CHATHAM COUNTY PURCHASING DEPARTMENT

ADDENDUM NO. 1 TO BID NO. 16-0092-4

FOR: CHATHAM COUNTY DETENTION CENTER EXPANSION - PROJECT 2

PLEASE SEE THE FOLLOWING FOR ADDITIONS, CLARIFICATIONS AND/OR CHANGES:

PLEASE SEE ATTACHED SHEETS (55 pages) WHICH INCLUDE:

1. Responses to Questions received
2. REVISED Bid Form
3. *Section 01 1100 - Correctional Institution - Supplemental Provisions: Attachment C*
4. *Section 01 1201 - Geotechnical Engineering Report*
5. *Section 08 7100 - Door Hardware - K-9 Building*
6. *Section 10 1419 - Dimensional Letter Signage*
7. Supplemental Drawing SD-A101
8. Supplemental Drawing SD-A102

NOTE: There will be an Addendum 2 that will contain responses to additional questions that have been received. Addendum 2 will be issued within the next 5 to 7 days.

THE PROPOSER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.

==========

BID OPENING REMAINS: 2PM, TUESDAY, NOVEMBER 15, 2016

==========

11-4-16
DATE

ROBERT E. MARSHALL
SENIOR PROCUREMENT SPECIALIST
CHATHAM COUNTY

SECTION 00 9111

ADDENDUM NUMBER 1

PARTICULARS:

DATE: NOVEMBER 4, 2016

PROJECT: CHATHAM COUNTY DETENTION CENTER EXPANSION PROJECT 2

PROJECT NUMBER: 14-2200-0273

OWNER: CHATHAM COUNTY BOARD OF COMMISSIONERS

PROJECT MANAGEMENT, ARCHITECTURE, AND ENGINEERING:

CDI INFRASTRUCTURE, LLC DBA L.R. KIMBALL

615 W HIGHLAND AVENUE

EBENSBURG, PA 15931

PHONE NUMBER: 814-472-7700

FAX NUMBER: 814-472-7712

TO: SINGLE PRIME CONTRACT BIDDERS :

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE ORIGINAL BIDDING DOCUMENTS DATED OCTOBER 2016 , WITH AMENDMENTS AND ADDITIONS NOTED BELOW.

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE BID FORM . FAILURE TO DO SO MAY DISQUALIFY THE BIDDER.

GENERAL CHANGES TO THE INVITATION TO BID:

THE FOLLOWING DATES WILL BE FOLLOWED FOR THE BID PROCESS:

Item #01. **ADDITIONAL DATE: Site Visit 3: Non mandatory site visit.** Open to all single primes and subcontractors. **Monday, November 7, 2016, at 1:00 pm** at the Chatham County Detention Center. Park in Lots B or D, enter into Main Lobby and wait to be escorted. This will be the final opportunity for a site visit.

Item #02. **REVISED DATE:** Last day for written questions from Bidders: **Tuesday, November 8, 2016 at 10:00 am**.

CHANGES TO THE PROJECT MANUAL:

SECTION 00 0110 - TABLE OF CONTENTS - VOLUME 2

Item #03. Add "01 1201 - Geotechnical Engineering Report".

SECTION 01 1000 - SUMMARY

Item #04. Paragraph 1.03.A.1: Delete the paragraph in its entirety and replace with the following:

1. For the purpose of this specification, and the project, all references to "secure perimeter" shall be considered all areas within the secured building of the Main Jail Building; including sally-ports, housing pods, corridors, and contiguous spaces.

Item #05. Paragraph 1.03.A.2: Add the paragraph in its entirety:

2. Access to the grade levels, roof levels and Component 2 Building shall not be considered within the secure perimeter. Other protocols and restrictions may apply to access these areas.

SECTION 01 1100 - CORRECTIONAL INSTITUTION - SUPPLEMENTAL PROVISIONS

Item #06. Paragraph 1.13.A: Delete the paragraph in its entirety and replace with the following:

A. The contractor shall provide the following information to the Owner's on-site representative concerning employees of the Contractor who will be entering inside the secured building. Security check for construction worker is not required for access to the grade levels, roof levels, and Component 2.
   1. Name (including any previous names)
   2. Date of Birth
   3. Social Security Number
   4. Drivers License Number
   5. Photocopy of Drivers License

SECTION 01 2300 - ALTERNATES

Item #07. Paragraph 3.01.N: Add the following paragraph in its entirety.

3.01.N. Alternate No. 14,

Component 2: Alternate Bid shall provide Johnson Controls system as indicated below. base Bid shall be Temperature Control System shall be manufactured and installed by Siemens Building Technologies, Inc. Building Automation and shall be an extension of the existing Siemens System.

1. A Temperature Control System which is in full compliance with this specification manufactured and installed by Johnson Controls is acceptable as an Alternate Bid. Johnson Controls is not acceptable under the base bid.
2. Under Alternate Bid Johnson Controls shall provide a fully standalone control system for the renovation of Unit 5 Building. Johnson Controls shall provide a PC based work station in each of these buildings. The system shall be capable of functioning as a standalone system. The system shall also be capable of being converted to a WEB based system with full security control established by Chatham personnel. Provide 80 hours training to Chatham Personnel as part of this alternate bid.
3. Alternate's price will indicate the difference of cost (add/or deduct) between Siemens and Johnson Controls.
4. Refer to Specification Section 23 0923 - Instrumentation and Control for HVAC.

SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS

Item #08. Paragraph 1.04.B: Delete the paragraph in its entirety and replace with the following:

B. Water Service: Non-potable water from the Owner's existing groundwater well is available for use, free of charge, if the contractor complies with the following; otherwise, the contractor will be responsible for the temporary water. The well is located near the existing building of Unit 5.
   1. Maximum Usage: 1,000 gallon per month.
   2. Contractor shall be responsible for necessary tap-in, metering, and removals at the end of the project. The location of the tap-in shall be coordinated with the Civil Engineer and Owner.
   3. Contractor shall be responsible for the testing of the water quality as required for construction.

Item #09. Paragraph 1.04.C: Delete the paragraph in its entirety and replace with the following:

C. Electric Power Service: Unit 5 will be powered throughout construction. The Contractor may use the electric power, without a fee, during construction from Unit 5 for Component 2 construction. This power will be available for Unit 5 construction activities only. Contractor will be responsible for hook-up and disconnect of this temporary service. Contractor will be responsible for making arrangements for any additional temporary power.

Item #10. Paragraph 2.02.D.3.i: Delete the paragraph in its entirety and replace with the following:

i. Contractor to provide all supplies required for the proper functioning of a copier/scanner/printer; including paper, ink, and toner for the entire duration of the project.

Item #11. Paragraph 2.02.D.3.k: Delete the paragraph in its entirety and replace with the following:

k. Contractor to provide wireless internet capability.

SECTION 08 71000 - DOOR HARDWARE - K-9 BUILDING

Item #12. Add the attached section in its entirety.

SECTION 10 1419 - DIMENSIONAL LETTER SIGNAGE

Item #13. Replace this section in its entirety with the section attached to this addendum.

SECTION 23 0923 - INSTRUMENTATION AND CONTROL FOR HVAC

Item #14. Paragraph 1.03.A.1: Delete the paragraph in its entirety and replace with the following:

1. Basis of Design Temperature Control System shall be manufactured and installed by Siemens Building Technologies, Inc. Building Automation and shall be an extension of the existing Siemens System.

Item #15. Paragraph 2.01.B: Delete the paragraph in its entirety.

CHANGES TO THE PROJECT DRAWINGS:

DRAWING G0.003

Item #16. Revise note at existing Loading Dock (2013 ADDITION G) fence to read: PORTION OF EXISTING FENCE TO BE TAKEN DOWN FOR CONSTRUCTION OF COMPONENT 5 (AND COMPONENT 1, IF NECESSARY). AT COMPLETION OF COMPONENT 5 (AND 1), NEW SECURITY FENCE TO BE INSTALLED WITH Tieing TO EXISTING BUILDING AND FENCING.

DRAWING A3.200

Item #17. Revise Drawing according to Supplemental Drawing SD-A101 issued with this addendum.

DRAWING A2.201

Item #18. Revise Drawing according to Supplemental Drawing SD-A102 issued with this addendum.

ATTACHMENTS:

QUESTIONS AND ANSWERS

REVISED BID FORM

SECTION 01 1100 - CORRECTIONAL INSTITUTION - SUPPLEMENTAL PROVISIONS: ATTACHMENT C

SECTION 01 1201 - GEOTECHNICAL ENGINEERING REPORT

SECTION 08 7100 - DOOR HARDWARE - K-9 BUILDING

SECTION 10 1419 - DIMENSIONAL LETTER SIGNAGE

SUPPLEMENTAL DRAWING SD-A101

SUPPLEMENTAL DRAWING SD-A102

END OF ADDENDUM NUMBER 1

Number	Question	Answer
1	Invitation to Bid - Article 1.18.5: Are financials to be provided with the bid?	Financial documentation is not required to be submitted with the bid.
2	Invitation to Bid - Article 1.18.6: Are safety records and plan to be provided with the bid?	Safety record and plan are not required to be submitted with the bid.
3	Invitation to Bid - Article 1.18.8: Are insurance and bonding to be provided with the bid?	The Bid bond is required to be submitted with the bid. Insurance and Payment and Performance bonds are to be submitted prior/at contract. The signed Surety Requirements Form is to be submitted with the bid.
4	Is security clearance required for all construction personnel?	Construction personnel working a) outside the secure perimeter and b) within the secure perimeter but outside the secure building(s) do not require a security background clearance check. A security background clearance check will be required for all construction personnel working within the secure building(s). Applicants shall use the attached consent form. There will be no charge to process the security clearance.
5	General – Equal Products/Manufacturers	During the bidding phase products are not approved or disapproved. Equal products are reviewed for acceptance after bid opening and prior to contract award at DeScoping submitted through the General Contractor. If your product meets or exceeds the requirements of technical specification then it would be approved when the request is submitted at DeScoping along with all back up information. Burden of proof is on the contractor & supplier. Refer division 1 for additional information.

ALTERNATES

For a full description of Alternates refer Division 01, Section "Alternates". Bidders must submit a bid for each Alternate listed. Price shall be for the complete installation of the work including all labor, material, equipment, delivery, taxes, Overhead and Profit, Bonds and Insurance.

Chatham County reserves the right to select none/ any one/ or more of the Alternates without any order of priority. The County reserves the right to negotiate the cost of any Alternate. For any accepted Alternate, work shall be executed under the same conditions as other work of the Contract.

Alternate	Description	Lump Sum Cost
Alternate #1	Component 1 – Modified Bitumen Roofing System	
	Add	$
	Deduct	$
Alternate #2	Component 2 - Qualified Security System (difference between MTI)	
	Add	$
	Deduct	$
Alternate #3	Component 3 - New K9 building and related Civil	
	Add	$
	Deduct	$
Alternate #4	Component 4 - Renovate Work Release Administration building	
	Add	$
	Deduct	$
Alternate #5	Component 5 - Renovate existing Gym into Auditorium	
	Add	$
	Deduct	$
Alternate #6	Component 5 - Seating in Auditorium	
	Add	$
	Deduct	$

Alternates continued

Alternate	Description	Lump Sum Cost
Alternate #7	Component 5 – Furnish and Install UPS server	
	Add	$
	Deduct	$
Alternate #8	Component 6 – Group A Canopies, Frames and Doors	
	Add	$
	Deduct	$
Alternate #9	Component 6 – Group B Canopies, Frames and Doors	
	Add	$
	Deduct	$
Alternate #10	Components 7 and 2 – Exterior Sanitary Line	
	Add	$
	Deduct	$
Alternate #11	Component 8 – Paving A	
	Add	$
	Deduct	$
Alternate #12	Component 8 – Paving B	
	Add	$
	Deduct	$
Alternate #13	Component 8 – Paving C	
	Add	$
	Deduct	$
Alternate #14	Component 2 – Johnson Controls (difference between Siemens)	
Addendum 1	Add	$
	Deduct	$

End of Alternates

Attachment C

CRIMINAL JUSTICE RELEASE WAIVER FOR APPLICANTS FOR CONSTRUCTION CHATHAM COUNTY DETENTION CENTER EXPANSION PROJECT 2

CONSENT TO BACKGROUND INVESTIGATION

TO: SHERIFF JOHN T. WILCHER
CHATHAM COUNTY SHERIFF'S OFFICE
1050 CARL GRIFFIN DRIVE
SAVANNAH, GEORGIA 31405

Sign this form only in the presence of a Notary Public

NAME _____ SSN _____

STREET ADDRESS _____ DRIVERS LICENSE STATE AND NUMBER (include clear copy of driver's license) _____

CITY/STATE/ZIP _____ DOB _____

SEX _____ RACE _____ HEIGHT (feet/inches) _____ WEIGHT _____

Accept this instrument as my personal request and authorization to conduct a comprehensive personal background investigation including pending charges of any description, a complete traffic history, criminal history (including first offender status if applicable), credit history report, medical records, full and complete disclosure of educational institutions, financial statements and records wherever filed, Veteran's Administration records, employment and pre-employment records, background reports, polygraph examinations or reports, efficiency ratings, and complaints or grievances by or against me. Furthermore, I voluntarily, fully consent to undergo a urinalysis drug screen testing if further required. I am fully aware and consent that the information gathered in this screening process be known to the officers and employees of the Chatham County Sheriff's Office as well as the officers and employees of Chatham County. I am aware that such information is required to obtain a security clearance to perform work in the secure facility. I certify that any person(s) who may furnish such information concerning me shall not be held accountable for giving this information; and I do hereby release said person(s) from any and all liability which may be incurred as a result of furnishing such information. Therefore, I AGREE THAT THE INFORMATION ACQUIRED IN THIS INVESTIGATION BE USED FOR EMPLOYMENT, TERMINATION OR DISCIPLINARY DETERMINATIONS and that such information becomes a matter of public information and is accessible to the public under existing laws.

In consideration of making application for employment and in complete understanding of the foregoing facts and possible results, I agree to hold to all elements of this release waiver and further agree TO HOLD HARMLESS, SHERIFF JOHN T. WILCHER AND ALL OTHER EMPLOYEES OF THE CHATHAM COUNTY SHERIFF'S OFFICE AND CHATHAM COUNTY FROM ANY CIVIL LIABILITY OF ANY KIND OR DESCRIPTION INCLUDING AN ACT OF OMISSION OR COMMISSION.

This declaration is made freely and voluntarily without fear of punishment or promise of reward and with full and complete understanding of the terms and consequences of my actions.

A photocopy of this release form will be valid as an original thereof, even though said photocopy does not contain original writing of my signature.

_____
(Legal Signature)

Sworn and subscribed before me this _____ day of _____, 20_____.

_____
(Notary Public)

SECTION 01 1201
GEOTECHNICAL ENGINEERING REPORT

THE FOLLOWING REPORT ONLY APPLIES TO WORK SITED IN VOLUME 4 OF THE PROJECT DRAWINGS

Geotechnical Engineering Report

Chatham County Detention Center Pavement Improvements
Savannah, Georgia

October 23, 2012
Terracon Project No. ES125119

Prepared for:
Chatham County Engineering Department
Savannah, Georgia

Prepared by:
Terracon Consultants, Inc.
Savannah, Georgia

October 23, 2012

Chatham County Engineering Department
124 Bull Street
Savannah, GA 31402

Attn: Mr. Al Bunguard, P.E.
P: (912) 652-7800
E: AGBundar@chathamcounty.org

Re: Geotechnical Engineering Report
Chatham County Detention Center Pavement Improvements
Savannah, Georgia
Terracon Project No: ES125119

Dear Mr. Bunguard:

Terracon Consultants, Inc. (Terracon) has completed the geotechnical engineering services for the above-referenced project. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning roadway improvements, pavement design and/or rehabilitation considerations, and sidewalk construction recommendations for the proposed project.

We appreciate the opportunity to be of service to you. Should you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

William Snow Jr., M.S. E.I.T.
Staff Geotechnical Engineer

Guoming Lin, Ph.D., P.E., D.GE
Senior Principal

cc: 1 – Client (PDF)
1 – File

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Terracon has completed the Geotechnical Engineering Investigation for the proposed Chatham County Detention Center Pavement Improvements in Savannah, Georgia. The investigation included a field exploration program and engineering evaluation of the subsurface conditions. The field exploration program consisted of sixteen (16) pavement coring with hand auger borings and nine (9) hand auger borings in the unpaved areas. The following geotechnical considerations were identified:

- For the proposed pavement improvement on Carl Griffin Drive and Bunger Pit Road at the Chatham County Detention Center, 16 hand auger borings were performed to a depth of 5 feet below the existing ground surface (BGS). Pavement coring was performed at each test location prior to hand auger borings. In general, the existing pavements have thin asphalt surface course over cement stabilized base and graded aggregate base (GAB). The existing pavement sections consist of 1 to 2 inches of asphalt surface over on 3 to 8 inches of cement stabilized base over graded aggregate base (GAB). One exception was at boring B6 where the asphalt surface was 5 inches thick but no base material was found. The upper 5 feet of soils are mainly sands and silty/clayey sands, which are generally suitable materials for pavement subgrade.

- For the gravel road at the newly completed section of the Chatham County Detention Center, six (6) hand augers were performed to a depth of 5 feet BGS. There was between 6 to 9 inches of GAB on top of a geotextile with the exception of B19 where only 3 inches of GAB was encountered. The upper 5 feet of soils are mainly sands and silty/clayey sands, which are generally suitable materials for pavement subgrade.

- For the proposed sidewalk along Carl Griffin Drive, three (3) hand augers were performed to a depth of 5 feet BGS. The upper 5 feet of soils are mainly clayey sands and sandy clay, which are generally suitable for sidewalk subgrade.

- For improvements over the existing pavement, asphalt overlay may be applied for the roads along the east side between B1 and B5. However, the existing pavement along the north side had extensive cracks and new pavement reconstruction would be more appropriate.

- The existing cement stabilized base and graded aggregate base (GAB) may be re-used for new pavements. The subgrade soils are general suitable materials.

This summary should be used in conjunction with the entire report for design purposes. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the findings and recommendations contained herein. The section titled **GENERAL COMMENTS** should be read for an understanding of the report's limitations.

GEOTECHNICAL ENGINEERING INVESTIGATION
CHATHAM COUNTY DETENTION CENTER PAVEMENT IMPROVEMENTS
Savannah, Georgia

Terracon Project No. ES125119

October 23, 2012

1.0 INTRODUCTION

Terracon has completed the Geotechnical Engineering Investigation for the proposed Chatham County Detention Center Pavement Improvements in Savannah, Georgia. The investigation included a field exploration program and engineering evaluation of the subsurface conditions. The field exploration program consisted of fifteen (15) pavement coring with hand auger boring along Carl Griffin Drive and Bunger Pit Road, seven (7) hand auger borings in the construction site area to the east of the detention center, and three (3) hand auger borings along the edge of Carl Griffin Drive for sidewalk construction. Field exploration records along with a site location map and exploration location plan are included in Appendix A of this report.

The purpose of this study is to provide subsurface information and geotechnical engineering recommendations relative to:

- subsurface soil conditions
- groundwater conditions
- pavement recommendations
- sidewalk construction
- site preparation

2.0 PROJECT INFORMATION

The geotechnical investigation for the proposed Chatham County Detention Center Pavement Improvements included the following 3 elements:

1. Pavement coring and subsurface condition investigation for the proposed pavement improvements on Carl Griffin Drive and Bunger Pit Road;

2. Subsurface investigation using hand auger borings for the perimeter road as part of the newly completed construction;

3. Subsurface investigation using hand auger borings for the sidewalk along Carl Griffin Drive.

3.0 SUBSURFACE CONDITIONS

3.1 Pavement Improvements on Carl Griffin Drive and Bunger Pit Road

We visually observed the pavement conditions along the road. In general, the pavement on the east side (borings B1 to B5 in front of the Detention Center) appeared in satisfactory condition without extensive cracking or potholes. In some localized locations the soils along the edges of the pavement have been eroded by standing water and traffic going off the road. However, the pavements along the north side (borings B5 to B14) and the parking area were in significantly worse condition. There were extensive block cracks on the surface. Asphalt surface was completed worn off in some localized areas.

As shown on the Exploration Location Plan, sixteen (16) hand auger borings were performed to the depth of 5 feet below the existing ground surface (BGS). Pavement coring was performed at each test location prior to hand auger borings. In general, the existing pavement sections consist of 1 to 2 inches of asphalt underlain by 3 to 8 inches of a combination of cement-stabilized base and gravel aggregate base (GAB). However at B6, the asphalt was 5 inches thick and there was no aggregate base underneath. At B14, the asphalt was been worn away completely in some location. In general, the existing pavement was not uniform in section thickness and contains very thin asphalt surface course. The soils underlying the pavement sections in the upper five feet are mainly sands and silty/clayey sands, which are generally suitable materials for pavement subgrade.

Groundwater was encountered in only two (2) of our hand auger borings (B22 and HA3) at depths of 4 to 4.5 feet BGS during our field exploration. These two locations were also in the same vicinity of each other. It should be noted that groundwater levels tend to fluctuate with seasonal and climatic variations as well as with construction activities. As such, the possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project. The seasonal high groundwater level can be estimated by mottling in the soil. Mottling was seen in many of the soil borings and it varied from 20 to 50 inches BGS during our field exploration. The groundwater table should be checked prior to construction to assess its effect on site work and other construction activities.

3.2 Perimeter Road Pavement

The perimeter road was newly completed with aggregate surface. As shown on the Exploration Location Plan, six (6) hand auger borings were performed to a depth of 5 feet BGS. In general, there was gravel aggregate base that had a thickness of 3 to 9 inches. Under this gravel base, there was a geotextile fabric. The soils in the upper five feet are mainly sands and silty/clayey sands, which are generally suitable materials for pavement subgrade.

3.3 Sidewalk along Carl Griffin Drive

As shown on the Exploration Location Plan, three (3) hand auger borings were performed to a depth of 5 feet BGS. In general, there was a silty sand topsoil with grass roots that had a thickness of 3 to 6 inches. This soil will need to stripped and removed prior to construction. There was a clayey sand layer that extended to a depth of 1 to 1.5 feet BGS. Under this layer there was a sandy clay layer that extended until the end of the borings.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

From the on-site observations and pavement coring and hand auger borings, we derived the following conclusions about the existing pavements and surface soils for the existing pavement and proposed sidewalks:

- The existing pavement along the front was in satisfactory condition but the pavement along the north side had deteriorated significantly with extensive cracking.
- The existing pavements contained very thin asphalt section of 1 to 2 inches thick. The base material is typically composed of cement-stabilized gravel base over graded aggregate base (GAB).
- The subgrade soils under the existing pavements and proposed new pavements are generally suitable materials
- Groundwater table is generally deeper than four feet below existing subgrade and should not be a concern for the new pavements. However, the grades outside the pavement should be improved in some areas to avoid ponding of water outside the edges of pavement.

4.1 Pavement Improvements on Carl Griffin Drive and Bunger Pit Road

Different measures may be applied to improve the existing pavements due to the different pavement conditions. For the front road (B1 to B5), an asphalt overlay should be the most straight forward and economic option. Prior to overlay, potholes and localized depressions should be repaired by removing loose materials and backfilling with graded aggregate base (GAB) or other approved material. The entire pavement should be cleaned and a tack coat should be applied. The thickness of the overlay can be at least 2.0 inches thick considering the thickness of the existing pavement.

For the roadway and parking lots along the north side (B5 to B14), the existing pavement was not uniform in section thickness. The asphalt surface course was relatively thin and had deteriorated with extensive cracking. We recommend re-construction of the pavement in this area. Depending on the final grades, existing base material may be kept and re-used for the

new pavement or a new base course may be constructed as part of the re-construction. Considering the roads will be used by some truck traffic, we recommend the new pavement to be comprised of 3.5 inches of asphalt over 8 inches of graded aggregate base (GAB). Concrete pavement may be used for areas around the fueling station or where extensive truck turning may be expected. The concrete pavement should be at least 7 inches in thickness.

A California Bearing Ratio (CBR) value of 8 has been estimated for the on-site granular soils and the proposed fill material. To help obtain this CBR value in the field, the upper 12 inches of pavement subgrades should be compacted to at least 95 percent of the modified Proctor density at moisture content within 3 percent of its optimum moisture.

Climatic conditions are considered in the design subgrade support value listed above and in the paving material characteristics. Recommended paving material characteristics, taken from the Georgia Department of Transportation's (GDOT) 2001 edition of *Standard Specifications for Construction of Transportation Systems,* are included for the asphalt concrete sections.

Pavement Design Recommendations

MATERIAL[1]	Asphalt Section Thickness (inches)
Asphalt Surface Course	1.5
Asphalt Intermediate Course	2.5
Aggregate Base Course	8
Total Pavement Section	**12**

1. Asphalt concrete aggregates and base course materials should conform to the following GDOT material specifications.
   - Section 815 for Graded Aggregate
   - Section 828 for Hot Mix Asphalt Concrete Mixture. Surface course may use 9.5 mm Superpave for smooth surface in the light-duty section or 12.5 mm Superpave for the heavy-duty section. 19 mm Superpave is recommended for the intermediate course.

4.2 Sidewalk along Carl Griffin Road

A side walk has been proposed for the side of Carl Griffin Drive from the Detention Center to the bus stop along Carl Griffin Drive. A California Bearing Ratio (CBR) value of 8 has been estimated for the on-site granular soils and the proposed fill material. To help obtain this CBR value in the field, the upper 12 inches of sidewalk subgrades should be compacted to at least 95 percent of the modified Proctor density at moisture content within 3 percent of its optimum moisture. The sidewalk will consist of a 4 inch layer of concrete.

5.0 GENERAL COMMENTS

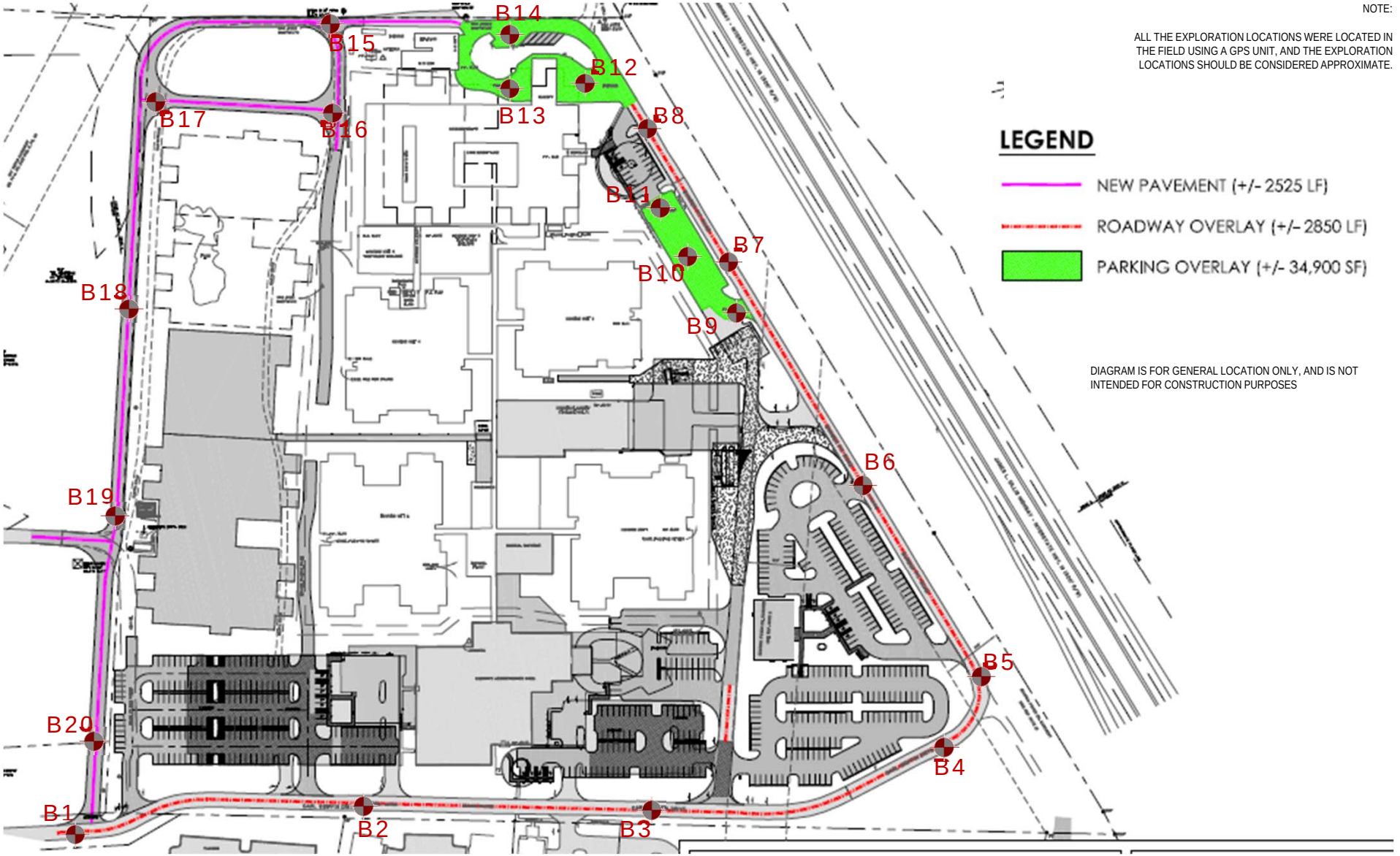
Terracon should be consulted to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the project design and specifications. Terracon should also be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

The analyses and recommendations presented in this report are based upon the data obtained from the explorations performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between exploration locations, across the site, or may be caused due to the modifying effects of construction or weather. Bear in mind that the nature and extent of such variations may not become evident until construction has started or until construction activities have ceased. If variations do appear, Terracon should be notified immediately so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, and bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or hazardous conditions. If the owner is concerned about the potential for such contamination or pollution, please advise so that additional studies may be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project and site discussed, and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either expressed or implied, are intended or made. Site safety, excavation support and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes, and then either verifies or modifies the conclusions of this report in writing.

APPENDIX A
FIELD EXPLORATION



NOTE:

ALL THE EXPLORATION LOCATIONS WERE LOCATED IN THE FIELD USING A GPS UNIT, AND THE EXPLORATION LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

LEGEND:

Coring and Hand Auger Boring

Project Manager: ZL	Project No. ES125119
Drawn by: ZL	Scale: N.T.S.
Checked by: GL	File Name:
Approved by: GL	Date: 8/31/2012

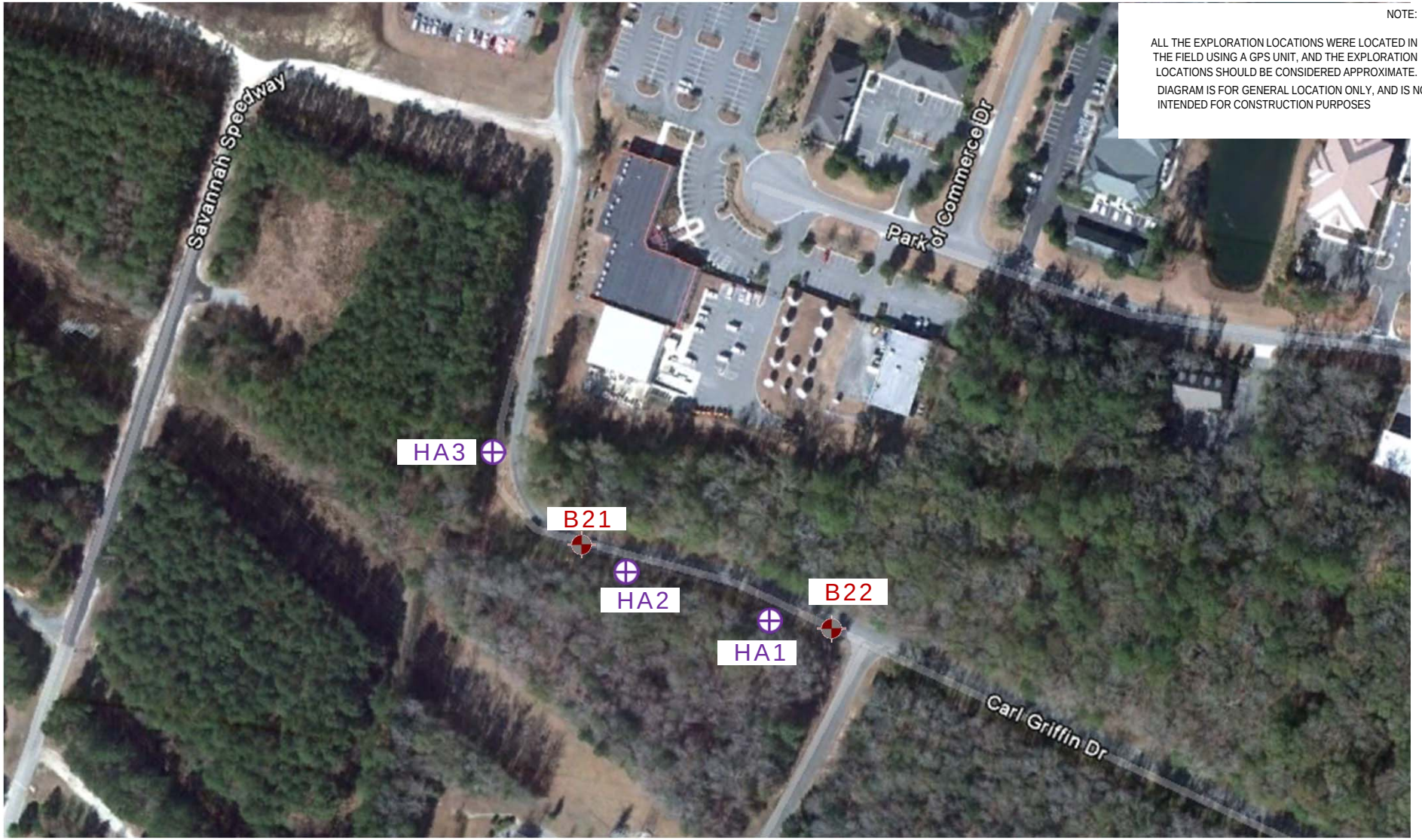
Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
Phone (912) 629 4000 Fax (912) 629 4001

EXPLORATION LOCATION PLAN

Chatham County Detention Center Paving Improvements
Savannah, Georgia

Exhibit

A-2



NOTE:

ALL THE EXPLORATION LOCATIONS WERE LOCATED IN THE FIELD USING A GPS UNIT, AND THE EXPLORATION LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

LEGEND:

- Hand Auger Boring
- Coring and Hand Auger Boring

Project Manager: WS	Project No. ES125119
Drawn by: WS	Scale: N.T.S.
Checked by: GL	File Name:
Approved by: GL	Date: 10/2/2012

Terracon
Consulting Engineers & Scientists
2201 Rowland Avenue Savannah, Georgia 31404
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EXPLORATION LOCATION PLAN

Chatham County Detention Center Paving Improvements
Savannah, Georgia

Exhibit

A-2

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
Project No.: ES125119
Project Location: Savannah, Georgia

B1		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.75	Asphalt	
1.75 to 8	Cement Stabilized Base Over GAB	
8 to 24	Light brown/orange silty SAND	SM
24 to 48	Poorly graded light brown/orange fine SAND with silt	SP-SM
48 to 60	Poorly graded gray fine SAND with silt	SP-SM
Alligator cracking on surface		
No Groundwater encountered	**Mottling @ 32" BGS**	

B2		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 2.25	Asphalt	
2.25 to 10	Cement Stabilized Base Over GAB	
10 to 42	Poorly graded light brown fine SAND with silt	SP-SM
42 to 60	Light brown/orange sandy CLAY	CL
No Groundwater encountered	**Mottling @ 42" BGS**	

B3		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.25	Asphalt	
1.25 to 9.5	Cement Stabilized Base Over GAB	
9.5 to 24	Brown silty SAND	SM
24 to 30	Gray clayey SAND	SC
30 to 42	Poorly graded light brown fine SAND with silt	SP-SM
42 to 60	Gray/brown sandy CLAY	CL
Wood Chip debris @ 48" BGS		
No Groundwater encountered	**No Mottling noted**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
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Project Location: Savannah, Georgia

B4		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.75	Asphalt	
1.75 to 8.5	Cement Stabilized Base Over GAB	
8.5 to 30	Brown/orange clayey SAND	SC
30 to 36	Poorly graded light brown fine SAND with silt	SP-SM
36 to 42	Orange/brown sandy CLAY	CL
42 to 54	Poorly graded brown fine SAND with silt	SP-SM
54 to 60	Brown sandy CLAY	CL
No Groundwater encountered	**No Mottling noted**	

B5		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.5	Asphalt	
1.5 to 7.5	Cement Stabilized Base Over GAB	
7.5 to 12	Poorly graded brown fine SAND with silt	SP-SM
12 to 60	Poorly graded light brown/brown/light gray fine SAND with silt	SP-SM
Alligator cracking		
No Groundwater encountered	**No Mottling noted**	

B6		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 5	Asphalt	
5 to 32	Very hard brown silty SAND	SM
32 to 48	Poorly graded light brown fine SAND with silt	SP-SM
48 to 60	Brown clayey SAND	SC
Alligator cracking		
No Groundwater encountered	**No Mottling noted**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
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B7		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.75	Asphalt	
1.75 to 7	Cement Stabilized Base Over GAB	
7 to 14	Brown/orange clayey SAND	SC
14 to 24	Poorly graded light brown fine SAND with silt	SP-SM
24 to 30	Orange/brown sandy CLAY	CL
30 to 60	Poorly graded brown fine SAND with silt	SP-SM
Alligator cracking		
No Groundwater encountered	**No Mottling noted**	

B8		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.25	Asphalt	
1.25 to 9	Cement Stabilized Base Over GAB	
9 to 12	Poorly graded brown fine SAND with silt	SP-SM
12 to 36	Dark brown clayey SAND	SC
36 to 42	Dark brown sandy CLAY with organics, roots	CL
Refusal @ 42" BGS due to roots		
No Groundwater encountered	**No Mottling noted**	

B9		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 2	Asphalt	
2 to 10.5	Cement Stabilized Base Over GAB	
10.5 to 14	Brown silty SAND	SM
14 to 60	Gray/red sandy CLAY	CL
No Groundwater encountered	**No Mottling noted**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
Project No.: ES125119
Project Location: Savannah, Georgia

B10		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.25	Asphalt	
1.25 to 9	Cement Stabilized Base Over GAB	
9 to 14	Light brown silty SAND	SM
14 to 60	Gray/brown/orange sandy CLAY with interbedded layers of light gray sand	CL
No Groundwater encountered	**Mottling @ 42" BGS**	

B11		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 0.75	Asphalt	
0.75 to 2	GAB	
2 to 6	Poorly graded light brown fine SAND with silt with gravel	SP-SM
6 to 12	Poorly graded light brown fine SAND with silt	SP-SM
12 to 60	Light brown/orange/gray sandy CLAY	CL
No Groundwater encountered	**Mottling @ 24" BGS**	

B12		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.75	Asphalt	
1.75 to 9	Cement Stabilized Base Over GAB	
9 to 24	Dark brown clayey SAND	SC
24 to 42	Poorly graded gray SAND with clays	SP-SC
42 to 60	Gray/brown sandy CLAY	CL
No Groundwater encountered	**Mottling @ 48" BGS**	

B13		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1	Asphalt	
1 to 12	Cement Stabilized Base Over GAB	
Refusal @ 12" due to pipe		
No Groundwater encountered	**No Mottling Noted**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
Project No.: ES125119
Project Location: Savannah, Georgia

B14		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 3	Soil Cement	
3 to 36	Poorly graded brown fine SAND with clay	SP-SC
36 to 54	Brown/orange clayey SAND with gravel	SC
54 to 60	Brown/orange sandy CLAY	CL
No Groundwater encountered	**No Mottling noted**	

B15		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 9	GAB	
9 to 30	Brown silty SAND	SM
30 to 48	Brown clayey SAND	SC
48 to 54	Brown/orange/gray sandy CLAY	CL
54 to 60	Light brown/orange clayey SAND	SC
Geotextile @ 9" BGS		
No Groundwater encountered	**Mottling @ 36" BGS**	

B16		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 6	Poorly graded brown fine SAND with silt with gravel	SP-SM
6 to 18	Poorly graded light brown fine SAND with silt	SP-SM
18 to 48	Brown/orange/gray sandy CLAY	SC
48 to 54	Light brown/orange clayey SAND	CL
54 to 60	Poorly graded light brown/orange fine SAND with clay	SP-SC
No Groundwater encountered	**Mottling @ 20" BGS**	

B17		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 8	GAB	
8 to 42	Poorly graded light brown fine SAND with silt	SP-SM
42 to 50	Poorly graded brown fine SAND with silt	SP-SM
50 to 60	Brown/orange clayey SAND	SC
Geotextile @ 8" BGS		
No Groundwater encountered	**Mottling @ 50" BGS**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

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B18		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 6	GAB	
6 to 36	Poorly graded light brown fine SAND with silt	SP-SM
50 to 60	Brown/orange clayey SAND	SC
Geotextile @ 6" BGS		
No Groundwater encountered	**Mottling @ 36" BGS**	

B19		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 3	GAB	
3 to 10	Poorly graded light brown fine SAND	SP
10 to 18	Poorly graded brown fine SAND with silts	SP-SM
18 to 36	Poorly graded brown fine SAND with clay	SP-SC
36 to 60	Gray silty SAND	SM
Geotextile @ 3" BGS		
No Groundwater encountered	**No Mottling noted**	

B20		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 8	GAB	
8 to 18	Poorly graded light brown fine SAND	SP
36 to 60	Poorly graded brown fine SAND with silt	SP-SM
Geotextile @ 8" BGS; Roots and organic odor @ 42" BGS		
No Groundwater encountered	**No Mottling noted**	

B21		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 2	Asphalt	
2 to 8	Cement Stabilized Base Over GAB	
8 to 14	Poorly graded light brown fine SAND with silt	SP-SM
14 to 30	Light brown silty SAND	SM
30 to 60	Dark brown sandy CLAY with wood fragments	CL
No Groundwater encountered	**No Mottling noted**	

Note: BGS = Below existing Ground Surface

Hand Auger Boring Log

Project Name: Chatham County Detention Center Pavement Improvements
Project No.: ES125119
Project Location: Savannah, Georgia

B22		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 1.25	Asphalt	
1.25 to 8	Cement Stabilized Base Over GAB	SP
8 to 30	Light brown/orange clayey SAND	SC
30 to 60	Dark brown sandy CLAY with wood fragments and organic odor	CL
Large wood fragments @ 42" BGS		
Groundwater @ 42" BGS	**No Mottling noted**	

HA1		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 3	Brown silty SAND with grass roots	SM
3 to 12	Light brown clayey SAND	SC
12 to 60	Dark brown sandy CLAY	CL
No Groundwater encountered	**No Mottling noted**	

HA2		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 6	Brown silty SAND with grass roots	SM
6 to 18	Light brown clayey SAND	SC
18 to 60	Dark brown sandy CLAY	CL
No Groundwater encountered	**Mottling @ 28" BGS**	

HA3		
Depth Below Grade (inch)	**Material Description**	**USCS CLASSIFICATION**
0 to 6	Brown silty SAND with grass roots	SM
6 to 14	Dark brown clayey SAND	SC
14 to 32	Dark brown sandy CLAY	CL
32 to 48	Dark brown/orange sandy CLAY	CL
48 to 60	Poorly graded light brown fine to medium SAND with silt	SP-SM
Groundwater @ 54" BGS	**Mottling @ 32" BGS**	

Note: BGS = Below existing Ground Surface

PHOTO #1: Measurement of Pavement Core B1

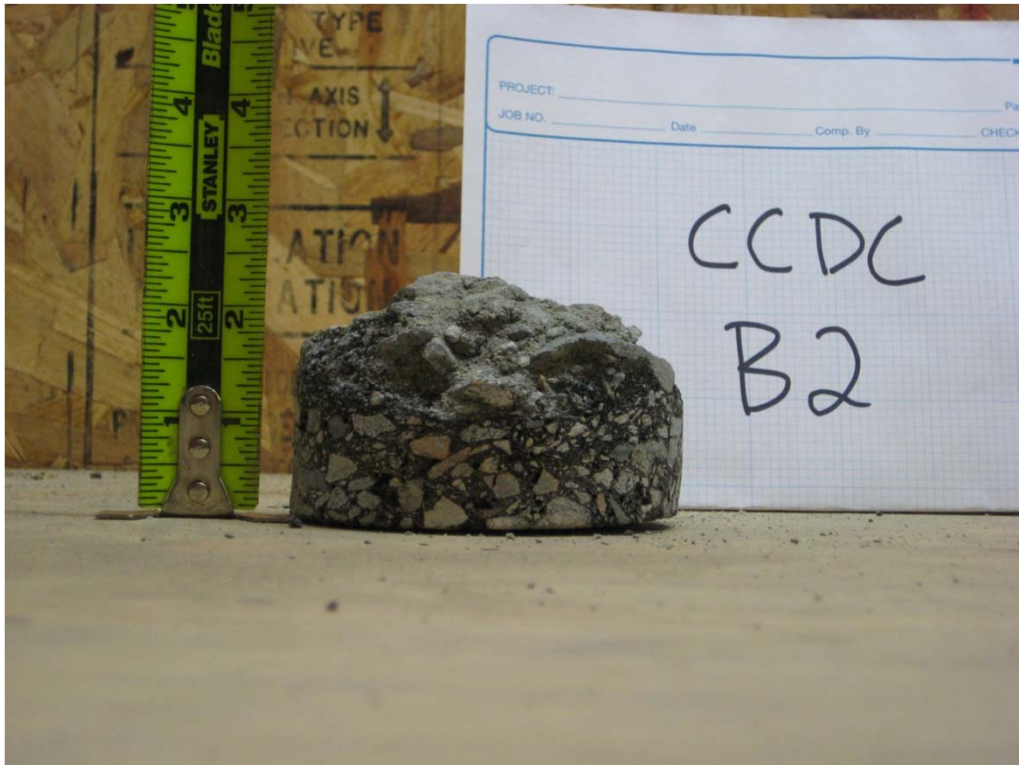


PHOTO #2: Measurement of Pavement Core B2

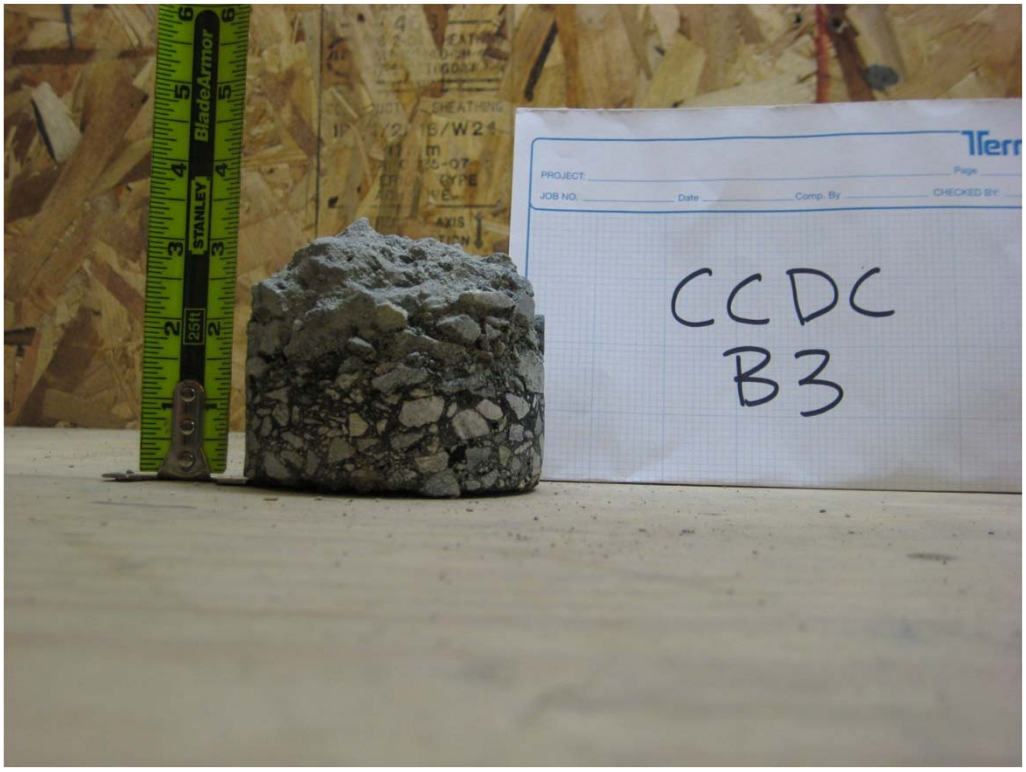


PHOTO #3: Measurement of Pavement Core B3

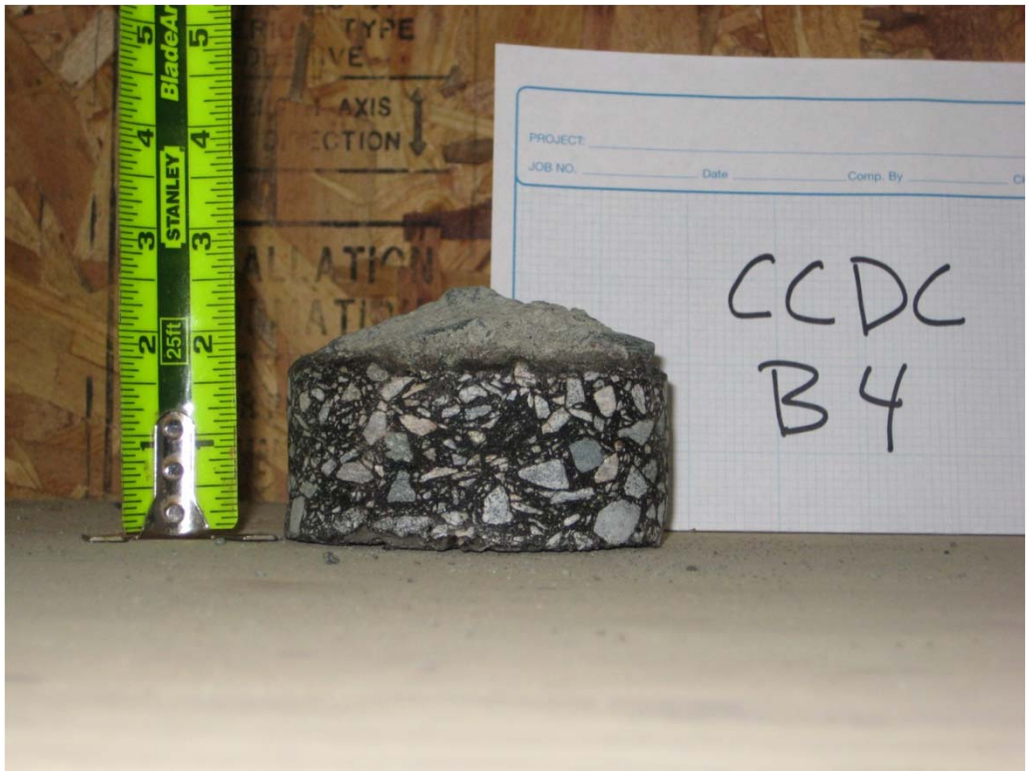


PHOTO #4: Measurement of Pavement Core B4

PHOTO #5: Measurement of Pavement Core B5

PHOTO #6: Measurement of Pavement Core B6

PHOTO #7: Measurement of Pavement Core B7

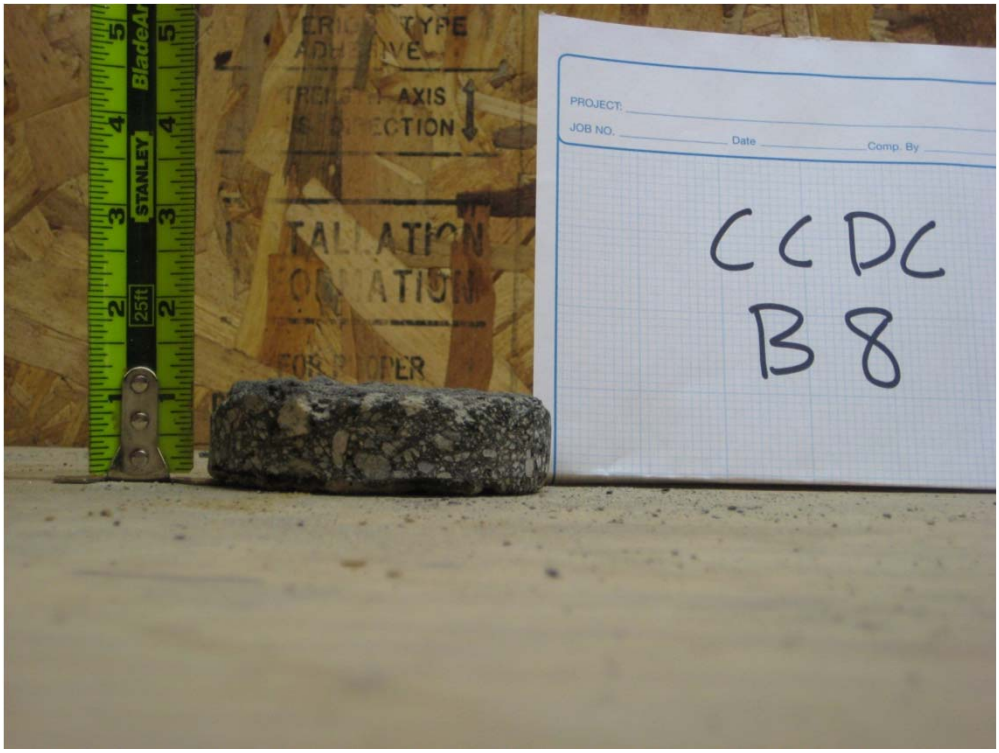


PHOTO #8: Measurement of Pavement Core B8

PHOTO #9: Measurement of Pavement Core B9

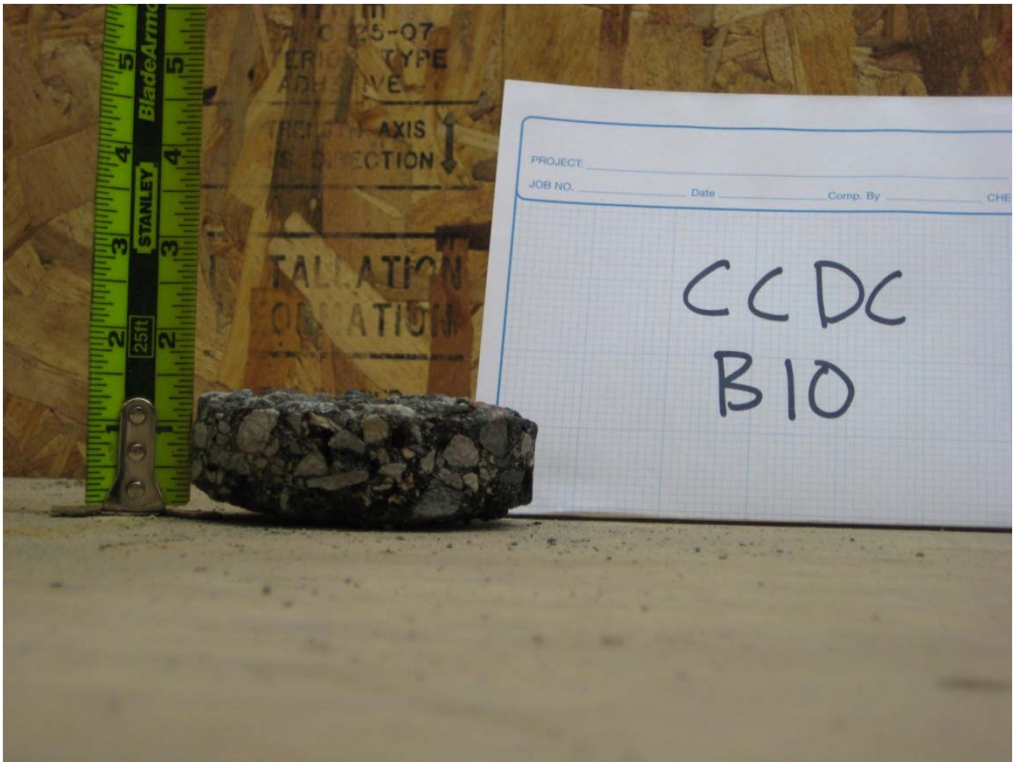


PHOTO #10: Measurement of Pavement Core B10

PHOTO #11: Measurement of Pavement Core B11

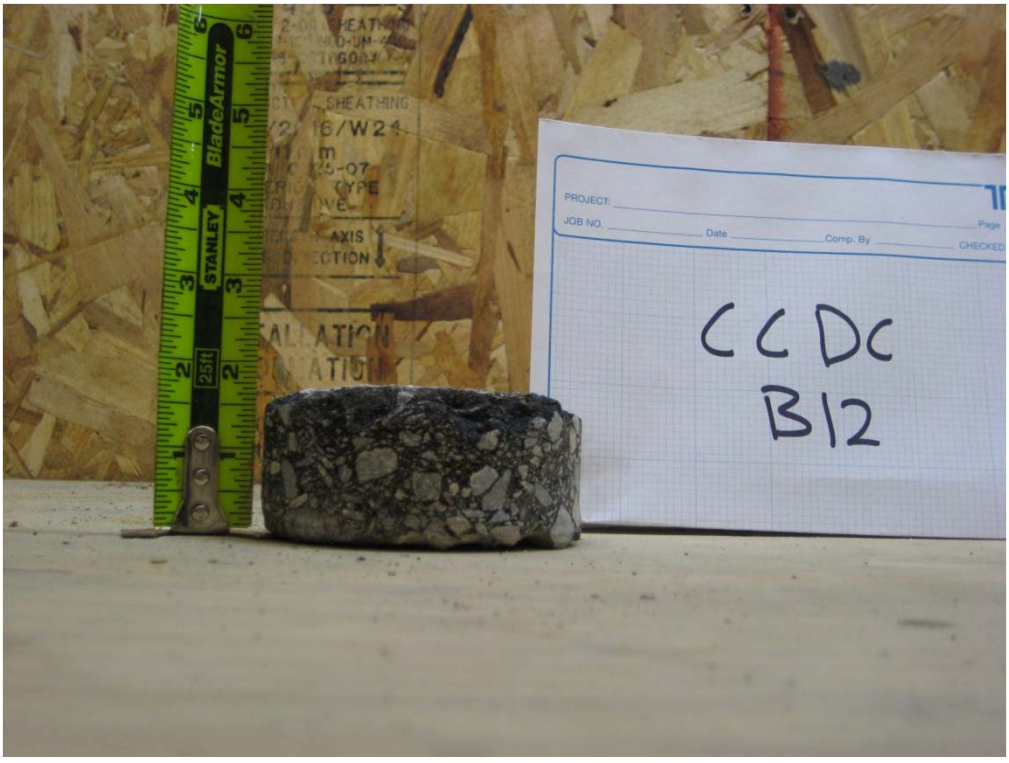


PHOTO #12: Measurement of Pavement Core B12

PHOTO #13: Measurement of Pavement Core B13

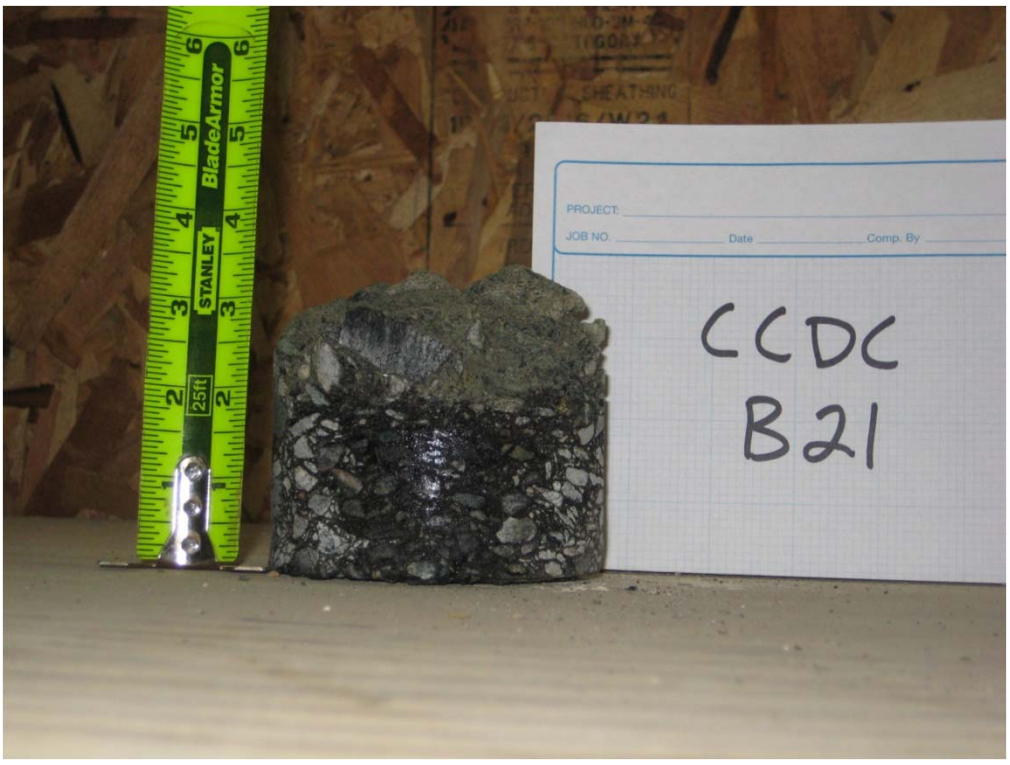


PHOTO #14: Measurement of Pavement Core B21

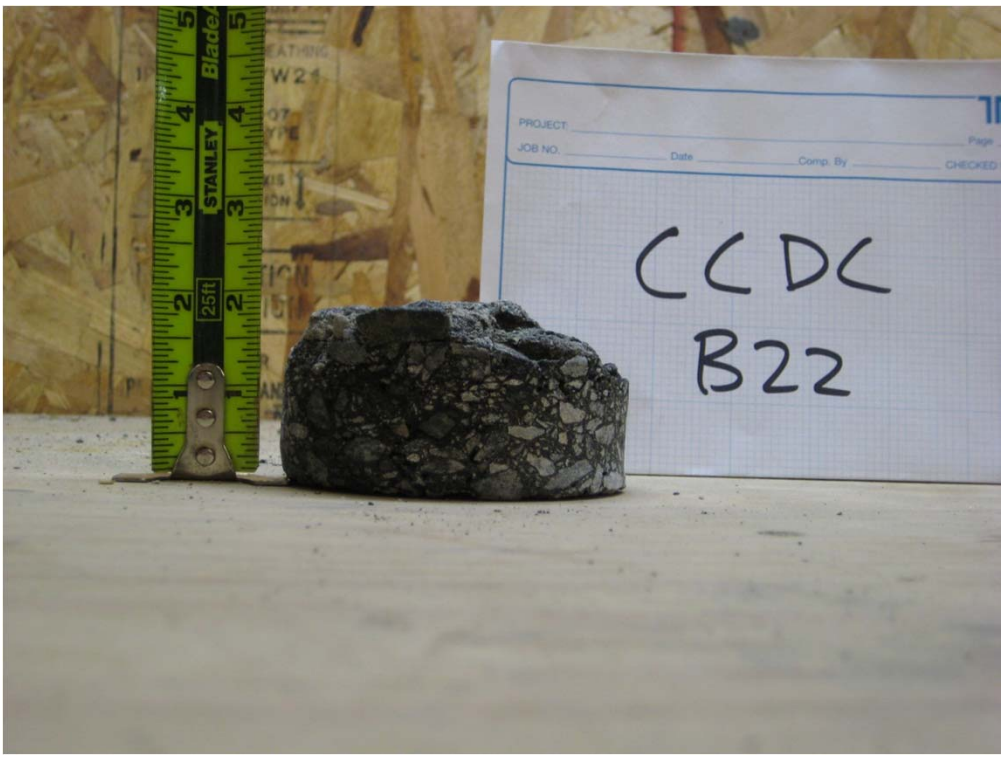


PHOTO #15: Measurement of Pavement Core B22

FIELD EXPLORATION DESCRIPTION

Terracon has completed the Geotechnical Engineering Investigation for the proposed Chatham County Detention Center Pavement Improvements in Savannah, Georgia. The investigation included a field exploration program, and engineering evaluation of the subsurface conditions and existing pavements. The field exploration program consisted of fifteen (15) hand auger borings with asphalt pavement coring and ten (10) hand auger borings into existing ground to a depth of 5 feet below the existing ground surface.

Hand auger borings were conducted in general accordance with ASTM D 1452-80, Standard Practice for Soil Investigation and Sampling by Auger Borings. In this test, hand auger boring is drilled by rotating and advancing a bucket auger to the desired depths while periodically removing the auger from the hole to clear and examine the auger cuttings. The soils were classified in accordance with ASTM D2488. In fifteen cases, the asphalt pavement was first cored and the core removed prior to the hand auger borings were conducted.

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$ [E]		GW	Well-graded gravel [F]
			$Cu < 4$ and/or $1 > Cc > 3$ [E]		GP	Poorly graded gravel [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]	$Cu \geq 6$ and $1 \leq Cc \leq 3$ [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,I]
			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:**	PI > 7 and plots 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:	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OL	Organic clay [K,L,M,N] / Organic silt [K,L,M,O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	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:	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	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 or 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] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[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 shaded 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.

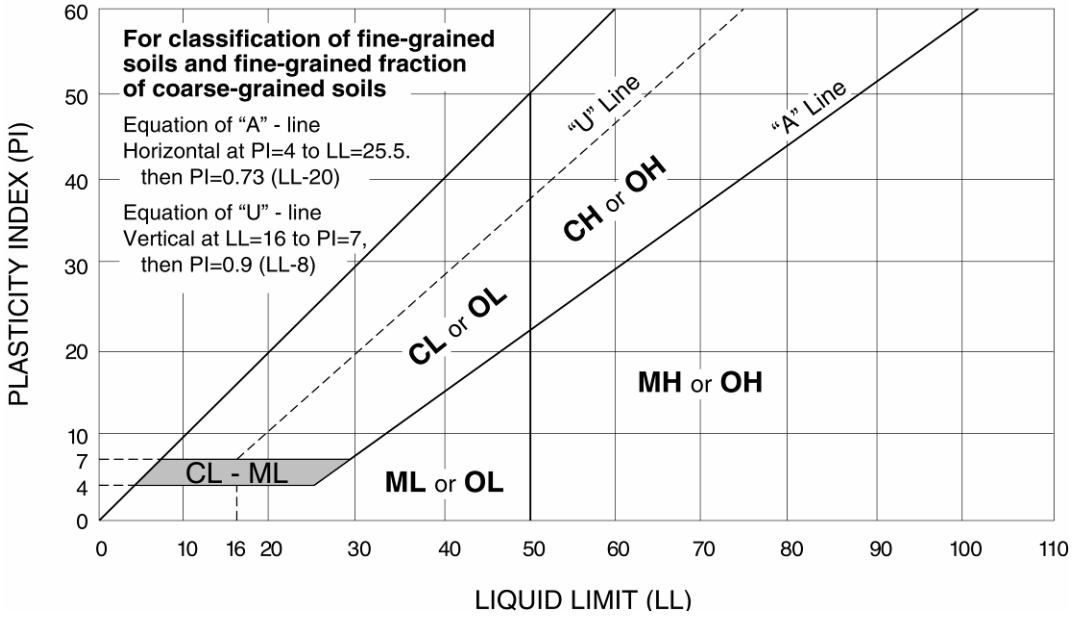
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[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.



SECTION 08 7100
DOOR HARDWARE - K9 Building & Work Release Admin

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Finish commercial builders hardware for interior and exterior doors at the **K9 Building (Component 3)** & **Work Release Administration (Component 4**), except as otherwise specified, as listed in schedule at end of section for each individual location.

B. Product furnished but installed under other sections include the following:

1. Templates furnished for door and frame preparation under Division 08 Section "Hollow Metal Doors and Frames".
2. Templates and physical hardware furnished for door and frame preparation and installation under Division 08 Section "Aluminum-Framed Entrances and Storefronts".

C. Related Sections include the following:

1. Division 06 Section "Miscellaneous Rough Carpentry" for provisions for installation of work of this section.
2. Division 08 Section "Hollow Metal Doors and Frames" for preparation of hollow metal doors and frames to receive finish hardware.
3. Division 08 Section “Access Doors”
4. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
5. Division 28 Sections for coordination with intercom system.

1.3 REFERENCE STANDARDS

A. American National Standard Institute (ANSI):

1. ANSI A17.1 – Specifications for making
Buildings and Facilities Accessible to and Usable by Physically Handicapped People.

B. Americans With Disabilities Act (ADA):

1. ADA – Accessibility Guidelines

C. American National Standards Institute/Building Hardware Manufacturers Association (ANSI/BHMA):

1. ANSI/BHMA A156.1 – Butts and Hinges
2. ANSI/BHMA A156.2 – Locks and Lock Trim
3. ANSI/BHMA A156.3 – Exit Devices
4. ANSI/BHMA A156.4 – Door Controls (Closers)
5. ANSI/BHMA A156.5 – Auxiliary Locks
6. ANSI/BHMA A156.6 – Architectural Door Trim
7. ANSI/BHMA A156.7 – Template Hinge Dimensions
8. ANSI/BHMA A156.8 - Door Controls (Overhead Holders)
9. ANSI/BHMA A156.13 – Mortise Locks and Latches
10. ANSI/BHMA A156.14 – Sliding and Folding Door Hardware
11. ANSI/BHMA A156.15 – Close Holder Release Devices
12. ANSI/BHMA A156.16 – Auxiliary Hardware
13. ANSI/BHMA A156.17 – Self-Closing Hinges and Pivots
14. ANSI/BHMA A156.18 – Materials

D. National Fire Protection Association (NFPA): NFPA 80 – Fire Doors and Windows

E. Underwriters Laboratory, Ind (UL):

1. UL 10B – Fire Tests of Door Assemblies
2. UL 305 – Panic

1.4 SUBMITTALS

A. Shop Drawings and Product Data: Submit in accordance with Division 01.

B. Shop Drawings: Submit detailed working schedule of hardware prepared in the "VERTICAL TYPE"

1. Identify each door and subsequent hardware set number.
2. Door swing and location
3. Door and frame construction.
4. Item, quantity, manufacturer's number, size and finish of hardware items.
5. In the event, due to specific detail requirements, more than one set of specific numbered hardware set is required, they shall be suffixed with a letter using the standard alphabetical sequence (i.e. Hardware Set #NH-1, Hardware Set #NH-2.
6. Prepared by an AHC, as certified by the Door and Hardware Institute

C. Product Data: Submit one set of manufacturer's technical product data, cuts or catalog sheets, in brochure form, illustrating each item of hardware scheduled.

D. Include numbers, finishes, and other pertinent data.

E. Manuals: Submit two appropriate manual describing installation and maintenance catalogs of each hardware item furnished for this project.

F. Templates: Supply all necessary paper template information, and when required, actual hardware shall be sent ot door and frame manufacturers to enable proper and accurate sizing and locations of cut outs for hardware.

G. Special Installation Tools: Furnish to installer, special tools (three of each type) where required for installing, adjusting and maintaining hardware items furnished. Upon completion of installation these tools will be turned over to the owner.

1.5 QUALITY ASSURANCE

A. Hardware Distributor Qualifications: Member of the American Society of Architectural Hardware Consultants, with a minimum five years experience and sufficient organization to properly handle, detail and service the hardware in a satisfactory manner.

B. Distributor Representation: Arrange for distributor's technical representative to visit the jobsites at least twice during construction to assist or advise Contractor in the installation of the hardware.

1.6 REGULATORY REQUIREMENTS

A. All work and material shall conform to ANSI A117.1, ADA, and local Building Code requirements.

B. State Requirements: All hardware furnished, whether specifically specified or not, shall conform to requirements of Federal, State, and Local Codes having jurisdiction over the finished installation. If hardware required by any of these agencies has been omitted from this Section, it shall be furnished and installed at no additional cost to the owner.

C. Fire-rated Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.

D. All exit devices must be listed under "panic hardware" in the accident equipment list of underwriters' laboratories. Where labeled fire doors are used as exits, they must be equipped with labeled UL 305 fire exit devices.

1.7 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Delivery:

1. Do not deliver finish hardware to job site until building is ready for its installation.
2. Deliver materials in manufacturer's original, unopened and undamaged protective cartons and packaging, with manufacturer's name, model, type, sizes, function, and finish designation labels intact and legible.
3. Furnish in such quantities and at such times so as not to delay the progress of the project.

B. Handling:

1. Take precautionary measures to prevent damage during delivery and on site storage, handling and installation.

C. Storage:

1. Check hardware on receipt at the project to insure that each set is complete with proper screws bolts accessories, and operative.
2. Store all finish hardware materials in a designated room under lock and key until ready for final application in a manner that will prevent damage.
3. Store in a manner that will insure that no items are removed from any set.

PART 2 - PRODUCTS

2.1 AVAILABLE MANUFACTURERS

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

1. Products/ manufacturers: Refer to Manufacture's Data Sheets located behind Hardware Schedule

2.2 KEYING

A. Keying and Key Cabinet: Refer to Division 08 Section "Detention Hardware".

PART 3 - EXECUTION

3.1 PAKAGING AND MARKING

A. Packaging: Each item of hardware and each lock set shall be packaged separately in individual container, complete with necessary screws, keys instruction, and installation template for spotting mortising tools.

B. Provide 10 percent additional screws for all types of hardware.

C. Marking and Tagging: All material cartons or packaging shall be marked, labeled or tagged with item number, corresponding to number shown on approved hardware schedule for its intended use in such a manner that application will be easily understood.

3.2 ASSEMBLING OF MATERIALS

A. Contractor must arrange for the assembling of materials before application so that hardware can be checked and also to enable all parties concerned to investigate discrepancies pertaining to quantity and character of materials.

B. Insure all items and materials are of first class workmanship, free from flaws and defects.

C. Verify all items furnished have proper quantity, size and type of screws and/or bolts necessary to apply same in satisfactory manner, and conforms in character and finish.

3.3 INSTALLATION

A. Apply required hardware in prepared openings in doors and frames, and hang doors. Unless otherwise established, mount hardware units according to NBHA "Recommended Locations for Builder's Hardware".

B. Install each hardware item in compliance with the manufacturer's instruction, using fasteners provided. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, install each item completely and then remove and store in a safe place during the finish application. After completion of the finishes, re-install each item. Do not install surface-mounted items until finish has been completed on the surface.

C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

D. Drill and countersink units which are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

E. Cut and fit thresholds and floor covers to profile of door frames, with mitered corners and hair-line joints. Join units with concealed welds or concealed mechanical joints. Cut smooth openings for spindles, bolts and similar items, if any.

F. Screw thresholds to substrate with No. 10 or larger screws, of the proper type for permanent anchorage and of the same metal as the threshold.

G. At the exterior doors, and elsewhere as indicated, set each edge of threshold in a seal strip of butyl rubber sealant or polyisobutylene mastic sealant, and remove excess.

3.4 PROTECTION, CLEANING AND ADJUSTING

A. The contractor shall see that all finish hardware shall be adequately protected from damage during the progress of the project

B. At completion of the project, all hardware shall be cleaned and any damaged or broken parts replaced.

C. All hardware shall be adjusted and left in perfect working order at completion of project.

3.5 INSTRUCTIONS AND TOOLS

A. At completion of project, provide owner with the following:

B. Instruction sheets for all locks, door closures, floor hinges and any special hardware items as appropriate.

C. Turn over a complete set of specialized tools used to install and adjust the hardware for Owner's continued adjustment, maintenance and removal of hardware.

D. Provide instruction of Owner's personnel and submit maintenance data in accordance with Division 01.

3.6 HARDWARE SCHEDULE

A. The following Schedule is included as a guide in establishing the quality, type, and function of hardware required for each opening and is not to be construed as all inclusive. Quantities listed under each “Hardware Set” are for each opening, whether a pair or single door.

B. Doors with 'S' heading + number refer to doors located at the K9 Kennel & Administration building. Doors with 'T' + number are located in the Work Release Administration Building.

C. Submit complete HARDWARE SCHEDULE to Architect for review with Owner, before order is placed in accordance with the following “Hardware Sets”.

NOTE: Hardware supplier to develop all door functions for all door hardware during the Shop Drawing submittal phase, per manufacturer’s requirements.

Submit complete HARDWARE SCHEDULE to Architect for review with Owner, before order is placed in accordance with the following

HDG 1 OFFICE ENTRY

DOORS: T114, T115, S103, S107, S108, S109, S110, S111,

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA LOCKSET 10504 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C US32D
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 2 STOREROOM LOCK

DOORS: S100B, S100A, S116A,

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA LOCKSET 10507 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA KICK PLATE .050 US32D 8 X 2 LDW
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 3 [NOT USED]

HDG 4 PASSAGE SET
DOORS: S103C

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA PASSAGE LATCH 10501 US32D
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA KICK PLATE .050 US32D 8 X 2 LDW
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 5 PRIVACY SET
DOORS: T103, S103A, S103B,

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA PRIVACY LATCH 10519 US32D
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA KICK PLATE .050 US32D 8 X 2 LDW
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 6 ELEC. LOCKSET - EXTERIOR

DOORS: T107B

2 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA HINGE ELEC. 204E
1 EA LOCKSET D9350 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA FLOOR STOP 468
1 EA DOOR POSITION SWITCH 3287
1 EA POWER SUPPLY AQD5
1 EA PDB 1R 8C1R
1 EA WIRE 30' FOR FRAME TO POWER SUPPLY ABOVE CEILING
1 EA WIRE 4' FOR DOOR CHASE
1 EA WIRE 30' FOR DPS SWITCH
1 EA THRESHOLD 2005 AT
1 EA SET W.S. S88D
1 EA DOOR BOTTOM 315AN
1 EA SET OF RISER DIAGRAMS -

[CARD READER AND SOFTWARE BY OTHERS, CARD READER TO OPERATE ELEC. LOCKSET.
FURNISH RISER DIAGRAMS DURING SUBMITTAL PROCESS]

HDG 7 ALUM EXIT – DESIGN PRESSURE -

DOORS: S100

1 EA CONT HINGE CFM83 ALUM QC8
1 EA EXIT DEVICE WS AD 55 56 8804 US32D
1 EA DOOR PULL BF110 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA DOOR CLOSER 2214 CONCEALED ALUM.
1 EA FLOOR STOP 468
1 EA DOOR POSITION SWITCH 3287
1 EA POWER SUPPLY AQD5
1 EA PDB 1R 8C1R
1 EA WIRE 30' FOR FRAME TO POWER SUPPLY ABOVE CEILING
1 EA WIRE 30' FOR DOOR POSITION SWITCH
1 EA WIRE 4' FOR DOOR CHASE
1 EA THRESHOLD 2005 AT
1 EA SET W.S. S88D
1 EA DOOR BOTTOM 315AN
1 EA SET OF RISER DIAGRAMS -

[CARD READER AND SOFTWARE BY OTHERS, CARD READER TO OPERATE ELEC. LOCKSET.
FURNISH RISER DIAGRAMS DURING SUBMITTAL PROCESS]

HDG 8 ELEC. LOCKSET

DOORS: S101, S106

2 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA HINGE ELEC. 204E
1 EA LOCKSET D9350 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA FLOOR STOP 468
1 EA DOOR POSITION SWITCH 3287
1 EA POWER SUPPLY AQD5
1 EA PDB 1R 8C1R
1 EA WIRE 30' FOR FRAME TO POWER SUPPLY ABOVE CEILING
1 EA WIRE 4' FOR DOOR CHASE
1 EA WIRE 30' FOR DOOR POSITION SWITCH
1 EA SET OF RISER DIAGRAMS -

[CARD READER AND SOFTWARE BY OTHERS, CARD READER TO OPERATE ELEC. LOCKSET.
FURNISH RISER DIAGRAMS DURING SUBMITTAL PROCESS]

HDG 9 ELEC. LOCKSET - EXTERIOR INSWING

DOORS: T100

2 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA HINGE ELEC. 204E
1 EA LOCKSET D9350 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA FLOOR STOP 468
1 EA DOOR POSITION SWITCH 3287
1 EA POWER SUPPLY AQD5
1 EA PDB 1R 8C1R
1 EA WIRE 30' FOR FRAME TO POWER SUPPLY ABOVE CEILING
1 EA WIRE 30' FOR DOOR POSITION SWITCH
1 EA WIRE 4' FOR DOOR CHASE
1 EA THRESHOLD 114A X 66A
1 EA SET W.S. S88D
1 EA SET OF RISER DIAGRAMS -

[CARD READER AND SOFTWARE BY OTHERS, CARD READER TO OPERATE ELEC. LOCKSET.
FURNISH RISER DIAGRAMS DURING SUBMITTAL PROCESS]

HDG 10 DEADLOCK

DOORS: T108, T109

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA DEADLOCK 4877 (CLASSRM DEADLOCK) US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA DOOR CLOSER 2214 ALUM
1 EA FLOOR STOP 468
1 EA PUSH PLATE 73C 32D SEC SCREWS
1 EA PULL PLATE BF 110 X 73C 32D SEC SCREWS
1 EA KICK PLATE .050 US32D 8 X 2 LDW
3 EA HMF SILENCERS

DEADLOCK KEY OUTSIDE – THUMBTURN ON INSIDE ONLY UNLOCKS DEADLOCK, WILL NOT

HDG 11 CLASSROOM FUNCTION

DOORS: T107A,

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA LOCKSET 10505 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA DOOR CLOSER 2214 ALUM.
1 EA STRIKE 500C US32D
1 EA KICK PLATE .050 US32D 8 X 2 LDW
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 12 EXIST PRIVACY

DOOR: T104 (DOOR TO REMAIN- REPLACE PRIVACY LATCH)

1 EA PRIVACY 28-10U65 LL US26D (SARGENT)

HDG 13 DORM LOCKSET

DOORS: S104, S105

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA LOCKSET 10513 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA DOOR CLOSER 2214 ALUM.
1 EA STRIKE 500C US32D
1 EA KICK PLATE .050 US32D 8 X 2 LDW
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 14 PRIVACY SET
DOORS: S104A, S105A

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA PRIVACY LATCH 10519 US32D
1 EA STRIKE 500C 32D
1 EA FLOOR STOP 468
3 EA SILENCERS HMF

HDG 15 LOCKSET - EXTERIOR
DOORS: S112, S113, S121, S118

3 EA HINGES 204FMSS US32D 4.5 X 4.5
1 EA LOCKSET 10513 US32D
1 EA MOGUL CYLINDER – KEYED TO EXISTING SYSTEM.
1 EA STRIKE 500C 32D
1 EA DOOR CLOSER 2214 ALUM
1 EA FLOOR STOP 468
1 EA DOOR POSITION SWITCH 3287
1 EA WIRE 30' FOR DOOR POSITION SWITCH
1 EA THRESHOLD 2005 AT
1 EA SET W.S. S88D
1 EA DOOR BOTTOM 315AN

HINGES SOUTHERN/FOLGER
ELEC HINGES SOUTHERN/FOLGER
CONT HING PEMKO
LOCKS/STRIKES SOUTHERN/FOLGER
CYLINDERS TO MATCH EXISTING MOGUL TYPE
ELEC LOCKS FOLGER
EXIT DEVICES SARGENT
DEADLOCK SARGENT
PRIVACY CYL SARGENT
DOOR STOPS ROCKWOOD
THRES/WS/ PEMKO
DR CLOSER LCN
PUSH/PULL ROCKWOOD MFG
POWER SUP SECURITRON
CONTL BDS SECURITRON
DPS SARGENT

FASTENERS: FURNISH TORX/SEC. HEAD SCREWS FOR ALL HARDWARE ITEMS.
HINGES TO HAVE SECURITY STUDS
ALL CYLINDERS MASTER KEYED TO EXISTING CYLINDER SYSTEM.

END OF SECTION 08 7100

SECTION 10 1419

DIMENSIONAL LETTER SIGNAGE

PART 1 GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SECTION INCLUDES

A. Cast dimensional characters.

1.03 RELATED REQUIREMENTS

A. Specification Section 04 2000 - Unit Masonry

1.04 REFERENCE STANDARDS

A. ASTM B26 / B26M - Standard Specification for Aluminum-Alloy Sand Castings; 2012.

B. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2010.

C. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2013.

D. ASTM B584 - Standard Specification for Copper Alloy Sand Castings for General Applications; 2014.

E. ASTM B36 / B36M - Standard Specification for Brass Plate, Sheet, Strip, and Rolled Bar; 2013.

F. ASTM B152 / B152M - Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar; 2013.

G. ASTM B240 / B240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications; 2014.

H. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2010.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.

C. Signage Schedule: Utilizing the same designations as indicated on the drawings, provide information sufficient to completely define each dimensional character sign for fabrication, including;
   1. Intended location of sign (building location)
   2. Text of signage
   3. Sign and character sizes.
   4. Character Font.
   5. Material and color / finish.

D. Shop Drawings: provide the following for each different dimensional letter sign;
   1. Elevation of sign at a minimum scale of 1/2" = 1'-0", and indicating the height, width, spacing, and location of the sign. Indicate orientation and location of mounting supports.
   2. Fabrication and installation details including attachment to other work at a minimum scale of 3/4" = 1'-0".
   3. Installation plan of sign in relation to other work..

E. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.

F. Verification Samples: Submit one six inch high character sample of each color specified.

G. Manufacturer's Installation Instructions: Include installation templates and attachment devices.

1.06 QUALITY ASSURANCE

A. Source Limitations for Signs: Obtain each dimensional character sign type indicated on drawings from a single source manufacturer.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturer's recommendations for delivery, storage and handling.

B. Deliver materials to site in manufacturer’s original, unopened packaging, with labels clearly identifying product name, manufacturer, and location of installation. Upon delivery, materials shall be inspected for damage. Deficient materials shall not be used.

C. Storage: Store materials in a clean, dry area indoors in accordance with manufacturer’s instructions. Keep temporary protective coverings in place.

D. Handling: Protect materials and finish from damage during handling and installation.

1.08 FIELD CONDITIONS

A. Field Measurements: Verify location of each sign in relation to adjacent work, and locate (if) any related power / lighting work by others imbedded in permanent construction. Indicate these field measurements on shop drawings.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Cast Dimensional Characters as fabricated by A.R.K. Ramos Architectural Signage Systems, Oklahoma City, OK

B. Acceptable manufacturers:
   1. ASI Sign Systems, Inc
   2. Gemini Incorporated, Cannon Falls, MN
   3. Metallic Arts, Spokane Valley, WA

2.02 CAST DIMENSIONAL CHARACTERS

A. Form characters by sand casting. Produce characters with smooth flat faces, sharp corners, precisely formed lines and profiles, free from pits, scale, sand holes and other defects. Cast anchoring devices into individual letters as required for anchorage.

B. Material:
   1. Cast Aluminum

C. Finish:
   1. F-6D Aluminum: Dark bronze, 313 duranodic

D. Thickness:
   1. 0.625”

E. Characters:
   1. Letterstyle - Helvetica Medium (No. 521)
   2. Height - 8 inches high
   3. Text (message) as indicated on drawings. Final copy to be approved by owner.

2.03 ACCESSORIES

A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of letters, noncorrosive and compatible with each material joined, and complying with the following:
   1. Use concealed fasteners and anchors unless indicated to be exposed.
   2. For exterior exposure, furnish hot-dip galvanized devices unless otherwise indicated.
   3. Exposed Metal-Fastener Components, General:
      a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.

b. Fastener Heads: For nonstructural connections, use flathead screws and bolts with tamper-resistant Allen-head slots unless otherwise indicated.

4. Sign Mounting Fasteners:
   a. Concealed Studs: Concealed (blind), threaded studs welded or brazed to back of sign material, screwed into back of sign assembly, or screwed into tapped lugs cast integrally into back of cast sign material, unless otherwise indicated.
   b. Projecting Studs: Threaded studs with sleeve spacer, welded or brazed to back of sign material, screwed into back of sign assembly, or screwed into tapped lugs cast integrally into back of cast sign material, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

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

B. Verify that sign-support surfaces are within tolerances to accommodate signs without gaps or irregularities between backs of signs and support surfaces unless otherwise indicated.

3.02 INSTALLATION

A. Locate letters where indicated:
   1. Locate letters and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.
   2. Provide full size paper mounting template showing hole placement and location of mounting holes.

B. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
   1. Install letters level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
   2. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
   3. Corrosion Protection: Coat concealed surfaces of exterior aluminum in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

C. Mounting Methods:
   1. Concealed Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.
      a. Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place sign in position and push until flush to surface, embedding studs in holes. Temporarily support sign in position until adhesive fully sets.
   2. Projecting Studs: Using a template, drill holes in substrate aligning with studs on back of sign. Remove loose debris from hole and substrate surface.
      a. Split Face (Rough Texture) Masonry Substrates: Fill holes with adhesive. Leave recess space in hole for displaced adhesive. Place spacers on studs, place letters in position, and push until spacers are pinched between sign and substrate, embedding the stud ends in holes. Temporarily support sign in position until adhesive fully sets.

D. Install letters level, plumb, and at the height indicated with sign surfaces free from distortion or other defects in appearance.

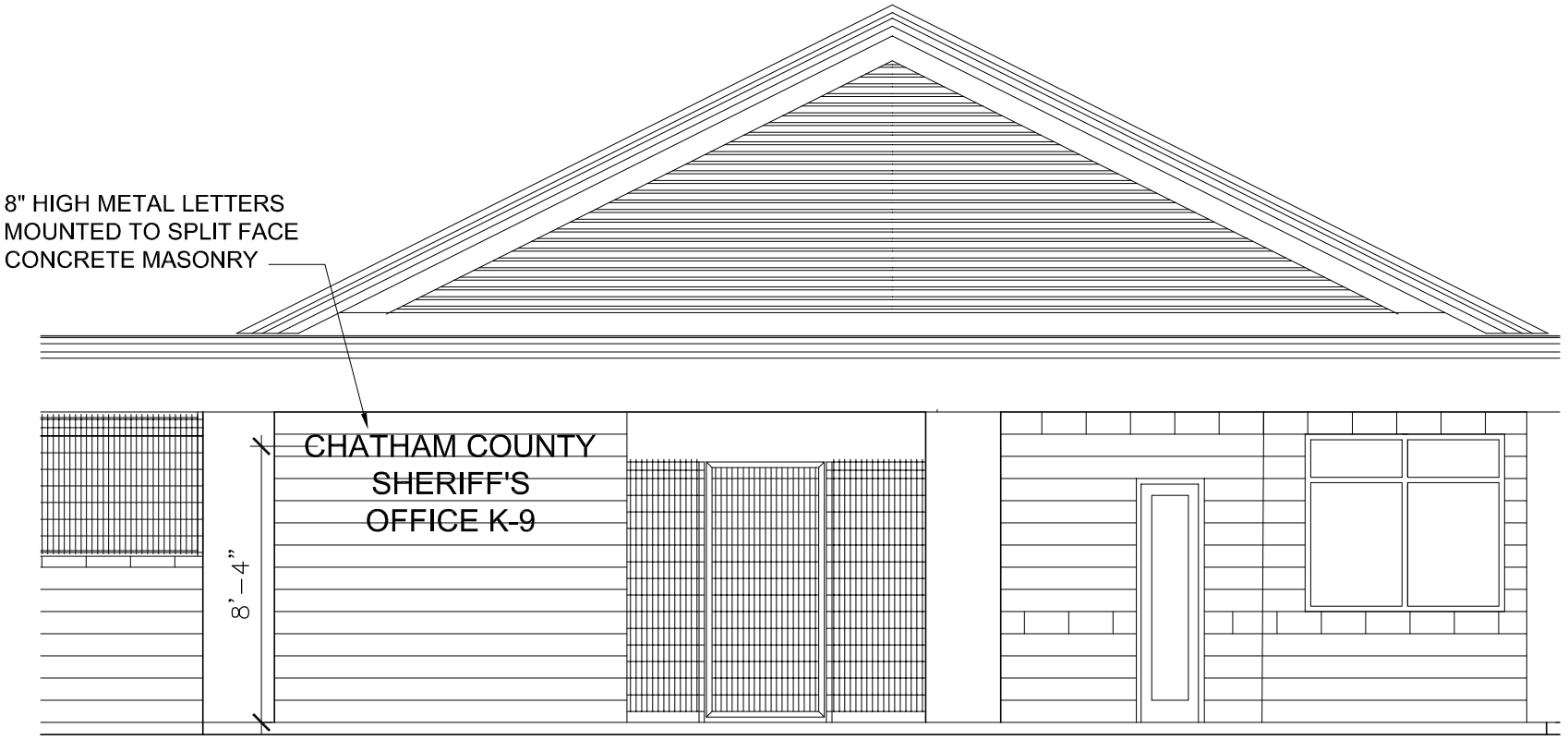
3.03 ADJUSTING AND CLEANING

A. Remove and replace damaged or deformed characters and signs that do not comply with specified requirements. Replace characters with damaged or deteriorated finishes or components that cannot be successfully repaired by finish touchup or similar minor repair procedures.

B. Remove temporary protective coverings and strippable films as signs are installed.

C. On completion of installation, clean exposed surfaces of signs according to manufacturer's written instructions, and touch up minor nicks and abrasions in finish. Maintain signs in a clean condition during construction and protect from damage until acceptance by Owner.

END OF SECTION



1 PARTIAL K9 ENTRY ELEVATION - BUILDING LETTERS

3/16" = 1'-0"

SUPPLEMENTAL DWG

SD-A101

REFER TO DWG. A3.200

DW/CK : RJP

SCALE : AS NOTED

ADDENDUM NO. 1

DATE : 10/26/16

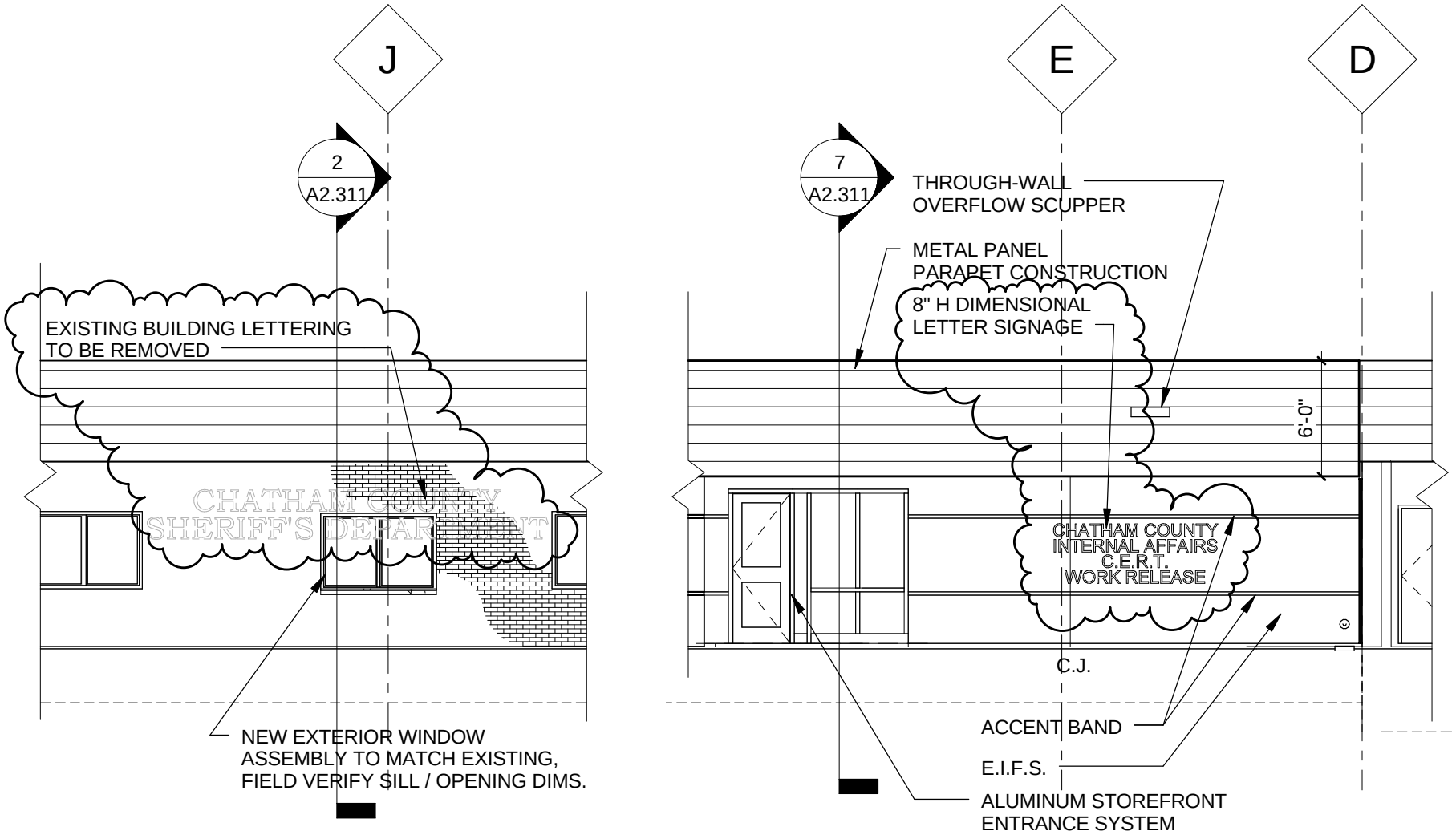
PROJECT : 14-2200-0273

CHATHAM COUNTY DETENTION CENTER

EXPANSION PROJECT 2

L.R. Kimball

615 West Highland Ave.
Ebensburg, PA 15931



1 PARTIAL UNIT 5 - NORTH ELEVATION - NEW CONSTRUCTION

1/8" = 1'-0"

SUPPLEMENTAL DRAWING

SD-A102

REFER TO DWG: **A2.201**

DW/CK: DMK /RV

SCALE: AS NOTED

ADDENDUM NO. **1** DATE: **11/03/16**

PROJECT: 14-2200-0273

CHATHAM COUNTY
DETENTION CENTER
EXPANSION PROJECT 2

L.R. Kimball
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