soils as recommended above in Item 7. A conceptual drawing of the benches and 2-foot undercut is illustrated on Figure 3.

9. When building the drainage crossing embankment and the fills slopes within the roadway and residential lots, we recommend the fill slopes be overbuilt with level, compacted benches which can then be trimmed back to obtain the desired finished slopes. A conceptual drawing of this placement method is illustrated on Figure 3.

10. Fill should be carefully placed around the 72-inch RCP culvert planned for the drainage crossing embankment. Fill placement should be per the manufacturer's recommendations and may require hand placement and compaction. Select on-site fill material with a maximum particle dimension of 2 inches should be used within 3 feet horizontally and vertically from the culvert. In no case should open-graded or poorly-graded backfill materials be used within 3 feet of the culvert.

5.3 UTILITY INSTALLATION

Based on the results of our field exploration, the majority of utility trench excavations of up to 25 feet below existing grades will be in fill material consisting of on-site silt, clay, gravel, and sand materials and weathered siltstone and weathered shale bedrock materials. Recommendations regarding utility trench excavation are provided in the Excavations section of this report. It is anticipated that the majority of the utility excavation can likely be completed with properly sized excavation equipment in good working order; however, cemented material may be encountered and may require specialty excavation methods including possible ripping, stinger hammers, or other aggressive excavation techniques to properly excavate.

We recommend the utility trench backfill be moisture conditioned to within 3% of the optimum moisture content and compacted to a minimum of 92% of the maximum dry density as indicated by ASTM D1557.

Pipe bedding materials should meet the requirements specified in City of Rapid City "Standard Specifications for Public Works Construction" 2022 Edition.

5.4 GENERAL MATERIAL PLACEMENT REQUIREMENTS

5.4.1 Fill Materials

The **on-site silt, clay, sand, and gravel materials**, segregated from debris, deleterious material, and any oversized material greater than 6-inches in maximum dimension, will be suitable for use as general site fill and drainage crossing embankment fill.

The **excavated siltstone, shale, and sandstone bedrock materials**, processed or segregated to result in a material with a maximum particle dimension of 6 inches, will be suitable for use as general site fill and drainage crossing embankment fill. Particles larger than 6 inches and a maximum particle dimension of 12 inches may be placed at the perimeter of fill limits, fill slopes, and the bottom 2 feet of the drainage crossing embankment fill, provided they do not interfere with designed drainage patterns.

On-site sources of **stabilization rock** were not identified. These materials will have to be imported to the site, if necessary. The stabilization rock should be a clean rock with 100% passing the 3-inch sieve, 0 to 15% passing the 1-inch sieve, and 0 to 8% passing the #4 sieve.

If necessary, **imported, non-engineered fill materials** for non-structural, general site fill areas shall have a maximum particle size of 6 inches and shall meet one of the following USCS classifications: GM, GC, SM, SC, CL, CH.

5.4.2 Fill Placement

We suggest that sufficient density tests be taken by qualified personnel to indicate the degree of compaction being attained. We recommend controlling scarification, fill and backfill operations using the moisture content and dry density relationship as determined by ASTM D 1557 (Modified Proctor Density). Site fill materials should be placed in 6-12-inch loose lifts and compacted to the densities and moisture contents outlined below. Any additional moisture required to achieve compaction in a layer should be added and the entire lift mixed to obtain uniform moisture content. Fill materials should be blended to the extents practical to provide a uniform fill material.

Site fill and embankment fill should be moisture conditioned to within 3% of the optimum moisture content and compacted to a minimum of 92% of the maximum dry density as indicated by ASTM D1557.

The earthen site construction materials should not be placed on frozen ground and compaction operations should not be performed during periods when temperatures are below 25 degrees Fahrenheit. During cold weather construction periods, it will be necessary to remove frozen soils prior to placement of new fill materials.

Placement of earthen site construction materials at temperatures below 35 degrees Fahrenheit may result in frost entering the soils and making placement at the required specifications difficult. Therefore, we suggest when temperatures are below 40 degrees Fahrenheit and earthen materials are being placed below structures, that the earthen site construction materials be continuously observed and tested. If frozen materials are observed being placed below structures, we suggest that they be removed and replaced with unfrozen materials as directed by the geotechnical engineer or testing personnel.

Soils having relatively high silt or fine sand contents are often difficult to compact to the desired specifications although they may be compacted well enough to suit the intended purpose. If great difficulty is encountered during construction regarding meeting the compaction specifications, a qualified geotechnical engineer should be consulted to determine if the placement of the soils at lower densities could still provide suitable characteristics.

5.5 PAVEMENT THICKNESS DESIGN

From our subsurface soil exploration and engineering analysis, we have arrived at the following conclusions and have the following recommendations regarding pavement section design at the site. The conclusions and recommendations presented in this report do not reflect variations in subsurface conditions that are likely to exist in unexplored areas. Should such variations be revealed during construction, it may be necessary to re-evaluate our recommendations based upon on-site observation of the variations. We understand that Asphalt Concrete (AC) paving will be used exclusively at the site.

5.5.1 Flexible Pavement

To develop the proposed flexible pavement design parameters for the proposed new pavement areas, we used the "PerRoadXPress" design software developed by the Asphalt Pavement Alliance.

5.5.2 Subgrade and Design Criteria

The on-site pavement subgrade soils will likely consist of silt, clay, gravel, and sand material, and siltstone, shale, and sandstone bedrock. Some variations are expected. An estimated CBR value of 3.0% was utilized in the calculation of the appropriate pavement section thicknesses. The flexible pavement is assumed to have a traffic loading of up to 500 vehicles per day with 1% heavy trucks. The pavement design is based on a 20-year life. The recommended pavement section is provided in Table 1 below. Areas where turning movements are concentrated will experience elevated loads and shoving or "bird-bathing" may occur and thicker pavement sections should be considered for use in these areas.

Table 1 – Recommended Pavement Sections

Section	*Flexible Paving*
Asphalt Concrete (AC)	5 Inches
Aggregate Base Course	6 Inches
Subgrade Scarification	8 Inches

5.5.3 Pavement Subgrade Preparation

We suggest that the existing subgrade soils be prepared in accordance with the standard engineering practices and procedures outlined as follows. We recommend grading the existing soils across the site to a uniform surface before the fill materials are placed. We suggest removing any topsoil, organics, and debris from these subgrade soils. Topsoil materials may be stockpiled for landscaping at the site. After removal of any topsoil, organics, and debris, we suggest that the subgrade soils be scarified and thoroughly mixed to a minimum depth of eight (8) inches, the moisture content adjusted, and then recompacted to meet the specifications set forth in Section 5.4. We suggest that the grading be performed so that positive drainage occurs off the pavement areas and that no puddling of water occurs. We suggest a minimum slope of one (1) percent.

We recommend that fill material be placed in accordance with the criteria provided in Section 5.4. Before the fill materials are placed, we suggest that a geotechnical engineer observe the subgrade soils to determine if soft areas exist. If soft areas exist, we recommend that the soft materials be removed and replaced with suitable materials that are recommended by the geotechnical engineer and that they are compacted to meet the specifications of Section 5.4.

After the subgrade soils have been scarified and recompacted and immediately prior to placing the next pavement or fill section, we recommend proof rolling the site with a fully loaded tandem axle end dump or water truck. We suggest that the proof rolling be performed to identify soft areas across the site that require additional work. We recommend that a geotechnical engineer observe the proof rolling operations. We suggest that the recommendations made by the geotechnical engineer during the proof rolling operations be implemented and be considered a part of this pavement thickness design.

5.5.4 Aggregate Base

The pavement sections presented in Table 1 require that the pavements be underlain by an untreated aggregate base course. We recommend that the untreated aggregate base course be placed immediately after the subgrade preparation has been completed. We recommend utilizing an untreated aggregate base course below the pavements because it will provide a firm base for the pavement as well as a drain for any ground and surface water that enters the pavement section. We recommend that the aggregate base course meet the City of Rapid City Aggregates for Granular Bases and Surfacing requirements that are in Section 117 of the (2022) "Standard Specifications for Public Works Construction."

5.5.5 Hot-Mix Asphalt (HMA) Pavement

We suggest that the hot-mix asphalt paving be done in accordance with Sections 31, 32, 35, 115, and 118 of the (2022) "City of Rapid City Standard Specifications for Public Works Construction." We suggest that the hot-mix asphalt be compacted to a maximum single-lift thickness of three (3) inches. We recommend that the lifts of the hot-mix asphalt be compacted to a minimum of ninety-two (92) percent of maximum density as determined by "Rice" specific gravity method when the specimens are prepared as specified in SD 312 when referenced to the like material.

6. PROJECT OBSERVATION AND CONSTRUCTION QUALITY ASSURANCE

As the provider of the geotechnical recommendations contained herein, FMG should be retained to provide any necessary pre-construction geotechnical reviews, interpretations, and supplemental information.

If any changes in the nature, design or location of the project are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and conclusions of this report modified or verified in writing.

Frequently, soil conditions vary slightly from those encountered in the borings that were drilled. Therefore, FMG should be retained to review the portions of the plans that pertain to earthwork and foundations.

Additionally, proper placement of site fill, engineered fill, and other structural elements per our recommendations and per the project specifications is essential to the performance of the foundation and floors of the structure. Failure to properly place the construction materials and structural elements can result in excessive movements potentially leading to failure and significant impact to the structural integrity of the structure.

Our recommendations are based on the necessary assumption that the material and structural element placement will occur as specified and that a detailed construction quality assurance program will be provided that clearly documents the proper placement of materials and structural elements at this site through adequate methods and frequency of testing. In the absence of such quality assurance and documentation, FMG cannot assume responsibility or liability for the performance of any foundation systems, embankments, or structural elements of this project. Should another agent perform the construction quality assurance, said agent will necessarily assume the role and responsibilities of construction-phase geotechnical engineer of record.

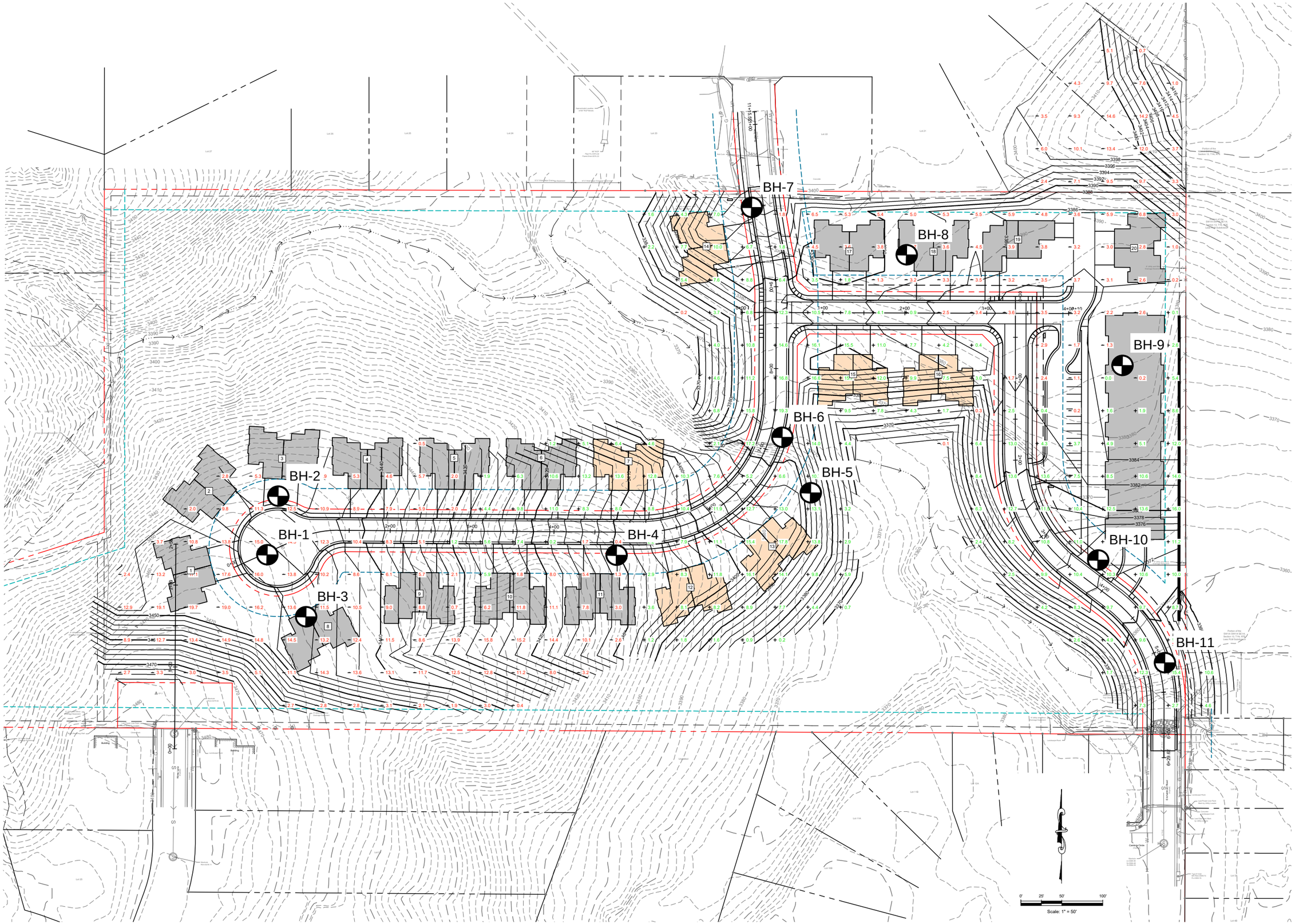
We are available to observe construction operations, particularly the compaction of the fill materials and other such field observations as may be necessary. Under no circumstances is it our intent to directly control the physical activities of the contractor or the contractor's workmen. Any field testing or observations performed by FMG would be a part of engineering opinions rendered to the contractor and should not be misconstrued as supervision of the contractor's work or workmen.

7. CONCLUDING STATEMENT

If any changes in the nature, design or location of the project features are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed, and conclusions of this report modified or verified in writing.

The findings and recommendations in this report were prepared following accepted soil mechanics procedures and practices. We make no other warranty, either implied or expressed. The conclusions and recommendations of this report are based upon the results of the field exploration boring, field tests, laboratory tests, and analysis. We have extrapolated the data obtained from the test borehole locations to the surrounding soils. Anomalies can exist around the borings. The data presented on the boring logs represent the conditions as encountered in that test hole on the date drilled and logged. If, during planning and construction, conditions are different from those indicated, please notify us so that we can modify the conclusions and recommendations.

c: Z:\231257.02 Westhills Village Expansion Survey & Geotech\Geotech\231257 Westhills Village Expansion -- FMG Geotech.docx



FMG ENGINEERING
3700 Sturgis Road
Rapid City, SD 57702
605.342.4105 • fmgengineering.com

Preliminary Not For Construction

File Number: 221257.01

Location: SE 1/4, SW 1/4, Section 13 T1N, R7E, BHM

Surveyed By: not surveyed
Date: NA

Designed By:
Drawn By:
Checked By:

June 2024

Westhills Village Expansion 2024
Rapid City, SD

Revision / Date

Sheet Name: Site Grading Plan

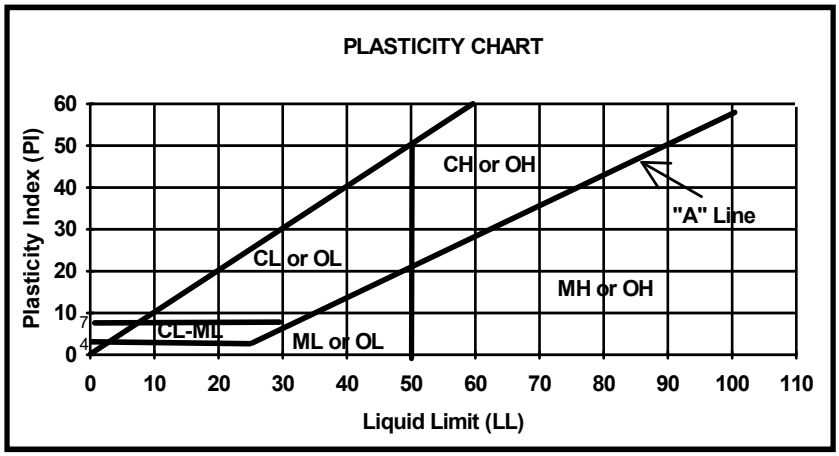
Sheet Number: 1

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

ASTM Designation: D 2487-90 and D 2488-90 (Unified Soil Classification System)

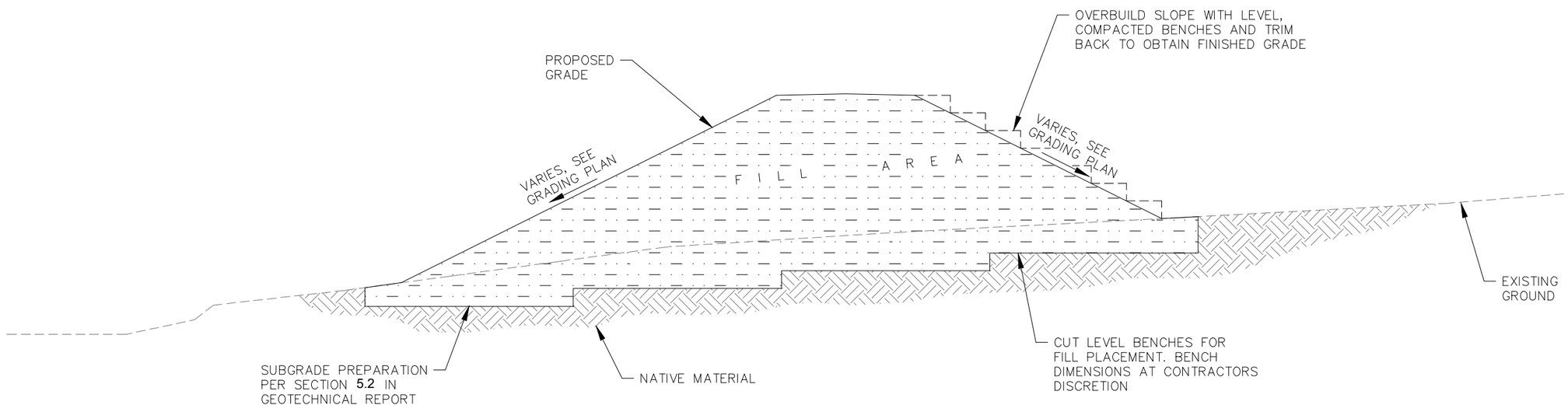
Criteria for Assigning Group Symbols and Group Names[A]				Soil Classification Group Symbol	Name
COARSE-GRAINED SOILS More than 50% retained on the No. 200 sieve	**Gravels** More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels Less than 5% fines[C]	Cu ≥ 4 and 1 ≤ Cc ≤ 3[E]	GW	Well-Graded Gravel[F]
			Cu < 4 and/or 1 > Cc > 3[E]	GP	PoorlyGradedGravel[F]
		Gravels with Fines More than 12% fines[C]	Fines classify as ML or MH	GM	Silty Gravel[F,G,H]
			Fines classify as CL or CH	GC	Clayey Gravel[F,G,H]
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands Less than 5% fines[D]	Cu ≥ 6 and 1 ≤ Cc ≤ 3[E]	SW	Well-Graded Sand[I]
			Cu < 6 and/or 1 > Cc > 3[E]	SP	Poorly Graded Sand[I]
		Sands with Fines More than 12% fines[D]	Fines classify as ML or MH	SM	Silty Sand[G,H,J]
			Fines classify as CL or CH	SC	Clayey Sand[G,H,I]
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	**Silts and Clays** Liquid limit less than 50	inorganic soils	PI>7and on or above "A" line[J]	CL	Lean Clay[K,L,M]
			PI<4 or plots below "A" line[J]	ML	Silt[K,L,M]
		organic soils	Liquid limit-oven dried / Liquid limit-not dried < .75	OL	Organic Clay[K,L,M,N] / Organic Silt[K,L,M,O]
	Silts and Clays Liquid limit 50 or more	inorganic soils	PI plots on or above "A" line	CH	Fat Clay[K,L,M]
			PI plots below "A" line	MH	Elastic Silt[K,L,M]
		organic soils	Liquid limit-oven dried / Liquid limit-not dried < .75	OH	Organic Clay[K,L,M,P] / Organic Silt[K,L,M,Q]
HIGHLY ORGANIC SOILS		Primarily organic matter, dark in color, and organic odor		PT	Peat

A. Based on the material passing the 3-in. (75-mm) sieve.
B. If field sample contained cobbles or boulders, or both, add "with cobbles and boulders, or both" to group name.
C. Gravels with 5% to 12% fines require dual symbols:
GW-GM well-graded gravel with silt
GW-GC well-graded gravel with clay
GP-GM poorly graded gravel with silt
GP-GC poorly graded gravel with clay
D. Sands with 5% to 12% fines require dual symbols:
SW-SM well-graded sand with silt
SW-SC well-graded sand with clay
SP-SM poorly graded sand with silt
SP-SC poorly graded sand with clay
E. $Cu = D_{60}/D_{10}$ $Cc=(D_{30})^2/D_{10}xD_{60}$
F. If soil contains ≥ 15% sand, add "with sand" to group name.
G. If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM
H. If fines are organic, add "with organic fines" to group name.
I. If soil contains ≥ 15% gravel, add "with gravel" to group name.
J. If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
K. If soil contains 15% to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
L. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.
M. If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravely" to group name.
N. PI ≥ 4 and plots on or above "A" line.
O. PI < 4 or plots below "A" line.
P. PI plots on or above "A" line.
Q. PI plots below "A" line.



Equation of "A" - line: Horizontal at PI = 4 to LL = 25.5, then PI = 0.73(LL-20) (Chart is for general graphic presentation purposes only)

- Figure 2-



TYPICAL EMBANKMENT FILL
BENCHING DETAIL
NOT TO SCALE

FMG ENGINEERING
3700 Sturgis Road
Rapid City, SD 57702
605.342.4105 • fmgengineering.com

File Number:
N/A

Location:
N/A
N/A

Surveyed By: N/A
Date: N/A

Drawn By: MDS
Checked By: JTL/AF

November 2022

Typical Embankment Fill Benching Detail

Revision / Date

Sheet Name:

Figure Number:

3

Appendix A

Borehole Logs

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/23/24 **COMP.:** 4/23/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 1

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

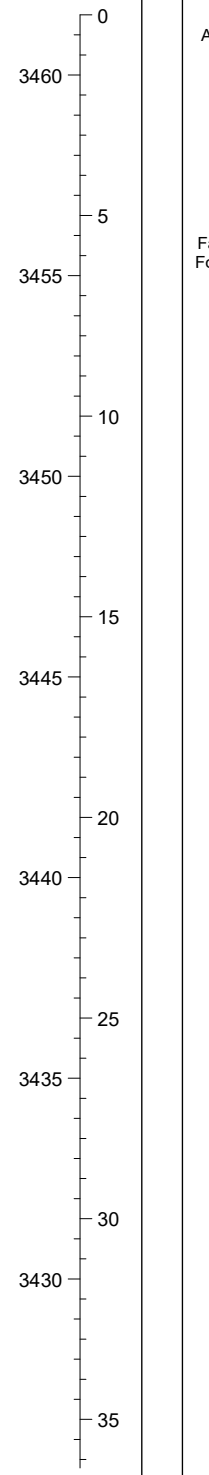
GROUND ELEVATION: 3461.5

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 4 inches in thickness.							
		Alluvium		CL	Silty Lean Clay: Red, moist, low plasticity, very stiff.							
			P1A 11/16/21 N=37									
		Fall River Formation		Silts	Siltstone: Pale brown, fine grained, moderately soft rock, completely weathered.							
			P1B 12/13/16 N=29	ML		8.8		24	NP			
			P1C 13/32/50 N=100									
			P1D 13/45/50 N=100									
				WS	Weathered Shale: Dark gray, fine grained, very soft rock, moderately weathered, blocky, with irom staining.							
			P1E 26/34/50 N=100									
				SS	Sandstone: Dark gray, fine to medium grained, moderately soft rock, moderately weathered, with iron staining.							
			P1F 27/50+ N=100		- End of borehole at 31.0 feet. No groundwater encountered while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/23/24 **COMP.:** 4/23/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 2

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

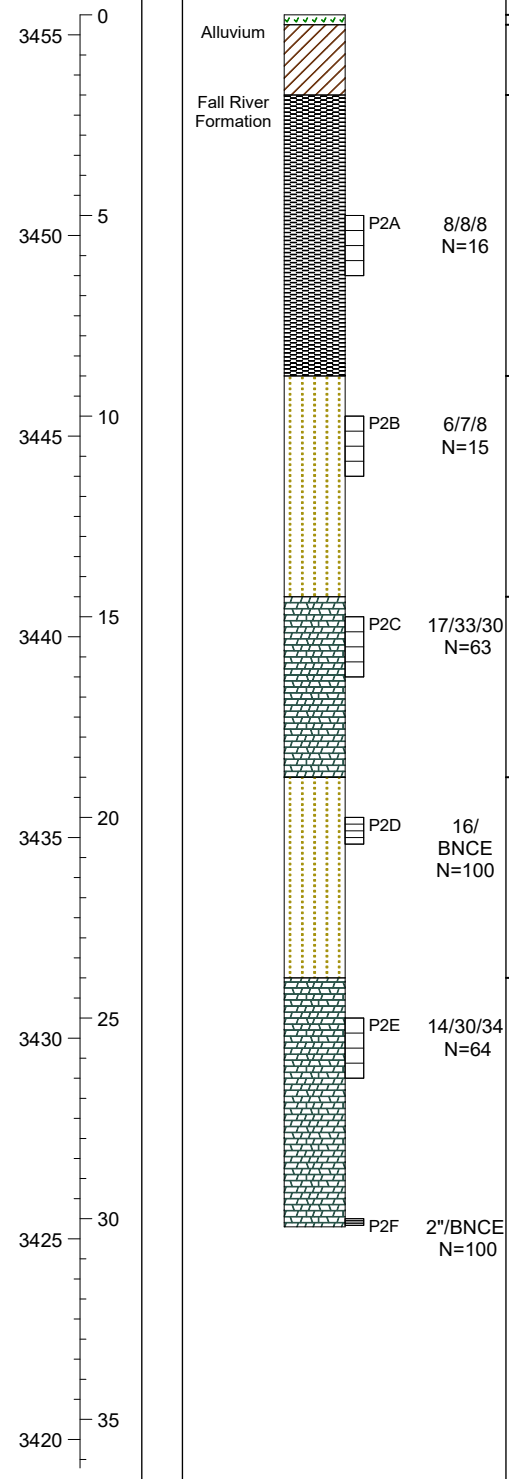
GROUND ELEVATION: 3455.5

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 3 inches in thickness.							
				CL	Silty Lean Clay: Red, moist, low plasticity, very stiff.							
			P2A 8/8/8 N=16	Silts	Siltstone: Gray, fine grained, moderately soft rock, completely weathered.							
			P2B 6/7/8 N=15	SS	Sandstone: Brown, fine to medium grained, moderately soft rock, completely weathered, with iron staining.							
			P2C 17/33/30 N=63	WS	Weathered Shale: Dark gray, fine grained, very soft rock, completely weathered, blocky, with irom staining and selenite.			27				
			P2D 16/ BNCE N=100	SS	Sandstone: Pale brown, fine to medium grained, moderately soft rock, moderately weathered, with iron staining.							
			P2E 14/30/34 N=64	WS	Weathered Shale: Dark gray, fine grained, very soft rock, moderately weathered, blocky, with iron staining.							
			P2F 2"/BNCE N=100		- End of borehole at 30.2 feet. No groundwater encountered while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/23/24 **COMP.:** 4/23/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 3

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

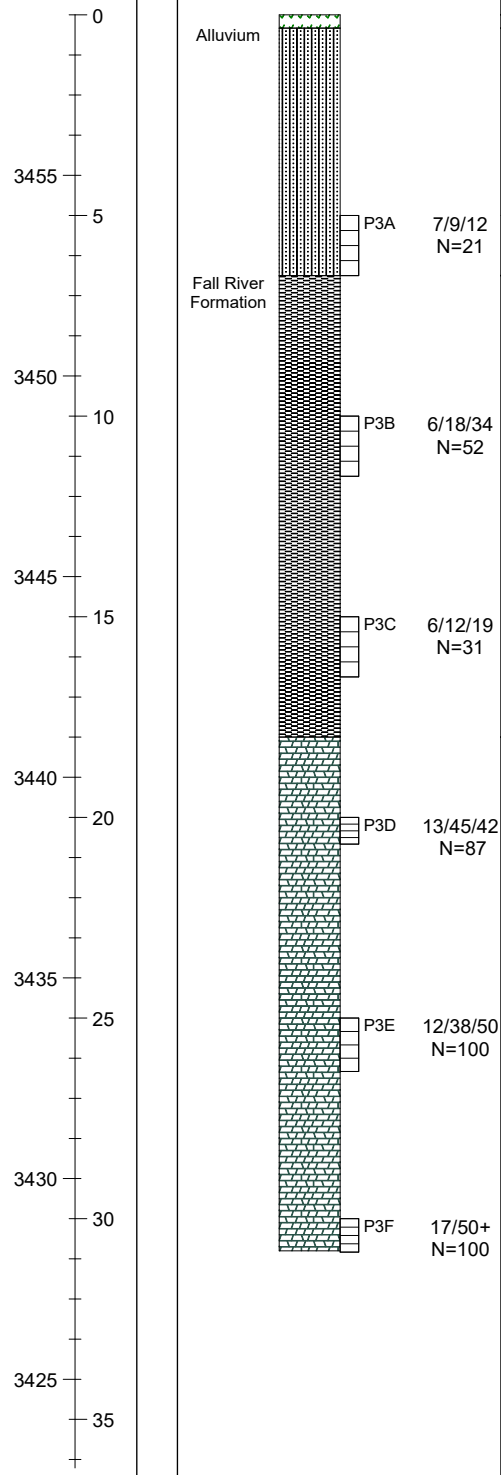
GROUND ELEVATION: 3459.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 4 inches in thickness.							
				SM	Silty Sand with Gravel: Red, moist, non-plastic, very stiff.							
			P3A 7/9/12 N=21	SM		6.0		NV	NP			
				Silts	Siltstone: Pale brown, fine grained, moderately soft rock, completely weathered.							
			P3B 6/18/34 N=52									
			P3C 6/12/19 N=31									
				WS	Weathered Shale: Dark gray, fine grained, very soft rock, highly weathered, blocky, with irom staining.							
			P3D 13/45/42 N=87									
			P3E 12/38/50 N=100									
			P3F 17/50+ N=100		- End of borehole at 30.8 feet. No groundwater encountered while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 4

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

GROUND ELEVATION: 3412.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered

ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
0 / 3410		Alluvium		Tops	Grass and Topsoil: 3 inches in thickness.							
				CL	Silty Lean Clay: Brown, moist, low plasticity, very stiff.							
5 / 3405		Fall River Formation	P4A 8/9/11 N=20	Silts	Siltstone: Pale brown, fine grained, moderately soft rock, highly weathered.							
				WS	Weathered Shale: Dark gray, fine grained, very soft rock, moderately weathered, with irom staining and sand in fractures.							
10 / 3400			P4B 10/27/50 N=100	SS	Sandstone: Yellowish brown, fine to medium grained, moderately soft rock, completely weathered, with iron staining. - End of borehole at 13.0 feet due to auger refusal. No groundwater encountered while drilling.							
15 / 3395												
20 / 3390												
25 / 3385												
30 / 3380												
35												

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 5

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

GROUND ELEVATION: 3376.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered

ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
0 / 3375		Alluvium		Tops	Grass and Topsoil: 5 inches in thickness.							
				CL	Lean Clay with Gravel and Sand: Brown, moist, non-plastic, dense.							
			S5A	CL		9.2		34	16			5.0 2.5
5 / 3370			P5A 5/6/6 N=12		- End of borehole at 6.5 feet. No groundwater encountered while drilling.							
10 / 3365												
15 / 3360												
20 / 3355												
25 / 3350												
30 / 3345												
35 / 3340												

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 6

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

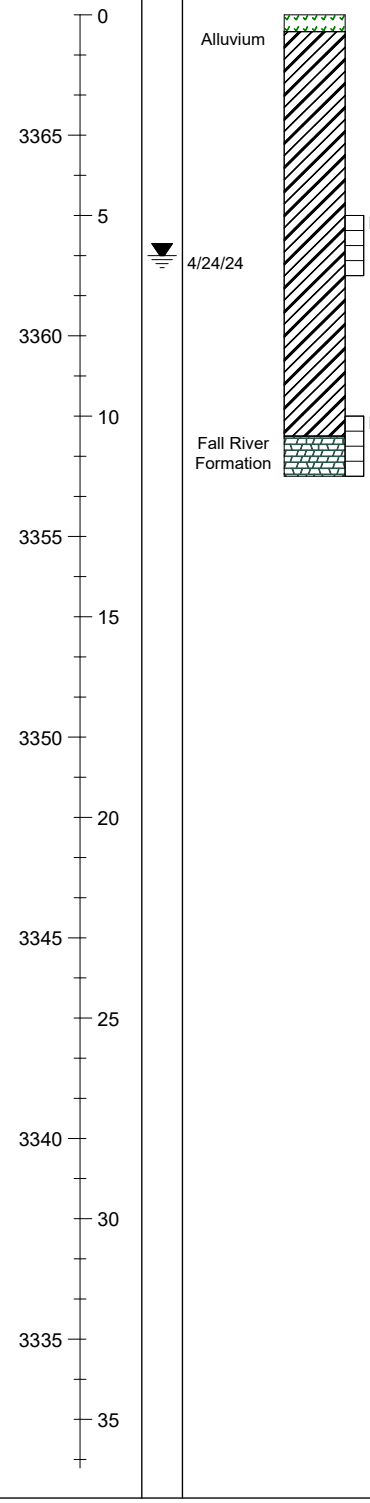
GROUND ELEVATION: 3368.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 5 inches in thickness.							
				CL-CH	Lean to Fat Clay with Gravel and Sand: Dark brown, moist, non-plastic, dense.							
			P6A 4/3/2 N=5	CL		17.1		27	11			
			P6B 9/17/25 N=42	WS	Weathered Shale: Dark gray, fine grained, very soft rock, moderately weathered, with iron staining. - End of borehole at 11.5 feet. Groundwater encountered at 6 feet while drilling.						

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 7

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

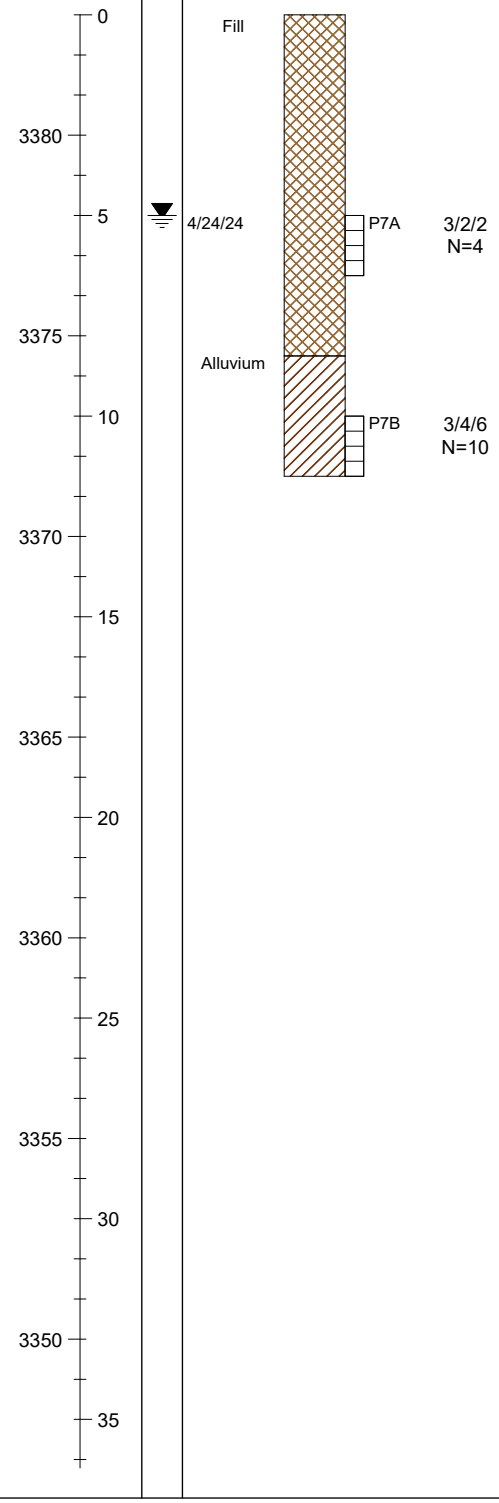
GROUND ELEVATION: 3383.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: 8.5 feet



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				CL	Lean Clay with Gravel: Brown, moist, low to medium plasticity, soft to medium stiff.							
				CL	Silty Lean Clay: Brown, moist, low plasticity, stiff.							
				CL	- End of borehole at 11.5 feet. Perched groundwater encountered at 5 feet while drilling.	16.3		30	13			

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 8

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

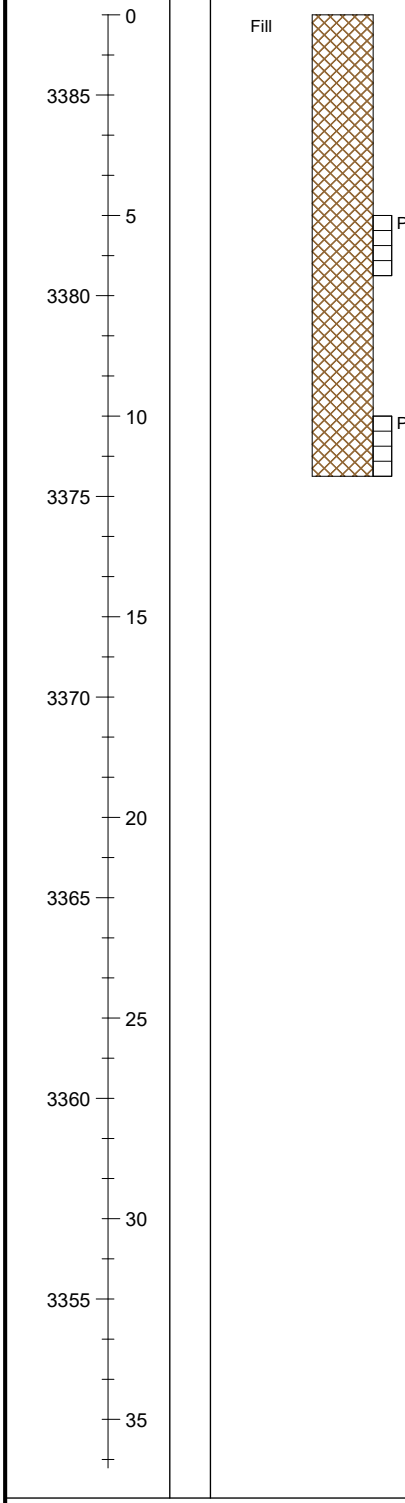
GROUND ELEVATION: 3387.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: 11.5+ feet



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				CL	Gravelly Lean Clay: Brown, moist, low to medium plasticity, soft to medium stiff.							
			P8A 9/10/11 N=21	CH	Fat Clay with Gravel: Very dark gray, moist, high plasticity, very stiff.							
				CL-CH	Lean to Fat Clay with Gravel: Brown, moist, medium plasticity, very stiff.							
			P8B 5/7/10 N=17	CL		14.3		30	15			
					- End of borehole at 11.5 feet. No groundwater encountered while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/25/24 **COMP.:** 4/25/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 9

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

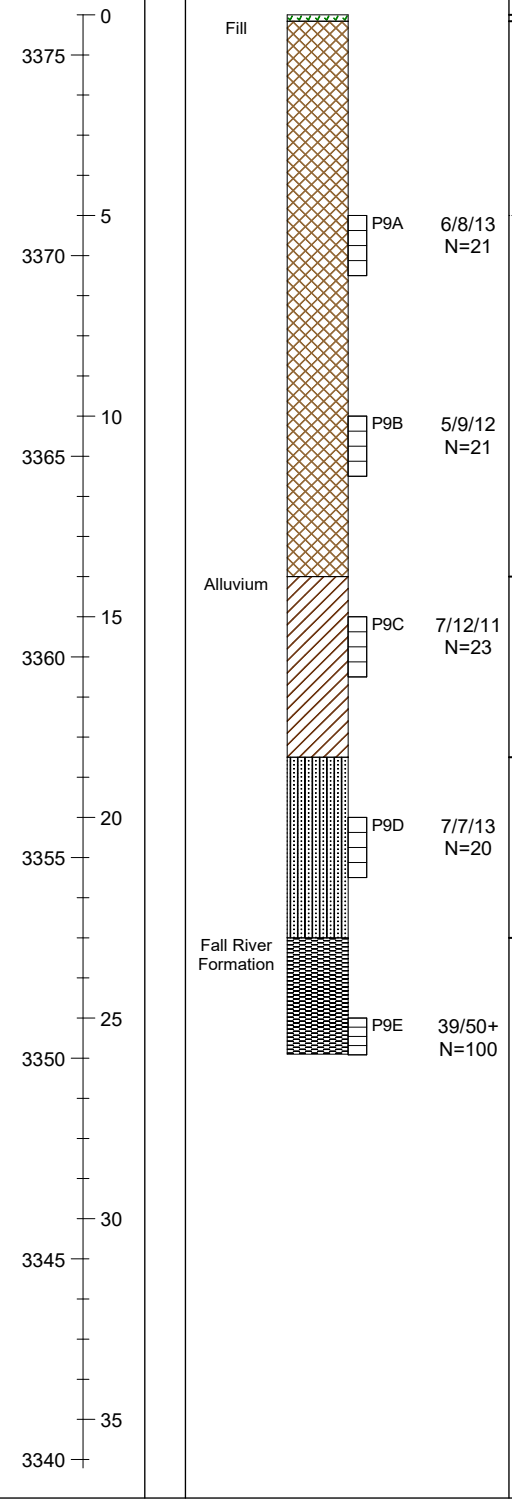
GROUND ELEVATION: 3376.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: 14 feet



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 2 inches in thickness.							
				CH	Fat Clay: Dark grayish brown, moist, high plasticity, very stiff. (recompacted shale)							
			P9A 6/8/13 N=21	CL		15.1		46	25			
			P9B 5/9/12 N=21									
			P9C 7/12/11 N=23	CL	Silty Lean Clay: Brown, moist, low to medium plasticity, very stiff.	11.0						
			P9D 7/7/13 N=20	SM	Silty Sand: Brown, moist, non-plastic, dense.							
			P9E 39/50+ N=100	SILTS	Siltstone: Light gray, fine grained, moderately soft rock, moderately weathered. - End of borehole at 25.9 feet. No groundwater encountered while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 10

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

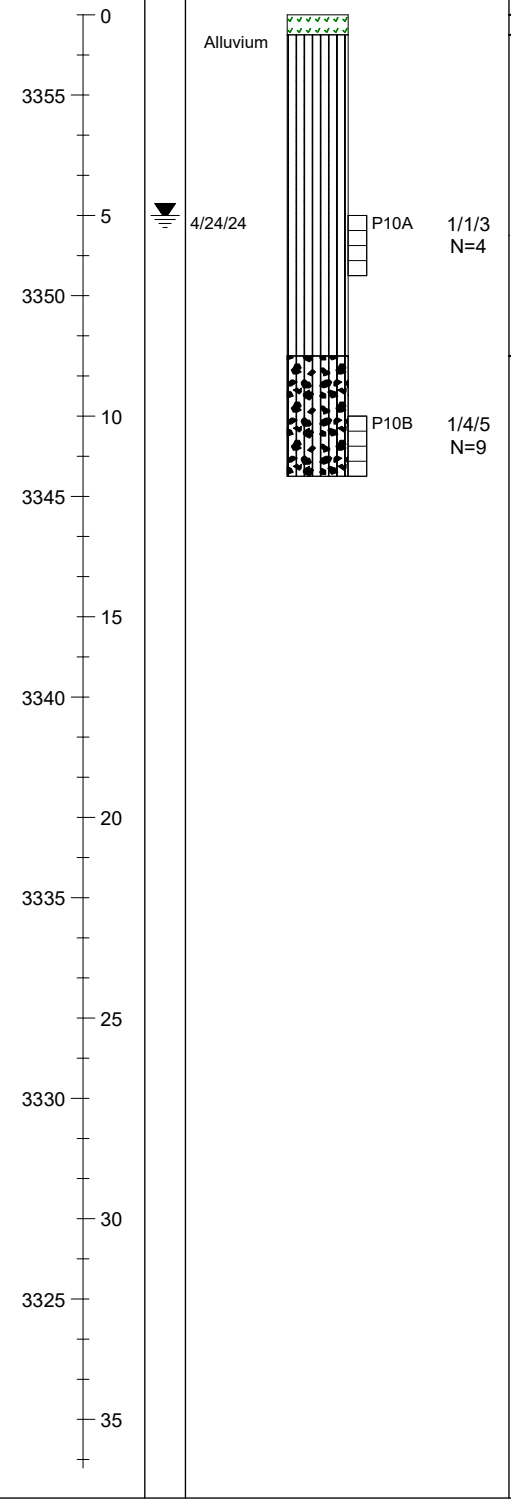
GROUND ELEVATION: 3357.0

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 6 inches in thickness.							
				ML	Sandy Silt: Brown, moist, non-plastic, loose to medium dense.							
	4/24/24		P10A 1/1/3 N=4	ML	Sandy Silt with Gravel: Brown, saturated, non-plastic, loose							
			P10B 1/4/5 N=9	GM	Silty Gravel with Sand: Brown, saturated, non-plastic, medium dense.							
					- End of borehole at 11.5 feet. Groundwater encountered at 5 feet while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

PROJECT: Westhills Village Expansion Geotech

LOCATION: Rapid City, SD

PROJECT #: 231257.02

DATE STARTED: 4/24/24 **COMP.:** 4/24/24

CONTRACTOR: FMG, Inc.

DRILL METHOD: HSA Diedrich D70

GEOLOGIC LOG OF BOREHOLE 11

FMG ENGINEERING
605-342-4105
3700 Sturgis Road
Rapid City, SD 57702
fmgengineering.com

BORING LOCATION: See Borehole Map

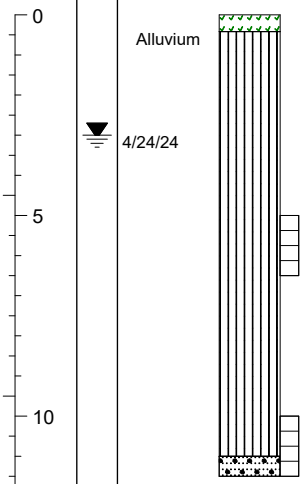
GROUND ELEVATION: 3354.5

DATUM: FMG Topo

BORING DIAMETER: 6 5/8"

COLLAPSE DEPTH: none

FILL DEPTH: none encountered



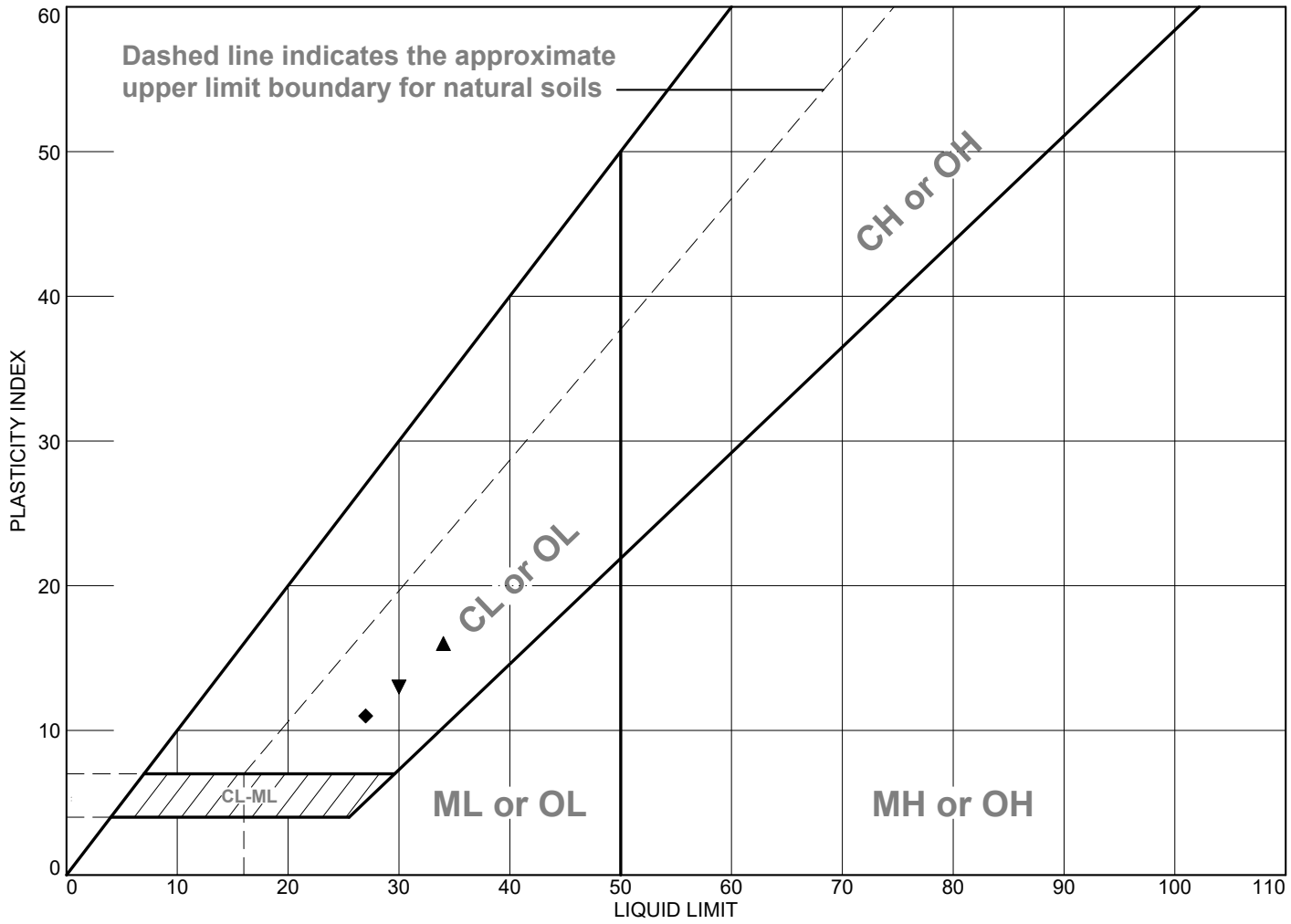
ELEVATION / DEPTH	WATER	GEOLOGY GRAPHIC	Sample Info Type,#/Blows	USCS	DESCRIPTION	NM %	DD (pcf)	LL (%)	PI (%)	Qu (psf)	phi (deg)	Swell (%) (ksf)
				Tops	Grass and Topsoil: 5 inches in thickness.							
				ML	Sandy Silt: Brown, moist, non-plastic, loose.							
				ML	Sandy Silt with Gravel: Brown, saturated, non-plastic, loose							
			P11A 1/0/1 N=1	ML	Sandy Silt: Brown, saturated, non-plastic, loose.							
			P11B 7/7/5 N=12	SP	Poorly Graded Sand: Brown, saturated, non-plastic, dense. - End of borehole at 11.5 feet. Groundwater encountered at 3 feet while drilling.							

SEE ATTACHED KEY FOR ABBREVIATIONS, NOTES & DESCRIPTIONS

Appendix B

Laboratory Testing

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Siltstone: Pale brown, fine grained, moderately soft rock, completely weathered.	24	NP	NP	88	79	ML
■	Silty Sand with Gravel: Red, moist, non-plastic, very stiff.	NV	19	NP	56	43	SM
▲	Lean Clay with Sand: Brown, moist, non-plastic, dense.	34	18	16	98	88	CL
◆	Lean to Fat Clay with Gravel and Sand: Dark brown, moist, non-plastic, dense.	27	16	11	76	62	CL
▼	Silty Lean Clay with Sand: Brown, moist, low plasticity, stiff.	30	17	13	98	81	CL

Project No. 231257.02 **Client:** Westhills Village

Project: Westhills Village Expansion Geotech

● **Source of Sample:** 1 **Depth:** 10 **Sample Number:** P1B
■ **Source of Sample:** 3 **Depth:** 5.0 **Sample Number:** P3A
▲ **Source of Sample:** 5 **Depth:** 3.5 **Sample Number:** S5A
◆ **Source of Sample:** 6 **Depth:** 5 **Sample Number:** P6A
▼ **Source of Sample:** 7 **Depth:** 10 **Sample Number:** P7B

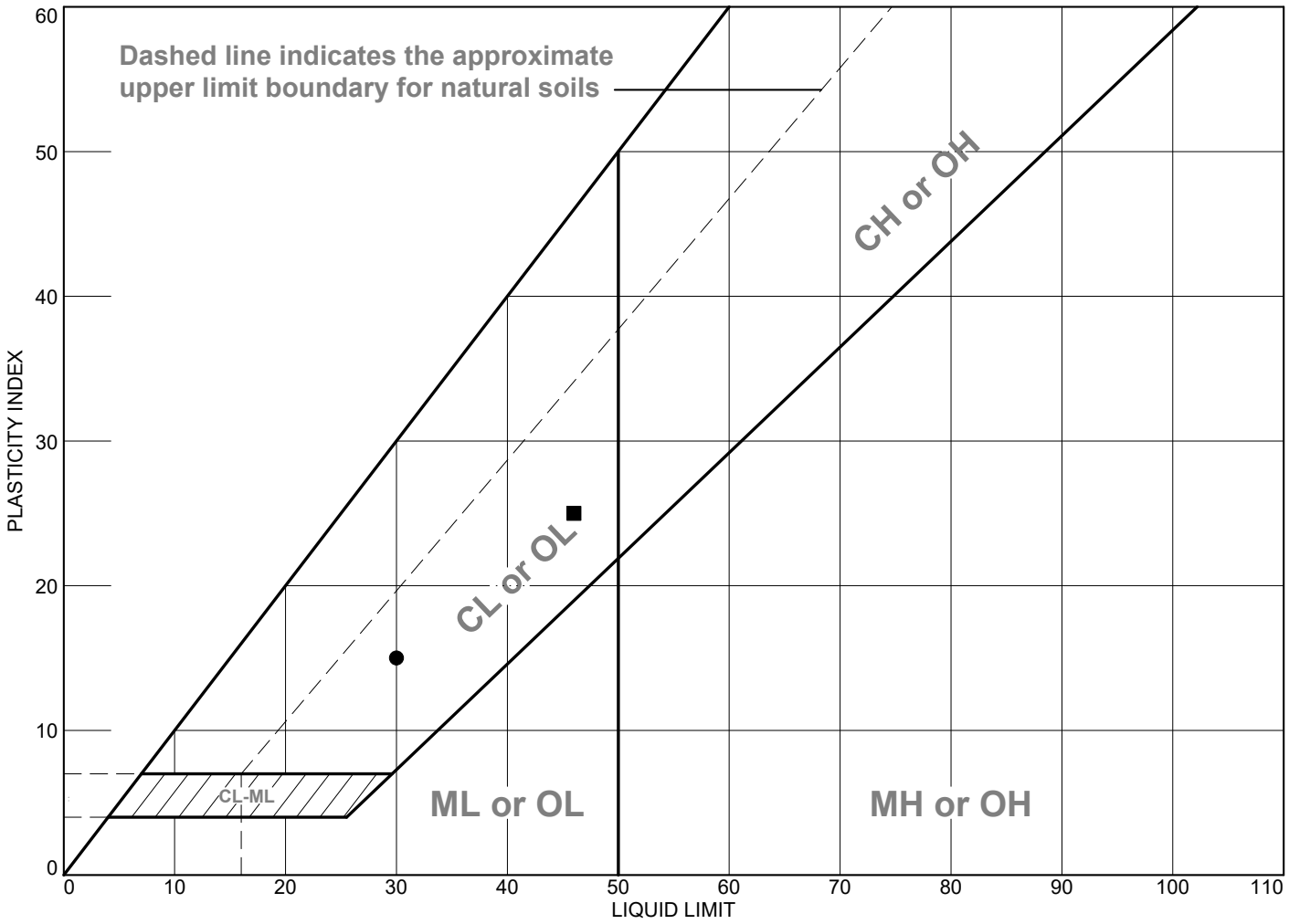
Remarks:

FMG, Inc.

Figure

Tested By: ● JB/CA ■ CA/JD ▲ JD ◆ CA/JD ▼ CA/JD **Checked By:** JB

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Lean to Fat Clay with Sand: Brown, moist, medium plasticity, very stiff.	30	15	15	93	81	CL
■	Fat Clay: Dark grayish brown, moist, high plasticity, very stiff. (recompacted shale)	46	21	25	94	78	CL
▲	Silty Lean Clay: Brown, moist, low to medium plasticity, very stiff.		19		99	95	

Project No. 231257.02 **Client:** Westhills Village

Project: Westhills Village Expansion Geotech

● **Source of Sample:** 8 **Depth:** 10 **Sample Number:** P8B

■ **Source of Sample:** 9 **Depth:** 5 **Sample Number:** P9A

▲ **Source of Sample:** 9 **Depth:** 15 **Sample Number:** P9C

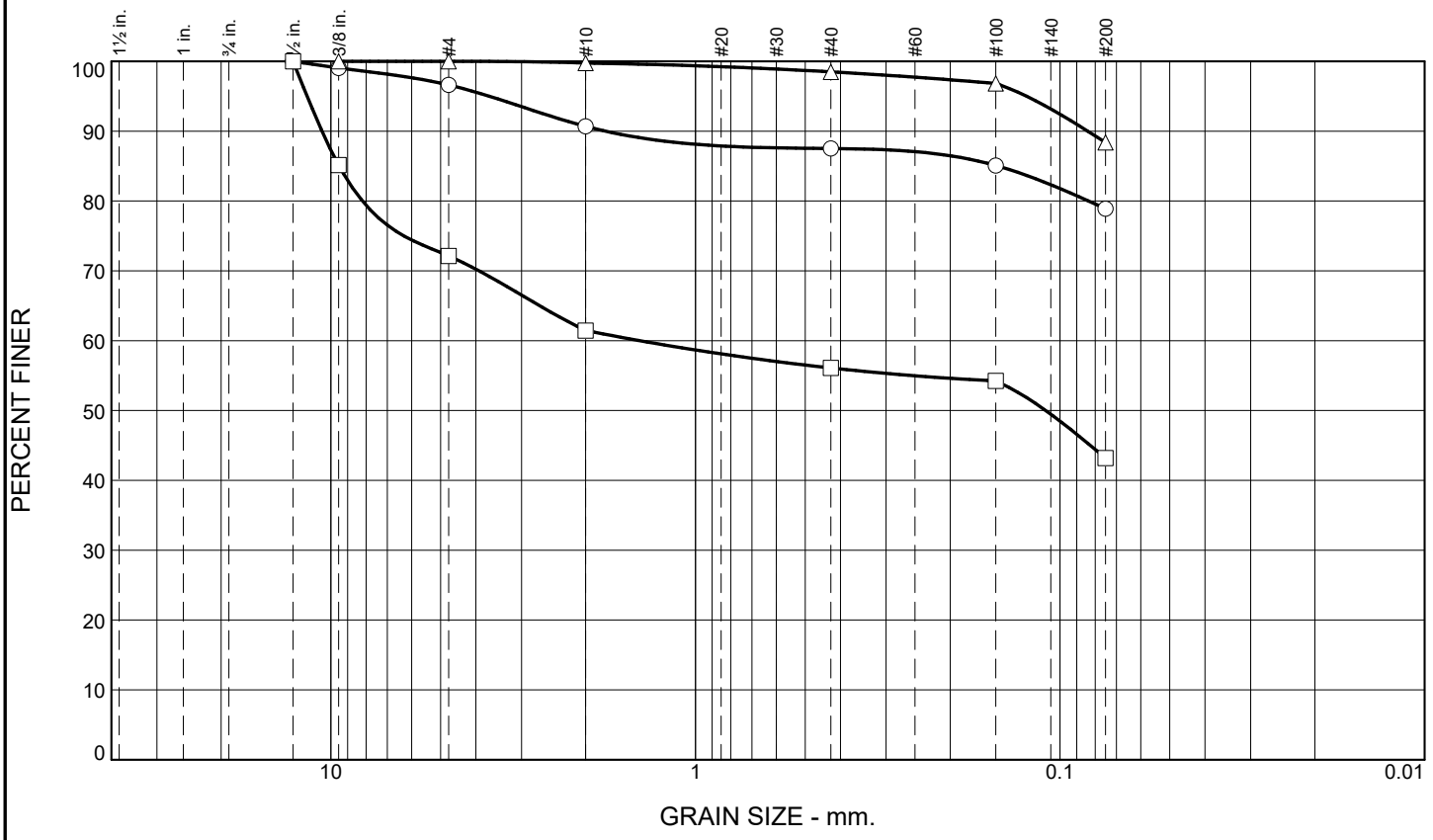
Remarks:

FMG, Inc.

Figure

Tested By: ● JD ■ CA ▲ CA **Checked By:** JB

Particle Size Distribution Report



	+3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PL	PI
○	0	3	18	79		ML	24	NP	NP
□	0	28	29	43		SM	NV	19	NP
△	0	0	12	88		CL	34	18	16

SIEVE inches size	PERCENT FINER ○	□	△
1/2	100	100	
3/8	99	85	100
	GRAIN SIZE		
D_{60}		1.4198	
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○	□	△
#4	97	72	100
#10	91	61	100
#40	88	56	98
#100	85	54	97
#200	79	43	88

Material Description

○ Siltstone: Pale brown, fine grained, moderately soft rock, completely weathered.

□ Silty Sand with Gravel: Red, moist, non-plastic, very stiff.

△ Lean Clay with Sand: Brown, moist, non-plastic, dense.

REMARKS:

○

□

△

○ Source of Sample: 1 Depth: 10 Sample Number: P1B

□ Source of Sample: 3 Depth: 5.0 Sample Number: P3A

△ Source of Sample: 5 Depth: 3.5 Sample Number: S5A

FMG, Inc.

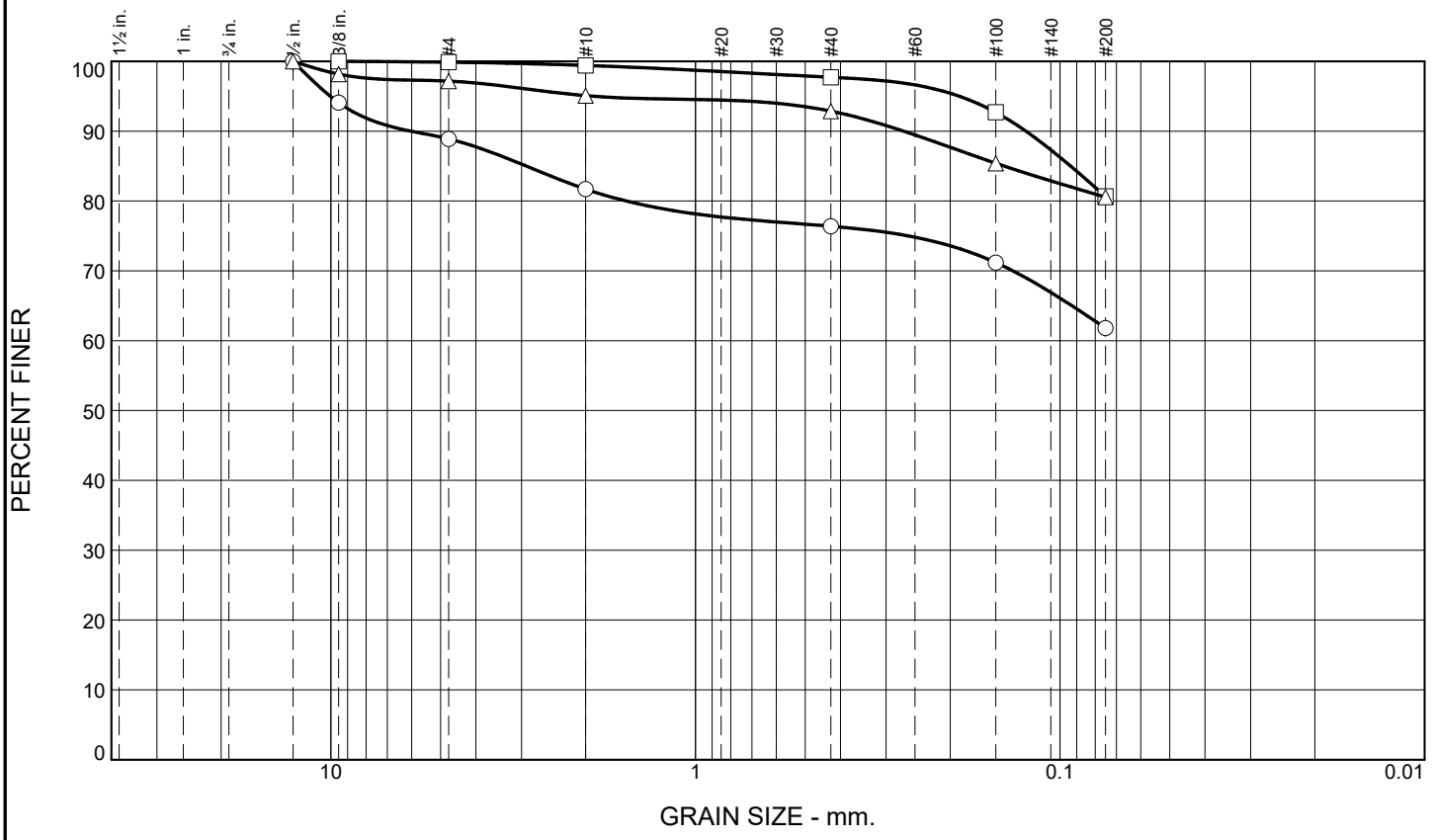
Client: Westhills Village

Project: Westhills Village Expansion Geotech

Project No.: 231257.02 Figure

Tested By: ○ JB/CA □ JB/CA/JD △ JB/JD **Checked By:** JB

Particle Size Distribution Report



	+3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PL	PI
○	0	11	27	62		CL	27	16	11
□	0	0	19	81		CL	30	17	13
△	0	3	16	81		CL	30	15	15

SIEVE inches size	PERCENT FINER ○	□	△
1/2	100		100
3/8	94	100	98
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○	□	△
#4	89	100	97
#10	82	99	95
#40	76	98	93
#100	71	93	85
#200	62	81	81

Material Description

○ Lean to Fat Clay with Gravel and Sand: Dark brown, moist, non-plastic, dense.

□ Silty Lean Clay with Sand: Brown, moist, low plasticity, stiff.

△ Lean to Fat Clay with Sand: Brown, moist, medium plasticity, very stiff.

REMARKS:

○

□

△

○ Source of Sample: 6 Depth: 5 Sample Number: P6A

□ Source of Sample: 7 Depth: 10 Sample Number: P7B

△ Source of Sample: 8 Depth: 10 Sample Number: P8B

FMG, Inc.

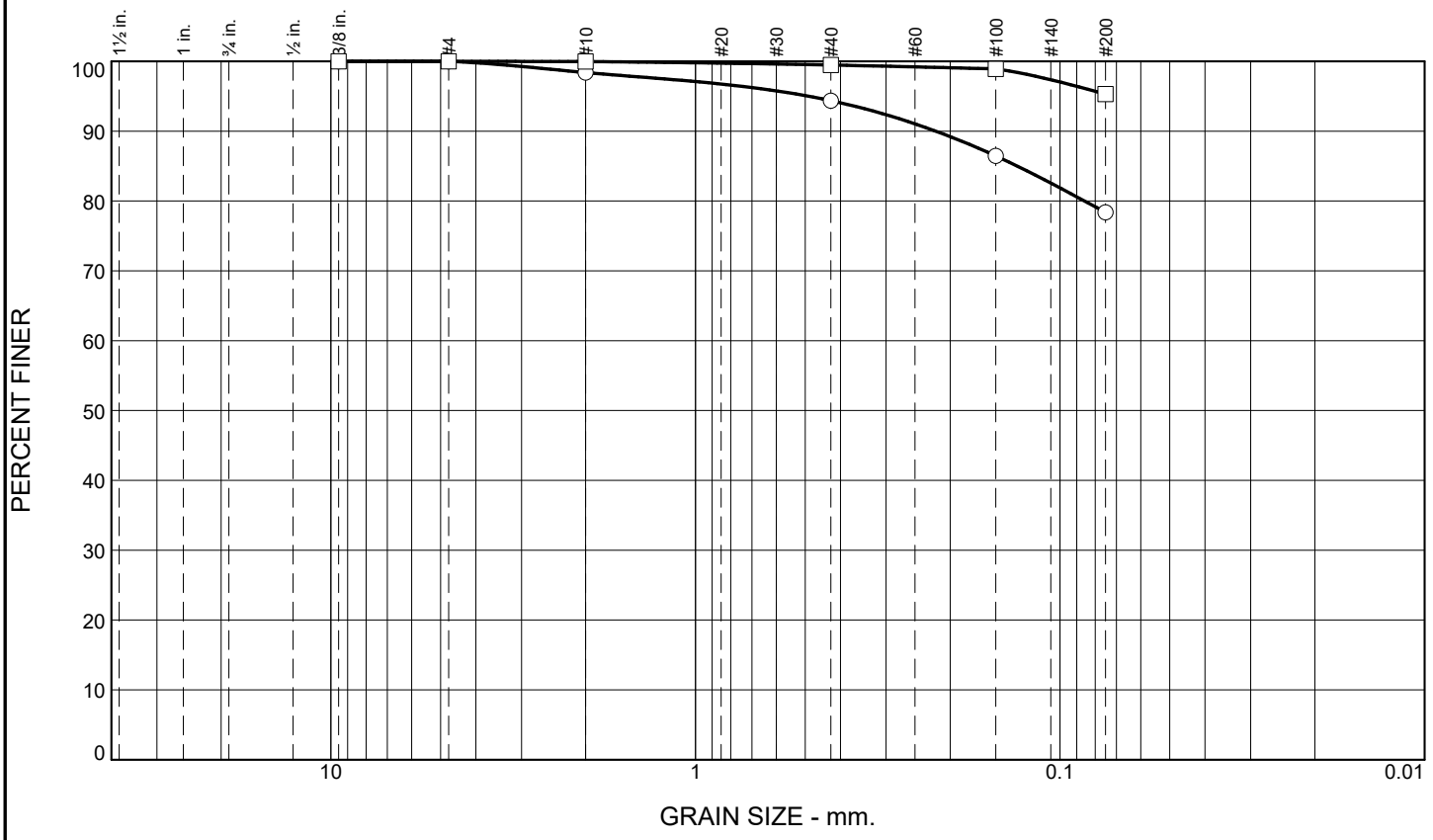
Client: Westhills Village

Project: Westhills Village Expansion Geotech

Project No.: 231257.02 Figure

Tested By: ● JB/JD/CA ■ JD/CA ▲ CA/JD **Checked By:** JB

Particle Size Distribution Report



	+3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PL	PI
○	0	0	22	78		CL	46	21	25
□	0	0	5	95				19	

SIEVE inches size	PERCENT FINER ○	□
3/8	100	100
GRAIN SIZE		
D_{60}		
D_{30}		
D_{10}		
COEFFICIENTS		
C_c		
C_u		

SIEVE number size	PERCENT FINER ○	□
#4	100	100
#10	98	100
#40	94	99
#100	86	99
#200	78	95

Material Description

○ Fat Clay: Dark grayish brown, moist, high plasticity, very stiff. (recompacted shale)

□ Silty Lean Clay: Brown, moist, low to medium plasticity, very stiff.

REMARKS:

○

□

○ Source of Sample: 9 Depth: 5 Sample Number: P9A

□ Source of Sample: 9 Depth: 15 Sample Number: P9C

FMG, Inc.

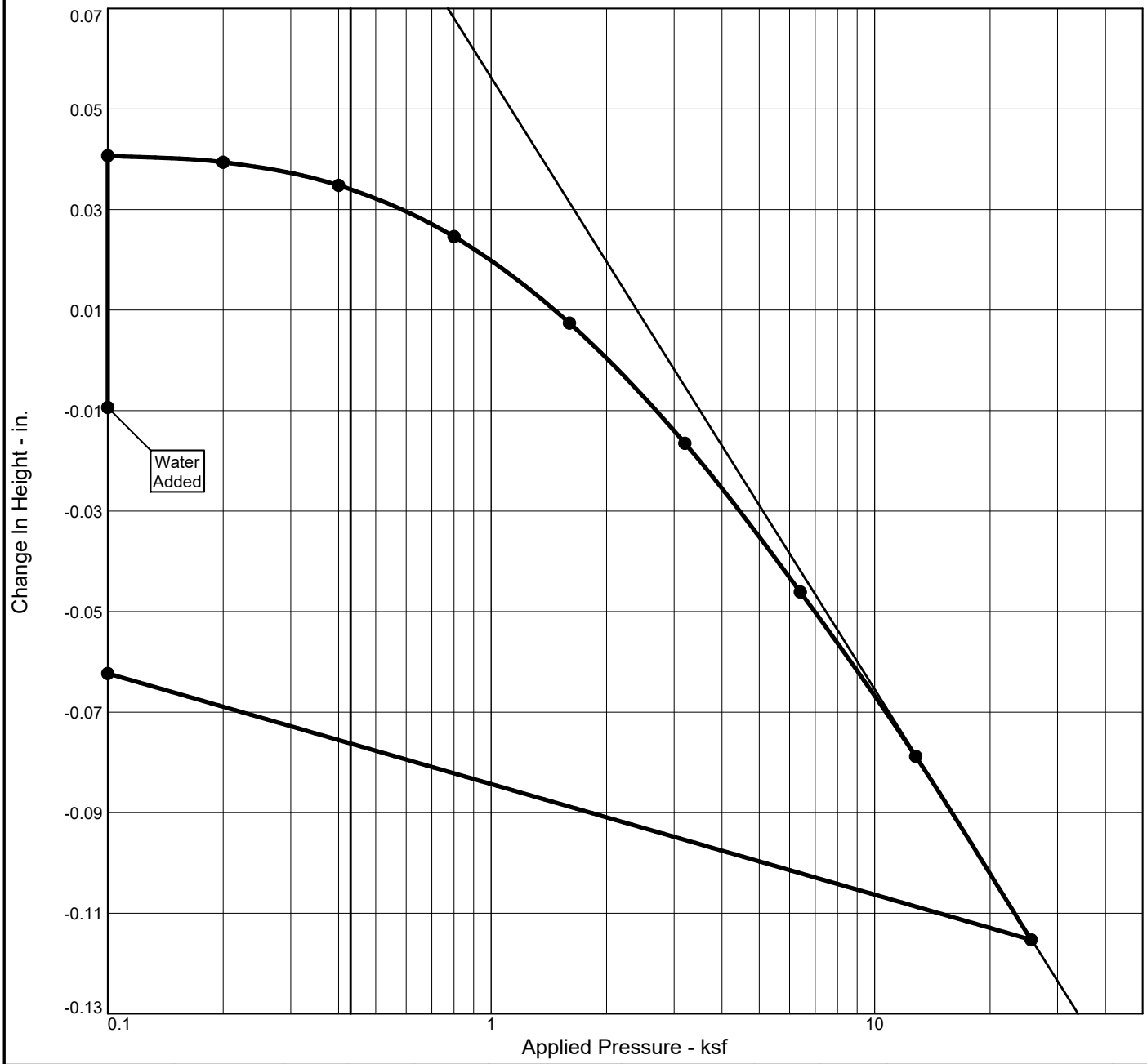
Client: Westhills Village

Project: Westhills Village Expansion Geotech

Project No.: 231257.02 Figure

Tested By: ● JB ■ JD **Checked By:** JB

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_s	Swell Press. (ksf)	Swell %	e_o
Sat.	Moist.											
42.4 %	9.2 %	105.0	34	16	2.65	.5	1.8	0.19	0.03	2.5	5.0	0.576

MATERIAL DESCRIPTION	USCS	AASHTO
Lean Clay with Sand: Brown, moist, non-plastic, dense.	CL	A-6(13)

Project No. 231257.02 **Client:** Westhills Village

Project: Westhills Village Expansion Geotech

Source of Sample: 5 **Depth:** 3.5 **Sample Number:** S5A

Remarks:

FMG, Inc.

Figure

Tested By: JB **Checked By:** JB

Appendix C

References

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Day, Robert W., "Foundation Engineering Handbook", The McGraw-Hill Companies, Inc., 2006.

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CONSTRUCTION MANAGER'S BID MANUAL

The Terraces at Westhill's Village – Site Development Package (Phase 1)

Rapid City , South Dakota

September 9, 2024

Scull
CONSTRUCTION SERVICE INC.

803 INDUSTRIAL AVENUE, RAPID CITY, SD 57709
P-605-342-2379 F-605-342-8568

The Terraces at Westhill's Village – Site Development Package

CONSTRUCTION MANAGER BID MANUAL

TABLE OF CONTENTS

DIVISION 00 – PROCUREMENT REQUIRMENTS

END OF TABLE OF CONTENTS

BIDDER'S CHECKLIST

The following items need to be reviewed and/or submitted along with your bid. All bids and any modifications to bids must be in the hands of a UDA Architecture and Design representative on or before the time set for opening bids in the Invitation for Bids.

- ☐ Review Regulatory Requirements
- ☐ Review Bidders General Requirements
- ☐ Review bid package and fill in all blanks on the Bid Form as required by bid package (Mark any unused blanks with N/A). Including, but not limited to, the following items:
  - ☐ Fill in payment and performance bond value (not to be included as a part of the base bid). Failure or inability to provide bond may result in bid being disqualified.
  - ☐ Receipt of all addenda
  - ☐ Bid Form is signed by an officer of the corporation or, if not a corporation, a proprietor or partner
  - ☐ Review bid package General Scope of Work Inclusions / Exclusions
- ☐ Review Project Schedule
- ☐ Review Minimum Insurance Requirements
- ☐ Review Scull Safety Policy

The Terraces at Westhill's Village – Site Development Package

Invitation to Bid

Scull Construction (CMAR) will receive sealed bids for the construction of the **The Terraces at West Hills Village** in Rapid City, South Dakota. Bids will be received at the UDA Architecture and Design Office located at 50 Minnesota Street, Suite 1 Rapid City, South Dakota on **September 26, 2024 until 11:00 a.m.** (Mountain Time); at which time and place the all bids will be privately with the owner. ***EMAILED BIDS WILL NOT BE ACCEPTED***

Contract documents, including bid proposal forms, drawings and project manual are available for review on September 10, 2024 at the following:

AGC of Wyoming	Cheyenne, WY
Bid Center	Casper, WY
Billings Builders Exchange	Billings, MT
Cheyenne Plan Service	Cheyenne, WY
Construction Industry Center	Rapid City, SD
Fargo-Moorhead Builders Exchange	Fargo, ND
Northeast Wyoming Plan	Gillette, WY
Plains Builders Exchange	Sioux Falls, SD
Sioux Falls Builders Exchange	Sioux Falls, SD

Copies of the bidding documents may also be obtained from the CMAR's website. Please contact Miranda Luze at Scull Construction, 605-342-2379 or email at mluze@scullconst.com for access. Printing of project documents will be the responsibility of the bidder obtaining the documents.

An pre-bid meeting is scheduled for September 16, 2024 at 1:30pm MST, at UDA Architecture and Design Office located at 50 Minnesota Street, Suite 1. Although not a requirement, it is advisable that the contractor inspects the project site to familiarize himself with the site and corresponding site preparations requirements prior to the bid opening. Questions regarding the bid may be directed to Scull Construction Services attention Shane Crecelius, email screcelius@scullconst.com. Phone 605-342-2379.

The Contract scope for the project consists of the follow bid packages:

31A – Site Development Contractor

Bids shall be submitted on the correct bid form in a sealed, opaque envelope. Bid envelopes shall clearly state the name of the bidder, name of bid package, and acknowledge all addenda. All bids shall be made in accordance with forms referenced to and/or made part of the proposed contract documents. Full responsibility for the delivery of mailed bids prior to the deadline for receiving bids rests with the bidder. ***EMAILED BIDS WILL NOT BE ACCEPTED***

The successful bidder may be required to furnish a contract performance bond and a labor and materials payment bonds in the penal amount of one hundred percent (100%) of the contract price as originally bid or subsequently modified.

West Hills Village shall reserve the right to reject any and all bids or proposals

INSTRUCTIONS TO BIDDERS

Instructions to Bidders

1. Examination of Plans, Specifications and Site.

Bidders should carefully examine the site of the proposed work, subsurface conditions, the Plans and Specifications, and the bid and contract documents governing the project. The submission of bids is conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered; the character, quality, and scope of the proposed work; the quality and quantity of the materials to be furnished; and the requirements of the bid, the Plans and Specifications, and the other Contract Documents.

Pre-bid questions should be directed to Scull Construction Services to the attention of the following:
Shane Crecelius, screcelius@scullconst.com.
Clarifications requested by bidders must be in writing not less than five (5) days before date set for receipt of bids. Product Substitutions requested by bidders must be in writing not less than five (5) days before date set for receipt of bids

2. Submission of Bids.

Each bid must:

a. Be submitted on the prescribed form (Exhibit "2"); all blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures;

b. Include any addenda issued during the time of advertising for bids the same as though it had been included in the original Plans and Specifications; and

c. Be submitted in a sealed opaque envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. See Exhibit "3" attached hereto for Sample Format for envelope. If forwarded by mail, Federal Express, or other commercial courier, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified on the bid form.

All bids must be in the hands of a UDA Architecture and Design representative on or before the time set for opening bids in the Invitation for Bids. Bids, which are not properly marked, may be disregarded. Bids will not be received after the time for bid opening.

3. Bid Modifications.

Any modifications to bids must be in the hands of a UDA Architecture and Design representative on or before the time set for opening bids in the Invitation for Bids.

4. Contractor's Qualification Statement.

For bids of $50,000.00 or more, the apparent low bidder, upon request, must submit to Scull Construction, within 48 hours of said request, the Contractor's Statement of Skills and Capabilities (Exhibit "5").

5. Withdrawal of Bids.

Any bid may be withdrawn by letter, telephone, email, or in person before the time specified in the advertisement therefor. Withdrawal of a bid does not prejudice a bidder's right to submit a new bid within the time designated for the submission of bids. No bids may be withdrawn after the time designated in the Invitation to Bid for the opening of bids.

6. Request for Interpretation.

Any person who plans to bid on the project may submit to Scull Construction a written request for an interpretation of any part of the Plans and Specifications or Contract Documents. Requests for interpretations shall be made not less than five (5) days prior to the opening of bids. Any interpretation will be in **writing** and furnished to each person receiving Plans and Specifications for bidding. Scull Construction will not be responsible for any other explanation or interpretation for questions asked within five (5) days of the bid opening.

7. Or Equal.

Whenever a material, article, or piece of equipment is identified on the Plans or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and any materials, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the performance requirements are met and the material, article, or equipment so proposed is, in the opinion of the Architect and Construction Manager, of equal substance and functions.

PRE-BID SUBSTITUTION - Any material or product that a bidder wishes to use that has not been identified as acceptable by the contract documents, should be submitted for approval prior to the bid to eliminate the risk of it not being approved during the submittal process. Any substitution request must be submitted to the Construction Manager five (5) days prior to the bid opening. If deemed acceptable, an addendum will be issued stating its approval.

8. Opening of Bids.

Bids will be received until the time for opening designated in the Invitation to Bid. All bids received within the designated time will be opened in a private bid opening.

9. Relief from Mistake in Bid.

A bidder claiming a mistake in a bid must give Scull Construction written notice of the alleged mistake within five calendar days after the bids are opened, specifying in detail how the mistake occurred. Relief will only be granted for clerical or mathematical mistakes which can be documented to the satisfaction of the Construction Manager (CM) and Owner.

10. Rejection of Bids.

Bids may be rejected if they show any alteration of form, additions not called for, conditional bids, incomplete bids, unexplained erasures, or irregularities of any kind. The Owner may waive any informality in the bids received. When bids are signed by an agent other than an authorized corporate officer or member of a partnership, a power of attorney must be filed with the bid. Otherwise, the bid will be rejected as irregular and unauthorized. If there is reason to believe that collusion among the bidders exists, any or all bids may be rejected. The Owner reserves the right to reject any or all bids if it's in their best interest.

11. Award of Contract.

If the contract is awarded, it will be awarded to the responsible bidder submitting the lowest bid, subject to paragraph 15 below, which complies with the Invitation to Bid and with these instructions. The successful bidder will be notified within forty-five (45) calendar days of the date bids are opened. Subsequent to notice of award, the successful bidder will be presented with a contract agreement. The contract will require the completion of work according to the Plans and Specifications and the Contract Documents. Conditional bids will not be accepted.

All bidders are required to hold submitted price for sixty (60) days following bid opening.

12. Responsibility.

The CM may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the CM all such information and data for this purpose as the CM may request. The CM reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the CM that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.

negotiate with the low bidder to produce a bid amount within the availability of funds.

14. Execution of Agreement.

Within ten (10) calendar days after the proposed contract agreement is presented to the successful bidder for execution, the successful bidder must execute the contract documents, and provide a performance and labor and material payment bond if requested.

15. Performance & Labor and Material Payment Bond.

Per the bid form, fill in required information concerning cost of bonding. Once bids have been opened and reviewed, the owner may at their option elect to have the bidding contractor provide bonds at the additional cost indicated on the bid form. This bond is to secure the faithful performance of the contract and the payment of those to whom the bidder may become legally indebted for labor, materials, tools, equipment, or services of any kind used or employed by the bidder in performing the work. The surety bond shall be on the form attached hereto as Exhibit "5". *(Failure on the part of the bidder to furnish such bond in the time stated shall be cause for consideration by the Owner of awarding the Contract to the next responsible low bidder.)*

16. Power of Attorney.

Attorneys-in-fact who sign contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

17. Default.

The failure to execute the contract documents or to furnish bonds required by these instructions within ten (10) calendar days after the proposed contract agreement is presented for execution constitutes a default. In the event of a default, the Owner may award the contract to the next lowest responsible bidder or may re-advertise for bids.

18. Commencement of Work/Time of Completion.

The contractor for the general construction shall commence work under the contract within ten (10) consecutive calendar days after issuance of written Notice to Proceed and shall substantially complete all work under the contract within the timeframe specified in the project schedule.

19. Liquidated Damages.

$500 per calendar day.

20. Applicable Laws and Regulations.

The bidder's attention is directed to the fact that all applicable South Dakota laws, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout and they will be deemed to be included in the contract the same as though herein written out in full.

EXHIBIT “1”

Bidder’s General Requirements

Exhibit 1 – Bidder's General Requirements

Contractor agrees to diligently process all requirements including permits, approvals, testing, submittals, expedite material deliveries and to supply adequate manpower and resources to complete work on all areas of this project within the project schedule durations. If inadequate progress by contractor is evident, the CM may direct that contractor take immediate remedies at no additional cost to CM or the Owner. Contractor further agrees to cooperate and work harmoniously with other trades in achieving these completion dates, and to coordinate the work to avoid compression (to the extent possible) for the benefit of all trades.

General Task Requirements:

1. Authorized contractor supervision must be onsite while work is being performed.
2. Work may be performed adjacent to existing structures, utilities, landscaping, roads, parking lots, site improvements, etc. Contractor to protect adjacent surfaces, whether interior or exterior, and is responsible to repair, replace, and make whole any damage to said structures done as a result of work associated with this bid package. If deemed expedient to the work, Construction Manager will perform repair work and back charge to Contractor.
3. Provide all required pedestrian protection, traffic control and protection including flagman, barricades, signage, etc. as required for the work, and as may be required for protection for equipment access, deliveries and loading.
4. Provide dust and noise control per governing authorities and as shall be required by the Construction Manager during the performance of Contractor's work.
5. Maintain and protect all existing active systems which serve on and off-site facilities which are required to remain in operation. Maintain access to operational components.
6. Protect public improvements including curb, sidewalks, streets, manholes, utilities, etc. required to remain.
7. Coordinate and conduct work to ensure minimum interference with vehicular or pedestrian traffic and to permit unencumbered access to site and adjacent properties.
8. Provide and mark as applicable to the work, all existing underground utility locations. Damage and repair to existing utilities will be the responsibility of the Contractor. Contractor responsible for locating all underground utilities, including fiber optic lines, PRIOR to drilling or excavating. A private contractor is to be used for all private utilities.
9. Contractor will repair, replace, and make whole any damage to existing utilities as a result of work associated with this bid package. If deemed expedient to the work, Construction Manager will perform repair work and back charge to Contractor.
10. Contractor to obtain approval from Construction Manager prior to shut-down of any existing utilities servicing the campus. Contractor to request approval 48 hours prior to the intended shut-down.
11. Provide all field engineering and layout from benchmarks and base building control (Benchmarks and baseline control is furnished by others). This contractor is responsible for replacement of any damaged benchmarks or base line control or layout work of other trades/packages that is damaged or destroyed by the work of this bid package.
12. Provide all hoisting, material transportation, dunnage, rigging, loading, and unloading etc. as required for the work of this bid package.

General Safety Requirements:

1. In addition to other safety requirements required elsewhere in this bid package, contractor shall replace or restore any removed safety rails, guards, or fences and the like that are temporarily removed or damaged by the work of this bid package.

General Cleaning Requirements:

1. All bidders shall include cleanup of all waste and debris created by their work scope and as generated by their employees, sub-tier subcontractors and suppliers as directed. All waste shall be accumulated, removed, broken down, compacted and/or bundled and deposited in project dumpsters provided by others. Contractor shall employ (as necessary) adequate personnel whose sole responsibility is the performance of clean-up as described herein. Additionally, each successful contractor shall be responsible for contributing personnel to a composite clean-up crew.
2. Provide all required dewatering, pumping, bailing, squeeging, mopping, fans, etc., necessary to keep all work areas free of water during performance of work. All discharge shall be in accordance with EPA guidelines or other more stringent jurisdictional and/or Owner requirements. Protect all existing and new finished surfaces from rutting, dirt, debris, stain, mold, and repair all damage resulting from standing or discharged water.

Administration Requirements:

1. ProCore will be utilized for electronic document submittal service.
2. Provide samples and mockups as specified. Remove mockups at completion or as directed by the CM.
3. Provide assistance, access, schedule and coordinate with CM for all required testing requirements including obtaining samples and data gathering as required. All field testing and cost thereof for geotechnical, concrete, asphalt, masonry, and structural steel is provided by others. Costs for any retesting due to failed tests, and/or contractor unpreparedness for tests, will be paid by this work package contractor.
4. Submit to the Construction Manager a self-performed, typewritten, pre-punch list for the work of this bid package, or any concealed or in-wall or above ceiling work, as part of contractor's quality control procedures.
5. Provide all warranties as specified.
6. Schedule of values and applications for payment shall be broken down as required by the Owner or Construction Manager.
7. Contractor's, subcontractor's, lower tier subcontractor's and supplier's lien releases must be received monthly prior to processing of the following month's application for payment.
8. If contractor needs special power needs, other than a 120v 3-phase, they are to include that in their bid as only standard power hooks up will be required.
9. A Preconstruction Meeting will be held with all parties at the beginning of the project where the project schedule, sequencing, project requirements…etc. will be discussed.
10. Preinstallation meetings will be required for each trade as specified and this meeting will be required to happened before any work can happen on-site.

11. Weekly progress meetings will be held at the job-site where the CM will discuss the project schedule, upcoming scheduled work, safety…etc. All subcontractors working on-site will be required to have at least their lead person on-site attend.
12. Provide all test and balance, start-up, and commissioning reports, Owner training information, record drawings, O&M manuals, etc. as specified. All close-out information is to be submitted as one package.
13. As applicable, provide all required attic stock, extra materials, chemicals, special tools, filters, testing equipment, etc. as indicated and specified.

General Schedule Requirements:

1. Provide manpower and equipment mobilizations and remobilizations as required for the work of this bid package in accordance with the project schedule, including phasing and interim milestone dates.
2. Coordinate all work with the Construction Manager to avoid any delay or interference with other work as applicable.
3. Contractor agrees to meet all schedule requirements in accordance with bid package project schedule. Weekend / overtime work to be performed as required meeting the project schedule at no additional cost; contractor will not be responsible for schedule delays created by other contractors on the project.
4. Work is to be bid based on meeting the project schedule included in contract documents. Bid is NOT to be based on a 40-hour work week. Bid is NOT to be based on a 40-hour work week. A standard five-day work week (Monday through Friday) is required at a minimum. A four-day ten-hour schedule is not acceptable unless approved by the Construction Manager.
5. All deliveries are to be scheduled with the CM 24 hours prior to arrival.

General Permitting/Code Requirements:

1. General building permit and fee is provided by others; however, all applicable trades must apply, obtain, and pay all fees for all other permits including specialty trade, Infrastructure Development Plan, and similar specialty permits as required by jurisdictional authorities.
2. Provide as applicable to the work all identification including charting, tagging, labeling, marking tape and trace wires, stenciling, and painting as specified, indicated, and /or required by jurisdictional authorities.
3. Provide all licenses, permits, fees, and certifications and arrange for inspections and tests as may be required for the work of this package (Coordinate all inspections and tests through the Construction Manager).
4. Coordination of electrical power, control, communication, and fire alarm interface requirements with other trades (includes all division 8, 10, 22, 23 and 26 trades).

`

EXHIBIT “2”

BID FORM / BID PACKAGES

The Terraces at Westhill's Village – Site Development Package
Rapid City, South Dakota

BID PACKAGE # 31A – Site Development Contractor
September 9, 2024

EXHIBIT "2" - BID FORM

BIDS DUE 9/26/2024 11:00 PM (Mountain Time)

BIDDER_____ Date: _____

To: UDA Architecture and Design
Attn: Jerud Pummel
50 Minnesota Street, Suite 1
Rapid City, SD 57701

Phone: 605-342-2379
Fax: 605-342-8568
Email: jerudp@uda-rc.com

The undersigned, being familiar with the local conditions affecting the work, and with the Contract Documents, including the Invitation to Bid, Instructions to Bidders, Bidder's General Requirements, Bid Form, Modification to Bid Form, Performance and Payment Bond, Form of Agreement for Construction, Technical Specifications, Plans and Addenda which govern the purchase of material and labor and the awarding of contracts hereby proposes to do all the work and provide all the material and equipment which pertains to

The Terraces at Westhill's Village – Site Development Package
Rapid City, South Dakota

as provided for in the Plans dated _____and Specifications dated _____ for the following base bid, payment & performance bond, and alternates:

BASE BID: _____

_____ DOLLARS ($_____)

PAYMENT AND PERFORMANCE BOND:
Provide Performance and Labor and Material Payment Bond (Not to be included in base bid). Failure or inability to provide bond may result in bid being disqualified. Add to the base bid the sum of

_____ DOLLARS ($_____)

UNIT PRICES (Cost for these items need to be included in the Base Bid; Unit Prices will only be used for lesser or additional quantities based upon what is shown on the contract documents):

Unit cost per Ton (TN), Cubic Yard (CY), Square Foot (SF) for labor, materials, equipment and O&P for:
Basecourse (TN)_____
Mass grading (YD)_____
Excess Haul off (YD)_____
Import Fill (YD)_____
Seeding (SF) _____

If applicable, identify any voluntary alternates or value engineering options in the section below. Include alternate description and cost for each option being presented:

VOLUNTARY ALTERNATES/VALUE ENGINEERING OPTIONS: Circle Add or Deduct as Applicable

Voluntary Alternate #1: Add/Deduct

DESCRIPTION:_____ Cost ($_____)

Voluntary Alternate #2: Add/Deduct

DESCRIPTION:_____ Cost ($_____)

The above bid includes all applicable State and Municipal Sales Taxes on materials.

Within ten (10) days after Contractor's receipt of the Agreement for Construction, the Contractor shall submit to the Construction Manager, the executed Agreement for Construction, Performance and Payment Bond (if required), Certificates of Insurance, and Schedule of Values.

Work shall be commenced within ten (10) consecutive calendar days after written Notice to Proceed by the Construction Manager and shall be completed per the attached schedule.

The undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each):

Addenda Nos. _____ dated _____respectively.

In submitting this bid, it is understood that the right is reserved by the Owner to reject any and all bids and to waive any irregularities. It is further understood by the Bidder that he may not withdraw his Bid within **60 days** after the actual opening thereof.

BIDDER: _____
(Type Name of Firm)

BY: _____
(Signature of Firm's Representative)

_____
(Type Name and Title of Firm's Representative)

TELEPHONE NO. _____

FACSIMILE NO. _____

E-MAIL ADDRESS _____

BUSINESS ADDRESS _____

_____

STATE OF INCORPORATION _____

SCOPE SUMMARY:

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS,	**Complete;**
DIVISION 01 - GENERAL REQUIREMENTS,	**Complete;**
Construction MANAGER BID MANUAL,	**Complete;**
CITY OF RAPID CITY STANDARD SPECIFICATIONS,	**Complete;**
LEGENDS, NOTES & SCHEDULES PER DOCUMENTS,	**Complete;**
GEOTECHNICAL ENGINEERING REPORT,	**Complete;**

In the event of a conflict or ambiguity between the following "clarifications" to the scopes of Work and the contract documents, the contract documents shall control. The following "Scope Clarifications" are intended to emphasize, amplify, and clarify the work of this package, and does not supersede the contract documents or in any way list every item of work required by the contract documents for completion of this work package.

THIS BID PACKAGE SHALL NOT BE MODIFIED IN ANY WAY. WHEN SUBMITTING A BID, THIS CONTRACTOR AGREES TO ALL INCLUSIONS, TERMS, AND CONDITIONS, INCLUDED HEREIN. THIS BID PACKAGE WILL BE USED AS THE SCOPE INCLUSIONS IN ITS ENTIRETY FOR THE FINAL SUBCONTRACT AGREEMENT.

Terminology

Owner shall mean West Hills Village
Construction Manager (CM) shall mean Scull Construction Services
Contractor shall mean work package Bidder (*Prime Contractor per CM G.C. agreement*)

GENERAL SCOPE OF WORK INCLUSIONS:

Includes, but is not limited to, providing all the necessary labor, materials, tools, supplies, supervision, insurance, equipment, scaffolding, hoisting, fees, etc. necessary to provide the above listed scope of work in accordance with the Contract Documents. It is further understood and agreed that this Work Package also includes the furnishing and installation of the below listed items regardless of whether or not they are in the listed specification section(s) or any other specification section(s), or shown on the plans. Drawing and detail references are provided for reference only and are not to be considered as all inclusive of Contract Documents for the particular items referenced. (Please note: The word "provide" when used herein shall mean furnish and install completely, including all costs for labor, materials, equipment, hoisting, layout, scaffolding, ladders, staging, tools, rigging and any other facilities necessary to complete the work.")

SCOPE OF WORK INCLUSIONS:

1. Project Specific Notes:

- Contractor to review the project schedule, issued with the Construction Manager's Bid Manual, and include all necessary equipment and labor to meet the durations shown in the schedule for this scope of work

2. Material Supply and Installation included, but not limited to the following:

- Provide all sitework, excavation, and utilities complete per the contract documents including:
  - Site Demolition:
    - All existing curb/gutter, sidewalk, pavement demo for utility tie-ins
    - All tree removal as shown
  - Initial Site Setup:
    - Provide/maintain all stabilized construction entrances as required
    - Street Cleaning after weather events as applicable
    - Provide all curb cuts and sidewalk removals as required for entrances
    - Remove and dispose of all stabilized entrance material when required
    - Provide all erosion control setup and maintenance as required
    - Provide and document SWPPP permit and documentation for duration
  - Site Grading (Provide the following):
    - All site clearing, grubbing, and topsoil stripping/stockpiling as required
    - All mass grading, material export/import as required
    - Site watering for dust mitigation as required
    - All site removals to be taken away from the site and lawfully disposed
    - Provide all site paving aggregate base course as required for:
      - Asphalt Paving
      - Curb and Gutter
      - Exterior Concrete Pads
      - Sidewalks (concrete and basecourse by others)
        - Will prep subgrade per the documents within this bid package
    - Provide placement of all topsoil as required
    - All sub-grade materials and depths per geotechnical report
    - Seeding and re-establishment after completion of scope of work
  - Site Utilities (Provide the following):

- All temporary utilities as required
- All Waterline and services as required
- All sanitary and storm sewer as required
- All structures, manholes, junction boxes, storm inlets…etc.
- All public utility work shall comply with all local AHJ's and be code compliant
- All utility systems are to include all connections, taps, adapters, meters, structures, etc. from utility service mains, connection points, etc.
- All site utilities to be installed to +/- 5' from the building structure
- Provide all tracing wires and warning tapes as indicated or required
- Coordinate all work with utility companies/agencies and CM as required
    - Utility companies will want to put services in trench provided for Black hills energy – Contractor will need to coordinate with the below entities for this installation
    - Black Hills energy
    - Montana, Dakota Utilities
    - Bluepeak
    - Midcontinent communications
    - SDN Communications
    - Century Link
- Provide all trenching and conduit for Black Hills Energy per the documents

- Provide all asphalt paving complete per the contract documents including:
    - Any issues must be brought to the CM prior to work commencing
    - All asphalt paving
    - All road signage as shown in construction documents or required by specifications/city of rapid city specifications
    - All markings and striping
    - Provide all accessories, materials, equipment, additives and admixtures, as required
    - Provide all indicated or required hot-mix asphalt patching
    - Base bid should include two mobilizations
    - All joint sealants and caulking as required
- Provide all concrete complete per the contract documents or required by specifications/ city of rapid city specifications:
    - All site cast-in-place concrete complete per the contract documents
    - Concrete paving
    - Curbs, gutters, and valley pans/gutters
    - Detectable warning panels
    - All joint sealants and caulking as required
    - All site concrete reinforcement
    - Flagpole bases
    - All exterior trench drain frame and grate assemblies
- General Notes:
    - Provide all required layout of items within this bid package:
        - Gridlines and benchmarks to be provided by CM
    - **Provide all traffic control as needed for work in this bid package:**
        - **Including the preparing and submitting of any required traffic control plans to the local AHJ**
    - Provide all site watering/dust mitigation during all earthwork operations as required

- Provide concrete truck wash-out area as approved by the CM
  - Remove all wash-out and waste material from site and legally dispose
- Coordinate with other subcontractors for items that require disconnection, capping, plugging, etc. for safe and proper removal
- Ensure proper coordination of removal in accordance with phasing to ensure existing construction and building services remain in service
- Provide detailed schedule to be updated at with owner and CM
  - Must work and coordinate schedule with CM/Owner and milestone schedule for phase 2 – housing
  - Must coordinate all necessary mobilizations, schedule with CM schedule and phasing plan
- Will attend OAC meetings with CM, architect and owner bi-weekly at a minimum.

3. PROJECT ACCEPTANCE, WARRANTY PERIOD, WARRANTY BOND

- The Contractor agrees to provide a two year warranty that all materials furnished and installed and work completed pursuant to this contract will be new, and shall be of good quality, free from defects, and in conformance with the approved plans and specifications. The warranty shall meet the requirements of the City of Rapid City Standard Specifications for Public Works Construction, Section 7.65.

- The warranty period for this project shall conform to Section 7.65 of the City of Rapid City Standard Specifications for Public Works, 2007 Edition with the exception the Warranty period will not begin until the project is 100% complete.

- A Warranty Bond is required for the project in accordance with Section 7.65 of the Standard Specifications. The final form of the Warranty Bond must be approved by the City of Rapid City and the Owner.

- The City of Rapid City has final approval authority for the project.

4. Safety:

- Contractor to utilize "vac truck" when exposing any existing site utilities where there are new utility crossings and/or performing work near existing utilities
- Provide all trench protection measures including sheeting and shoring as required per OSHA and other governing authorities.
- CM will not have staff on site. It is the responsibility of this contractor to provide and maintain an OSHA compliant site and provide the competent person on site at all time during construction of the contractual scope of work.
- Will need a site specific safety plan that will be reviewed by Scull Safety director

5. Contractor to include all applicable City and State sales taxes

SCOPE OF WORK EXCLUSIONS:

1. Material Testing
2. Sidewalks
3. Excise Tax
4. Staking

END OF BID PACKAGE

EXHIBIT "3"

SAMPLE OF SEALED ENVELOPE

Return Address
John Smith, Contractor
Box 1
Anytown, USA

TO: UDA Architecture and Design
Attn: Jerud Pummel
50 Minnesota Street, Suite 1
Rapid City, South Dakota 57701

Bid For: The Terraces at Westhill's Village – Site Development Package
Rapid City, South Dakota

To Be Opened: (Hour & Date)
BID PACKAGE NO. _____
ADDENDA RECEIVED: NOs. _____

EXHIBIT “4”

SAMPLE OF PERFORMANCE AND PAYMENT BOND

DRAFT

AIA® Document A312™ – 2010

Performance Bond

CONTRACTOR:
(Name, legal status and address)

« »« »
« »

SURETY:
(Name, legal status and principal place of business)

« »« »
« »

OWNER:
(Name, legal status and address)

« »« »
« »

CONSTRUCTION CONTRACT
Date: « »
Amount: $ « »
Description:
(Name and location)

« »
« »

BOND
Date:
(Not earlier than Construction Contract Date)
« »
Amount: $ « »
Modifications to this Bond: « » None « » See Section 16

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or **BROKER:**

« »
« »
« »

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

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ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

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§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

.1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

.2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

.3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the

Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

.2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and

.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »
Address:	« »	Address:	« »

DRAFT

AIA® Document A312™ – 2010

Payment Bond

CONTRACTOR:
(Name, legal status and address)

« »« »
« »

SURETY:
(Name, legal status and principal place of business)

« »« »
« »

OWNER:
(Name, legal status and address)

« »« »
« »

CONSTRUCTION CONTRACT
Date: « »
Amount: $ « »
Description:
(Name and location)

« »
« »

BOND
Date:
(Not earlier than Construction Contract Date)
« »
Amount: $ « »
Modifications to this Bond: « » None « » See Section 18

CONTRACTOR AS PRINCIPAL
Company: *(Corporate Seal)*

Signature: _____
Name and Title: « »« »

SURETY
Company: *(Corporate Seal)*

Signature: _____
Name and Title: « »« »

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)
AGENT or **BROKER:**

« »
« »
« »

OWNER'S REPRESENTATIVE:
(Architect, Engineer or other party:)

« »
« »
« »
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ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

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Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

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§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- **.1** have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- **.2** have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- **.1** the name of the Claimant;
- **.2** the name of the person for whom the labor was done, or materials or equipment furnished;
- **.3** a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- **.4** a brief description of the labor, materials or equipment furnished;
- **.5** the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- **.6** the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- **.7** the total amount of previous payments received by the Claimant; and
- **.8** the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		**SURETY**	
Company:	*(Corporate Seal)*	Company:	*(Corporate Seal)*
Signature:		Signature:	
Name and Title:	« »« »	Name and Title:	« »« »
Address:	« »	Address:	« »

EXHIBIT “5”

CONTRACTOR’S STATEMENT OF SKILLS AND CAPABILITIES

The Terraces at Westhill's Village – Site Development Package

Contractor's Statement of Skills and Capabilities

Send Completed Form to: Shane Crecelius
803 Industrial Avenue
Rapid City, SD 57702
Phone: 605.342.2379 Fax: 605.342.8568
screcelius@scullconst.com

Project Name: The Terraces at Westhill's Village – Site Development Package
Location: Piedmont, South Dakota

CONTRACTOR INFORMATION

A. Business Structure

Submitted By:

1. Current Business Name and Address.

   Business Name:

   Address:

   Phone:

   Fax:

   email:

2. How many years has your company been in business under the name listed above?

3. Has your company been in business under any other business name(s)?
   If so, list previous business name(s) and the years your company operated under each name:

4. If a corporation, provide the:

   Date and State of incorporation:
   Type of corporation:
   Names of Officers

   President:
   Vice-president(s):
   Secretary:
   Treasurer:

5. If a partnership, provide the:

   State of Organization:
   Partnership type:
   Date of organization:
   Names of partners:

6. If individual, provide:

   Date of organization:
   Name of owner:

7. Use this space to describe your company's business structure if it differs from those listed above:

8. List the states and trades in which you may legally do business where applicable. Provide registration or license number(s).

9. If your company is organized under the laws of another state, has it registered with the Secretary of State for the State of South Dakota and/or the Department of Revenue?

B. Background and History

1. What types of Work does your company perform with its own forces?

2. Has your company ever failed to complete Work it had contracted to perform? Provide details if the answer is "yes."

3. Within the last five years, has any officer or principal of your company been an officer or principal of another company that failed to complete Work that the latter company contracted to perform? Provide details if "yes."

4. List any and all judgments, claims, suits at law, or arbitration proceedings pending or outstanding against your company or its officers regarding any construction contracts:

5. Within the last five years, has your company filed law suits or requested arbitration regarding any construction contracts?

6. On separate paper, provide a list of major construction projects your company is currently working on. For purposes of this document “major construction projects” shall be considered anything of average size or greater for your company. Provide name of owner, location, architect, contract amount, and scheduled completion.

7. On separate paper, list the major construction projects your company has completed in the last five years. For purposes of this document “major construction projects” shall be considered anything of average size or greater for your company. Provide name of owner, project, location, architect, contract amount, and scheduled completion.

8. On separate paper, list the construction background/experience of the key personnel in your company.

9. What is the average annual value of all construction work your company performed within the last five years?

C. References

1. List your company’s Business/Industry References:

2. List your company’s Financial References:

3. Provide the name and address of your company’s Surety, as well as the name and address of the Agent:

SIGNATURE AND NOTARIZATION

Date _____

_____
Signature

(Affix Seal)

Typed Name: _____

Title: _____

Business Name: _____

Address: _____

_____

On this _____day of_____, 20 _____, before me personally appeared _____, who, being duly sworn, declares all statements made in this Qualification Statement to be true and correct to the best of his or her knowledge.

_____
Notary Public

My commission expires the _____day of _____, 20_____

EXHIBIT “6”

Project Schedule Narrative

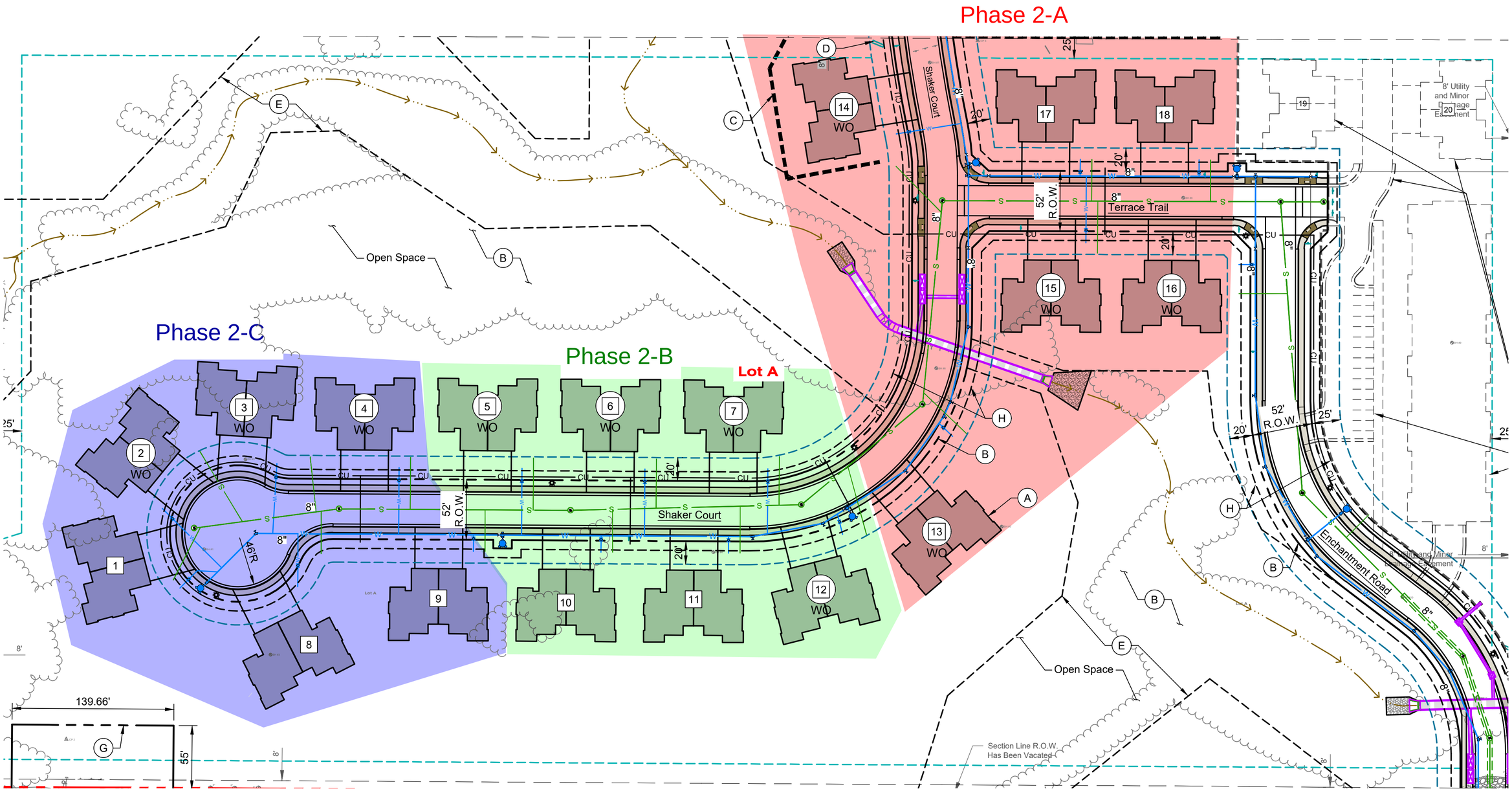
Project Schedule Narrative for The Terraces at Westhill's Village – Site Development Package (Phase 1)

The Terraces at West Hills Village will be executed according to the below project milestone and completion dates. It is the Development contractor's responsibility to provide a detailed, comprehensive schedule that outlines all phases, tasks, and milestones of the project. This schedule will be coordinated with the owner, architect and construction manager. Construction manager will work with the Development contractor for the final development of the master schedule to accommodate the work of Phase 2 Housing Construction.

Key Phases and Milestones:

1. **Pre-Bid Phase**:
    - **Pre-Bid Meeting**: September 16, 2024
2. **Bidding Phase**:
    - **Bid Date**: September 26, 2024
3. **Construction Phases**:
    - **Phase 1 Mass Grading, Utilities and Roads**: Begins October 21, 2024
    - **Phase 2A Housing Construction**: Begins March 3, 2025
        1. **(Not in development contractors' scope of work, however, will need to accommodate and coordinate schedule with Construction Manager)**
        2. **See Exhibit**
    - **Phase 1 Substantial Completion**: August 29, 2025
    - **Phase 1 Final Completion**: September 26, 2026

Exhibit 9 - Phase 2 Housing Construction
- Scope of work not in this Bid Package
- Shown for reference and coordination purposes ONLY
- Phasing Plan is not Final. Subject to change.



AGREEMENT FOR CONSTRUCTION

A401 Subcontract Sample
Minimum Insurance Requirements
Scull Safety Policy

AIA® Document A401® – 2017

Standard Form of Agreement Between Contractor and Subcontractor

AGREEMENT made as of the day of in the year
(In words, indicate day, month and year.)

BETWEEN the Contractor:
(Name, legal status, address and other information)

Scull Construction Service, Inc.
P.O. Box 7636
Rapid City, SD 57709

and the Subcontractor:
(Name, legal status, address and other information)

The Contractor has made a contract for construction (hereinafter, the Prime Contract) dated:

with the Owner:
(Name, legal status, address and other information)

for the following Project:
(Name, location and detailed description)

Templates

The Prime Contract provides for the furnishing of labor, materials, equipment and services in connection with the construction of the Project. A copy of the Prime Contract, consisting of the Agreement Between Owner and Contractor (from which compensation amounts may be deleted) and the other Contract Documents enumerated therein, has been made available to the Subcontractor.

The Architect for the Project:
(Name, legal status, address and other information)

The Contractor and the Subcontractor agree as follows.

TABLE OF ARTICLES

ARTICLE 1 THE SUBCONTRACT DOCUMENTS

§ 1.1 The Subcontract Documents consist of (1) this Agreement; (2) the Prime Contract, consisting of the Agreement between the Owner and Contractor and the other Contract Documents enumerated therein; (3) Modifications to the Prime Contract, whether issued before or after the execution of this Agreement, in accordance with the provisions of Article 5; (4) other documents listed in Article 15 of this Agreement; and (5) Modifications to this Subcontract issued after execution of this Agreement, in accordance with the provisions of Article 5. These form the Subcontract, and are as fully a part of the Subcontract as if attached to this Agreement or repeated herein.

§ 1.2 The Subcontract Documents form the Subcontract for Construction. The Subcontract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Subcontract Documents, other than Modifications to the Prime Contract or Modifications to this Subcontract issued subsequent to the execution of this Agreement, appears in Article 15.

§ 1.3 Except to the extent of a conflict with a specific term or condition contained in the Subcontract Documents, the General Conditions governing this Subcontract shall be the AIA Document A201™–2017, General Conditions of the Contract for Construction.

§ 1.4 The Subcontract may be amended or modified only by a Modification to this Subcontract. A Modification to this Subcontract is a written amendment to this Agreement signed by both parties, or as otherwise described in, and in accordance with the provisions of, Article 5.

§ 1.5 The Subcontract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and the Subcontractor, (2) between the Owner and the Subcontractor, or (3) between any persons or entities other than the Contractor and Subcontractor.

§ 1.6 The Contractor shall make the Subcontract Documents available to the Subcontractor prior to execution of this Agreement, and thereafter, upon request. The Contractor may charge the Subcontractor for the reasonable cost to reproduce the Subcontract Documents provided to the Subcontractor.

ARTICLE 2 MUTUAL RIGHTS AND RESPONSIBILITIES

The Contractor and Subcontractor shall be mutually bound by the terms of this Agreement and, to the extent that the provisions of AIA Document A201–2017 apply to this Agreement pursuant to Section 1.3 and provisions of the Prime Contract apply to the Work of the Subcontractor, the Contractor shall assume toward the Subcontractor all obligations and responsibilities that the Owner, under such documents, assumes toward the Contractor, and the Subcontractor shall assume toward the Contractor all obligations and responsibilities that the Contractor, under such documents, assumes toward the Owner and the Architect. The Contractor shall have the benefit of all rights, remedies, and redress against the Subcontractor that the Owner, under such documents, has against the Contractor, and the Subcontractor shall have the benefit of all rights, remedies, and redress against the Contractor that the Contractor, under such documents, has against the Owner, insofar as applicable to this Subcontract. Where a provision of such documents is inconsistent with a provision of this Agreement, this Agreement shall govern.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in this Agreement and is referred to throughout the Subcontract Documents as if singular in number. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all Project matters requiring the Contractor's approval or authorization. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall render decisions in a timely manner and in accordance with the Contractor's construction schedule.

§ 3.2 Services Provided by the Contractor

§ 3.2.1 The Contractor shall cooperate with the Subcontractor in scheduling and performing the Contractor's Work to avoid conflicts or interference in the Subcontractor's Work and shall review, and expedite written responses to, submittals made by the Subcontractor in accordance with Section 4.2.3 and Article 5. Promptly after execution of this Agreement, the Contractor shall provide the Subcontractor with copies of the Contractor's construction schedule and schedule of submittals, together with such additional scheduling details as will enable the Subcontractor to plan and perform the Subcontractor's Work properly. The Contractor shall promptly notify the Subcontractor of subsequent changes in the construction and submittal schedules and additional scheduling details.

§ 3.2.2 The Contractor shall provide suitable areas for storage of the Subcontractor's materials and equipment during the course of the Work. Except as previously agreed upon, additional costs to the Subcontractor resulting from relocation of such storage areas at the direction of the Contractor shall be reimbursed by the Contractor.

§ 3.3 Communications

§ 3.3.1 The Contractor shall promptly make available to the Subcontractor information, including information received from the Owner, that affects the performance of this Subcontract and that becomes available to the Contractor subsequent to execution of this Subcontract.

§ 3.3.2 The Contractor shall not give instructions or orders directly to the Subcontractor's employees or to the Subcontractor's Sub-subcontractors or suppliers unless such persons are designated as authorized representatives of the Subcontractor.

§ 3.3.3 The Contractor shall permit the Subcontractor to request information directly from the Architect regarding the percentages of completion and the amount certified on account of Work done by the Subcontractor.

§ 3.3.4 If hazardous materials or substances are being used on the site by the Contractor, a subcontractor, or anyone directly or indirectly employed by them (other than the Subcontractor), and they are a type of hazardous material or substance of which an employer is required by law to notify its employees, the Contractor shall, prior to delivery to the Project site or exposure of the Subcontractor's employees to such material or substance, give notice of the chemical composition thereof to the Subcontractor in sufficient detail and time to permit the Subcontractor's compliance with such laws.

§ 3.3.5 The Contractor shall promptly notify the Subcontractor of any fault or defect in the Work under this Subcontract or nonconformity with the Subcontract Documents.

§ 3.3.6 The Contractor shall furnish to the Subcontractor within 30 days after receipt of a written request, or earlier if so required by law, information necessary and relevant for the Subcontractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property, usually referred to as the site, on which the Project is located and the Owner's interest therein. If the Contractor does not have such information, the Contractor shall request the information from the Owner in accordance with Article 2 of AIA Document A201-2017 and promptly furnish the information received from the Owner to the Subcontractor.

§ 3.3.7 If the Contractor asserts a Claim against, or defends a Claim by, the Owner that relates to the Work of the Subcontractor, the Contractor shall promptly make available to the Subcontractor all information relating to the portion of the Claim that relates to the Work of the Subcontractor.

§ 3.4 Claims by the Contractor

§ 3.4.1 Liquidated damages, if provided for in the Prime Contract, shall be assessed against the Subcontractor only to the extent caused by the Subcontractor or any person or entity for whose acts the Subcontractor may be liable, and in no case for delays or causes arising outside the scope of this Subcontract.

§ 3.4.2 The Contractor's Claims for the costs of services or materials provided due to the Subcontractor's failure to execute the Work shall require

.1 seven days' notice prior to the Contractor's providing services or materials, except in an emergency; and

.2 written compilations to the Subcontractor of services and materials provided by the Contractor and charges for such services and materials no later than the fifteenth day of the month following the Contractor's providing such services or materials.

§ 3.5 Contractor's Remedies

If the Subcontractor defaults or neglects to carry out the Work in accordance with this Agreement and fails within ~~five working days~~ 72 hours after receipt of notice from the Contractor to commence and continue correction of such default or neglect with diligence and promptness, the Contractor may, without prejudice to other remedies the Contractor may have, remedy such default or neglect and withhold, in accordance with Section 11.1.7.2, the reasonable cost thereof from current or future payments due the Subcontractor. If payments due to the Subcontractor are not sufficient to cover such amounts, the Subcontractor shall pay the difference to the Contractor.

ARTICLE 4 SUBCONTRACTOR

§ 4.1 General

The Subcontractor is the person or entity identified as such in this Agreement and is referred to throughout the Subcontract Documents as if singular in number. The Subcontractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Subcontractor shall designate in writing a representative who shall have express authority to act on the Subcontractor's behalf with respect to the Project. The term "Subcontractor" means the Subcontractor or the Subcontractor's authorized representative.

§ 4.2 Execution and Progress of the Work

§ 4.2.1 For all Work the Subcontractor intends to subcontract, the Subcontractor shall enter into written agreements with Sub-subcontractors performing portions of the Work of this Subcontract by which the Subcontractor and the Sub-subcontractor are mutually bound, to the extent of the Work to be performed by the Sub-subcontractor, assuming toward each other all obligations and responsibilities that the Contractor and Subcontractor assume toward each other and having the benefit of all rights, remedies and redress each against the other that the Contractor and Subcontractor have by virtue of the provisions of this Agreement.

§ 4.2.2 The Subcontractor shall supervise and direct the Subcontractor's Work, and shall cooperate with the Contractor in scheduling and performing the Subcontractor's Work to avoid conflict, delay in, or interference with the Work of the Contractor, other subcontractors, the Owner, or Separate Contractors.

§ 4.2.3 Submittals

§ 4.2.3.1 The Subcontractor shall submit Shop Drawings, Product Data, Samples, and similar submittals required by the Subcontract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Contractor or other subcontractors.

§ 4.2.3.2 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Subcontractor represents to the Contractor that the Subcontractor has (1) reviewed and approved them; (2) determined and verified materials, field measurements, and field construction criteria related thereto, or will do so; and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Subcontract Documents.

§ 4.2.4 The Subcontractor shall furnish to the Contractor periodic progress reports on the Work of this Subcontract as mutually agreed, including information on the status of materials and equipment that may be in the course of preparation, manufacture, or transit.

§ 4.2.5 The Subcontractor agrees that the Contractor and the Architect each have the authority to reject Work of the Subcontractor that does not conform to the Prime Contract. The Architect's decisions on matters relating to aesthetic effect shall be final and binding on the Subcontractor if consistent with the intent expressed in the Prime Contract.

§ 4.2.6 The Subcontractor shall pay for all materials, equipment, and labor used in connection with the performance of this Subcontract through the period covered by previous payments received from the Contractor, and shall furnish satisfactory evidence, when requested by the Contractor, to verify compliance with the above requirements.

§ 4.2.7 The Subcontractor shall take necessary precautions to properly protect the work of the Contractor, Separate Contractors, and other subcontractors from damage caused by operations under this Subcontract.

§ 4.2.8 The Subcontractor shall cooperate with the Contractor, other subcontractors, the Owner, and Separate Contractors whose work might affect the Subcontractor's Work. The Subcontractor shall participate in the preparation of coordinated drawings in areas of congestion, if required by the Prime Contract, specifically noting and advising the Contractor of potential conflicts between the Work of the Subcontractor and that of the Contractor, other subcontractors, the Owner, or Separate Contractors.

§ 4.3 Permits, Fees, Notices, and Compliance with Laws

§ 4.3.1 The Subcontractor shall give notices and comply with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on performance of the Work of this Subcontract. The Subcontractor shall secure and pay for permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Subcontractor's Work, the furnishing of which is required of the Contractor by the Prime Contract.

§ 4.3.2 The Subcontractor shall comply with Federal, state, and local tax laws; social security acts; unemployment compensation acts; and workers' compensation acts, insofar as applicable to the performance of this Subcontract.

4.3.2a – Provide SDS booklets for the chemicals known with subcontracts. Any additional chemicals used, provide SDS to superintendent prior to use of chemicals.

§ 4.4 Safety Precautions and Procedures

§ 4.4.1 The Subcontractor shall take reasonable safety precautions with respect to performance of this Subcontract. The Subcontractor shall comply with safety measures initiated by the Contractor and with applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, for the safety of persons and property, in accordance with the requirements of the Prime Contract. The Subcontractor shall notify the Contractor within three days of an injury to an employee or agent of the Subcontractor which occurred at the site.

§ 4.4.2 If hazardous materials or substances are being used on the site by the Subcontractor, the Subcontractor's Sub-subcontractors, or anyone directly or indirectly employed by them, and they are a type of hazardous material or substance of which an employer is required by law to notify its employees, the Subcontractor shall, prior to delivery to the Project site or exposure of the Contractor, other subcontractors, and other employers on the site to such

material or substance, give notice of the chemical composition thereof to the Contractor in sufficient detail and time to permit compliance with the laws by the Contractor, other subcontractors, and other employers on the site.

§ 4.4.3 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a hazardous material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Subcontractor, the Subcontractor shall, upon recognizing the condition, immediately stop Work in the affected area and promptly report the condition to the Contractor in writing. When the material or substance has been rendered harmless, the Subcontractor's Work in the affected area shall resume upon written agreement of the Contractor and Subcontractor. The Subcontract Time shall be extended appropriately and the Subcontract Sum shall be increased in the amount of the Subcontractor's reasonable additional costs of demobilization, delay, and remobilization, which adjustments shall be accomplished as provided in Article 5 of this Agreement.

§ 4.4.4 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Subcontractor, the Subcontractor's Sub-subcontractors, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 4.4.3 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 4.4.5 The Subcontractor shall reimburse the Contractor for the cost and expense the Contractor incurs (1) for remediation of a hazardous material or substance brought to the site and negligently handled by the Subcontractor or (2) where the Subcontractor fails to perform its obligations under Section 4.4.3, except to the extent that the cost and expense are due to the Contractor's fault or negligence.

~~§ 4.5 Cleaning Up~~

4.4.6 The subcontractor shall be responsible for their own written safety programs and employee training as required by OSHA or MSHA. Provide a copy of safety plan to superintendent prior to start of any work on site and maintain a copy on site throughout the project. 4.4.7 The subcontractor's competent person must be on site whenever subcontractor's employees are working on this project. Competent persons means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has the authorization to take prompt corrective measures to eliminate them. (OSHA CFR 1926.32 (f)). 4.4.8 Any fines by OSHA or other safety enforcement agencies as a result of a safety violation will be passed on the subcontractor in violation. 4.4.9 Subcontractor employees will be required to wear hard hats, safety glasses, high visibility clothing and boots on this project at ALL times. Employees may be asked to leave without the proper personal protective equipment

4.4.10 Scaffolding must be inspected by a qualified individual under the direction of Scull Construction Service, Inc. prior to use of scaffolding.

4.4.11 Subcontractor must attend Contractor-Subcontractor pre-construction meeting before starting work!

§ 4.5.1 The Subcontractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations performed under this Subcontract. The Subcontractor shall not be held responsible for conditions caused by other contractors or subcontractors.

§ 4.5.2 As provided under Section 3.4.2, if the Subcontractor fails to clean up as provided in the Subcontract Documents, the Contractor may charge the Subcontractor for the Subcontractor's appropriate share of cleanup costs.

§ 4.6 Warranty

§ 4.6.1 The Subcontractor warrants to the Owner, Architect, and Contractor that materials and equipment furnished under this Subcontract will be of good quality and new unless the Subcontract Documents require or permit otherwise. The Subcontractor further warrants that the Work will conform to the requirements of the Subcontract Documents and will be free from defects, except for those inherent in the quality of the Work the Subcontract

Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Subcontractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Subcontractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Architect and Contractor, the Subcontractor shall provide satisfactory evidence as to the kind and quality of materials and equipment furnished or to be furnished.

§ 4.6.2 All material, equipment, or other special warranties required by the Subcontract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with the Subcontract Documents.

§ 4.7 Indemnification

§ 4.7.1 To the fullest extent permitted by law, the Subcontractor shall indemnify and hold harmless the Owner, Contractor, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Subcontractor's Work under this Subcontract, provided that any such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Subcontractor, the Subcontractor's Sub-subcontractors, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 4.7.

§ 4.7.2 In claims against any person or entity indemnified under this Section 4.7 by an employee of the Subcontractor, the Subcontractor's Sub-subcontractors, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 4.7.1 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Subcontractor, or the Subcontractor's Sub-subcontractors under workers' compensation acts, disability benefit acts, or other employee benefit acts.

§ 4.8 Remedies for Nonpayment

If the Contractor does not pay the Subcontractor through no fault of the Subcontractor, within seven days from the time payment should be made as provided in this Agreement, the Subcontractor may, without prejudice to any other available remedies, upon seven additional days' notice to the Contractor, stop the Work of this Subcontract until payment of the amount owing has been received. The Subcontract Sum shall, by appropriate Modification, be increased by the amount of the Subcontractor's reasonable costs of demobilization, delay, and remobilization.

§ 4.9 Professional Services Provided by Subcontractor

§ 4.9.1 The Subcontractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Subcontract Documents or unless the Subcontractor is required to provide such services in order to carry out the Subcontractor's responsibilities for its own construction means, methods, techniques, sequences, and procedures. The Subcontractor shall not be required to provide professional services in violation of applicable law.

§ 4.9.2 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Subcontractor by the Subcontract Documents, the Contractor will provide all performance and design criteria that such services must satisfy to the extent the Contractor has received such performance and design criteria from the Owner and Architect under the terms of the Prime Contract.

§ 4.9.3 If professional design services or certifications by a design professional are required because of means, methods, techniques, sequences, or procedures required by the Contractor and related to the Work of the Subcontractor, the Contractor will provide all performance and design criteria that such services must satisfy.

§ 4.9.4 The Subcontractor shall be entitled to rely upon the adequacy, accuracy, and completeness of the performance and design criteria received from the Contractor under this Section 4.9.

§ 4.9.5 The Subcontractor shall cause the professional services performed under this Section 4.9 to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations,

specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop drawings and other submittals related to the Work designed by such design professional shall bear the professional's written approval when submitted to the Contractor. The Contractor shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals, provided the Contractor has provided to the Subcontractor all performance and design criteria required by this Section 4.9.

ARTICLE 5 CHANGES IN THE WORK

§ 5.1 The Owner may make changes in the Work by issuing Modifications to the Prime Contract. Upon receipt of a Modification to the Prime Contract issued subsequent to the execution of this Agreement, the Contractor shall promptly notify the Subcontractor of such Modification. Unless otherwise directed by the Contractor, the Subcontractor shall not thereafter order materials or perform Work that would be inconsistent with the changes made by the Modification to the Prime Contract.

§ 5.2 The Subcontractor may be ordered in writing by the Contractor, without invalidating this Subcontract, to make changes in the Work within the general scope of this Subcontract consisting of additions, deletions, or other revisions, including those required by Modifications to the Prime Contract issued subsequent to the execution of this Agreement, with the Subcontract Sum and the Subcontract Time adjusted accordingly. The Subcontractor, prior to the commencement of such changed or revised Work, shall submit promptly to the Contractor written copies of a Claim for adjustment to the Subcontract Sum and Subcontract Time for such revised Work in a manner consistent with requirements of the Subcontract Documents.

§ 5.3 The Subcontractor shall make all Claims promptly to the Contractor for additional cost, extensions of time and damages for delays, or other causes in accordance with the Subcontract Documents. A Claim which will affect or become part of a Claim which the Contractor is required to make under the Prime Contract within a specified time period or in a specified manner shall be made in sufficient time to permit the Contractor to satisfy the requirements of the Prime Contract. Such Claims shall be received by the Contractor not less than two working days preceding the time by which the Contractor's Claim must be made. Failure of the Subcontractor to make such a timely Claim shall bind the Subcontractor to the same consequences as those to which the Contractor is bound.

ARTICLE 6 CLAIMS AND DISPUTES

§ 6.1 Mediation

§ 6.1.1 Claims, disputes, or other matters in controversy arising out of or related to this Subcontract, except those waived as provided for in Sections 6.4 and 11.3.2, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 6.1.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to this Subcontract and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 6.1.2, the parties may nonetheless proceed to the selection of the arbitrators(s) and agree upon a schedule for later proceedings.

§ 6.1.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by mediation pursuant to Section 6.1, the method of binding dispute resolution shall be as follows:
(Check the appropriate box.)

[X] Arbitration pursuant to Section 6.3 of this Agreement

[ ] Litigation in a court of competent jurisdiction

[ ] Other: *(Specify)*

If the Contractor and Subcontractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

§ 6.3 Arbitration

§ 6.3.1 If the Contractor and Subcontractor have selected arbitration as the method of binding dispute resolution in Section 6.2, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of this Agreement. The arbitration should be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be made in writing, delivered to the other party to the Subcontract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 6.3.2 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 6.3.3 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 6.3.4 The foregoing agreement to arbitrate, and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 6.3.5 Consolidation or Joinder

§ 6.3.5.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 6.3.5.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a Claim, dispute, or other matter in question not described in the written consent.

§ 6.3.5.3 The Contractor and Subcontractor grant to any person or entity made a party to an arbitration conducted under this Section 6.3, whether by joinder or consolidation, the same rights of joinder and consolidation as the Contractor and Subcontractor under this Agreement.

§ 6.4 Waiver of Claims for Consequential Damages

The Contractor and Subcontractor waive claims against each other for consequential damages arising out of or relating to this Subcontract, including without limitation, any consequential damages due to either party's termination in accordance with Article 7. Nothing contained herein shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of this Agreement.

ARTICLE 7 TERMINATION, SUSPENSION OR ASSIGNMENT OF THE SUBCONTRACT

§ 7.1 Termination by the Subcontractor

The Subcontractor may terminate the Subcontract for the same reasons and under the same circumstances and procedures with respect to the Contractor as the Contractor may terminate with respect to the Owner under the Prime Contract, or for nonpayment of amounts due under this Subcontract for 60 days or longer. In the event of such termination by the Subcontractor for any reason which is not the fault of the Subcontractor, the Subcontractor's Sub-subcontractors, or their agents or employees or other persons or entities performing portions of the Work under contract with the Subcontractor, the Subcontractor shall be entitled to recover from the Contractor payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, as well as reasonable overhead and profit on work not executed and costs incurred by reason of such termination.

§ 7.2 Termination by the Contractor

§ 7.2.1 Termination for Cause

If the Subcontractor repeatedly fails or neglects to carry out the Work in accordance with the Subcontract Documents or otherwise to perform in accordance with this Subcontract and fails within a ~~ten-day~~ 72 hour period after receipt of notice to commence and continue correction of such default or neglect with diligence and promptness, the Contractor may, by notice to the Subcontractor and without prejudice to any other remedy the Contractor may have, terminate the Subcontract and finish the Subcontractor's Work by whatever method the Contractor may deem expedient. If the unpaid balance of the Subcontract Sum exceeds the expense of finishing the Subcontractor's Work and other damages incurred by the Contractor and not expressly waived, such excess shall be paid to the Subcontractor. If such expense and damages exceed the unpaid balance of the Subcontract Sum, the Subcontractor shall pay the difference to the Contractor.

§ 7.2.2 Termination for Convenience

§ 7.2.2.1 If the Owner terminates the Prime Contract for the Owner's convenience, the Contractor shall promptly deliver notice to the Subcontractor.

§ 7.2.2.2 In case of such termination for the Owner's convenience, the Subcontractor shall be entitled to receive payment for Work properly executed, costs incurred by reason of the termination, and reasonable overhead and profit on the Work not executed.

§ 7.2.2.3 Upon receipt of notice of termination, the Subcontractor shall

- **.1** cease operations as directed by the Contractor in the notice;
- **.2** take actions necessary, or that the Contractor may direct, for the protection and preservation of the Work; and
- **.3** except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing Sub-subcontracts and purchase orders and enter into no further Sub-subcontracts and purchase orders.

§ 7.3 Suspension by the Contractor for Convenience

§ 7.3.1 The Contractor may, without cause, order the Subcontractor in writing to suspend, delay, or interrupt the Work of this Subcontract in whole or in part for such period of time as the Contractor may determine. In the event of suspension ordered by the Contractor, the Subcontractor shall be entitled to an equitable adjustment of the Subcontract Time and Subcontract Sum.

§ 7.3.2 The Subcontract Time and Subcontract Sum shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 7.3.1. Adjustment of the Subcontract Sum shall include profit on the increased cost of performance caused by suspension, delay, or interruption. No adjustment shall be made to the extent that

- **.1** performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the Subcontractor is responsible; or
- **.2** an equitable adjustment is made or denied under another provision of this Subcontract.

§ 7.4 Assignment of the Subcontract

§ 7.4.1 In the event the Owner terminates the Prime Contract for cause, this Subcontract is assigned to the Owner pursuant to Section 5.4 of AIA Document A201–2017 provided the Owner accepts the assignment by notifying the Contractor and Subcontractor.

§ 7.4.2 Without the Contractor's written consent, the Subcontractor shall not assign the Work of this Subcontract, subcontract the whole of this Subcontract, or subcontract portions of this Subcontract.

ARTICLE 8 THE WORK OF THIS SUBCONTRACT

The Subcontractor shall execute the following portion of the Work described in the Subcontract Documents, including all labor, materials, equipment, services and other items required to complete such portion of the Work, except to the extent specifically indicated in the Subcontract Documents to be the responsibility of others.
(Insert a precise description of the Work of this Subcontract, referring where appropriate to numbers of Drawings, sections of Specifications and pages of Addenda, Modifications, and accepted alternates.)

ARTICLE 9 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 9.1 The date of commencement of the Subcontractor's Work, shall be:
(Check one of the following boxes.)

[ ] The date of this Agreement.

[ ] A date set forth in a notice to proceed issued by the Contractor.

[ ] Established as follows:
(Insert a date or a means to determine the date of commencement of the Subcontractor's Work.)

If a date of commencement of the Subcontractor's Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 9.2 Subcontract Time

§ 9.2.1 The Subcontract Time is the period of time, including authorized adjustments, allotted in the Subcontract Documents for Substantial Completion of the Work described in the Subcontract Documents. The Subcontract Time shall be measured from the date of commencement of the Subcontractor's Work.

§ 9.2.2 Subject to adjustments of the Subcontract Time as provided in the Subcontract Documents, the Subcontractor shall achieve substantial completion of the Subcontractor's Work:
(Check one of the following boxes and complete the necessary information.)

[ ] Not later than ( ) calendar days from the date of commencement of the Subcontractor's Work.

[ ] By the following date:

§ 9.2.3 Subject to adjustments of the Subcontract Time as provided in the Subcontract Documents, if portions of the Subcontractor's Work are to be completed prior to substantial completion of the Subcontractor's Work, then the Subcontractor shall achieve earlier substantial completion of such portions by the following dates.
(List all portions of the Subcontractor's Work required to achieve substantial completion of the Subcontractor's Portion of the Work.)

Portion of Work	Substantial Completion

§ 9.2.4 If the Subcontractor fails to achieve substantial completion as provided in this Section 9.2, liquidated damages, if any, shall be assessed as set forth in Section 3.4.

§ 9.3 With respect to the obligations of both the Contractor and the Subcontractor, time is of the essence of this Subcontract.

§ 9.4 No extension of time will be valid without the Contractor's written consent after a Claim is made by the Subcontractor in accordance with Section 5.3.

ARTICLE 10 SUBCONTRACT SUM

§ 10.1 The Contractor shall pay the Subcontractor the Subcontract Sum in current funds for the Subcontractor's performance of the Subcontract. The Subcontract Sum shall be (($), subject to additions and deductions as provided in the Subcontract Documents.

§ 10.2 Alternates

§ 10.2.1 Alternates, if any, included in the Subcontract Sum:

Item	Price

§ 10.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Contractor following execution of this Agreement. Upon acceptance, the Contractor shall issue a Modification to this Subcontract:
(Insert below each alternate and the conditions that must be met for the Contractor to accept the alternate.)

Item	Price	Conditions for Acceptance

§ 10.3 Unit prices, if any:
(Identify and state the unit price, and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price Per Unit ($0.00)

§ 10.4 Allowances, if any, included in the Subcontract Sum:
(Identify allowance and state exclusions, if any, from the allowance price.)

Item	Price

ARTICLE 11 PAYMENTS

§ 11.1 Progress Payments

§ 11.1.1 Based upon Applications for Payment submitted to the Contractor by the Subcontractor, corresponding to Applications for Payment submitted by the Contractor to the Architect, and Certificates for Payment issued by the Architect, the Contractor shall make progress payments on account of the Subcontract Sum to the Subcontractor as provided below and elsewhere in the Subcontract Documents. Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor and Subcontractor for Work properly performed by their contractors and suppliers shall be held by the Contractor and Subcontractor for those contractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor or Subcontractor for which payment was made to the Contractor by the Owner or to the Subcontractor by the Contractor, as applicable. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor or Subcontractor, shall create any fiduciary liability or tort liability on the part of the Contractor or Subcontractor for breach of trust, or shall entitle any person or entity to an award of punitive damages against the Contractor or Subcontractor for breach of the requirements of this provision.

§ 11.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

Retainage will match the retainage held by the Owner. Progress payments may be withheld for the following: Failure to provide shop drawings in a timely manner so as not to adversely affect the scheduling and completion of work.

A list of material suppliers and sub-tier subcontractors (See Attachment #1) is provided to the contractor prior to the first application of payment.

Signed lien releases for all material purchases must accompany monthly applications for payment.

At Scull discretion, Subcontractor's may receive joint checks with sub-tiers/suppliers.

Lien waivers that are sent out with checks will be required back fully signed before any additional payments will be issued.

All contracts and required insurances are required back before any payment is issued. Schedule of Vaules to reflect exact amounts to the sub-tier and suppliers. All pay applications must submit invoices to support line items that are being billed for.

§ 11.1.3 Provided an Application for Payment is received by the Contractor not later than the day of a month, the Contractor shall include the Subcontractor's Work covered by that application in the next Application for Payment which the Contractor is entitled to submit to the Architect. The Contractor shall pay the Subcontractor each progress payment no later than seven working days after the Contractor receives payment from the Owner. If the Architect does not issue a Certificate for Payment or the Contractor does not receive payment for any cause which is not the fault of the Subcontractor, the Contractor shall pay the Subcontractor, on demand, a progress payment computed as provided in Sections 11.1.7, 11.1.8, 11.1.9 and 11.2.

§ 11.1.4 If the Subcontractor's Application for Payment is received by the Contractor after the application date fixed above, the Subcontractor's Work covered by it shall be included by the Contractor in the next Application for Payment submitted to the Architect.

§ 11.1.5 The Subcontractor shall submit to the Contractor a schedule of values prior to submitting the Subcontractor's first Application for Payment. Each subsequent Application for Payment shall be based upon the most recent schedule of values submitted by the Subcontractor in accordance with the Subcontract Documents. The schedule of values shall allocate the entire Subcontract Sum among the various portions of the Subcontractor's Work and be prepared in such form and supported by such data to substantiate its accuracy as the Contractor may require, and unless objected to by the Contractor, shall be used as a basis for reviewing the Subcontractor's Applications for Payment.

§ 11.1.6 Applications for Payment submitted by the Subcontractor shall indicate the percentage of completion of each portion of the Subcontractor's Work as of the end of the period covered by the Application for Payment.

§ 11.1.7 Subject to the provisions of the Subcontract Documents, the amount of each progress payment shall be computed as follows:

§ 11.1.7.1 The amount of each progress payment shall first include:

.1 That portion of the Subcontract Sum properly allocable to completed Work:

.2 That portion of the Subcontract Sum properly allocable to materials and equipment delivered and suitably stored at the site by the Subcontractor for subsequent incorporation in the Subcontractor's Work or, if approved by the Contractor, suitably stored off the site at a location agreed upon in writing; and

.3 The amount, if any, for changes in the Work that are not in dispute and have been properly authorized by the Contractor, to the same extent provided in the Prime Contract, pending a final determination by the Contractor of the cost of changes in the Subcontractor's Work, even though the Subcontract Sum has not yet been adjusted.

§ 11.1.7.2 The amount of each progress payment shall then be reduced by:

.1 The aggregate of previous payments made by the Contractor;

.2 The amount, if any, for Work that remains uncorrected and for which the Contractor has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201-2017 for a cause that is the fault of the Subcontractor;

.3 For Work performed or defects discovered since the last payment application, any amount for which the Contractor may withhold payment in whole or in part, as provided in Article 9 of AIA Document A201-2017, for a cause that is the fault of the Subcontractor; and

.4 Retainage withheld pursuant to Section 11.1.8 of this Agreement.

§ 11.1.8 Retainage

§ 11.1.8.1 For each progress payment made prior to substantial completion of the Subcontractor's Work, the Contractor may withhold the following amounts as retainage from the payment otherwise due:
(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

§ 11.1.8.1.1 The following items are not subject to retainage:
(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

§ 11.1.8.2 Reduction or limitation of retainage, if any, shall be as follows:
(If the retainage established in Section 11.1.8.1 is to be modified prior to substantial completion of the entire Work, including modifications for substantial completion of portions of the Subcontractor's Work as provided in Section 9.2.3, insert provisions for such modification.)

§ 11.1.9 Upon the partial or entire disapproval by the Contractor of the Subcontractor's Application for Payment, the Contractor shall provide notice to the Subcontractor. If the Subcontractor disputes the Contractor's decision regarding a Subcontractor's Application for Payment in whole or in part, the Subcontractor may submit a Claim in accordance with Article 6. When the basis for the disapproval has been remedied, the Subcontractor shall be paid the amounts withheld.

§ 11.1.10 Provided the Contractor has fulfilled its payment obligations under the Subcontract Documents, the Subcontractor shall defend and indemnify the Contractor and Owner from all loss, liability, damage, or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any of the Subcontractor's subcontractors, suppliers, or vendors of any tier. Upon receipt of notice of such lien claim or other claim for payment, the Contractor shall notify the Subcontractor. If approved by the applicable court, when required, the Subcontractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 11.2 Substantial Completion

When the Subcontractor's Work or a designated portion thereof is substantially complete and in accordance with the requirements of the Prime Contract, the Contractor shall, upon application by the Subcontractor, make prompt Application for Payment for such Work. Within 30 days following issuance by the Architect of the Certificate for Payment covering such substantially completed Work, the Contractor shall, to the full extent allowed in the Prime Contract, make payment to the Subcontractor, deducting any portion of the funds for the Subcontractor's Work withheld in accordance with the certificate to cover costs of items to be completed or corrected by the Subcontractor. Such payment to the Subcontractor shall be the entire unpaid balance of the Subcontract Sum if a full release of retainage is allowed under the Prime Contract for the Subcontractor's Work prior to the completion of the entire Project. If the Prime Contract does not allow for a full release of retainage, then such payment shall be an amount which, when added to previous payments to the Subcontractor, will reduce the retainage on the Subcontractor's substantially completed Work to the same percentage of retainage as that on the Contractor's Work covered by the certificate.

§ 11.3 Final Payment

§ 11.3.1 Final payment, constituting the entire unpaid balance of the Subcontract Sum, shall be made by the Contractor to the Subcontractor when the Subcontractor's Work is fully performed in accordance with the requirements of the Subcontract Documents, the Architect has issued a Certificate for Payment covering the Subcontractor's completed Work and the Contractor has received payment from the Owner. If, for any cause which is not the fault of the Subcontractor, a Certificate for Payment is not issued or the Contractor does not receive timely payment or does not pay the Subcontractor within seven days after receipt of payment from the Owner, final payment to the Subcontractor shall be made upon demand.

(Insert provisions for earlier final payment to the Subcontractor, if applicable.)

§ 11.3.2 Before issuance of the final payment, the Subcontractor, if required, shall submit evidence satisfactory to the Contractor that all payrolls, bills for materials and equipment, and all known indebtedness connected with the Subcontractor's Work have been satisfied. Acceptance of final payment by the Subcontractor shall constitute a waiver of claims by the Subcontractor, except those previously made in writing and identified by the Subcontractor as unsettled at the time of final Application for Payment.

§ 11.4 Interest

Payments due and unpaid under this Subcontract shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

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ARTICLE 12 INSURANCE AND BONDS

§ 12.1 Subcontractor's Required Insurance Coverage

§ 12.1.1 The Subcontractor shall purchase and maintain the following types and limits of insurance, from a company or companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, as will protect the Subcontractor from claims that may arise out of, or result from, the Subcontractor's operations and completed operations under the Subcontract:
(Specify each type of insurance, such as commercial general liability, automobile, worker's compensation, employers' liability, professional liability, and pollution, required to be carried by the Subcontractor, the limits of coverage for each type of insurance, and any other pertinent requirements.)

Type of Insurance	Limits	Other Pertinent Requirements
-See Attachment #3: Minimum Insurance Requirements		

§ 12.1.2 Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Subcontractor's Work until the date of final payment and termination of any coverage required to be maintained after final payment to the Subcontractor, and, with respect to the Subcontractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Prime Contract.

§ 12.1.3 If professional services are required under Section 4.9, the Subcontractor shall provide the professional liability insurance coverage required under this Section 12.1 for the following period after completion of the Work:

§ 12.1.4 Certificates of Insurance. The Subcontractor shall provide certificates of insurance acceptable to the Contractor evidencing compliance with the requirements in this Article 12 at the following times: (1) prior to commencement of the Subcontractor's Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Contractor's written request. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the time required in this Article 12. The certificates shall show the Contractor and the Owner as additional insureds on the Subcontractor's Commercial General Liability and any excess or umbrella liability policy.

§ 12.1.5 Deductibles and Self-Insured Retentions. The Subcontractor shall disclose to the Contractor any deductible or self-insured retentions applicable to any insurance required to be provided by the Subcontractor.

§ 12.1.6 Additional Insured Obligations. To the fullest extent permitted by law, the Subcontractor shall cause its commercial general liability coverage to include: (1) the Contractor, the Owner, the Architect, and the Architect's consultants as additional insureds for claims caused in whole or in part by the Subcontractor's negligent acts or

omissions during the Subcontractor's operations; and (2) the Contractor and Owner as additional insureds for claims caused in whole or in part by the Subcontractor's negligent acts or omissions for which loss occurs during the Subcontractor's completed operations. The additional insured coverage shall be primary and non-contributory to any of the Contractor's and Owner's general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect's consultants, CG 20 32 07 04.

§ 12.1.7 Notice of Cancellation or Change in Coverage. Within three (3) business days of the date the Subcontractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Subcontract Documents, the Subcontractor shall provide notice to the Contractor of such impending or actual cancellation or expiration. Upon receipt of notice from the Subcontractor, the Contractor shall, unless the lapse in coverage arises from an act or omission of the Contractor, have the right to suspend the Work in accordance with this Agreement until the lapse in coverage has been cured by the procurement of replacement coverage by the Subcontractor. The furnishing of notice by the Subcontractor shall not relieve the Subcontractor of any contractual obligation to provide any required coverage.

§ 12.2 Subcontractor's Required Performance Bond and Payment Bond

§ 12.2.1 The Subcontractor shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, as follows:
(Specify type and penal sum of bonds.)

Type	Penal Sum ($0.00)
Payment Bond	
Performance Bond	

Payment and Performance Bonds shall be AIA Document A312™, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312™, current as of the date of this Agreement.

§ 12.2.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations under this Agreement, the Subcontractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

§ 12.3 Contractor's Insurance and Bond Obligations

§ 12.3.1 The Contractor shall furnish to the Subcontractor certificates of insurance evidencing insurance coverage required of the Contractor under the Prime Contract.

§ 12.3.2 The Contractor shall promptly, upon request of the Subcontractor, furnish a copy or permit a copy to be made of any bond covering payment of obligations arising under the Subcontract.

§ 12.4 Property Insurance

§ 12.4.1 When requested in writing, the Contractor shall provide the Subcontractor with copies of the property and equipment policies in effect for the Project, to the extent copies of the policies are available to the Contractor. The Contractor shall notify the Subcontractor if the required property insurance policies are not in effect.

§ 12.4.2 If the required property insurance is not in effect for the full value of the Subcontractor's Work, then the Subcontractor shall purchase insurance for the value of the Subcontractor's Work, and the Subcontractor shall be reimbursed for the cost of the insurance by an adjustment in the Subcontract Sum.

§ 12.4.3 Property insurance for the Subcontractor's materials and equipment required for the Subcontractor's Work, stored off site or in transit and not covered by the Project property insurance, shall be paid for through the Application for Payment process.

§ 12.5 Waivers of Subrogation

The Contractor and Subcontractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other, and (2) the Owner, the Architect, the Architect's consultants, and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and

employees for damages caused by fire or other causes of loss to the extent those losses are covered by property insurance provided under the Prime Contract or other property insurance applicable to the Work or to property at or adjacent to the Project site, except such rights as they may have to proceeds of such insurance held by the Owner as a fiduciary. The Subcontractor shall require similar written waivers in favor of the individuals and entities enumerated herein from the Subcontractor's Sub-subcontractors, agents, and employees. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this Section 12.5 shall not prohibit this waiver of subrogation, which shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the property damaged.

ARTICLE 13 TEMPORARY FACILITIES, SERVICES, EQUIPMENT AND WORKING CONDITIONS

§ 13.1 The Contractor shall furnish and make the Contractor's temporary facilities and services available to the Subcontractor at no cost, except as noted below:

§ 13.2 The Contractor's equipment will be available to the Subcontractor only at the Contractor's discretion and on mutually satisfactory terms, except as noted below:

§ 13.3 Specific working conditions as noted below:
(Insert any specific arrangements or requirements concerning working conditions and labor matters applicable to the Subcontractor's Work.)

ARTICLE 14 MISCELLANEOUS PROVISIONS

§ 14.1 Where reference is made in this Subcontract to a provision of another Subcontract Document, the reference refers to that provision as amended or supplemented by other provisions of the Subcontract Documents.

§ 14.2 The Contractor's representative:
(Name, address, email address and other information)

§ 14.3 The Subcontractor's representative:
(Name, address, email address and other information)

§ 14.4 Notice

§ 14.4.1 Except as otherwise provided in Section 14.4.2, where the Subcontract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic notice is set forth in Section 14.4.3.

§ 14.4.2 Notice of Claims shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 14.4.3 Notice in electronic format, pursuant to Section 14.4.1, may be given in accordance with AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:
(If other than in accordance with AIA Document E203™–2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

§ 14.5 Neither the Contractor's nor the Subcontractor's representative shall be changed without ten days' prior notice to the other party.

§ 14.6 The invalidity of any provision of the Subcontract Documents shall not invalidate the Subcontract or its remaining provisions. If it is determined that any provision of the Subcontract violates any law or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case, the Subcontract shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Subcontract.

§ 14.7 The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. The parties will use AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.

§ 14.7.1 Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™–2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.

ARTICLE 15 ENUMERATION OF SUBCONTRACT DOCUMENTS

§ 15.1 This Agreement is comprised of the following documents:

.1 AIA Document A401™–2017, Standard Form Agreement Between Contractor and Subcontractor;

.2 Prime Agreement between the Owner and Contractor, including all exhibits thereto, attached as Exhibit A;

~~**.3** AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, if not included in the Prime Agreement, dated as indicated below:~~

~~*(Insert the date of the E203–2013 incorporated into this Agreement.)*~~

.4 Other Exhibits incorporated into this Agreement:
(Clearly identify any other exhibits incorporated into this Agreement.)

.5 Other documents:
(List other documents, if any, forming part of the Agreement.)

Attachment #2: Prime Contractors' Exemption Certificate
Attachment #3: Minimum Insurance Requirements

Attachment #4: Certificate of Compliance
Attachment #5: Electronic Code of Federal Regulations

This Agreement entered into as of the day and year first written above.

CONTRACTOR *(Signature)*

(Printed name and title)

SUBCONTRACTOR *(Signature)*

(Printed name and title)

Scull Construction Service, Inc.
PO Box 7636
Rapid City, SD
605-342-2379
605-342-8568

Attachment #3: MINIMUM INSURANCE REQUIREMENT

Subcontractors

All subcontractors of Scull Construction Service Inc. are required to have the following Minimum Insurance Requirements to begin work on our jobsite. Subcontractors shall procure and maintain, at its own expense, the insurance coverages set forth below and in your subcontract agreement. If Scull Construction Service, Inc. does not have the subcontractors certificate of insurance and/or does not meet the following requirements, the subcontractor will not be allow on the jobsite and/or payments will be held until all requirements are met.

☐ Comprehensive General Liability – Bodily Injury & Property Damage – Combined Single Limit Premises/Job-Site Operations-Products/Complete Operation & Contractual Liability

LIMITS REQUIRED: $1,000,000 Each Occurrence Limit
$2,000,000 General Aggregate Limit with Per Project Aggregate
$2,000,000 Products/Completed Operations Aggregate Limit

☐ Automobile Bodily Injury & Property Damage Liability Combined Single Limit (Including owned, non-owned, and hired automobiles)

LIMITS REQUIRED: $1,000,000 Each Accident

☐ Umbrella Liability

LIMITS REQUIRED: $1,000,000 Each Occurrence Limit
$1,000,000 Aggregate

☐ Worker's Compensation – Statutory for the State of Operation and all states where work is to be performed. Coverage must include all persons at the work site, including sole proprietors, partners and executive officers of a corporation.

LIMITS REQUIRED: $500,000 – Each Accident
$500,000 – Each Disease
$500,000 – Each Employee Disease

☐ **If owner/operator is ONLY employee on jobsite, work comp is not required. However, an Additional Affidavit of Exempt Status is required. (Available upon request)**

☐ Certificates of Insurance **MUST** state the legal project name & location in the description section.

☐ Subcontractors or second-tier subcontractors **MUST** name Scull Construction Service, Inc./ Scull Construction Service ND, Inc. as an additional Insured on a primary and non-contributory basis as respect General Liability per form CG2010 07 04, CG2037 07 04 & CG2001 04 13 for statute of repose, Auto Liability, and Umbrella Liability coverage's. This **MUST** be stated as such on the Certificate of Insurance. ***If you are unable to put this information directly on the certificate, the endorsement pages stating such coverages are then required.***

☐ Waiver of Subrogation in favor of the additional insured applies to General Liability, Auto Liability, umbrella liability and worker's compensation. This **MUST** be stated as such on the Certificate of Insurance. ***If you are unable to put this information directly on the certificate, the endorsement pages stating such coverages are then required.***

☐ A firm 30 day cancellation notice is required.

☐ If you are a North Dakota or Wyoming Subcontractor and you have your Work Comp coverages through the State, your WSI Certificate of Premium Payment (ND) or Certificate of Good Standing (WY) is required.

_____

Signed By Date

_____

Title

Scull

CONSTRUCTION SERVICE INC.

Safety Policy

Scull Construction Service, Inc. March 2019

SCULL CONSTRUCTION SERVICE, INC.

SAFETY PLAN

Work Type Code: 1.0

SCULL CONSTRUCTION SERVICE, INC.

Corporate Commitment

Safety in all Scull Construction operations is not just a corporate goal *it is a requirement!*

To this end, we have formulated this written policy to govern all the operations of Scull Construction. It is a condition of employment with Scull Construction that all employees adhere faithfully to the requirements of this policy. As well as the safety rules, instructions, and procedures issued in conjunction with it. Failure to do so will result in disciplinary action.

It is a condition of all subcontracts and purchase orders issued by Scull Construction that this policy and the safety rules, instructions and procedures issued in conjunction with it, as well as all applicable state, federal and local codes and regulations be adhered to. Failure to comply is a breach of contract terms.

All visitors to any Scull Construction operation including but not limited to suppliers, owner representatives, agents of the architect or engineer, regulatory authorities and insurance company representatives shall be required to follow all safety rules and regulations in effect during their visit. Visitors will be required to participate in a safety orientation prior to coming onto the job site.

Scull Construction will make an effort to endure that the operations of other contractors not under our control do not endanger the safety of our employees. To this end, all employees are required to report hazardous activities of other employees to appropriate Scull Construction officials.

The Safety Director, General Superintendent, Project Manager, Job Superintendents, and Foremen have the full support of the management in enforcing the provision of this policy as it relates to responsibilities assigned to them.

Sincerely,

Andrew J. Scull
President

Responsibilities

IT IS THEPOLICY OF THIS COMPANY TO PROVIDE A SAFE AND HEALTHFUL PLACE OF EMPLOYMENT FOR ALL OF ITS EMPLOYEES.

THE SAME CONDITIONS WHICH CAUSE ACCIDENTS CAUSE, OR CAN CAUSE, OTHER EXPENSIVE OPERATING COSTS OR PROBLEMS. THESE MUST BE CONTROLLED IN THE SAME WAY AS ANY OTHER OPERATING PROBLEMS: THROUGH MANAGEMENT AWARENESS, LINES OF RESPONSIBILITY AND OPERATING STANDARDS.

It is therefore the purpose of this stated policy to:
1. Abide by all federal, state, and local regulations as they pertain to construction.
2. Apply good sense and safe practices to all jobs.
3. Exercise good judgment in the application of this policy.
4. Protect the public from all hazards, which result from our operations.

To further these goals the following assignments of responsibility are made:

Project Superintendents/Project Managers

1. Review pre-job hazard checklist.
2. Plan production so that all work will be done in compliance with established safety regulations.
3. Be completely responsible for on the job safety, health, and securing correction of safety deficiencies.
4. Make sure proper safety materials and protective devices are available and used, and that all equipment is in safe working order.
5. Assure that all new employees have been instructed as to job hazard controls prior to job assignment.
6. Instruct foremen and workers in safety requirements
7. Review accidents, supervise correction of unsafe practices, and file accident reports.
8. Conduct jobsite safety meetings and provide employees with proper instruction on safety requirements
9. Require conformance to safety standards from subcontractors
10. Notify company office of safety violations
11. Provide the protection of the public from company operations
12. Attempt to ensure safe performance by others present on the site, including owner and architect/engineer representatives, the general public, visitors, and employees of the contractors.
13. Work closely with corporate safety officer in eliminating unsafe practices, and participate in safety activities as requested.
14. Actively observe all job site areas for compliance of all OSHA, corporate, and client safety rules and regulations.

15. Ensure that all required OSHA postings are in place and up to date. Ensure that job site hazardous material lists and files of MSDS's are on site, up to date, and that all employees have been trained in accordance with the company Hazardous Communication Program.
16. Maintain adequate first aid supplies, first aid kits, and attend to minor first aid incidents on job site.
17. Maintain first aid logs, safety violation logs, and safety meeting attendance records.
18. Ensure all First Reports of Injury, Authorization of Treatment forms are completed and forwarded to the corporate safety office as soon as possible. (No later than the day of the accident/incident)
19. Coordinate with local health facilities for medical treatment of job related injuries and transportation to these facilities.

Safety Director

The Safety Director(s) shall be responsible for the effective application and administration of the safety program on a corporate level. His/her activities in this capacity shall include:

1. Set up methods of safety education through safety meetings, safety rules, procedures, and new employee indoctrination.
2. Conduct safety meetings on periodic basis.
3. Visit all jobs on a routine basis, and conduct safety surveys on these jobs to insure that safety rules and job procedures are being complied with.
4. Assist and consult with all department heads in their respective accident control problems.
5. Attend customer safety meetings.
6. Assist job superintendents in setting up files and completion of first reports of injury and OSHA record keeping programs.
7. Issue recommendations to jobs.
8. Review all accident reports and assure him/her that the necessary corrective action has been applied without undue delay.
9. Make an analysis of serious accidents and submit a report along with recommendations to management. Investigate unusual accidents or trends.
10. Provide management with up-to-date copies of federal, state, local codes, and standards.
11. The acquisition of safety supplies, clothing, equipment, and the proper use and maintenance of the same.
12. Assist the Project Superintendent in fulfilling his/her responsibilities with regard to safety.

Workers

1. Work safely in such a manner as to ensure your own safety as well as that of co-workers
2. Request help when unsure about how to perform any task safely.
3. Correct unsafe acts or conditions within the scope of the immediate work.
4. Report any uncorrected unsafe acts or conditions to the appropriate supervisor.
5. Report for work in good mental and physical condition to safely carry out assigned duties.
6. Avail yourself of company industry sponsored safety programs.
7. Use and maintain all safety devises provided.
8. Maintain and properly use all tools under your control.

9. Follow all safety rules.
10. Provide fellow employees help with safety requirements.
11. Keep all work areas clean and free of debris.
12. Asses result of your actions on the entire work place. Work will not be performed in ways that cause hazards for others.
13. Abide by the safety rules and regulations of every construction site.
14. Work in strict conformance with federal, state, and local regulations.

Architects, Engineers, Owners, and Visitors shall be requested to:

1. Abide by all safety rules.
2. Inform construction site superintendent before entering a construction site.
3. Check in with all jobsite supervisors so personal protective equipment may be provided such as hard hats, eye protection, and respirators if necessary.

Enforcement of safety and health rules

As with any system of rules, the safety, health program, and rules can only be effective if they are enforced. Each employee must be aware of and understand the rules, and be aware that they will be enforced.

The Occupational Safety and Health Standards for the Construction Industry 29, CFR Part 1926, are the basis for the Scull Construction's Safety Policy. (OSHA 1926) No policy or statement in this handbook is intended to conflict with Federal or State laws. If there is any conflict the provisions of the Federal and State law will apply.

At the discretion of the superintendent, serious or gross safety violations may result in immediate termination.

SCULL CONSTRUCTION SERVICE, INC.

Bloodborne Pathogens Program

Scope and Application

This written Exposure Control Plan (ECP) for SCULL CONSTRUCTION SERVICE, INC., in accordance with OSHA standard 29 CFR 1910.1030, applies to all occupational exposure to blood or other potentially infectious materials (OPIM), including:

- Human body fluids such as semen, vaginal secretions, cerebrospinal fluid, saliva in dental procedures, synovial fluid, pleural fluid, peritoneal fluid, amniotic fluid, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids, and others as stated in 1910.1030(b) "definitions".

The Exposure Control Plan is designed to eliminate or minimize employee exposure to blood or other potentially infectious material.

Administrative Duties

The Safety Director is responsible for implementing and maintaining the ECP. This plan is available to all employees in accordance with 1910.20(e) and is located in his/her office. The Safety Director is responsible for maintaining any records related to the Exposure Control Plan. The ECP shall be made available to the OSHA Assistant Secretary and the Director upon request for examining and copying.

Exposure Determination

We have determined which employees may incur occupational exposure to blood or OPIM. The exposure determination is made without regard to the use of personal protective equipment (i.e., employees are considered to be exposed even if they wear personal protective equipment.

All employees trained in First Aid/CPR will be exposed to bloodborne pathogens and are required to receive the Bloodborne Pathogen training.

Methods of Compliance

This plan includes a schedule and method of implementation for the various requirements of the standards.

Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

Engineering and Work Practice Controls

Engineering and work practice controls will be used to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, employees

are required to wear personal protective equipment. Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness. At SCULL CONSTRUCTION SERVICE, INC., the following engineering controls are used:

- Performing procedures so that splashing, spraying, splattering, and producing drops of blood or OPIM is minimized.
- Removing soiled PPE as soon as possible.
- Cleaning and disinfecting all equipment and work surfaces potentially contaminated with blood or OPIM.
- Thorough hand washing with soap and water immediately after providing care or provision of antiseptic towelettes or hand cleaners where handwashing facilities are not available.
- Prohibition of eating, drinking, smoking, applying cosmetics, handling contact lenses, and so on in work areas where exposure to infectious materials may occur.
- Use of leak-proof, labeled containers for contaminated disposable waste or laundry.

Handwashing Facilities
Hand washing facilities are available to employees who have exposure to blood or OPIM. Sinks for washing hands after occupational exposure are near locations where exposure to bloodborne pathogens could occur.

When circumstances require handwashing and facilities are not available, either an antiseptic cleanser and paper towels or antiseptic towelettes are provided. Employees must then wash their hands with soap and water as soon as possible.

If employees' skin or mucous membranes become contaminated with blood or OPIM, then those areas are washed or flushed with water as soon as feasible following contact.

Sharps
Employees may not bend, recap, remove, shear, or purposely break contaminated needles and other sharps. If a procedure requires that the contaminated needle be recapped or removed and no alternative is feasible, than that employee must recap or remove the needle by using a mechanical device or a one-hand technique.

Handling Contaminated Sharps

The procedure for handling contaminated sharps is:

- Contaminated sharps are discarded immediately or as soon as possible in containers that are closeable, puncture resistant, leak proof on sides and bottom, and labeled or color-coded.
- During use, containers for contaminated sharps shall be easily accessible to personnel and located as close as possible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., first aid stations).
- The containers are kept upright throughout use, replaced routinely, and not allowed to be overfilled.
- When moving containers of contaminated sharps from the area of use, the containers are closed immediately before removal or replacement to prevent spills or protrusion of contents

during handling, storage, transport, or shipping.

- The containers are placed in a secondary container if leakage of the primary container is possible. The second container shall be closeable, constructed to contain all contents and prevent leakage during handling, storage and transport, or shipping. The second container shall be labeled or color-coded to identify its contents.
- Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

- Any employee within a given area will collect and sterilize the reusable sharps.

Work Area Restrictions
In work areas where there is a reasonable likelihood of exposure to blood or OPIM, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or OPIM are present.

Contaminated Equipment or Environmental Surfaces
SCULL CONSTRUCTION SERVICE, INC. requires that all equipment or environment surfaces which have become contaminated with blood or OPIM must be cleaned & decontaminated before servicing or shipping as necessary unless the decontamination of the equipment is not feasible.

Personal Protective Equipment

All personal protective equipment (PPE) used at this facility is provided **without cost to the employees**. PPE is chosen based on the anticipated exposure to blood or OPIM. The protective equipment is considered appropriate only if it does not permit blood or OPIM to pass through or reach the employees' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

SCULL CONSTRUCTION SERVICE, INC. makes sure that appropriate sizes of protection are readily accessible at the work site and is issued **without cost to employees**.

PPE shall be used unless SCULL CONSTRUCTION SERVICE, INC. shows that employees temporarily declined to use PPE under rare circumstances.

Employees must remove all garments which are penetrated by blood immediately or as soon as possible.

They must remove all PPE before leaving the work area. When PPE is removed, employees place it in a designated container for disposal, storage, washing, or decontamination.

Gloves
Employees must wear gloves when they anticipate hand contact with blood, OPIM, non-intact skin, and mucous membranes when performing vascular access procedures, and when handling or touching contaminated items or surfaces.

Disposable gloves used at this facility are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised.

Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration or when their ability to function as a barrier is compromised.

Housekeeping

All contaminated work surfaces are decontaminated after an exposure.
All bins, pails, cans, and similar receptacles are inspected and decontaminated on a regularly scheduled basis.
Any broken glassware which may be contaminated will not be picked up directly with the hands.

Handling Regulated Wastes
When handling regulated wastes, other than contaminated needles and sharps, we make sure it is:

- Placed in containers which are closeable, constructed to contain all contents, and prevent fluid leaks during handling, storage, transportation, or shipping.

- Labeled or color coded (red) and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

Handling Contaminated Laundry
Laundry contaminated with blood or OPIM is handled as little as possible. Such laundry is placed in appropriately marked (biohazard labeled, or color-coded red bag) bags at the location where it was used.

Our facility ships contaminated laundry off-site to a second facility.

Communication of Hazards to Employees

All bags and containers containing blood or OPIM and used to store, transport or ship this waste, shall be **RED in color.**

Information and Training

SCULL CONSTRUCTION SERVICE, INC. employees are trained by the Safety Director and/or outside consultants. All exposed employees are trained and all employees covered by the bloodborne pathogens standard are trained at the time of initial assignment to tasks where occupational exposure may occur, and every year thereafter as a refresher.
Training is tailored to the education and language level of the employee, is offered during the normal work shift **and at no cost to the employee**. The training will be interactive and cover the

following:

- The standard and its contents.
- The epidemiology and symptoms of bloodborne diseases.
- The modes of transmission of bloodborne pathogens.
- SCULL CONSTRUCTION SERVICE, INC. Bloodborne Pathogen ECP and a method for obtaining a copy.
- The recognition of tasks that may involve exposure.
- The use and limitations of methods to reduce exposure, for example engineering controls, work practices, and personal protective equipment (PPE).
- The types, use, location, removal, handling, decontamination, and disposal of PPEs.
- The basis of selection of PPEs.
- The Hepatitis B vaccination, including efficacy, safety, method of administration, benefits, and that it will be offered free of charge.
- The appropriate actions to take and persons to contact in an emergency involving blood or OPIM.
- The procedure to follow if an exposure incident occurs, including the method of reporting and medical follow-up.
- The evaluation and follow-up required after an employee exposure incident.

Additional training is provided to employees when there are any changes of tasks or procedures affecting the employee's occupational exposure. Employees who have received training on bloodborne pathogens in the 12 months preceding the effective date of this plan will only receive training in provisions of the plan that were not covered.

Recordkeeping

Training records of each employee shall be maintained for 3 years from the date of training. The following information shall be documented:

- The dates of the training sessions
- An outline describing the material presented
- The names and qualifications of persons conducting the training.
- The names and job titles of all persons attending the training sessions

Medical records shall be maintained in accordance with OSHA Standard 29 CFR 1910.20. These records shall be kept confidential, and must be maintained for at least the duration of employment plus 30 years. The records shall include the following:

The name and social security number of the employee.

- A copy of the employee's HBV vaccination status, including the dates of vaccination.
- A copy of all results of examinations, medical testing, and follow-up procedures.
- A copy of the information provided to the healthcare professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure.

Availability
All employee records shall be made available to the employee in accordance with 29 CFR 1910.20. All employee records shall be made available to the Assistant Secretary of Labor for the Occupational Safety and Health Administration and the Director of the National Institute for Occupational Safety and Health upon request and copying. Medical records must have written consent of the employee before being released.

Transfer of Records
If this facility is closed or there is no successor employer to receive and retain the records for the prescribed period, the Director of the NIOSH shall be contacted for final disposition.

Evaluation and Review
This program and its effectiveness is reviewed every year and updated as needed. All provisions required by this standard will be implemented by the Safety Director

Hepatitis B Vaccination Program
SCULL CONSTRUCTION SERVICE, INC. offers the Hepatitis B vaccine and vaccination series to all employees who have occupational exposure to blood borne pathogens, and post exposure follow-up to employees who have had an exposure incident.

All medical evaluations and procedures including the Hepatitis B vaccine and vaccination series and post exposure follow up, including prophylaxis are:

- Made available at **no cost to the employee**.
- Made available to the employee at a reasonable time and place.
- Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional.
- Provided according to the recommendations of the U.S. Public Health Service.

All laboratory tests are conducted by an accredited laboratory at **no cost to the employee**. Hepatitis B vaccination is made available:

- After employees have been trained in occupational exposure, (see Information and Training).
- Within 10 working days of initial assignment.
- To all employees who have occupational exposure unless a given employee has previously received the complete Hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

Participation in a pre-screening program is not a prerequisite for receiving Hepatitis B vaccination. If the employee initially declines Hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the vaccination will be made available. All employees who decline the Hepatitis B vaccination offered must sign the OSHA-required waiver indicating their refusal.

If a routine booster dose of Hepatitis B, vaccine is recommended by the U.S. Public Health Service at a future date, such booster doses will be made available.

SCULL CONSTRUCTION SERVICE, INC.

Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B virus (HBV) infection.
I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signature of Employee _____
Date_____

SCULL CONSTRUCTION SERVICE, INC.

Confined Space Entry Program

Scope and Application

The Confined Space Entry Program for SCULL CONSTRUCTION SERVICE, INC. contains requirements for practices and procedures to protect employees from the hazards of entry into permit-required confined spaces as required by OSHA CFR 1910.146.

The Safety Director has overall responsibility for coordinating safety and health requirements in this program.

Copies of the written program may be obtained from the Safety Director.

Hazard Evaluation for Permit Spaces

SCULL CONSTRUCTION SERVICE, INC. shall advise employees of all permit-required confined spaces in which they may have to work in and that are covered by their Permit-Required Confined Space Entry Program. This written hazard evaluation is kept in the Safety Director's office.

Preventing Unauthorized Entry

To provide a safe work environment and to prevent exposed employees from accidentally entering a permit space, the company has implemented procedures to inform all employees of SCULL CONSTRUCTION SERVICE, INC. of the existence, location, and danger posed by permit spaces in the facilities. To inform employees of the existence of a permit space, the company provides CS training to all new employees. To ensure that unauthorized employees do not enter and work in permit spaces, the company posts and monitors the area.

All entrants will be protected from external hazards, such as pedestrians and vehicles, while working in confined spaces. The proper barriers will be provided to afford this protection.

Contractors

All contractors are advised of the plant confined space procedures as appropriate and required to evaluate the confined space hazards and develop their own procedures, which must be at least as stringent as the SCULL CONSTRUCTION SERVICE, INC. Confined Space Program Procedures.

Pre-Entry Evaluation

To ensure the safety and health of our employees, before allowing authorized workers to enter a permit space, the Safety Director will evaluate conditions in that space to determine if the conditions are safe for entry. Any employee, who enters the space, or that employee's authorized representative, has the opportunity to observe the pre-entry and any subsequent testing.

The authorized entrant or that employee's representative also has the option of requesting a reevaluation of the space if they feel that the evaluation was not adequate. The evaluation shall be done according to the following considerations:

1. Lack of natural ventilation
2. Oxygen deficiency
3. Flammable/explosive atmosphere
4. Dangerous concentration of air contaminants
5. Unexpected release of hazardous energy
6. Instability of stored product
7. Physical barriers or limitations to movement
8. Limited entry and exit
9. Thermal hazards
10. Work to performed in the confined space and it's impact on the environment
11. Isolation ability for equipment in the confined space and equipment and/or material to enter the space.

The Safety Director follows the procedures to evaluate each permit space before entry according to 1910.146(c) (5) (ii) (C). This includes testing the internal atmosphere with a calibrated direct-reading instrument for oxygen content, flammable gases and vapors, and potential toxic air contaminants. We also periodically test the atmosphere of the space to ensure that the continuous ventilation is preventing the accumulation of a hazardous atmosphere. Testing and monitoring of the atmosphere will be conducted by the Safety Director.

Certification

According to 1910.146(c) (5) (ii) (H), the Safety Director verifies that the space is safe for entry and that the pre-entry measures required by 1910.146(c) (5) (ii) have been taken, through a written certification that contains the date, location of the space, and signature of the person providing the certification. The certification is made before entry and is available to each employee entering the space.

According to 1910.146(c)(5)(iii), our company documents the basis for determining that all hazards in a permit space have been eliminated, through a certification that contains the date, location of the space, and signature of the person making the determination. The Safety Director is responsible for documenting this information. The certification is available to each employee entering the space.

Equipment

To ensure the safety and health of our employees, SCULL CONSTRUCTION SERVICE, INC. provides appropriate equipment to all employees who work in or near our permit spaces. According to 1910.146(k)(3)(I), each authorized entrant will use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which SCULL CONSTRUCTION SERVICE, INC. can establish presents a profile small enough for the successful removal of the entrant. Wristlets may be used instead of the chest or full body harness if SCULL CONSTRUCTION SERVICE, INC. can demonstrate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.

All equipment shall be maintained in excellent working condition and the entrants shall be trained in the correct usage of this equipment.

Duties: Authorized Entrants

Those persons who have completed the training and are authorized to enter our permit spaces are assigned specific duties and responsibilities which they must perform when they work in permit space. Their duties and responsibilities will be reviewed with the appropriate personnel. Authorized entrants for SCULL CONSTRUCTION SERVICE, INC. are all employees trained as Authorized Entrants.

All entrants must be authorized by the entry supervisor to enter permit spaces, have received the required training, used the proper equipment, and observes the entry procedures and permit. The entrant shall be trained on the following items:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
- Properly use the equipment required for safe entry;
- Communicate with the attendant as necessary to enable the attendant to monitor the status of the entrants and to enable the attendant to alert the entrants of the need to evacuate the space if necessary;
- Alert the attendant whenever; the entrant recognizes any warning signs or symptoms of exposure to a dangerous situation, or any prohibited condition is detected; and
- Exit the permit space as quickly as possible whenever; the attendant or entry supervisor gives an order to evacuate the permit space, the entrant recognized any warning signs or symptoms of exposure to a dangerous situation, the entrant detects a prohibited condition, or an evacuation alarm activated.

Duties: Authorized Attendants

Those persons who have completed the training and have been designated as permit space attendants are assigned specific duties and responsibilities which they must perform in permit space job duties. Attendants for SCULL CONSTRUCTION SERVICE, INC. are all **employees trained as Authorized Attendants.**

At least one attendant is required outside the permit space into which entry is authorized for the duration of the entry operation. Their responsibilities include:

- To know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- To be aware of possible behavioral effects of hazard exposure on entrants
- To continuously maintain an accurate count of entrants in the permit space and ensures a means to accurately identify authorized entrants
- To remain outside the permit space during entry operations until relieved by another attendant (once properly relieved, they may participate in other permit space activities, including rescue if they are properly trained and equipped).
- To communicate with entrants as necessary to monitor entrant status and alert entrants of the need to evacuate.

- To monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the entrants to immediately evacuate. If the attendant detects a prohibited condition, detects entrant behavioral effects of hazard exposure, detects a situation outside the space that could endanger the entrants; or if the attendant cannot effectively and safely perform all the attendant duties.
- To summon rescue and other emergency services as soon as the attendant determines the entrants need assistance to escape the permit space hazards.
- To perform non-entry rescues as specified by that rescue procedure and entry supervisor
- Not to perform duties that might interfere with the attendants' primary duty to monitor and protect the entrants.
- To take the following action when unauthorized persons approach or enter a permit space while entry is under way:
- Warn the unauthorized persons that they must stay away from the permit space,
- Advise unauthorized persons that they must exit immediately if they have entered the space, and
- Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
- The attendant must monitor only **one confined space location.**

Duties: Authorized Entry Supervisors

Those persons who have completed the training and have been designated as permit space entry supervisors are assigned specific duties and responsibilities which they must perform in permit space job duties. The Authorized Entry Supervisor for SCULL CONSTRUCTION SERVICE, INC. is **the Safety Director.**

The Entry Supervisor is responsible for the overall permit space entry and must coordinate all entry procedures, tests, permits, equipment, and other revenant activities. The following Entry Supervisor's required duties are:

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure
- Verifies, by checking that the appropriate entries have been made on the permit, all test specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin
- Terminate the entry and cancel the permit when the entry is complete and there is a need for terminating the permit
- Verify that rescue services are available and that the means for summoning them are operable
- Remove unauthorized persons who enter o r attempt to enter the space during entry operations
- Determine whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with the permit terms that acceptable entry conditions are maintained.

Training Program

Every employee at SCULL CONSTRUCTION SERVICE, INC. who faces the risk of confined space entry is provided with training so that each designated employee acquires the understanding, knowledge, and skills necessary for the safe performance of the duties assigned to them. The Safety Director and/or outside consultants conduct our permit-required confined space training. The training shall establish the employee's proficiency in the duties required and shall introduce new or revised procedures, as necessary.

New employees shall be trained before their initial assignment of duties. When changes occur in permit-required confined space areas of our company, all affected employees shall be retrained. If we have reason to believe that an employee has deviated from a previously trained upon procedure or that their knowledge seems inadequate, we revert to our established disciplinary program.

Upon successful completion of SCULL CONSTRUCTION SERVICE, INC. permit-required confined space training program, the company shall certify that the training has been accomplished. The certification shall contain each employee's name, the signature, or initials of the trainer(s), and the dates of training. The certification is available for inspection by employees and their authorized representatives by contacting the Safety Director.

Rescue and Emergency Services

Rescue and emergency services will be coordinated with the customer. The general procedure will be as follows:

1. The attendant will notify, by radio or personal messenger, the customer operator as to the location and general conditions of the emergency. The operator will then notify the rescue service.
2. The attendant will perform the assigned duties as outlined in this program.

This service will be stated and agreed upon by the Customer in the contract language. Unauthorized personnel, those who have not been trained in rescue procedures, shall not attempt a rescue. This rescue and emergency policy shall be posted in conspicuous places.

Multiple Employer Entry Procedures

When outside employers/contractors enter our facility to perform work in permit spaces, they coordinate entry and work operations following these procedures:

All work by non-company employees that involves the entry into confined spaces will follow the procedures of this program. The information of this program and specific hazard of the confined spaces to be entered will be provided to the non-company employees prior to commencing entry or work.

Review-Procedures

To ensure that all employees participating in entry operations are protected from permit space hazards, SCULL CONSTRUCTION SERVICE, INC. shall review the Permit-Required Confined Space Entry Program on a regular basis. The written program will be reviewed if there is any unauthorized entry of a confined space; a hazard is found not covered by the permit, if there is an occurrence of an injury or near miss or if there is an employee complaint. We use the retained canceled permits from the past 12 months within one year after each entry and revise the program as necessary. SCULL CONSTRUCTION SERVICE, INC. performs a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review will be performed.

Enforcement

Constant awareness of and respect for permit-required confined space entry hazards, and compliance with all safety rules are considered conditions of employment. The Safety Director reserves the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this permit entry program. This will be done in accordance with SCULL CONSTRUCTION SERVICE, INC.'s Disciplinary Program.

SCULL CONSTRUCTION SERVICE, INC.

Disciplinary Program

Implementation

Management and Supervisory personnel are responsible for the instruction of all employees under their jurisdiction for proper and safe work methods in performing work duties. Supervisors shall take immediate corrective action to eliminate hazardous conditions and practices to prevent accidents, personal injury, or property damage. The Manager, Safety Director, as well as all other supervisors and subcontractors will be responsible for **commitment to safety goals** and shall vigorously enforce the established safety program at all times and will not permit safety in the work place to be sacrificed for any reason.

All employees of SCULL CONSTRUCTION SERVICE, INC. are required to comply with all published company health and safety policies.

Physical inspections of company officials that indicate violations showing overall lack of commitment to company goals shall be under the same level of disciplinary actions.

The following Disciplinary Action steps will be taken **by the Project Manager, Safety Director, Superintendent, or Owner** when there is a violation of any of the established safety rules. Such violations include:

- Not following verbal or written safety procedures, guidelines, and/or rules.
- Horseplay
- Failure to wear the proper personal protective equipment, etc.

Workers:
After the first violation, Supervisor shall meet with the involved employee to discuss the infraction and inform him/her of the rule that was violated and the corrective action to be taken. They will receive education/training as required to prevent the problem from reoccurring.

After the second violation, a written warning will be given to the employee. The written warning will include the next steps if other violations occur and the written warning shall be documented by the affected employee and entered in the employee's file.

After the third violation, the affected employee may be given time off without pay and/or dismissed.
After multiple serious violations, employees will get two days off without pay and or dismissed

Supervisors
After the first violation, the employee's supervisor shall meet with the involved employee to discuss the infraction and inform him/her of the rule that was violated and the corrective action to be taken. They will receive education/training as required to prevent the problem from reoccurring.

After the second violation, a written warning will be given the employee. The written warning will include the next steps if other violations occur and the written warning shall be documented by the affected employee and entered in the employee's file.

After the third violation, the affected employee may be given time off without pay and/or dismissed.

Sub-Contractors

The following steps will be followed for any subcontractor that violated safety procedures.

The **FIRST** safety violation by Subcontractor's employees observed by the GC Project Manager, Safety Director, Superintendent, or Field Coordinator will result in a written violation being assessed to the subcontractor and publically documented on the job-site.

The **SECOND** safety violation by any of the Subcontractor's employees will result in the GC issuing a written violation and "stop work" until the violation is fixed or resolved. The Subcontractor will be issued a $500.00 penalty. The Subcontractor will be invoiced for the penalty and will have 10 days from the invoice date to pay the penalty. If the penalty is not paid within 10 days, the Subcontractor will not be paid at their next pay request, or until the penalty has been paid.

A **THIRD** safety violation by Subcontractor's employees will result in the GC issuing a written violation and possible removal from the jobsite for failure to comply with safety procedures. Subcontractor will be issued a $1,000 penalty. Subcontractor will be invoiced for the penalty, and will have 10 days from the invoice date to pay the penalty. If the penalty is not paid within 10 days, the Subcontractor will not be paid at their next pay request, or until the penalty has been paid.

FOUR or more violations will result in a $1,000 penalty per violation and/or dismissal from the jobsite. If the penalty is not paid within 10 days, the Subcontractor will not be paid at their next pay request, or until the penalty has been paid.

SCULL CONSTRUCTION SERVICE, INC.

Subcontractor Safety Responsibilities

The following is a list of responsibilities to be followed by all subcontractors working on this specific jobsite.

All local, state and federal regulations (29 CFR Part 1926) concerning safety shall be complied with.

The following safety practices established by the WRGCA as well as all practices and policies addressed in the GC Safety Manual shall be complied with, without reservation. A copy of the GC Safety Manual will be distributed to all Subcontractors; if additional copies are needed, they are available through the GC Office.

1. Housekeeping shall be maintained at all times. All subcontractors are responsible for their clean up daily. The disposal of all trash is a responsibility of the subcontractor.

2. Storage area, aisles, and walkways shall be kept clean. Materials shall be neatly piled and stacked.

3. Electrical cords, leads, hoses, etc. should be placed to avoid tripping hazards or prevent damage.

4. Scrap lumber, waste material and rubbish shall be removed from the immediate work area as work progresses.

5. Refuse piles must be removed as soon as possible.

6. Spills must be cleaned up immediately. Spills which contain hazardous materials shall be contained. Notify your supervisor and GC immediately of a hazardous spill.

7. Covers are required on containers used for flammable or harmful substances.

8. At the end of each portion of work, return all tools and excess material to proper storage. Clean up all debris before moving onto next phase.

9. Hard hats are required to be worn 100% of the time without exception.

10. Safety glasses and high visibility clothing will be worn 100% of the time without exception.

11. Proper work clothing shall be worn at all times. The minimum requirement is a T-shirt with sleeves, long pants, and sturdy leatherwork boots.

12. Safety harnesses and proper fall arrest equipment must be utilized when there is an exposure to a fall and no other fall protection is available. Any heights 6’ and over require some type of fall protection in place.

13. When a subcontractor creates a hazard such as a floor opening, wall opening, or an unsafe stairway, such Subcontractor shall provide acceptable, protective railing(s), guardrail(s), temporary tread(s), hole cover(s), or other protection which meets OSHA and other safety rules and regulations. If a Subcontractor is given permission to remove any perimeter protection installed by GC or another Subcontractor, the Subcontractor removing the said protection must replace it in the condition found before removal.

14. All erected scaffold and scaffold planking must comply with OSHA regulation 29 CFR Part 1926, Subpart L.

15. Protruding nails in lumber, dismantled forms, scaffolding, etc. must be pulled or bent over as soon as they are exposed.

16. All electrical equipment, electrical cords, and power tools must be properly grounded or double insulated. Flat cords or frayed or damaged cords will not be allowed on-site. All OSHA requirements will be met for ground-faults protection. Employers shall either use ground-fault circuit interrupters or establish and implement an assured equipment grounding program. (OSHA 29 CFT Part 1926, Subpart K)

17. All guards on power equipment, machinery, and tools must be kept in good working order, and must be in place whenever such equipment is being operated.

18. Workmen shall not remove safety guards except for repairing or servicing. The equipment shall be properly disconnected from its power source or locked out before such operations are performed.

19. Employers shall provide hearing protection, whenever an employee is placed in an environment requiring such protection.

20. **ALL ACCIDENTS** are to be reported to the **GC IMMEDIATELY**.

21. All employers’ Hazard Communication Programs will be made available at the jobsite.

22. No food or drink allowed within the perimeter of the building when posted by the GC.

23. No tobacco products within perimeter of buildings/site when posted by GC.

24. All trenching and excavation activities must comply with OSHA Regulation 29 CFR Part 1926 Subpart P.

25. Subcontractors will furnish GC with name and immediate contact number of their Competent Person prior to beginning work and will have a Competent Person on-site at

all times during work activity. This individual shall have the authority to discipline and stop work and correct unsafe conditions.

- Anyone caught using drugs or alcohol on site will be removed from the site. The foreman on site will be notified about the incident

SCULL CONSTRUCTION SERVICE, INC.

Electrical Safety Program (Non-Qualified)

General Company Policy

This program applies to all work operations where SCULL CONSTRUCTION SERVICE, INC. employees may be exposed to live electrical parts and/or those parts, which have been de-energized.

The Safety Director has the overall responsibility for the Electrical Safety Program and all SCULL CONSTRUCTION SERVICE, INC. employees shall follow this program. Copies of the program may be obtained from the Safety Director

Hazard Analysis Report

The Safety Director will conduct a hazard analysis of the workplace. This analysis will provide us with information identifying which departments have equipment using electricity, various types of wiring installations, and the types of employee functions that must be covered by the Electrical Safety Program. The departments/areas of the company identified as having electrically operated equipment and/or wiring installations are reviewed for each project.

Electrically operated equipment, which must be deenergized before work can be done on it.

Employees of our company who are qualified to work on, near, or with energized electric circuits and equipment are trained in electrical systems.

Training Program

Every employee at SCULL CONSTRUCTION SERVICE, INC. who faces the risk of electric shock from working on or near energized or de-energized electrical sources receives training by the Safety Director in electrical related safety work practices pertaining to the individual's job assignment.

The goal of the SCULL CONSTRUCTION SERVICE, INC. electrical safety-training program is to ensure that all employees understand the hazards associated with electric energy and that they are capable of performing the necessary steps to protect themselves and their co-workers.

The SCULL CONSTRUCTION SERVICE, INC. electrical training program covers these basic elements:

- Lockout and tagging of conductors and parts of electrical equipment.
- Safe procedures for deenergizing circuits and equipment.
- Application of locks and tags.

- Verification that the equipment has been deenergized.
- Procedures for reenergizing the circuits or equipment.
- Other electrically related information which is necessary for employee safety.

Working on or near exposed energized parts

Overhead Lines

In SCULL CONSTRUCTION SERVICE, INC., all the persons working on or near energized or deenergized electric sources are considered "qualified" to work safely with electrical energy and have received the appropriate training and certification to do so. In addition to the basic training elements, our "qualified" employees are trained in the skills and techniques necessary to identify exposed live parts, determine nominal voltages, and clearance distances and corresponding voltages.

If work is to be performed near overhead lines, the lines shall be deenergized and grounded, or other protective measures shall be provided before work is started.

When a **qualified or unqualified person** is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized line than the following distances.

(1) For voltages to ground 50kv or below – 10 feet;
(2) For voltages to ground over 50kv – 10 feet plus 4 inches for every 10kv over 50kv.

When a **qualified or unqualified person** is working on the ground in the vicinity of overhead lines, the person may not bring any conductive object closer to unguarded, energized lines than the distances stated above.

Vehicular and mechanical equipment

Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 feet is maintained. If the voltage is higher than 50kv, the clearance shall be increased 4 in. for every 10kv over that voltage. Under no circumstances, shall the clearance be less than listed above.

Employees standing on the ground may not contact the vehicle or mechanical equipment or any of its attachments while such equipment is working under overhead lines unless they use protective equipment rated for the voltage or the above clearances are maintained.

If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground near the point of grounding may not stand at the grounding location whenever there is a possibility of overhead line contact. Additional precautions, such as the use of barricades or insulation, shall be taken to protect employees from hazardous ground potentials, depending on earth resistivity and fault currents, which can develop within the first few feet or more outward from the grounding point.

Illumination

Employees may not enter spaces containing exposed energized parts, unless illumination is provided that enables the employees to perform the work safely.

Where lack of illumination or an obstruction precludes observation of the work to be performed, employees may not perform tasks near exposed energized parts. Employees may not reach blindly into areas which may contain energized parts.

Confined or enclosed work spaces

When an employee works in a confined or enclosed space (such as a manhole or vault) that contains exposed energized parts, SCULL CONSTRUCTION SERVICE, INC. will provide, and the employee shall use, protective shields, protective barriers, or insulating materials as necessary to avoid inadvertent contact with those parts. Doors, hinged panels, and the like shall be secured to prevent their swinging into an employee and causing the employee to contact exposed energized parts.

Conductive materials and equipment

Conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts. If an employee must handle long dimensional conductive objects (such as ducts and pipes) in areas with exposed live parts, SCULL CONSTRUCTION SERVICE, INC. will institute work practices (such as the use of insulation, guarding, and material handling techniques) which will minimize the hazard.

Portable ladders

Portable ladders shall have nonconductive siderails if they are used where the employee or the ladder could contact exposed energized parts.

Conductive apparel

Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts.

The procedures we follow when training new employees who will be working on or near electrical equipment or circuitry are covered in the SCULL CONSTRUCTION SERVICE, INC. orientation program. When changes occur in our company that involves electrical elements, we provide additional employee training to ensure the safety of all affected workers.

The SCULL CONSTRUCTION SERVICE, INC. Safety Director oversees or conducts the electrical safety training for all employees. A record of the training will include who was trained, the dates of training, and the signature of the person conducting the training

Lockout and Tagging Program

Policy that circuits and equipment must be disconnected from all electric energy sources before work on them begins the SCULL CONSTRUCTION SERVICE, INC. Lockout and tagging devices are used to prevent the accidental reenergization of this equipment. These lockout and tagging procedures are the main component of our electrical safety program as found in the SCULL CONSTRUCTION SERVICE, INC. . Lockout/Tagout program.

Equipment Grounding Conductor Program

This written plan is intended to establish and implement specific procedures for the equipment grounding conductor program covering:

- All cord sets, receptacles which are not a part of the building or structure, and equipment connected by cord and plug which are available for use or used by employees.

This part of the written plan complies with the requirements of 1926.404(b) (1) (iii).

Equipment Grounding Conductor Inspection

Each cord set, attachment cap, plug, and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage, are visually inspected before each day's use for:

- External defects, such as deformed or missing pins, insulation damage, and indications of possible internal damage.

Equipment found damaged or defective shall be removed from service and not to be used until repaired.

Equipment Grounding Conductor Testing

The following tests are performed on all cord sets, receptacles which are not a part of the permanent wiring of the building structure, and cord-and plug-connected equipment required to be grounded:

- All equipment-grounding conductors are tested for continuity and are electrically continuous.
- Each receptacle and attachment cap or plug is tested for correct attachment of the equipment-grounding conductor.
- The equipment-grounding conductor is connected to its proper terminal.

All required tests are performed:

- Before first use.
- Before equipment is returned to service following any repairs.
- Before equipment is used after any incident, which can be reasonable suspected to have caused damage (for example, when a cord set is run over).

- At intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not
  exposed to damage will be tested at intervals not exceeding 6 months.

Recordkeeping

Tests performed as required in this program are recorded. The test records:

- Identify each receptacle, cord set, and cord-and plug-connected equipment that passed the test, and
  indicate the last date it was tested or the interval for which it was tested.
- The Safety Director is responsible for maintaining these records.
- The record is made available on the job site for inspection by OSHA and any affected employee.

Lockout and Tagging of Circuits is found in the Lockout/Tagout section of this plan.

Training

Training is provided to ensure that all employees are familiar with the requirements of this plan. The Safety Director is responsible for training.

The training program addresses the required written elements for electrical safety for-

- The assured equipment-grounding conductor program.
- Lockout and tagging procedures to be used when working on exposed de-energized parts.

Program Evaluation

The Electrical Safety Plan is evaluated and updated annually by the Safety Director to ensure the continued effectiveness of the program.

Scull Construction Service, Inc.
Steel Erection Policy

Policy

Scull Construction Service, Inc. is dedicated to the safety of its employees. The erection of steel and the activities that go on around the process are extremely hazardous and require everyone to work together safely. All employees involved shall follow all safety requirements and wear all required safety equipment while working on site.

Responsibilities

A. Safety Director
   The Safety Director or designee will be responsible for the training of all affected employees. Other responsibilities will include the final approval of the site-specific steel erection plan, inspection of the job site for plan compliance, and technical advisor to field management.

B. Superintendent
   The Superintendent is responsible for ensuring that all safety plans and devices are in place prior to the start of steel erection activities. Other responsibilities include preliminary approval of the site-specific safety plan, conducting the pre-erection safety meeting/conference, monitoring compliance with the safety plan, and taking corrective actions when needed.

C. Competent Person
   The competent person along with the controlling contractor will ensure that the site-specific safety plan addresses all necessary safety needs, that the plan is followed, and that all equipment meets required specifications for the intended application. The competent person shall ensure all safety systems are used when required, systems and equipment are inspected as required, and shall ensure that all workers are engaged in safe work activities.

Purpose

The purpose of the policy is to prevent injury to SCULL CONSTRUCTION SERVICE, INC. employees caused by the erection of steel and the activities that go along with steel erection. The safe and correct implementation and use of the program will help ensure SCULL CONSTRUCTION SERVICE, INC. compliance with the Occupational Safety and Health Administration's (OSHA's) Subpart R Steel Erection.

The following parts are an overview of the steel erection requirements, please note you should refer to the proper OSHA standard for detailed requirement of this topic (29CFR 1926. 750/762).

1) Site Lay Out Overview
    - Clearly knows the duties and responsibilities of the controlling contractor.
    - Assure all proper written notifications are on site (i.e. ASTM standard test methods for concrete).
    - Assure all requirements for adequate access roads to and from the site
    - Site specific erection plan is completed (see attachment).
2) Hoisting and Rigging
    - Assure that the pre planning of overhead hoisting has been performed.
    - Assure all hoisting and rigging safety requirements are being met and maintained (pre-shift inspections record are available and corrective action taken needed).
    - Assure that all safety requirements have been met for working under loads; routes for suspended loads have been pre-planned.

3) Structural Steel Assembly
    - Assure structural assembly is maintained at all times during the erection process.
    - Permanent floors shall be installed as the erection process progresses, (no more than 8 stories between the erection floor and the upper most permanent floor).
    - At no time shall there be more than 4 floor of 48 feet (whichever is less) of unfinished bolting or welding above the foundation or uppermost permanently secured floor.
    - Walking/working surfaces, assure that tripping hazards are addressed.
    - Plumbing- up, the competent person shall determine if plumbing-up equipment shall be installed in conjunction with steel erection process.
    - Metal decking, assure proper hoisting, landing and placing of metal decking.
    - Assure all bundles are secured and placed properly over supports.

4) Column Anchorage
    - All columns shall be anchored by a minimum of 4 anchor bolts, unless final design drawings indicate less.
    - Columns shall be set on level finished floors, or leveling nuts/shims.
    - All columns shall be evaluated by the computer person to determine if guying or bracing is needed.

5) Beams and Columns
    - Do not release members from the hoisting lines until at least 2 bolts per connection are wrench tight
    - The competent person shall determine if more than 2 bolts are needed to ensure stability.
    - Diagonal bracing shall be secured by at least 1 bolt per column, wrench tight.

6) Open Web Steel Joist
    - Vertical stabilizer plates shall be provided for each column of steel joints
    - Stabilize the bottom chords of steel joists to prevent rotation during erection.

● Hoisting cables shall not be released until the seat at each end of the steel joist is field bolted and each end of the bottom chord is restrained by the column stabilizer plate.

●During placement of loads the employer placing the load on the steel joist shall ensure that the load is properly distributed.

● When installing joist please refer to manufacturers written instructions for erection short and long span joists.

7) System – Engineered Metal Buildings

● Assure structural column shall be anchored by a minimum of 4 bolts.

● Assure rigid frames shall have at least 50% of their bolts installed.

● Do not place construction loads on any structural steel framework unless it is safely bolted.

● Erection of bays shall start at the bracing bay if applicable.

● Plumbing- up, the competent person shall determine if plumbing- up equipment shall be installed in conjunction with steel erection process.

8) Falling Object Protection

● Assure all materials, equipment and tools are secured.

● Assure that the controlling contractor has barred all other construction processes from occurring when hazards may be present overhead, unless overhead protection has been provided.

9) Fall Protection

● Protect employees for fall hazards in steel erection activity when they are exposed to fall hazards of 6 feet or more by means of guardrails, safety net systems, personal fall arrest systems, positioning device systems or fall restraints.

●Connectors shall be protected from fall hazard at heights of 6 feet or more

● Controlled Decking Zone (CDZ) can be established in areas of the structure over 15 feet and up to 30 feet above lower level where metal decking is initially installed. Controlled decking zones must be approved by the safety director and inspected daily by a competent person.

10) Training

Training must address the following:

● The recognition and identification of fall hazards.

● The use and operation of fall protection systems, guardrails, and personal fall protection equipment.

● The training and authorization of operators for all required equipment.

●Assure the proper level of additional training is provided for CDZ activity and it is specific to the site where it is being used.

Site Specific Steel Erection Plan and Checklist

Job Name: _____

Job Number: _____ Date: _____

Erector: _____ Project Eng.: _____

Sheeter: _____ Qualified Person: _____

Anchor Bolt Cont.: _____ Fabricator: _____

Crane Optr: _____ Qualified Rigger: _____

Scope of Work

Pre-Engineered Metal Building	☐	Sq. Ft. _____	Tons	_____
Conventional Steel Building	☐	Sq. Ft. _____	Tons	_____
Roofing	☐	Sq. Ft. _____	Tons	_____
Siding	☐	Sq. Ft. _____	Tons	_____
Decking	☐	Sq. Ft. _____	Tons	_____
Miscellaneous Steel	☐	Sq. Ft. _____	Tons	_____
General Miscellaneous	☐	Sq. Ft. _____	Tons	_____

General Description of Work: _____

_____

_____

_____

Footings, Piers, Walls and Anchor Bolts

1. Has concrete reached 75% of sufficient strength?	☐ Yes	☐ No
2. Proof of Strength		
a. ASTM test method results	☐ Yes	☐ No
b. Engineer verification	☐ Yes	☐ No
3. Were anchor bolts repaired, replaced, or modified?	☐ Yes	☐ No
4. Was erector notified in writing?	☐ Yes	☐ No

Notification of Commencement of Steel Erection

1. Was written notification given to the erector?	☐ Yes	☐ No

Site Layout

1. Has controlling contractor provided adequate access to site?	☐ Yes	☐ No
2. Is laydown area firm, properly graded, well drained and accessible?	☐ Yes	☐ No

Pre-Construction Site Conference

Has a Pre-construction Site Conference been held? ☐ Yes ☐ No

Please list those attending:

Sequence of Erection Activity

1. Give a general sequence of erection activities:

2. Material delivery date:

3. How will activities be coordinated with other trades?

Cranes

1. Crane Type:
2. Crane Brand:
3. Crane Capacity:
4. How is the site prepared for the crane?

5. How many different locations will the crane have and where are they?

6. What is the path of overhead loads?

7. How will employees be notified of overhead loads?

8. Are there any critical lifts? (75% of capacity or dual crane)
   a. How many?
9. Describe critical lifts:

10. Are lift permits attached for critical lifts? ☐ Yes ☐ No

11. Are lift permits attached for all lifts over 5,000 lbs? ☐ Yes ☐ No

Steel Erection Activities/Procedures (give a description of the following items and how they will be performed)

1. Temporary Bracing/Guying _____

2. Repair, Replacement or Modification of Anchor Bolts:

3. Columns/Beams (Joists or Purlins): _____

4. Connections: _____

5. Decking: _____

6. Roofing: _____

7. Siding: _____

8. Steel Grating: _____

9. Handrail or Miscellaneous Iron: _____

Fall Protection (Please identify the Fall Protection procedures for the following tasks):

1. Erection of vertical structural members
   - ☐ JLG Lift/Tie-off
   - ☐ Scissor Lift/Guardrails
   - ☐ Vertical Lifeline/Harness and Lanyard
   - ☐ Retractable Lanyard/Harness
   - ☐ Other - Explain _____

2. Erection of horizontal structural members
   - ☐ JLG Lift/Tie-off
   - ☐ Scissor Lift/Guardrails
   - ☐ Vertical Lifeline/Harness and Lanyard
   - ☐ Retractable Lanyard/Harness

☐ Other - Explain _____

3. Installation of Siding & Associated Insulation
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other - Explain _____

4. Installation of Roofing & Associated Insulation
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other – Explain _____

5. Installation of Decking
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other – Explain _____

6. Unprotected Sides/Edges
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other – Explain _____

7. Leading Edges
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other – Explain _____

8. Holes
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other - Explain _____

9. Wall Openings
☐ JLG Lift/Tie-off
☐ Scissor Lift/Guardrails
☐ Vertical Lifeline/Harness and Lanyard
☐ Retractable Lanyard/Harness
☐ Other – Explain _____

10. Has fall protection training been documented? ☐ Yes ☐ No

11. Is a competent person on-site at all times? ☐ Yes ☐ No
12. Were fall protection systems designed by a Qualified Person? ☐ Yes ☐ No

Falling Object Protection

1. Method for securing loos items aloft: _____

_____

_____

2. Are all personnel wearing hardhats? ☐ Yes ☐ No
3. Are erection areas properly barricaded? ☐ Yes ☐ No

Hazardous Non – Routine Tasks

1. Are Job Safety Analyses performed on all non – routine hazardous tasks? ☐ Yes ☐ No
2. Attach JSA's

Training Certification

1. Are all personnel properly trained for performing steel erection activities? ☐ Yes ☐ No
2. Are all personnel properly trained for the use of fall protection systems? ☐ Yes ☐ No
3. Attach all documentation of training.

List of Qualified and Competent Persons

1. Qualified Person for site specific erection plan: _____
2. Qualified Person for fall protection system design: _____
3. Qualified Rigger: _____
4. Crane Operator: _____
5. Crane Inspector: _____
6. Fall Protection Competent Person: _____

Emergency Rescue Procedures

☐ Self – Rescue ☐ Emergency Response Team ☐ Manbasket
☐ Stair Tower ☐ 1st Aid Trained Personnel ☐ Hoists
☐ Aerial Lifts ☐ Other

Comments: _____

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Completed By: _____ Date: _____
Reviewed By: _____ Date: _____

SCULL CONSTRUCTION SERVICE, INC. .

Fall Protection Program

I. INTRODUCTION

SCOPE:

This policy applies to all SCULL CONSTRUCTION SERVICE, INC. employees working on any job site and who may be exposed to fall hazards in the course of their daily activities.

PURPOSE:

To prevent work related injuries resulting from falls from elevations. The prevention of these incidents will be accomplished by the use of fall prevention, fall protection methods, and the training of effected employees.

II. SAFETY GOALS AND OBJECTIVES

a. SCULL CONSTRUCTION SERVICE, INC. . Management

The goal of management is to reduce and eliminate the occurrences of falls from elevation on the job site. Through the evaluation of related incidents, management will modify the fall protection measures until these incidents are eliminated. Fall protection programs shall be prepared and modified by a qualified person for the **specific work-site**. Qualified person means "one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project." **The Qualified person(s) for SCULL CONSTRUCTION SERVICE, INC. is the Safety Director, Project Manager, or Superintendent.**

b. SCULL CONSTRUCTION SERVICE, INC. . Safety Director

The goal will be to ensure compliance with the fall protection program through hazard identification, hazard mitigation, employee training, and enforcement of the fall protection program. **The Safety Director, Project Manager, or Superintendent** will also serve as the "Competent person" for the fall protection program. "Competent person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them."

c. SCULL CONSTRUCTION SERVICE, INC. . Employees

The goals for the employees are:
1. Employees will be able to identify the fall hazards on the job site.
2. Employees will be able to understand the hazards associated with working near fall hazards.
3. Employees will understand the OSHA regulations relating to fall protection.

III. RESPONSIBILITIES

a. Safety Director

The Safety Director or designee will be responsible for the training of all affected employees. Other responsibilities will include inspection of job sites for fall hazards, technical advisor to field management, and reporting of safety status to Management.

b. Workforce Employees

Workforce Employees are required to report any fall hazards to the Safety Director, Project Manager, or Superintendent, follow all fall prevention and protection requirements in this program, and be responsible for all daily inspections on all personal fall arrest equipment before use.

IV. HAZARD IDENTIFICATION AND ELIMINATION

a. Daily Inspections

Job sites will be inspected daily by the Safety Director or designee. In the daily inspection, focus will be placed on the following:

1. Any area or activity that exposes an employee to a fall hazard.
2. Fall hazards associated with the following areas:
    a). scaffolds
    b). ladders
    c). scissor lifts
    d). aerial work platforms
    e). floor holes
    f). roofs
    g). unprotected sides and edges

b. Analyzing the Work Area

In analyzing the work area, the Safety Director or designee will review work conditions for current and upcoming fall hazards. This will be accomplished by inspection of the current and upcoming work areas.

c. Pre-Planning for Fall Prevention

SCULL CONSTRUCTION SERVICE, INC. . will pre-plan prevention by completing the following tasks:

1. Have a competent person specify what fall protection method will be used.
2. Have a competent person specify the proper anchorage points to be used.
   Anchorage points shall be capable of supporting at least 5,000 pounds per employee attached.
3. All scaffolds system will have guardrails attached.
4. All open-sided floors will have guardrails attached before employees engage in work on this level.
5. All floor holes shall have covers. A floor hole is "a floor hole on the working surface that is greater than 3 inches in diameter."

V. CONVENTIONAL FALL PROTECTION

a. Guardrails

All Personal Fall Arrest Systems purchased shall meet the requirements of ANSI A10.14-1975 All guardrail systems will comply with the current OSHA standards. (1926.502(b)

b. Personal Fall Arrest Systems

All SCULL CONSTRUCTION SERVICE, INC. . employees required to wear personal fall arrest systems, will follow these guidelines.

1. Only a full body harness is allowed for fall arrest.
2. Only shock absorbing and self-retracting lanyards are acceptable.
3. All lanyards will have locking snap hooks.
4. All personal fall arrest systems will be inspected before each use by the employee.

All SCULL CONSTRUCTION SERVICE, INC. . employees will be required to use personal fall arrest systems where there is danger of falling. Personal fall arrest systems will be required under the following conditions:

1. When work from an aerial work platform.
2. When working above six feet on a platform or other support not equipped with adequate guardrails.
3. When working in an aerial basket suspended from a crane.
4. When working in a confined space where personnel may have to be lowered or raised vertically, a body harness with a Y-lanyard is required. This includes silos or hoppers where the danger of being buried by loose material exists.
5. When working near an unguarded floor opening or on roofs, a lifeline fall arrest system is often desirable for mobility.

IV. INSPECTION AND MAINTENANCE OF ALL PROTECTION SYSTEMS

a. Guardrails

1. All guardrails will be visually inspected daily by the Safety Director or designee.

b. Personal fall arrest systems.

1. Personal fall arrest systems shall be inspected daily by the employee before use.
2. Personnel fall arrest systems shall be inspected by the Safety Director or designee periodically to ensure inspections are being performed properly by the employees.

VII. SAFETY MONITORING SYSTEM

When conventional fall protection is not feasible, a safety monitoring system may be used. "Not feasible" means, "that it is impossible to perform the construction work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection.

a. SCULL CONSTRUCTION SERVICE, INC. has designated the **Safety Director, Project Manager, or Superintendent as the competent person** to monitor the safety of other employees and the company shall ensure that the safety monitor complies with the following requirements:

1. The safety monitor shall be competent to recognize fall hazards.
2. The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
3. The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored.
4. The safety monitor shall be close enough to communicate orally with the employee.
5. The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.

VIII. CONTROLLED ACCESS ZONES

When conventional fall protection is not feasible, a controlled access zone may be used. "Not feasible" means, "that it is impossible to perform the construction work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection."

Controlled access zones are not recommended for use by SCULL CONSTRUCTION SERVICE, INC. .

If the controlled access zones are necessary, they shall conform to the following provisions:

1. When used to control access to areas where leading edge and other operations are taking place, the controlled access zone shall be defined by a control line or by other means to restrict access.

2. When control lines are used, they shall be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge, except when erecting pre-cast concrete members.
3. The control line shall extend along the entire length of the unprotected or leading edge and shall be approximately parallel to the unprotected edge.
4. The control line shall be connected on each side to a guardrail system or wall.
5. Control lines shall consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:
6. Each line shall be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material (example yellow caution line).
7. Each line shall be rigged and supported in such a way that its lowest point is not less than 39 inches from the walking/working surface and its highest point is not more than 45 inches from the walking/working surface.
8. Each line shall have a minimum breaking strength of 200 pounds.

X. TRAINING

The Safety Director, Project Manager, or Superintendent will be adequately trained in the fall protection systems in use and will be responsible for training all field employees during new employee orientation. In the event a new system is employed, additional training will commence immediately to all effected employees.

a. Training Outline

1. Review of OSHA standard 1926.501
2. Training video
3. Review of fall protection system and their use.
4. Discussion and questions.
5. Training test.

b. Documentation

All employees trained in fall protection will be documented in the following manner:

1. The date of the training.
2. The employees printed name and signature.
3. The printed name and signature of the instructor.
4. The specific subjects covered in the training session.
5. Records will be retained in the SCULL CONSTRUCTION SERVICE, INC. . office for review of applicable federal, state, and local agencies.

c. Retraining

Retraining will take place when one of the following exists:

1. When an effected employee who has been trained does not have the understanding and skill to recognize the hazards associated with fall from elevations and the procedures to be followed to minimize these hazards.
2. Changes in the workplace render previous training obsolete.
3. Inadequacies in effected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill.

XI. PROGRAM EVALUATION

SCULL CONSTRUCTION SERVICE, INC. will strive to improve the performance of the fall protection program to benefit our employees. The criteria used to evaluate the program's performance will be the following:

1. Accident/incident reports: After any accident/incident, involving fall protection the program will be revised to prevent any future similar accidents/incidents.
2. Medical reports.
3. Incident rates.
4. Employee compliance.
5. Industry comparison.

SCULL CONSTRUCTION SERVICE, INC. .

Fire Protection Plan

Scope and Application

The requirements of this section apply to the placement, use, maintenance, and testing of portable fire extinguishers provided for the use of employees.

General Requirements

SCULL CONSTRUCTION SERVICE, INC.:

- Shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury.
- Will provide only approved portable fire extinguishers.
- Shall not provide or make available in the workplace portable fire extinguishers using carbon tetrachloride or chlorobromomethane extinguishing agents.
- Shall assure that portable fire extinguishers are maintained in a fully charged and operable condition and kept in their designated places at all times except during use.

Inspection, Maintenance, and Testing

SCULL CONSTRUCTION SERVICE, INC.:

- Shall be responsible for the inspection, maintenance, and testing of all portable fire extinguishers in the workplace.
- Shall assure that portable fire extinguishers are subjected to an **annual maintenance check.** The date of this annual check shall be recorded and the record shall be retained for one year after the last entry or the life of the shell, whichever is less. This record shall be made available to the OSHA Assistant Secretary upon request.
- Shall visually inspect all portable fire extinguishers on a monthly basis.

Training and Education

SCULL CONSTRUCTION SERVICE, INC. shall provide an educational program to familiarize employees with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.

This required education shall be provided by the Safety Director upon initial employment and at least annually thereafter.

SCULL CONSTRUCTION SERVICE, INC.

First Aid/CPR

SCULL CONSTRUCTION SERVICE, INC. will provide and make easily accessible, approved first-aid supplies. The first aid kit shall consist of appropriate items and stored in a weatherproof container with individually sealed packages for each type of item. First-aid kit contents will be checked prior to issuance and on a weekly basis thereafter by the SCULL CONSTRUCTION SERVICE, INC. Safety, Director or his/her designee and expended items replaced. An inspection checklist should be included in each first aid kit. Dependent on the type and size of operations, the company must determine the need for additional first aid kits at the work site, additional types of first aid equipment and supplies and additional quantities and types of supplies and equipment in the first aid kits. **Our company's first aid cabinet items are found following this section.**

1. In the absence of an infirmary, clinic, hospital, or physician that is reasonably accessible in terms of time and distance to the work site, designated employees having a valid certificate in first aid training shall be available at the work sites to render emergency first aid and CPR.

2. Where the eyes or body of any person may be exposed to injurious or corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

3. In case of a medical emergency, call 911 for necessary ambulance service. This telephone number will be conspicuously posted at each job site by the SCULL CONSTRUCTION SERVICE, INC. Safety Director, Project Manager, or Superintendent. In areas where 911 are not available, the telephone numbers of the physicians, hospitals, or ambulances shall be conspicuously posted. Where on-site emergency help is available, it shall be used. If emergency help is available on-site, the help will be provided by the Customer.

SCULL CONSTRUCTION SERVICE, INC.

Products included in First Aid Cabinets

a) Plastic Strips (Band-Aids)
b) Adhesive Tape
c) Gauze Bandage
d) Non-Adherent Pads
e) Gauze Pads
f) Eye Wash
g) Ammonia Inhalants
h) Antiseptic Wipes
i) Pair Gloves
j) Triple Biotic Foil Packs
k) Burn Spray Scissors
l) Tweezers
m) Aspirin
n) Cotton

SCULL CONSTRUCTION SERVICE, INC. .

Forklifts

All employees of SCULL CONSTRUCTION SERVICE, INC. . who operate forklift trucks must be properly trained and authorized to do so.

Trucks, Railroad Cars & Dock boards

When highway trucks are boarded with forklift trucks, the brakes of the highway trucks shall be set and wheel chocks placed under the rear wheels to prevent rolling.

Wheel stops or other recognized positive protection shall be provided to prevent railroad cars from moving during loading or unloading operations.

If necessary, fixed jacks will be used to support a semi-trailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.

If used, portable and powered dock boards shall be strong enough to carry the load imposed on them.
Portable dock boards shall be secured in position, either by being anchored or equipped with devices which will prevent their slipping. Handholds or other effective means shall be provided on portable dock boards to permit safe handling.

Operator Training

SCULL CONSTRUCTION SERVICE, INC. . will ensure that each forklift truck operator is competent to operate a forklift truck, as demonstrated by the successful completion of the training and evaluation required by the OSHA standard. No employee will be permitted to operate a forklift truck (except for training purposes) until they have successfully completed the required training.

Training shall consist of a combination of **formal instruction** (lecture, discussion, interactive computer learning, video tape, written material), **practical training**, (demonstrations performed by the trainer and practical exercises performed by the trainee), and **evaluation of the operator's performance in the workplace.**

The trainer for SCULL CONSTRUCTION SERVICE, INC. is the Safety Director and/or outside consultants. They have the knowledge, training, and experience to train forklift truck operators and evaluate their competence.

Our forklift truck operators shall receive initial training in the following topics:

Truck-related topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be **authorized to operate;**
- Differences between the truck and the automobile;
- Truck controls and instrumentation: where they are located, what they do, and how they work;
- Engine or motor operation;
- Steering and maneuvering;
- Visibility (including restrictions due to loading);
- Fork and attachment adaptation, operation, and use limitations;
- Vehicle stability;
- Vehicle capacity;
- Any vehicle inspection and maintenance that the operator will be required to perform;
- Refueling and/or charging of batteries; Operating limitations;
- Any other operating instructions, warnings, or precautions listed in the **operator's manual** for the types of vehicle that the employee is being trained to operate.

Workplace-related topics:

- Surface conditions where the vehicle will be operated;
- Composition of loads to be carried and load stability;
- Load manipulation, stacking, and un-stacking;
- Pedestrian traffic in areas where the vehicle will be operated;
- Narrow aisles and other restricted places where the vehicle will be operated;
- Hazardous (classified) locations where the vehicle will be operated;
- Ramps and other sloped surfaces that could affect the vehicle's stability;
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust;
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

Requirements of this section.

Refresher training and evaluation

Refresher training in relevant topics will be provided to any operator of a forklift truck when:

a. The operator has been observed to operate the vehicle in an unsafe manner;
b. The operator has been involved in an accident or near-miss incident;
c. The operator has received an evaluation that reveals that the operator is not operating the truck safely;
d. The operator is assigned to drive a **different type of truck**; or
e. A condition in the workplace changes in a manner that could affect safe operation of the truck.

An evaluation of each forklift truck operator's performance will be conducted **at least once every three years and re-certified.**

Inspections

SCULL CONSTRUCTION SERVICE, INC. operators of forklift trucks shall make an examination of the truck they are using before being placed in service. The trucks **shall not** be placed in service if the examination shows any condition adversely affecting the safety of the forklift truck. This examination will be made by a qualified person at least daily. If our trucks are used on a round-the-clock basis, they will be examined after each shift. **Any defects shall be immediately reported and corrected.**
A copy our company's inspection form is found at the end of this section.

Certification

SCULL CONSTRUCTION SERVICE, INC. shall issue a certification of training for each employee trained in the safe operation of forklift trucks. The following information shall include the name of the operator, the date of training, the date of the evaluation, and the name and title of the person or persons performing the training or evaluation.

SCULL CONSTRUCTION SERVICE, INC. .

Grounding Conductor Program

Assured Equipment Grounding Conductor Program

This written plan will establish and implement specific procedures for the assured equipment grounding conductor program on construction sites covering:

- All cord sets, receptacles which are not a part of the building or structure, and equipment connected by cord and plug which are available for use or used by employees.

The written description of this program, including the specific procedures adopted by SCULL CONSTRUCTION SERVICE, INC. . is available at our job sites for inspection by the Assistant Secretary and any affected employees.

The **competent person** responsible for implementing this program is the **Safety Director**. The "competent person" means "**one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them".**

Each cord set, attachment cap, plug and receptacle of cord sets, and any equipment connected by cord and plug, except cord sets and receptacles which are fixed and not exposed to damage**, shall be visually inspected before each day's use,** for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage. **Equipment found damaged or defective shall be tagged "DO NOT USE,"** removed from service until repaired and tested.

The following tests shall be performed on all cord sets, receptacles which are not a part of the permanent wiring of the building or structure, and cord-and-plug connected equipment required to be grounded:

1. All equipment grounding conductors shall be tested for continuity and shall be electrically continuous.
2. Each receptacle and attachment cap or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment-grounding conductor shall be connected to its proper terminal. [1926.404(b)(1)(iii)(D)]

The above-required tests shall be performed:

- Before first use;
- Before equipment is returned to service following any repairs;
- Before equipment is used after any incident which can be reasonably suspected to have caused damage; and

- At intervals not to exceed 3 months, except that cord sets and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding 6 months.

Ground Fault Protection

GFCI's shall be used on all 120 volt, single-phase, 15- and 20- ampere receptacle outlets which are not part of the permanent wiring of any building and are used by *Scull Construction Service, Inc.* . employees. GFCI's are not required on receptacles on a two-wire single-phase portable or vehicle-mounted generator rated not more than 5kw where the circuit conductors are not part of the generator frame. Not all other grounded surfaces need to be protected with GFCI's.

Assured Equipment Grounding

In addition to the use of GFCI's, *Scull Construction Service, Inc.* . shall implement and follow assure equipment grounding, which is a testing and identification procedure to verify that electrical equipment is safe to operate in regards to the electrical hazards. Each GFCI, cord set, attachment, cap, plug and receptacle cord sets, and any equipment connected by cord and plug must be visually inspected daily for external defects.

Test Record

Scull Construction Service, Inc. . will keep record by using color-coded tape to signify the successful testing of the cord set, receptacle, plug and cord connected equipment, and logging the results of each test. The color of the tape will be based upon the seasons of the year:

White- Winter (January 1- March 31)
Green- Spring (April 1- June 30)
Red- Summer (July- September 31)
Orange- Fall (October 1-December 31)

The record logs will be kept on file at the office, and these records will be made available at the job site as needed.

SCULL CONSTRUCTION SERVICE, INC. will not make available or permit the use of any equipment, which has not met the requirements of an assured equipment-grounding program.

The required tests performed shall be recorded. This test record will identify each receptacle, cord set, and cord-and-plug- connected equipment that passed the test and shall indicate the last date it was tested or the interval for which it was tested. This record shall be kept by means of logs and color-coding and shall be maintained until replaced by a more current record. The record shall be made available on the johsite for inspection by the Assistant Secretary and any affected employee.

SCULL CONSTRUCTION SERVICE, INC. .

Hazard Communication Program

Introduction

SCULL CONSTRUCTION SERVICE, INC. is complying with the requirements of OSHA's Hazard Communication Standard by compiling an inventory of hazardous chemicals, using Material Safety Data Sheets (SDS), ensuring that containers are labeled, and training our workers present at a given construction site. In addition, we provide this same information to subcontractors involved in a specific project so that they may provide this information and train their employees.

This program applies to all work operations where our employees may be exposed to hazardous substances.

The Safety Director is the program coordinator and has the overall responsibility for the program. He/she will review and update the program, as necessary. Copies of the written program may be obtained from the Safety Director.

All employees, or their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable SDSs, and chemical information lists from the Safety Director. Under this program, our employees will be informed of the contents of the Hazard Communication Standard, the hazardous properties of chemicals with which they work, safe handling procedures, and measures to take to protect themselves from these chemicals.

SCULL CONSTRUCTION SERVICE, INC. . employees will be informed by the Safety Director, in the form of a written document, of the hazards associated with non-routine tasks, such as the cleaning of reactor vessels, and the hazards associated with chemicals in unlabeled pipes.

While OSHA requires that the written Hazard Communication Program, all SDS, and container labels be written in English, SCULL CONSTRUCTION SERVICE, INC. will make every effort to communicate the Hazard Communication Program in the language of non-English speakers. Effective communications will be accomplished through any of the following methods or combinations thereof:

1. Training over entire program in employee's native language with use of an interpreter/intermediary.
2. Video presentations in the native language of the employee.
3. Written materials (handouts, SDS. Container labels) in the native language of the employee, when available and/or accessible.

Hazardous Chemicals Inventory

The Site Superintendent has compiled an inventory of all hazardous chemicals that will be used on the work-site by reviewing container labels and MSDS. The list will be updated as necessary. The list will be kept on the job-site.

The chemical inventory serves as a list of every chemical for which an SDS must be maintained.

The chemical inventory list is found following this section.

Safety Data Sheets (SDSs)

SDS shall be maintained and readily accessible in each work area. SDS can be maintained at the primary work site. However, they must be available in case of an emergency. MSDS must be made available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director of OSHA.

The Safety Director is responsible for obtaining/maintaining the MSDSs at their facility. He/she will contact the chemical manufacturer or vendor if additional research is necessary. All new procurements for the company must be cleared by the Safety Director. The material data sheets are kept at the Safety Director's office and/or on the job site. Employees can obtain access to them by contacting the Safety Director.

Labels and Other Forms of Warning

It is the policy of the SCULL CONSTRUCTION SERVICE, INC. . to ensure that each container of hazardous chemicals on a job site is properly labeled.

Labels will list at least the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer, or other responsible party.

The Safety Director is responsible for ensuring that all hazardous chemicals in in-plant containers are properly labeled and updated, as necessary. He/she also ensures that newly purchased materials are checked for labels prior to use.

If employees transfer chemicals from a labeled container to a portable container that is intended only for their IMMEDIATE use, no labels are required on the portable container.

Employee Information and Training

Everyone who works with or is potentially "exposed" to hazardous chemicals will receive initial training and any necessary retraining on the Hazard Communication Standard and the safe use of those hazardous chemicals by the Safety Director. Whenever a new hazard is introduced or an old hazard changes, additional training is provided.

Information and Training Content

Employees shall be **informed** of the requirements of this section; any operations in their work area where hazardous chemicals are present; and, the location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and material safety data sheets required. Employees shall be **trained** in methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.) The physical and health hazards of the chemicals in the work area and the measures the employees can take to protect themselves from these hazards; including specific procedures, the employer has implemented to protect employees from exposure to hazardous chemicals. Such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and, the details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

All training shall be documented. This documentation shall include the employee's signature, the subjects on which the employees are trained, location of training and date of training.

Multi-Employer Facility

When contractors or any other employers' workers (i.e., painters, electricians, or plumbers) will be working at this workplace, the Safety Director will:

- Provide the other employer(s) with MSDSs for any of our chemicals to which their employees may be exposed, and
- Relay necessary label and/or emergency precautionary information to the other employer(s).

Each contractor bringing chemicals on-site must provide the Safety Director with the appropriate hazard information on these substances, including the MSDSs, the labels used and the precautionary measures to be taken in working with these chemicals.

Additional Information

All employees, or their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable MSDSs, or chemical information lists from the Safety Director.

All superintendents will contact Scull receptionist with all information to get SDS's updated for their computer. It's up to superintendents to make sure all information is up to date for every job they do.

SCULL CONSTRUCTION SERVICE, INC.

Lifting/Mobile Equipment

Derricks

Only those employees of SCULL CONSTRUCTION SERVICE, INC. . who have been trained in the safe work standards in the operation of derricks shall be authorized and permitted to operate such derricks.

Maintenance
A preventive maintenance program based on the Derrick Manufacturer's recommendations and in accordance with the following procedures shall be followed:

- All hoist drum dogs shall be engaged
- The main or emergency switch shall be locked in the open position, if an electric hoist is used.
- Warning or out of order signs shall be placed on the derrick and hoist
- The repairs of booms of derricks shall either be made when the booms are lowered and adequately supported or safely tied off.

Rope Inspection
A thorough inspection of all ropes in use shall be made at least **once a month by the Competent Person** and a certification record which includes the date of inspection, the signature of the person who performed the inspection, and an identifier for the ropes which were inspected shall be prepared and kept on file where readily available. Any deterioration, resulting in appreciable loss of original strength shall be carefully observed and determination made as to whether further use of the rope would constitute a safety hazard.

All rope which has been idle for a period of a month or more due to shutdown or storage of a derrick shall be given a thorough inspection before it is used and the same certification record completed as required for all rope inspections.

Crawler Locomotive and Truck Cranes (1910.180)

Only designated personnel trained in safe operating procedures of these cranes and in the use of fire extinguishers are permitted to operate these cranes.

Load rating chart
A substantial and durable rating chart with clearly legible letters and figures shall be provided with each crane and securely fixed to the crane cab in a location easily visible to the operator while seated at his/her control station.

Inspection classification

The Safety Director will conduct frequent and periodic inspections. Frequent inspections, conducted in daily to monthly intervals with the following items inspected:

- All control mechanisms for maladjustment interfering with proper operation: Daily
- All control mechanisms for excessive wear of components and contamination by lubricants or other foreign matter.
- All safety devices for malfunction.
- Deterioration or leakage in air or hydraulic systems: Daily
- Crane hooks with deformations or cracks.
- Rope reeving for noncompliance with manufacturer's recommendations.
- Electrical apparatus for malfunctioning, signs of excessive deterioration, dirt, and moisture accumulation.

Complete periodic inspections of the crane shall be conducted at intervals of 1 to 12 months, depending upon its activity, severity of service and environment or as specifically indicated in the manufacturer's manual.

Inspection records

Certification records of inspections shall include the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, of the crane which was inspected shall be made monthly on critical items in use such as brakes, and ropes. This certification record shall be kept readily available.

Testing

Rated load test: Written reports shall be available showing test procedures and confirming the adequacy of repairs or alterations.

Rope inspection

A thorough inspection of all ropes in use shall be made at least once a month and a certification record which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the ropes shall be prepared and kept on file where readily available. All inspections shall be performed by an appointed or authorized person who is the Safety Director.

All rope which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed shall be given a thorough inspection before it is used.

Particular care shall be taken in the inspection of non-rotating rope.

Fire extinguishers

A carbon dioxide, dry chemical or equivalent fire extinguisher shall be kept in the cab or vicinity of the crane. Operating and maintenance personnel shall be made familiar with the use and care of the fire extinguishers provided.

Operations near overhead lines

If work is to be performed near overhead lines, the lines shall be deenergized and grounded, or other protective measures shall be provided before work is started. These work practices must be done by qualified persons.

Overhead and Gantry Cranes

Only designated and authorized personnel, trained in the safe operations of the crane and in the use and maintenance of the fire extinguishers shall be permitted to operate a crane.

Inspection

Frequent inspections, daily to monthly intervals, and periodic inspections, one to 12 month intervals, shall be conducted on all cranes.

Hooks with deformation or cracks shall be visually inspected daily. Monthly inspections shall be made and a certification record kept. This record shall include the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, of the hook inspected. Hooks with cracks or having more than 15% in excess of normal throat opening or more than 10 degrees twist from the plane of the unbent hook shall be discarded.

Hoist chains, including end connections, shall be visually inspected daily for excessive wear, twist, distorted links interfering with proper function, or stretch beyond manufacturer's recommendations. A monthly inspection shall also be conducted with a certification record which includes the date of inspection, the signature of the person who performed the inspection and an identifier of the chain which was inspected.

Maintenance

A preventive maintenance program based on the crane manufacturer's recommendations shall be established.

Before repairs and adjustments are started on a crane, warning or "out of order" signs shall be placed on the crane, also on the floor beneath or on the hook where visible from the floor. Repairs and adjustments shall be done only by designated employees qualified to perform specific duties.

Rope inspection

A thorough inspection of all running ropes shall be made at least once a month and a certification record which includes the date of inspection, the signature of the person who performed the

inspection and an identifier for the ropes which were inspected shall be kept on file where readily available to appointed personnel.

All rope which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed shall be a thorough inspection before it is used. This inspection shall be for all types of deterioration and shall be performed by an appointed person whose approval shall be required for further use of the rope. A certification record shall be available for inspection which includes the date of inspection, the signature of the person who performed the inspection and an identifier for the rope which was inspected.

SCULL CONSTRUCTION SERVICE, INC. .

Lockout/Tagout Program

Scope

This energy control program is in effect when employees of SCULL CONSTRUCTION SERVICE, INC. . service and/or maintain machines and equipment in which the "unexpected" energization or start up of the machine and/or equipment, or release of stored energy could cause injury to our employees. Our energy control program is in effect when employees are required to remove or bypass a guard, other safety device. Or when an employee is required to place any part of his or her body into an area on a machine or piece of equipment, where work is actually performed upon the material, being processed (point of operation) or where an associated danger zone exists during a machine operating cycle.

Lock-Out/Tag-Out Devices

Lockout and tagout devices shall be singularly identified; shall be the only device(s) used for controlling energy; shall not be used for other purposes; and shall meet the following requirements:

- Our devices shall be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- Tags shall be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible.
- Tags shall not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored.
- The lockout devices and tagout devices shall indicate the identity of the employee applying the device(s).
- Our tagout devices shall warn against hazardous conditions if the machine or equipment is energized and will include the legend "DO NOT OPERATE"

Periodic Inspections

SCULL CONSTRUCTION SERVICE, INC. will conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of the standard are being followed. The Safety Director**, who does not actually use the lockout/tagout program**, will conduct the periodic inspections. The company will certify that the inspections have been performed. The certification will identify the machine or equipment on which the procedure was being utilized, the date of the inspection, the employees included in the inspection and the person performing the inspection.

Energy Control Procedures

The Safety Director shall be responsible for controlling the energy control program. Any employee deviating from this written program shall be reprimanded accordingly.

Lockout/Tagout

If an energy-isolating device is not capable of being locked out, we will utilize the tag out system. If we replace, do major repair, renovate, or modify our machines or equipment, we will design such equipment or machines to accept a lockout device.

When a tagout only system is used, we will assure that the tag meets the requirements as stated above and will assure that this system will provide a level of safety to that obtained by using a lockout program.

Basic rules for using lockout or tagout system procedures

- All equipment will be locked out or tagged out to protect against accidental or inadvertent operation, when this operation could cause injury to personnel.

- Do not attempt to operate any switch, valve, or other energy-isolating device where it is locked or tagged out.

- Notify all affected employees that a lockout or tagout system is going to be utilized on a piece of our facility's equipment, as well as the reason lockout/tagout is performed, the energy that the equipment uses, and the hazards of this energy.

- If the equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open the toggle switch, etc.).

- Operate the appropriate switches, valves or other energy isolating devices so that the equipment is isolated from its energy sources. Stored energy (such as that in springs, parts of the equipment that are elevated and could drop, rotating fly-wheels, capacitors, hydraulic systems, and air, gas, steam or water pressure, etc.) must be dissipated or restrained. This can be accomplished by methods such as repositioning, blocking, bleeding down, grounding, etc.

- Lockout and/or tag-out the energy isolating devices with the appropriate individual locks and/or tags.

- After making sure that no personnel are exposed, check the effectiveness of having locked/tagged out the energy sources. This can be done by operating the push button or other normal operating controls to make sure the equipment will not operate—(**CAUTION: Return operating controls to "neutral" or "off" positions after performing these tests.)**

Restoring machines or equipment to normal production operations

- After the work, being performed is completed and the equipment is ready to resume normal production operations, check the area around the equipment to ensure that no one is exposed.

- After all tools have been removed from around the equipment, guards have been reinstalled (if applicable) and employees are in the clear, remove all lock-out/tag-out devices. Operate the energy isolating devices to restore energy to the equipment.

Procedure involving more than one person

- In the proceeding steps, if more than one person is required to lock-out or tag-out equipment, each person will place their own personal lock-out or tag-out device on the energy isolating devices.

- When an energy-isolating device cannot accept multiple locks or tags, a multiple lock-out/tag-out device (such as multi-holed hasp) may be used.

- As an alternative, if lock-out is used a single lock may be used to lock out the equipment, with the key to that single lock being placed in a lock-out box or cabinet, which allows the use of multiple locks to secure that cabinet.

- Each employee will then use his or her own lock to secure the box or cabinet.

- As each person no longer needs to maintain their lockout protection, that person will remove their lock from the multiple lock-out/tag-out devices or the lockout box or cabinet, whichever is being used.

While we can use the General Control Procedure when working with some of or powered equipment, much of our equipment requires that a separate Energy Control Procedure be written specifically for that piece of equipment. As a result, we have prepared specific Energy Control Procedures for that equipment.

Each Energy Control Procedure includes the following information:

- Identity and description of the equipment to which the procedure applies.

- The controls that exist on each piece of equipment (such as “on/off” buttons, toggle switches, etc.).

- The types of energy used by the equipment.

- Energy sources and energy isolation devices associated with that equipment.

- Shutdown procedures to be used to de-energize the equipment.

- Release and start-up procedures to be used with the equipment.

These procedures may need to be revised if modifications are made to the equipment or our energy systems. Whenever modifications of this type are made, we will review the Energy Control Procedures associated with the affected equipment.

Our Energy Control Procedures shall be periodically reviewed to make sure they are accurate and up-to-date. To keep our procedures current we review these procedures annually.

Shutdown Procedures

The steps listed below must be followed to properly shut down and de-energize this equipment.

- Notify "affected" and "other" employees of impending equipment shutdown.
- Before shutdown, our authorized employee, a Scull Certified Electrician, shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy.
- The machine or equipment shall be turned off or shut down using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazard(s) to employees because of the equipment stoppage.
- Lockout or tagout devices shall be affixed to each energy-isolating device by our authorized employee.
- Following the application of lockout or tagout, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe.
- Prior to starting work on machines or equipment, that have been locked out or tagged out, the authorized employee shall verify that isolation, and de-energization has been accomplished.

Release and Restart Procedures

The steps listed below must be followed to properly release this equipment from a locked or tagged out condition and affected its restart. Our authorized employee, a Scull Certified Electrician, shall follow the procedures listed below:

- The work area shall be inspected to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.
- The work area shall be checked to ensure that all employees have been safely positioned or removed.
- After lockout or tagout devices have been removed and before a machine or equipment is started. Affected employees shall be notified that the lockout our tagout devices have been removed.

Each lockout or tagout device shall be removed from each energy-isolating device by the employee who applied it. If the authorized employee who applied the device is not available to remove it, that device may be removed under the direction of the employer, provided that specific procedures and training for such removal have been developed, documented and incorporated into our energy control program. We will verify that the authorized employee who applied the device is not at the facility. We will make all reasonable efforts to contact the

authorized employee to inform him/her that their lockout or tagout device has been removed. We will ensure that the authorized employee has this knowledge before they resume work at that facility.

Employee Training

Employees will be provided with comprehensive training in the following areas.

- **"Authorized" Employees –** have been trained in three areas:
    1. Recognition of Hazardous Energy Sources
    2. Ability to identify the type and magnitude of energy available in the facility.
    3. The methods and means necessary to isolate and control this energy (i.e., the facility's Energy Control Procedures).

- **Affected Employees** – Trained in the purpose and use of the facility's Energy Control Procedures for equipment that they operate or equipment located in areas in which they work.

- **"Other" Employees** (whose work operations are in areas where Energy Control Procedures may be utilized.) – These employees are trained regarding the appropriate Energy Control Procedure, as well as the fact that they are prohibited from attempting to re-start or re-energize equipment which is locked or tagged out.

- **Authorized, Affected and "Other" Employees – Employees whose job requires him/her to operate or use a machine/equipment on which servicing or maintenance is being performed under lockout or tag-out. Or whose job requires him/her to work in an area in which such servicing or maintenance is being performed or when performing servicing or maintenance on such machines or equipment.**

In addition to providing initial training to all the categories of employees listed above, both "authorized" and "affected" employees are re-trained in the following situations:

- When their job assignments change.

- When there is a change in the equipment that they operate or the processes that they are involved with which presents a new hazard.

- When there is a change in Energy Control Procedures affecting them.

Our employees are also re-trained periodically to keep their knowledge "up-to-date" on whenever we discover any employees deviating from established Energy Control Procedures.

Additionally, employees who have received Energy Control Program training are listed, along with the dates of their initial training and any re-training that they have gone through.

All training is the responsibility of SCULL CONSTRUCTION SERVICE, INC. Safety Director. He/she **shall certify that the training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.**

SCULL CONSTRUCTION SERVICE, INC. .
Noise Exposure

Administration

It is the policy of SCULL CONSTRUCTION SERVICE, INC. to institute an occupational hearing conservation program for our construction workers to prevent any temporary or permanent noise-induces hearing loss to employees, and to comply with the federal OSHA standard found at 29 CFR 1926.52.

This written hearing conservation plan serves as a record of the details of the hearing conservation program in place at this company. We have this program in place to meet the hearing of all workers in the company. Elements of the hearing conservation program include:

- Monitoring
- Audiometric testing program
- Hearing Protection
- Training and Information, and
- Recordkeeping

The Safety Director is the person having overall responsibility for the Hearing Conservation Program. He/she will review and update the program, as necessary.

Copies of the written program may be obtained from the Safety Director.

Monitoring

The monitoring program is in place by SCULL CONSTRUCTION SERVICE, INC. . to provide an ongoing means of determining employee exposure to noise and protect employees based on excessive exposure.

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the company develops and implements an appropriate monitoring program to identify all employees for inclusion in the hearing conservation program and to select proper hearing protection.

The company notifies all employees exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

Hearing Protection

The company makes hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at **no cost to the employees.**

The company ensures that employees have a variety of suitable protectors that attenuate

employee exposure at least to an 8-hour time-weighted average of 90 decibels, or 85 decibels or lower for employees who have experienced a standard threshold shift in their hearing.

The company ensures evaluation for adequacy of the hearing protection attenuation for the specific noise environments in which the protector will be used, according to specifications.

The company reevaluates attenuation whenever employee noise exposures increase to the extent that current hearing protectors no longer provide adequate attenuation, and then provides a more effective hearing protection.

Training and Information

SCULL CONSTRUCTION SERVICE, INC. has a hearing protection-training program for all employees exposed to noise at or above an 8-hour time-weighted average of 85 decibels. The Safety Director is responsible for providing this training.

The company repeats the training program annually. The company assures that the training material is updated to be consistent with changes in the protective equipment and work processes.

The company assures that each employee is informed of at least the following information:

- The effects of noise on hearing;
- The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care;
- The purpose of audiometric testing; and
- An explanation of testing procedures.

The company makes informational materials pertaining to the Occupational Noise Exposure standard that are supplied to it by OSHA available to affected employees or their representatives.

SCULL CONSTRUCTION SERVICE, INC.

Personal Protective Equipment (PPE) Assessments

Application

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through **absorption, inhalation or physical contact. The SCULL CONSTRUCTION SERVICE, INC. Safety Director, Project Manager, or Superintendent shall conduct inspections to ensure the proper maintenance and operation of all PPE.**

Employee-owned Equipment

Where employees provide their own protective equipment, SCULL CONSTRUCTION SERVICE, INC. . shall be responsible to assure its adequacy, including **proper maintenance, and sanitation of such equipment.**

Hazard Assessment and Equipment Selection

SCULL CONSTRUCTION SERVICE, INC. shall assess the workplace to determine if hazards are present, or are likely to be present, which requires the use of personal protective equipment. If such hazards are present, or likely to be present, SCULL CONSTRUCTION SERVICE, INC. shall:

- Select, and **have each affected employee use,** the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment.
- Communicate the selection decisions to each affected employee.
- Select PPE that **properly fits each affected employee.**

SCULL CONSTRUCTION SERVICE, INC. shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed, the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment.

Defective and Damaged Equipment

Defective or damaged personal protective equipment **shall not be used.**

Training

SCULL CONSTRUCTION SERVICE, INC. Safety Director, Project Manager, or Superintendent shall provide training to each employee who is required to use PPE. They shall be trained to know **at least** the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust, and wear PPE
- The limitations of PPE
- The proper care, maintenance, useful life and disposal of the PPE

Each trained employee shall demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE.

When SCULL CONSTRUCTION SERVICE, INC. . has reason to believe that, any affected employee who has already been trained does not have the understanding and skill required they shall retrain each such employee. Circumstances where retraining is required include, but are not limited to, situations where:

- Changes in the workplace render previous training obsolete or
- Changes in the types of PPE to be used render previous training obsolete or
- Inadequacies in an affected employee's knowledge or use of assigned PPE indicate that the employee has not retained the requisite understanding or skill.

SCULL CONSTRUCTION SERVICE, INC. shall verify that each affected employee has received and understood the required training through a written certification that contains the name of each employee trained, the date(s) of training, and that identifies the subject of the certification.

Employees will be required to wear hard hats, safety glasses and high visibility at all times, from start to finish of job.

SCULL CONSTRUCTION SERVICE, INC.

Process Safety Management (PSM)

The purpose of this program is to ensure that all employees of SCULL CONSTRUCTION SERVICE, INC. are made aware of the possible hazards of their job so that the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals in certain job settings are prevented or at the very least minimized.

Training requirements
SCULL CONSTRUCTION SERVICE, INC. management pledges that each employee, upon hire, presently involved in operating a process and/or before being involved in operating a newly assigned process, shall be trained by the Safety Director and/or outside consultants in the safe work practices necessary to his/her job so that the safety of our employees as well as others around the job site is not compromised. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee'' job tasks.

Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process. The employer, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

Training will remain on going throughout the tenure of employment through hazard communication, confined space entry, lockout/tag out, and site-specific orientation land constant hands-on training by supervision.

All training will be documented, which includes the identity of the employee, the date of training, and the means used to verify that the employee understood the training, and maintained in the employee safety file.

Task evaluation
Each task that requires the use of chemicals will be evaluated to determine the chemical or combination of chemicals that will be used to perform the task as well as other materials that may be used near the work. If a malfunction during the operation has the potential to cause serious injury or property damage, the Emergency Action Plan will be put into effect.

Responsibilities
SCULL CONSTRUCTION SERVICE, INC., Safety Director will be responsible to assure that all employees are properly trained by his/her designee in hazard assessment, hazard communication, accident/incident reporting, and safe work procedures to the extent that the supervisors can properly relay all information to employees and see that all procedures are followed.

Safe Work Practices
All employees of SCULL CONSTRUCTION SERVICE, INC. will abide by the proven safe work practices of all host-contracting authorities. In the event that a contract authority program is in contrast to that of SCULL CONSTRUCTION SERVICE, INC., the more stringent program and procedures will apply.

Whenever SCULL CONSTRUCTION SERVICE, INC. performs work in any refinery, gas plant, etc., our employees will be made aware through the use of pre-job safety meetings of all unique hazards of the employer's work, or of any hazards found by the contract employee's work, any chemicals they may be confronted with, all confined spaces, all lockout/tag out procedures and all other information pertinent to the work being performed on the contract authorities premises.

Emergency Action Plan
In order to assure that employees are exposed to the least amount of danger possible, SCULL CONSTRUCTION SERVICE, INC. has initiated the following Emergency Action Plan in accordance with OSHA Standard 29CFR 1910.38. This policy will be in effect on all job sites before work begins and all employees will be apprised of the contents of the plan.

1. In the event of an emergency at the job site, when the alarm sounds or by verbal command, all work shall stop immediately and employees shall proceed in an orderly fashion to the predetermined meeting area. When possible, a map giving emergency evacuation routes will be on the job site. If a map is not available, all affected employees will be informed of the routes beforehand. Once the employees have left the work area, they are not to return until the "all clear" has been given.

2. If possible and feasible, the supervisors on the job shall make sure that all equipment is shut down before he/she leaves the work area. If this is not feasible, the main source of power should at least be disconnected or by some means shut off.

3. On each SCULL CONSTRUCTION SERVICE, INC., job site an employee roster will be filled out daily. This roster shall include the employee's name, social security number, and time in and out of the work area. In the event of an evacuation, when the employees have gathered at the pre-determined meeting area, the foreman will then take a roll call using the employee job site roster sheet and shall verify in writing each employees presence at the meeting site.

4. Unless First Aid responders are certified and qualified, no employee of SCULL CONSTRUCTION SERVICE, INC. shall perform rescue or medical services outside of those which are practical.

5. In the event of a fire or other emergency, it is preferred that the supervisors be informed immediately so that he/she can make other necessary notifications. If for any reason this is not possible, then a member of MANAGEMENT shall be notified at once. All emergency phone numbers shall be available at the job site.

6. If questions arise concerning any aspect of this plan, or if further information is necessary, then the Safety Director should be notified.

7. The supervisors shall be trained to assist in the safe and orderly evacuation of employees.

8. The emergency action plan shall be reviewed by and explained to employees at the following times:
   - At the beginning of each new job assignment.
   - Whenever the employee's responsibilities or designated duties under the plan change.
   - Whenever the plan itself is changed.

9. All accidents, incidents, and near misses will be reported to the supervisor immediately. An accident/incident investigation will be initiated within 48 hours and all documentation pertaining to the investigation as far as corrective action and resolutions will be maintained for a period of 5 years.

10. This emergency action plan shall be available on every job site.

Hot Work Permits
Employees of SCULL CONSTRUCTION SERVICE, INC. are informed that no work that involves hazards pertaining to ignition, flames, electricity or other spark causing possibilities will be performed without obtaining a hot work permit from the contracting authority and that all provisions of the permit are explained to and understood by the employee.

Trade Secret Confidentiality
At times when employees will be working on the premises of different fuel or chemical producing companies, they will respect the confidentiality of trade secret information when the process safety information is given to them.

Conclusion
SCULL CONSTRUCTION SERVICE, INC. pledges to review and update this program annually or when changes in the process occur. Whenever changes are made, all employees will undergo retraining and this will be documented and placed in the employee safety file.

SCULL CONSTRUCTION SERVICE, INC.

Scaffolds (Users Only)

Training Requirements

SCULL CONSTRUCTION SERVICE, INC. requires that each employee who performs work while on a scaffold be trained by the Safety Director, Superintendent and/or outside consultants, who are qualified in scaffold use, have the ability to recognize the hazards associated with the type of scaffold being used and understands the procedures to control or minimize those hazards. The training shall include the following areas, as applicable:

- The nature of any electrical hazards, fall hazards and falling object hazards in the work area;
- The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used;
- The proper use of the scaffold, and the proper handling of materials on the scaffold;
- The maximum intended load and the load-carrying capacities of the scaffolds used; and
- Never use a scaffold that is tagged out with the following tag: **DEFECTIVE SCAFFOLD – DO NOT USE UNTIL REPAIRED OR REPLACED!**
- Any other pertinent requirements of subpart L.

SCULL CONSTRUCTION SERVICE, INC. shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by the Safety Director or Superintendent, to recognize any hazards associated with the work in question. The training shall include the following topics, as applicable:

- The nature of scaffold hazards;
- The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question;
- The design criteria, maximum intended load-carrying capacity and intended use of the scaffold;
- Any other pertinent requirements of this subpart.

When SCULL CONSTRUCTION SERVICE, INC. has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, we will retrain each such employee so that the requisite proficiency is regained. Retraining shall be required in at least the following situations:

- Where changes at the work-site present a hazard about which an employee has not been previously trained; or
- Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or

- Where inadequacies have affected employee's work, involving scaffolds indicate that the employee has not retained the requisite proficiency.

Inspections and Tags

The Safety Director or Superintendent shall inspect all scaffolds and scaffold components for visual defects before each work shift, after any occurrence which could affect a scaffold's structural integrity and during use to insure that such scaffolds are safe for employees to use. **A green tag w/black print – "OK – DO NOT ALTER** shall be affixed to the scaffold stating that the scaffold has been erected to meet the OSHA standards and is safe for all crafts.

If the scaffold inspections find the scaffolds defective and not meeting the OSHA requirements and that employees working from the scaffold must use an approved safety harness the scaffold must be tagged with a **yellow tag w/black print - "CAUTION This scaffold does NOT MEET OSHA Specifications."** That scaffold may not be used until the defects are corrected and/or fall protection is used if required.

If the scaffold is being erected, taken down or has been found defective, it shall be tagged with a **red tag w/black print - "DANGER - DO NOT USE THIS SCAFFOLD - KEEP OFF.**

Examples of these tags are found following this section.

Employees shall comply with the above tags and all supervisors shall enforce this rule. The defective scaffolds shall be immediately repaired or replaced, braced to meet those provisions, or removed from service until repaired.

Modifications

Only SCULL CONSTRUCTION SERVICE, INC. Safety Director or Superintendent is qualified and allowed to modify scaffolding systems used in our company. **Non-qualified employees shall not make any modifications of the scaffolding systems.** Non-qualified employees attempting to modify scaffolding will be disciplined according to our Disciplinary Program.

SCULL CONSTRUCTION SERVICE, INC.

TRENCHING/SHORING

Scope and application

The following rules shall apply to all open excavations made in the earth's surface. Excavations are defined to include trenches.

Specific excavation requirements

Surface encumbrances

All surface encumbrances that are located to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees.

Underground installations

1. The estimated location of utility installations, such as sewer, telephone, fuel, electric, waterlines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.
1. Utility companies or owners shall be contacted within established or customary local response times
   installations prior to the start of actual excavation. When utility companies or owners cannot respond to a request to locate their utilities within 24 hours, or cannot establish the exact location of these installations, SCULL CONSTRUCTION SERVICE, INC. may proceed, provided they do so with caution, and provided detection equipment or other acceptable means to locate the utilities are used.
2. When excavation operations approach the estimated location of underground installations, the exact
   location of the installations shall be determined by safe and acceptable means.
3. While the excavation is open, underground installations shall be protected, supported or removed as
   necessary to safeguard employees.

Access and egress

A stairway, ladder, ramp, or other safe means of egress shall be located in trench excavations that are 4 feet or more in depth to require no more than 25 feet of lateral travel for employees.

Exposure to vehicular traffic

Employees exposed to public vehicular traffic shall be provided with **and shall wear,** warning vests or other suitable garments marked with or made of reflectorized or high visibility material.

Exposure to falling loads

No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.

Warning system for mobile equipment

When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

Hazardous atmospheres

Where oxygen deficiency(less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby, the atmospheres in the excavation **shall be tested before employees enter excavations greater than 4 ft. in depth.**

Adequate precautions shall be taken to prevent employee exposure to hazardous atmospheres. These precautions include providing proper respiratory protection or ventilation.

Adequate precaution shall be taken such as providing ventilation, to prevent employee exposure to an atmosphere containing a concentration of a flammable gas in excess of 20 percent of the lower flammable limit (LFL) of the gas.

When controls are used that is intended to reduce the level of atmospheric contaminants to acceptable levels, testing shall be conducted as often as necessary to ensure that the atmosphere remains safe.

When controls are used that is intended to reduce the level of atmospheric contaminants to acceptable levels, **testing shall be conducted as often as necessary to ensure that the atmosphere remains safe.**

Emergency rescue equipment

Emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment shall be attended when in use.

Protection from hazards associated with water accumulation

Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions may vary with each situation, but could include **special support or shield systems, water removal, or use of a safety harness and lifeline.**

If water is controlled or prevented from accumulating by the use of water removal equipment, the equipment and operations shall be monitored by a **competent person who is the Safety Director.**

Excavations subject to runoff from heavy rains will require an **inspection by the competent person.**

Stability of adjacent structures
Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, support systems such as shoring, bracing, or underpinning shall be provided to ensure their stability for the protection of employees.

Protection of employees from loose rock or soil

Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation **face.** Such protection shall consist of scaling to remove loose material; installation of protective barricades at intervals as necessary on the face to stop and contain falling material; or other means of equivalent protection.

All materials and equipment **shall be placed and kept at least 2 feet from the edge of the excavation, or retaining devices shall be used to prevent material and equipment from falling or rolling into excavations.**

Inspections

Daily inspections of excavations, the adjacent areas, and protective systems shall be made by the **competent person** for evidence of a situation that could result in possible cane-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. Inspections shall also be made after every rainstorm or other hazard-increasing occurrence.

Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

Competent person

The competent person for SCULL CONSTRUCTION SERVICE, INC. is t**he General Manage and Superintendents.** He/she is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to

employees. **The Safety Director or Superintendents have authorization to take prompt corrective measures to eliminate the conditions.**

The Safety Director or Superintendents are responsible for protecting all employees in an excavation from cave-ins by an **adequate protective system designed in accordance with the OSHA standards.**

Fall protection

Walkways with the required guardrails shall be provided where employees or equipment are required or permitted to cross over excavations.

Requirements for protective systems

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with the OSHA standard 1926.652(b) or (c). Except when excavations are made entirely in stable rock, or in excavations are less than 5 feet in depth and examination of the ground by a competent person provides no indication of a potential cave-in.

Protective systems shall have the capacity to resist without failure all loads that are intended or could be reasonably expected to be applied or transmitted to the system.

The slopes and configurations of sloping and benching systems shall be selected and constructed in accordance with the requirements of the OSHA standard.

Materials and equipment used for protective systems shall be free from damage or defects that might impair their proper function. When the material or equipment is damaged, a competent person shall examine the material or equipment and evaluate its suitability for continued use. If the competent person cannot assure that they are able to support the intended loads or is otherwise suitable for safe use, then it must be removed from service and shall be evaluated and approved by a registered professional engineer before being returned to service.

Shield Systems

Shield systems shall not be subjected to loads exceeding those which the system was designed to withstand.

Shields shall be installed in a manner to restrict lateral or other hazardous movement of the shield in the event of the application of sudden lateral loads.

Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

Employees shall not be allowed in shields when they are being installed, removed, or moved **vertically.**

Excavations of earth material to a level not greater than 2 feet below the bottom of a shield shall be permitted. Only if the shield is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the shield.

Soil classification and design of protection

Soil classification as found in the Appendix A to 1926 Subpart P shall be used to determine they type of protection necessary in an excavation.

Appendix B to 1926 Subpart P contains specifications for sloping and benching when used as methods of protecting employees working in excavations from cave-ins.

SCULL CONSTRUCTION SERVICE, INC.
Welding, Cutting, and Hot Work

GENERAL REQUIREMENTS

Fire Prevention and Protection

Basic Precautions
The basic precautions for fire prevention in welding or cutting work are:

- If the object to be welded or cut cannot readily be moved, all movable fire hazards in the vicinity shall be taken to a safe place.

- If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shall be used to confine the heat, sparks, and slag, and to protect the immovable fire hazards.

- If the above requirements cannot be met, then welding and cutting shall not be performed.

Special Precautions
Suitable fire extinguishing equipment shall be maintained in a state of readiness for instant use. Such equipment may consist of pails of water, buckets of sand, hose, or portable extinguishers depending upon the nature and quantity of the combustible material exposed.

Firewatchers are required whenever welding or cutting is performed in locations where other than a minor fire might develop, or any of the following conditions exist:

- Appreciable combustible materials, in building construction or contents, closer than 35 feet to the point of operation.

- Appreciable combustibles more than 35 feet away but are easily ignited by sparks.

A fire watch shall be maintained for at least a half-hour after completion of welding or cutting operations to detect and extinguish possible smoldering fires.

Assigned firewatchers will be trained in the use of the fire extinguishing equipment and familiar with the facilities for sounding an alarm in the event of fire.

Cutting or welding shall not be permitted in the following situations:

- In areas not authorized by management. Before cutting or welding is permitted, the area shall be inspected by the Safety Director, who is the individual responsible for authorizing cutting and welding operations. The Safety Director shall designate precautions to be followed in granting authorization to proceed. This shall be done in the form of a written permit. 1910.252 (a)(2)(iv)

- In sprinklered buildings while such protection is impaired.

- In the presence of explosive atmospheres (mixtures of flammable gases, vapors, liquids, or dusts with air), or explosive atmospheres that may develop inside uncleaned or improperly prepared tanks or equipment which have previously contained such materials, or that may develop in areas with an accumulation of combustible dusts.

Welding or Cutting Containers

No welding, cutting, or other hot work shall be performed on used drums, barrels, tanks or other containers until they have been cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids, or other materials which when subjected to heat, might produce flammable or toxic vapors. Any pipelines or connections to the drum or vessel shall be disconnected or blanked.

Protection of Personnel

General

A welder or helper working on platforms, scaffolds, or runways shall be protected against falling with railings, safety belts, lifelines, or some equally effective safeguards.

Eye Protection

Helmets or hand shields shall be used during all arc welding or arc cutting operations, excluding submerged arc welding. Helpers or attendants shall be provided with proper eye protection.

Helmets and hand shields shall be made of a material which is an insulator for heat and electricity.

Helmets, shields, and goggles shall not be readily flammable and shall be capable of withstanding sterilization.

Helmets and hand shields shall be arranged to protect the face, neck, and ears from direct radiant energy from the arc.

Where the work permits, the welder should be enclosed in an individual booth painted with a finish of low reflectivity such as zinc oxide (an important factor for absorbing ultra-violet radiations) and lampblack, or shall be enclosed with non-combustible screens similarly painted. Booths and screens shall permit circulation of air at floor level. Workers or other persons adjacent to the welding areas shall be protected from the rays by non-combustible or flameproof screens or shields or shall be required to wear appropriate goggles.

Protective Clothing

Employees exposed to the hazards created by welding, cutting, or brazing operations shall be protected by personal protective equipment in accordance with the requirements of OSHA Standard 1910.132. appropriate protective clothing required for any welding operation will vary with the size, nature, and location of the work to be performed. Welders should always select clothing materials which will provide maximum protection from sparks and hot metal. Protective

eyewear, safety shoes, clean, fire-resistant clothing, and fire-resistant gauntlet gloves are recommended. Additionally, the shirt should have full sleeves, no pockets and should be work outside the trousers with collar buttoned. The trousers should have no cuffs and should extend well down to the safety shoes.

All protective equipment shall be provided at no cost to the employee.

Work in Confined Spaces
A confined space is defined in this regulation to be a relatively small or restricted space such as a tank, boiler, pressure vessel, or small compartment of a ship.

Adequate ventilation is a prerequisite to work in confined spaces. Ventilation requirements are discussed later in this section.

When welding or cutting is being performed in any confined space, the gas cylinders and welding machines shall be left on the outside.

Where welders must enter a confined space through a manhole or other small opening, means shall be provided for quickly removing them in case of emergency. An attendant with a pre-planned rescue procedure shall be stationed outside to observe the welder at all times and be capable of putting rescue operations into effect.

When arc welding is to be suspended for any substantial period of time, such as during lunch or overnight, all electrodes shall be removed from the holders and the holders carefully located so that accidental contact cannot occur and the machine disconnected from the power source.

In order to eliminate the possibility of gas escaping through leaks of improperly closed valves, when gas welding or cutting, the torch valves shall be closed and the fuel-gas and oxygen supply to the torch positively shut off at some point outside the confined area whenever the torch is not to be used for a substantial period of time. Such as during lunch or overnight, where practicable, the torch and hose shall also be removed from the confined space.

Health Protection and Ventilation
Local exhaust or general ventilating systems are required when welding or cutting is done with materials not specifically mentioned in this section. These systems shall be arranged to keep the amount of toxic fumes, gases, or dusts below the maximum allowable concentration as specified in 1910.1000. These materials—fluorine compounds, zinc, lead, beryllium, cadmium, mercury, cleaning compounds, and stainless steel are particularly hazardous and have specific control requirements.

When welding must be performed in a space entirely screened on all sides, the screens shall be so arranged that no serious restriction of ventilation exists. It is desirable to have the screens so mounted that they are about 2 feet above the floor unless the work is performed at so low a level that the screen must be extended nearer to the floor to protect nearby workers from the glare of welding.

First aid equipment shall be available at all times. All injuries shall be reported as soon as possible for medical attention. First aid shall be rendered until medical attention can be provided.

Training
It is the policy of SCULL CONSTRUCTION SERVICE, INC. to permit only trained and authorized personnel to operate welding cutting equipment.

All welders and cutters are trained and tested by the Safety Director or Superintendents on the equipment they will be operating before they begin their job. Training will cover the operational hazards of our welding and cutting operations, including:

- Hazards associated with the particular make and model of with welding and cutting equipment
- Hazards of the workplace, and
- General hazards that apply to the operation of all or most welding and cutting equipment.

All training will be evaluated and documented.

OXYGEN-FUEL GAS WELDING AND CUTTING – 1910.253

General Requirements
Under no conditions shall acetylene be generated, piped (except in approved cylinder manifolds, (or utilized at a pressure in excess of 15 psig (pounds per square inch gauge) or 30 psia (pounds per square inch absolute). The 30-psia limit is intended to prevent unsafe use of acetylene in pressurized chambers such as caissons, underground excavations, or tunnel construction.

This requirement is not intended to apply to storage of acetylene dissolved in a suitable solvent in cylinders manufactured and maintained according to U.S. Department of Transportation requirements, or to acetylene for chemical use.

Cylinders and Containers

Approval and Marking
All portable cylinders used for the storage and shipment of compressed gases shall be constructed and maintained in accordance with the regulations of the U.S. Department of Transportation, 49 CFR parts 171-179.

Compressed gas cylinders shall be legibly marked, for the purpose of identifying the gas content, with either the chemical or trade name of the gas. Such marking shall be by means of stenciling, stamping, or labeling, and shall not be readily removable. Whenever practical, the marking shall be located on the shoulder of the cylinder.

Storage of Cylinders – General
Cylinders shall be kept away from radiators and other sources of heat.

Inside of buildings, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet (6.1 m) from highly combustible materials.

Cylinders should be stored in definitely assigned places away from elevators, stairs, or gangways, or other areas where they might be knocked over or damaged by passing or falling objects, or subject to tampering.

Empty cylinders shall have their valves closed.

Valve protection caps, where the cylinder is designed to accept a cap, shall always be in place, hand-tight, except when cylinders are in use or connected for use. The valve protection cap is designed to take the blow in case the cylinder falls.

Fuel Gas Cylinder Storage
Inside a building, cylinders, except those in actual use or attached ready for use, shall be limited to a total gas capacity of 2,000 cubic feet (56m^3) or 300 pounds of liquefied petroleum gas.

Acetylene cylinders shall be stored valve end up. If the cylinder is on its side, acetone may leak out and create a dangerous condition.

Oxygen Storage
Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1 m) or by a non-combustible barrier at least 5 feet (1.5 m) high having a fire-resistance rating of at least one-half hour. This requirement is intended to reduce the possibility of any fire support when a fire occurs among the fuel gas storage.

Operating Procedures
Cylinders, cylinder values, couplings, regulators, hose, and apparatus shall be kept free from oily or greasy substances. Oxygen cylinders or apparatus shall not be handled with oily hands or gloves. A jet of oxygen must never be permitted to strike an oily surface, greasy clothes, or enter a fuel oil or other storage tank.

Valve-protection caps shall not be used for lifting cylinders from one vertical position to another. The cap may accidentally and suddenly come loose. Should the cylinder fall or be knocked over, the valve may be damaged or sheared off, causing a sudden release of pressure.

Should the valve outlet of a cylinder become clogged with ice, thaw with warm-not boiling-water.

Unless cylinders are secured on a special truck, regulators shall be removed and valve-protection caps, when provided for, shall be put in place before cylinders are moved.

Cylinders not having fixed hand wheels shall have keys, handles, or non-adjustable wrenches on valve stems while these cylinders are in service.

Unless connected to a manifold, always attach a regulator to the compressed gas cylinder before use. Make certain that the regulator is proper for the particular gas and service pressure. Make sure the regulator is clean and has a clean filter installed in its inlet nipple.

Before attaching the regulator, remove the protective cap from the cylinder. Stand to one side of the cylinder. Open the cylinder valve slightly for an instant, and then close it. This "cracking" of the cylinder valve will clean the valve of dust or dirt which may have accumulated during storage. Dirt can damage critical parts of a regulator, and may cause a fire or explosion.

Before a regulator is removed from a cylinder valve, the valve shall be closed and the gas released from the regulator.

An acetylene cylinder valve shall not be opened more than one and one-half turns of the spindle. This permits adequate flow of acetylene and allows ready closing of the valve in an emergency.

Hose and Hose Connections
The operator must use the proper hose. Fuel gas hose is usually red (sometimes black) and has a left-hand threaded nut for connecting to the torch. Oxygen hose is green and has a right-hand threaded nut for connecting to the torch.

Hose and hose connections shall be clamped or otherwise securely fastened in a manner that will withstand, without leakage, twice the pressure to which they are normally subjected in service, but in no case less than a pressure of 300 psi. Oil-free air or an oil-free inert gas shall be used for the test.

Pressure-Reducing Regulators
Pressure-reducing regulators shall be used only for the gas and pressures for which they are intended. When regulators or parts of regulators, including gages, need repair, the work shall be performed by skilled mechanics who have been properly instructed. Most production shops do not have the proper equipment to make repairs. For any equipment repairs or if there are questions about performance reliability, contact the manufacturer.
Gages on oxygen regulators shall be marked "USE NO OIL."

Arc Welding and Cutting
Welding equipment shall be chosen for safe application to the work to be done.

Employees designated to operate arc-welding equipment shall be properly instructed and qualified to operate such equipment.

Employees assigned to operate or maintain arc-welding equipment shall be trained by the Safety Director or Superintendent on the requirements of arc welding and with 1910.252(a), (b), and (c) of Subpart Q.

Silica Policy

Crystalline silica is a dangerous mineral. Scull Construction/SWS recognizes that exposure to silica dust can cause silicosis (a deadly lung disease) and may cause lung cancer. Scull Construction takes responsibility for protecting the safety and health of its employees.

The Occupational Silica Dust Control Program includes the following parts:

1. Hazard Identification
2. Worksite Air Monitoring
3. Employee Training
4. Housekeeping Procedures
5. Engineering Controls
6. Personal Hygiene
7. Personal Protective Equipment
8. Medical Examinations and Evaluation
9. Record Keeping
10. Emergency First Aid Procedures for Silica Dust
11. Spill and Disposal Procedures

Part 1: Hazard Identification

Scull Construction/SWS recognizes that the following job/task can produce silica dust at our workplace. (Sandblasting, concrete cutting, determine hazards for each job site) The competent person on site will

be the jobsite superintendent for Scull Construction or Site Work Specialists.

- *Concrete Cutting*
- *Sanding drywall*
- *CMU Demolition*
- *Drywall/Building demolition*
- *Concrete joint cutting*
- *Hammer drilling*
- *Floor grinding*
- *Concrete demo*

When any of these jobs/tasks are performed by a worker employed by Scull Construction or SWS they will be protected by the Occupational Silica Dust Exposure Control Program.

Part 2. Worksite Monitoring

When a job/task is identified as a silica dust hazard the process and the worker's breathing zone will be monitored for silica dust concentrations. Employee exposure measurements must represent actual breathing zone exposure conditions for each employee.

Each job/task identified in part one will be monitored every four months and whenever a change is made to the process. Engineering controls will be monitored immediately after implementation and quarterly thereafter.

Employees will be able to view all air monitoring records; copies of the records can be found at Scull Construction's office. Doug Krull; safety director is responsible for the worksite monitoring program.

Part 3. Employee Training

All employees working in the job/tasks identified in part one are required to complete a training course prior to working in the exposure area. Workers will be trained when first assigned to the job/task and annually thereafter.

Training for the Occupational Silica Dust Exposure will include the following topics:

1. Health hazards of silica dust exposure (including signs and symptoms of silicosis).
2. Operations and materials that can produce silica dust exposure.
3. Engineering and work practice controls used to protect them from exposures.
4. The importance of proper equipment and control maintenance.
5. Housekeeping procedures.
6. Proper use of respirators and the respirator standard.
7. Personal Hygiene procedures to reduce exposures.
8. How smoking increases the risk of developing silicosis and other lung damage.
9. The details of the Occupational Silica Dust Exposure Control Program.

Training will be performed by Doug Krull; Safety Director. Records of attendance, dates of training, and training materials will be documented and located at Scull Construction's office. Additional training or reference material on silica dust exposure will be made available upon request to employees.

Part 4. Housekeeping Procedures

Dry sweeping and the use of compressed air are prohibited for removing dust in jobs/task identified in part one. Work areas and equipment covered by dust will be cleaned at the end of every shift by using a HEPA filter vacuum. Wet clean up may also be used to remove dust.

Waste materials will be stored and will be removed at least weekly.

Supervisors are responsible for ensuring that work areas are free from dust at the end of each shift.

Part 5. Engineering Controls

Scull Construction/SWS will use engineering controls whenever possible to control silica dust exposures. Ventilation systems will be inspected and maintained by the jobsite superintendent.

Ventilation systems will be checked at least weekly to determine if they are functioning properly. Scull Construction will not use abrasives that contain more than 1% crystalline silica during blasting options. Jobsite superintendents are responsible for inspecting and maintaining engineering controls on all jobs.

Scull Construction will also implement the following engineering controls based on OSHA's Table 1 of the new standard:

Part 6. Personal Hygiene

Employees working at the job/tasks identified in part one will change out of contaminated clothing and work boots before leaving the jobsite. Contaminated clothing will be vacuumed with the HEPA filer vacuum to remove silica dust. Vacuums will be located at jobsite trailers.

When worksites are located in the field away from normal operation, Scull Construction will provide portable containers to hand washing.

Employees will not eat, smoke, or use smokeless tobacco in the areas identified in part one.

Part 7. Personal Protective Equipment

When respirators are required to protect employees for silica dust exposure, the Scull Construction Respirator Program will be strictly followed. Copies of the Respirator Program are located at Scull Construction's office.

Part 8. Medical Surveillance

Any workers working in jobs/tasks identified in part one will be given medical examinations to prevent the development of silicosis fi they are wearing a respirator for more than 30 days during a year.

Medical examinations must include:

- Chest X-rays
- Pulmonary function tests
- Tuberculosis evaluation.

Employees whose chest X-rays show changes consistent with the development of silicosis are customary removed from job/tasks that expose them to silica dust. Input from the attending physician will be considered in making this decision.

Medical records will be made available at Scull Construction's office.

Part 9. Recordkeeping

All training, medical records, air monitoring, engineering control maintenance records, and injury records will be kept and located at Scull Construction's office. Doug Krull; safety director is responsible for the recordkeeping program.

Part 10. Emergency First Aid Procedures for Silica Dust

1. Eye Exposure

   If crystalline silica dust gets into the eyes, wash immediately with large amounts of water, lifting the lower and upper lids occasionally. If irritation is present after washing, get medical attention. Portable eyewashes will be kept at jobsites in the field away from the company locations.

2. Breathing

   If a person breathes in large amounts of crystalline silica dust, move the exposed person to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Part 11. Spill and Disposal Precautions

If crystalline silica is spilled or released in hazardous concentrations, the following steps must be taken:

1. Ventilate the area of the spill or release.
2. Persons doing the clean-up are required to wear appropriate respirators.
3. Collect spilled material in the most convenient and safe manner for reclamation or disposal in a secured sanitary landfill.