THE COUNTY OF GALVESTON

RUFUS G. CROWDER, CPPO CPPB
PURCHASING AGENT

GWEN MCLAREN, CPPB
ASST. PURCHASING AGENT

COUNTY COURTHOUSE
722 Moody (21st Street)
Fifth (5th) Floor
GALVESTON, TEXAS 77550
(409) 770-5371

June 25, 2014

RE: ADDENDUM #1
RFP #B141025 Galveston County Road & Bridge Department Crystal Beach Facility

To All Prospective Proposers,

Attached you will find Addendum #1 for RFP # B141025 Galveston County Road & Bridge Department Crystal Beach

As a reminder, all questions regarding this proposal must be submitted in writing to:

Rufus G. Crowder, CPPO CPPB
Galveston County Purchasing Agent
722 Moody, Fifth (5th) Floor
Galveston, Texas 77550
E-mail: rufus.crowder@co.galveston.tx.us

If you have any further questions regarding this proposal, please address them to Rufus Crowder, CPPO CPPB, Purchasing Agent, via e-mail at rufus.crowder@co.galveston.tx.us, or contact the Purchasing Department at (409) 770-5371.

Please excuse us for any inconvenience that this may have caused.

Sincerely,

Rufus G. Crowder, CPPO CPPB
Purchasing Agent
Galveston County

County Architect

ADDENDUM NO. 1
June 24, 2014

- **Proposal Packages**
- RFP #B141025 Road and Bridge Department – Crystal Beach Facility

Project:

Prepared by: Brax Easterwood Architects, Shelmark Engineering, LLC, and IBIS Engineering, LLC.
Project No.: SME 12-324

Prepared for: Prospective Proposers

PART A: NOTICE TO BIDDERS:

1. Receipt of this Addendum shall be acknowledged on the Bid Proposal Form. Failure to do so may subject Bidders to disqualification. Each Proposer shall make necessary adjustments and submit his proposal with full knowledge of all modifications, clarification, and supplemental data included therein.
2. This Addendum forms part of the Contract Documents and shall be incorporated integrally therewith. Where provisions of the following supplemental data differ from those of previously issued documents, this Addendum shall govern.
3. The following Contract Documents have been issued to date delineating the Work (Project).
   Contract Documents May 19, 2014
4. This Addendum consists of 4 type written pages, 1 drawings, 1 sign in sheet, and 1 Proposal Form attached

PART B: CHANGES TO THE PROJECT MANUAL (SEE ATTACHMENT A)

1. Added BID PROPOSAL FORM (4 pages)
2. Modified Agreement between Galveston County and Contractor by adding Alterations, Page 11 Article XII. (12 pages)
3. Modified Section 01030 – Alternates (2 pages)
4. Added Section 04720 – Cast Stone Masonry (6 pages)
5. Added Section 05400 – Cold Formed Metal Framing (6 pages)
6. Added Section 10280 – Toilet Room Accessories (4 pages)

PART C: CHANGES TO BID PROPOSAL FORM (B141025)

1. None at this time.

PART D: RE-ISSUED DRAWING SHEETS (SEE ATTACHMENT B).

1. Cover Sheet – Modified to 2009 IBC.
2. Drawing A3.5 – Modified roof eave height.
3. Drawing A9.3 – Added wall types 0A30/003A, 0B4B, 0A4B/0B4A, and 0A6D/0D6A
4. Drawing S2.1 - Revised Bar Joist Size to 16K4.

PART E: NEWLY ISSUED DRAWING SHEET (SEE ATTACHMENT C)

1. Survey dated May 1, 2013

PART F: ADDENDA MEMO ATTACHED – Questions/answers from bid/proposal period.

QUESTIONS DURING PROPOSAL PERIOD AND CLARIFICATIONS (ANSWERS IN BOLD)

1. How Many Removable Loading Guardrails are there?
    a. **ANSWER: There are approximately 170 Linear Feet of removable guard rail.**

2. Does the Owner provide the 10" Limestone/Crushed Base Parking Area in the Base Bid?
    a. **ANSWER: No 10" Limestone/Crushed Base provided by the Contractor.**

3. Does the Owner provide the 8" Limestone/Crushed Base in Alternate #2?
    a. **ANSWER: No 8" Limestone/Crushed Base provided by the Contractor if selected.**

4. On Drawing C1.2, what type of pipe and what size are the Conduits?
    a. **ANSWER: Provide 4-inch PVC Schedule 40 or 80 UL 651 conduit that is so marked**

5. Please provide a copy of the Geo-Tech Report.
    a. **ANSWER: Geotechnical Report dated June 2013 is attached as Attachment D.**

6. Please provide details/specs for the Light Gage Metal Canopy on Drawing A0.2.
    a. **ANSWER: Please refer to Drawing A3.3.**

7. Please provide a specification for the Cast Stone.
    a. **ANSWER: Added Section 04720 – Cast Stone Masonry. See Attachment A.**

8. Please provide specifications for the Restroom Accessories listed on Drawing A1.3.
    a. **ANSWER: Added Section 10280 – Toilet Room Accessories. See Attachment A.**

9. Please specify the type of hanger connecting the 2x12 beams to the 2x8 rafters.
    a. **ANSWER: There are no hangers required. The 2x8 rafters bear across the 2x12 beams. The connection between the rafter-beam shall be a 2x6 wood framing anchor with 3 rows of 16d nails per connection. See Detail 1 – Sheet S3.3.**

10. Please provide the specification for the Trench Drain in the truck wash.
    a. **ANSWER: MIFAB T1320-FL trench drain, or approved equal.**

11. On Drawing S1.1, are there any Footings and/or Piling under Electrical Room?
    a. **ANSWER: See Sheets S5.1 and S5.2 for grade beams and slab design.**

12. Spec 11501 Asphalt Tank, unable to locate Duraco Inc. Do you have a contact number?
    a. **ANSWER: Phone: 601-932-2100 or Toll Free: 866 60 Patch**

13. Please provide Foundation Requirements for the Asphalt Emulsion Tank.
    a. **ANSWER: There are no special foundation requirements for the asphalt emulsion tank.**

14. Spec 06400 lists suppliers that typically manufacture large millwork projects. Can we use local Millwork subcontractors in lieu of these that are listed?
    a. **ANSWER:**

15. Please review the Controls Specifications, i.e. 23 09 33 and 23 09 34. If my interpretation is correct (23 0934), and the GC is handling the purchasing and coordination of the "BAS" for the Building and same is proprietary. Some of the verbiage within the two (2) specification sections is somewhat conflicting but the implied intent is the GC purchases and coordinates. From my interpretation, this is quite a BAS for such a relatively small facility and I need confirmation that this is the system they want and you are going to take care of each and every aspect of the same. We will not do 'part' of the system as that leads to confusion and misinterpretation. We do all of the Controls or we do none. Don't have a problem wither way, just not....you do this part and we will do another part.
    a. Please confirm this is the system they want for this facility. Y/N .
    b. Who is going to take care of the purchase and installation of same? G/C or Mechanical Contractor?

i. **ANSWER: Provide 7-day programmable thermostat only. No controls required. Unit heaters are to be individually thermostatically controlled**

16. Please refer to Plan Page M1.0. There is a "Revision Triangle" on the Page with a 'C' inside. We find no Revision clouded or noted and nothing on the Legend that would clarify what this signifies or references.
    a. Please clarify what this Symbol indicates, signifies, or references to.
        i. **ANSWER: Disregard, stray mark.**

17. Please refer to Plan Page M1.0 and M2.0. With regards to the Ductwork and specifically to the "Trunk Lines" of same:
    a. M1.0, the ductwork drawings are comprised of single line duct references and the sizes noted thereon are typical of rectangular duct dimensions.
    b. Plan Note No. 1 states 'All Trunk Ductwork shall be Internally Insulated, Dual-Walled, Galvanized Duct w/ R-8 Insulation Minimum'. Typically, Double Wall, Internally Insulated Duct is utilized for areas of 'Exposed Ductwork', however, referencing the Reflected Ceiling Plan, there does not appear to be any Exposed Ductwork on the site.
    c. M2.0, the "Duct Liner and Insulation Schedule' indicates (note 4 & 5) that all Supply & Return Air Ductwork to be internally insulated with 1" Duct Liner and Externally Insulated with R-8 exterior wrap.
    d. M2.0, the 'Duct Liner and Insulation Schedule' indicates the back pan of the Return Air Grills are to be externally insulated but not the back pan of the Supply Air Grills.
    e. Please provide clarification regarding exactly what kind of ductwork is required and what insulation is needed. If there are difference, i.e. where internal and external insulation are required where other areas internal and external insulation are not required, please advise where the two separations would apply.
        i. **ANSWER: Ductwork and diffuser/return backs and parts of air handler will be installed in or adjacent to unconditioned, unventilated, humid, spaces. Contractor shall provide a system of insulation, sealed vapor barriers and thermal breaks to preclude the formation of condensation on or within the ductwork, interior and exterior insulation surfaces, diffusers, return grills, ceiling grid, air handler parts. Internal duct insulation is preferred.**

18. Please refer to Plan Page M1.0. Plan Note No. 3 indicates 'Exterior Compressor shall be Heresite Coated'.
    a. Please confirm. Is the entire Air Cooled Condensing Unit to be coated or just the Condensing Coil to be coated?
        i. **ANSWER: Condenser coil shall be FACTORY coated. Disassembly and re-assembly of condenser shall be performed by manufacturer's factory representatives. Past experience with 3rd party coating contractor labor who reassemble the units has been unsatisfactory and has resulted in premature failure of newly installed equipment on more than one county project.**

19. Please refer to Plan Page M1.0 & P1.0. Plan Page M10 indicates the Air Handling Unit to be located on the right side of the Plan Page. Plan Page P1.0 indicates all the Plumbing will be on the left side of the Plan Page. Without any alterations, the condensate drain piping would have to be run basically the full width of the building to get to a Plumbing Sanitary Sewer termination point. We do not recommend this arrangement as long condensate drain lines provide for increased issues over time. We recommend the Sanitary Plumbing be Revised to include a drain riser to the Mezzanine Floor providing a Floor Drain or Hub Drain for the disposal point for the condensate drain.
    a. Will you please revise the Plumbing Sanitary Drain Plan to include a Floor Drain or Hub Drain to be located at the Mezzanine Floor for use as a Condensate Disposal Point? I can tell you for a fact...the Owner will greatly appreciate it in years to come.
        i. **ANSWER: Will modify drawings to provide 2" floor/hub drain adjacent to the air handler room for condensate disposal.**

20. Please refer to Plan Page M1.0. We find no indications of any fire or fire/smoke dampers at any locations.
    a. Please confirm there are no Fire, Smoke, or Fire/Smoke Dampers on the Project.
        i. **ANSWER: Fire dampers are required through fire rated walls/assemblies. No fire rated assembly wall are indicated on the Architectural drawings. Provide smoke detector in return.**

21. Please refer to Specification Section 23 05 094, 'Coordination of Testing and Balancing'. This Specification Section specifically states, "Balancing and Adjusting of the Environmental Systems is specified in Section 23 05 93". We did

not find any Specification Section 23 05 93 in any of the information we downloaded from ISQFT. We downloaded all of the documents available on the ISQFT site.

a. Please confirm/clarify: Who provides for the Testing and Balancing of the HVAC Systems on the Project? We can provide Certified Test and Balance of the HVAC System by a third party, however, we do not find where we are to do so.

i. **ANSWER: Contractor shall provide 3rd party TAB cert. Should be a note at the bottom of the Mechanical notes drawing.**

22. I really need the metal building quote / write up in order to establish the scope of work. We will erect what the metal building company furnishes.

a. **ANSWER: Foundation and mezzanine information was provided for bidding purposes only based on preliminary information provided by pre-engineered metal building manufacturer. See Specification 13341 for design information. Contractor shall be responsible to order metal building and provide final design reactions to Shelmark Engineering to verify preliminary information.**

23. The wage scale chart does not list metal building erectors. I will need to know if we are considered iron workers, sheet metal workers, laborers, or some combination of those.

a. **ANSWER: Based upon the US Department of Labor Resource Book 2010: "Metal Building assemblers/builders/erectors is a specialty classification that may use a combination of Iron Workers, Laborers, Sheet Metal Workers, and/or Carpenters." Laborers do not use tools.**

24. Is there a Survey drawing that can be provided?

a. **ANSWER: Survey is attached. See Attachment C.**

25. Do the overhead doors get motor operators? The electrical drawings do not show any circuits for the doors?

a. **ANSWER: No motor operators are required.**

26. Is the bid date changing?

a. **ANSWER: No changes to the bid date have been proposed.**

27. Has an addendum already been issued.

a. **ANSWER: No previous addenda have been issued.**

28. Alternates for Pole Barn – Plans don't match alternate spec section.

a. **ANSWER: The specification Section 01030 has been revised to match the drawings. See Attachment A.**

29. Drawing C1.2 shows conduit but no size.

a. **ANSWER: 4-inch PVC Schedule 40 or 80 UL 651 conduit that is so marked**

30. Signage – don't see a schedule.

a. **ANSWER: Spec Section 10140 lists the signage types and their locations. Refer to the specifications and the building elevations on A2.1 and A2.2.**

31. Wall types shown on floor plans but don't see a detail for them. Type OD6A, OA4B, OA30, OB4B.

a. **ANSWER: A9.3 will be reissued in Addendum 1 to including the fore mentioned wall types.**

32. Metal Building Questions.

a. Roof slopes / Eave heights vary on different drawings.

i. **ANSWER: A3.1 and A3.5 will be reissued in Addendum 1.**

b. Exposure "C" or "D"?

i. **ANSWER: Exposure C**

c. Collateral load?

i. **ANSWER: Collateral Load is two (2) pounds per square foot.**

d. FM rating I-60, 9, or 120.

i. **ANSWER: FM Rating of I-90**

e. Crane data for the (5) ton crane TRE?
   i. **ANSWER: See Sheet S2.3 for top of steel (beam) elevation.**

f. Mezzanine loads?
   i. **ANSWER: 100 pounds per square foot as indicated on sheet S1.0.**

g. Is eave trim required on wash bay & pole buildings?
   i. **ANSWER: The wash bay and pole building do not have eave/rave trim**

h. Mid – West rood panels & purlins are NOT factory punched. Is this acceptable?
   i. **ANSWER: Unable to find technical information on Mid-West website. Submit information on Mid-west and where they differ from the specifications.**

i. Need kip load for canopy with membrane roof.
   i. **ANSWER: Main Wind Force Resisting System (MWFRS) Roof Loads shall be 15 pounds per square foot (PSF) dead load and 20 PSF for live loads. Uplift load pressure shall be -54.5 PSF. Design pressure for metal roof cladding shall be -72 PSF.**

j. Is reverse roll PBU panel ok for the type 2 panel. Ribs are ¾" high.
   i. **ANSWER: Unable to find technical information on Mid-West website. Submit information on Mid-west and where they differ from the specifications. Panel must meet specification 13341, design loads, and connection to wood frame.**

k. Is Mid-West steel Building Company approved?
   i. **ANSWER: Any pre-engineered metal building manufacturer is eligible to provide the metal buildings and roof cladding as long as they can meet design criteria in specification 13341. Contractor shall be responsible to order metal building and provide final design reactions to Shelmark to verify preliminary information.**

33. I have run across the Crystal Beach Facility job on ISQFT and noticed Lightoiler is listed on the lighting schedule along with "approved equal". I was hoping to get a little more information on how Cooper lighting can become an approved equal for this particular job. Are substitutions possible, and if so, is a prior package necessary.
    a. **ANSWER: We have reviewed the submittals from PSA lighting. Cooper lighting is an acceptable alternate to the specified lighting fixtures. Note that any emergency lighting in the shop areas is to be wall mounted, not recessed, because there is no ceiling.**

34. I believe I have discovered a flaw in the placement of slab at the Crystal Beach Facility project. The details on S1.2 and S2.3 show the footers, grade beams, and finish slab to be placed monolithic. Generally the pilecaps (footers), and grade beams are placed first then stripped and backfilled to proper density. Then the finish slab is placed above said foundation. This provides a more structural foundation and a better quality finish.
    a. **ANSWER: The footings (pilecaps), grade beams and slab shall be poured monolithically after piling installation. No cold joints shall exist in the footings. The perimeter curb were specified may be poured secondly.**

35. I have been informed that the joist specified on plan sheet S2.1 will not span the length please advise.
    a. **ANSWER: The joist specified shall be 16K3 at 24-inches on center spacing. This information is presented for bidding purposes and shall be verified with pre-engineered metal building manufacturer. See revised Sheet S2.1.**

36. Windstorm Engineering, Inspections and Certification comments from Shelmark Engineering, LLC.
    a. **ANSWER: Inspection and final building certifications (main building, truck wash, and truck shed) shall be provided by Shelmark Engineering per existing contract with Galveston County. Contractor shall be responsible for construction compliance per pre-engineered building manufacturing erection plans and project construction documents. In the event, deviations are noted during the inspection process, Contractor may be required to hire independent inspection firm to provide windstorm certifications at their expense.**

37. Water and sanitary sewer service comments from Shelmark Engineering, LLC.
    a. **Water service line and connection to existing water main shall be the responsibility of the Contractor including permit fees and building permit from Bolivar Peninsula Special Utility District (BPSUD). Phone contact is (409) 684-3515. BPSUD shall install water meter.**
    b. **Sanitary sewer grinder pump and force main extension shall be installed by Bolivar Utility Services, LLC (BUS). Contractor shall coordinate with BUS for permits and all permit fees. Contact Number is 409-684-9941.**
    c. **See Attachment E for miscellaneous forms. Coordinate with BPSUD and BPSU.**

38. Additional comments from IBIS Engineering.
    a. **Plumbing contractor shall provide a 2-inch sanitary hub drain to the area adjacent to the mezzanine air handling unit room for disposal of condensate. Location of this line shall be coordinated with the mechanical contractor.**
    b. **Dwg. E0.1 and E0.1A... contractor shall provide and install pole light and foundation for light LT-7. LT-7 shall match existing adjacent light pole specifications, coordinate with owner for specifications.**
    c. **Emergency lights X-2 which are installed in the shop areas shall be wall mounted.**
    d. **Copper lighting is an acceptable alternative for the lighting fixtures.**
    e. **Air conditioning equipment shall be Trane or Carrier only. Heresite coating shall be applied to condenser coils only, and shall be FACTORY applied. Reassembly of the condenser shall be performed by manufacturer's personnel only.**
    f. **Provide 7-day programmable thermostat for air handler unit. Building automation controls are not required.**
    g. **Third party Testing and Air Balancing certificate shall be provided by the contractor.**

END OF ADDENDUM

Attachments:
Bid Proposal Form
Agreement between Galveston County and Contractor
Section 10280 – Toilet Room Accessories (4 pages)
Section 05400 – Cold Formed Metal Framing (6 pages)
Section 04720 – Cast Stone Masonry (6 pages)
Geotechnical Report
Survey

THE COUNTY OF GALVESTON

RUFUS G. CROWDER, CPPO CPPB
PURCHASING AGENT

GWEN MCLAREN, CPPB
ASST. PURCHASING AGENT

COUNTY COURTHOUSE
722 Moody (21st Street)
Fifth (5th) Floor
GALVESTON, TEXAS 77550
(409) 770-5371

June 27, 2014

RE: ADDENDUM #2
RFP #B141025, Galveston County Road & Bridge Department Crystal Beach Facility

To All Prospective Proposers,

The following information is being provided to aid in preparation of your proposal submittal(s):

Attached you will find Addendum #2 for RFP #B141025, Galveston County Road & Bridge Department Crystal Beach Facility.

OPENING DATE:
RFP #B141025, Galveston County Road & Bridge Department Crystal Beach Facility, originally scheduled to be opened on Tuesday, July 1, 2014 at 10:00 a.m. has been re-scheduled. The new deadline for submitting a proposal is as follows:

Date: Tuesday, July 8, 2014
Time: 10:00 a.m.

Please send bid submittals to:
Galveston County Purchasing Agent
Attention: Rufus Crowder, CPPO CPPB
722 Moody (21st Street), Fifth (5th) Floor
Galveston, Texas 77550

As a reminder, all questions regarding this proposal must be submitted in writing to:

Rufus G. Crowder, CPPO CPPB
Galveston County Purchasing Agent,
722 Moody, Fifth (5th) Floor
Galveston, Texas 77550
Fax: (409) 621-7987
E-mail: rufus.crowder@co.galveston.tx.us

Please excuse us for any inconvenience that this may have caused.

Sincerely,

Rufus G. Crowder, CPPO CPPB
Purchasing Agent
Galveston County

County Architect

ADDENDUM NO. 2
June 26, 2014

- **Proposal Packages**
- RFP #B141025 Road and Bridge Department – Crystal Beach Facility

Project:

Prepared by: Brax Easterwood Architects, Shelmark Engineering, LLC, and IBIS Engineering, LLC.
Project No.: SME 12-324

Prepared for: Prospective Proposers

PART A: NOTICE TO BIDDERS:

1. The Proposal Date has been moved to **July 8, 2014** at 10:00 am.

2. Receipt of this Addendum shall be acknowledged on the Bid Proposal Form. Failure to do so may subject Bidders to disqualification. Each Proposer shall make necessary adjustments and submit his proposal with full knowledge of all modifications, clarification, and supplemental data included therein.

3. This Addendum forms part of the Contract Documents and shall be incorporated integrally therewith. Where provisions of the following supplemental data differ from those of previously issued documents, this Addendum shall govern.

4. The following Contract Documents have been issued to date delineating the Work (Project).

Contract Documents	**May 19, 2014**
Addenda 1	**June 24, 2014**

5. This Addendum consists of **6** type written pages, 0 drawings, 0 sign in sheet, and **1** Proposal Form attached

PART B: CHANGES TO THE PROJECT MANUAL

1. None included

PART C: CHANGES TO BID PROPOSAL FORM (B141025)

1. Revised Proposal Form dated June 26, 2014 attached.

PART D: RE-ISSUED DRAWING SHEETS

1. None included

PART E: NEWLY ISSUED DRAWING SHEET

1. None included

PART F: ADDENDA MEMO ATTACHED – Questions/answers from bid/proposal period.

QUESTIONS DURING PROPOSAL PERIOD AND CLARIFICATIONS (ANSWERS IN BOLD)

1. There is no Proposal Form in the Specifications. Where do we obtain the Proposal Form?

    a. **ANSWER: Addenda 1 included a Proposal Form. Addenda 2 revises the Proposal Form. Use the attached form that includes an Evaluation Waiver and Qualification Statement. This is attached as part of addenda 2.**

2. Under this same section as above, Pg. 6 of 18, #2 QUALIFICATION STATEMENT, it states "The Qualification Statement included in the Proposal Evaluation Waiver must be completed and submitted along with the Proposal Form". There is no Proposal Evaluation Waiver/Qualification Statement in the specifications. Where is the Qualification Statement and Proposal Evaluation Waiver?

    a. **ANSWER: Addenda 1 included a Proposal Form. Addenda 2 revises the Proposal Form. Use the attached form that includes an Evaluation Waiver and Qualification Statement. This is attached as part of addenda 2.**

3. Will Galveston County accept the "TX Statutory Bond Form" for the Payment and Performance Bond?

    a. **ANSWER: Yes.**

4. Bridge Crane spec 14630-1.04-A. indicates bridge crane is to be designed for 10 ton capacity. Same section 14630-2.03-A. indicates the crane system is to be 5 ton capacity. Please clarify which capacity crane is to be provided.

    a. **ANSWER: 10 Ton**

5. Structural General Notes sheet s1.0 – Under Construction Materials – Foundations – Driven Timber Piles:

    A. Note 1. Reference Project Geotechnical Report Prepared By QC Lab Number 12G9733 Dated July 25, 2003 For Additional Information and Requirements.

    How do we get access to this geotechnical report? It is not in the file listing on the FTP site.

    a. **ANSWER: The Geotechnical Report is included in addenda 1 and available on the ftp site ftp://208.110.200.12 . If anyone has trouble getting it from wither of those 2 locations Galveston County will send it direct upon request.**

    B. Under PILE NOTES – 2. PILING INSTALLATION –

    Note 2.A. "Timber piling to be driven….to the elevation shown on the plans or as designated by the engineer." Bottom of piling (tip) elevation is not shown on plans. Please clarify bottom (tip) elevation for the piling.

    a. **ANSWER: Pile length is 35 foot per drawing sheet S1.0. The elevation of the top of pile is indicated on the section details. Piles should be driven to the full depth or as per instructions in the Geotechnical Report. Generally it should be assumed the piles are installed to the full depth to achieve maximum pile end bearing pressure of 3,000 psf.**

5. Addenda 1 Proposal Form item #8 says to include all allowances except for the contingency allowance. Item #10 is the testing allowance. Item #17 will therefore have the testing allowance calculated twice. Please clarify.

    a. **ANSWER: Addenda 1 included a Proposal Form. Addenda 2 revises the Proposal Form. Use the attached form that clarifies this question. The base Proposal does not include alternates. The Contingency allowance is calculated solely on the Base Proposal. Alternates will be added to the Proposal Total as is possible with available funding. The revised Proposal form dated June 26, 2014 is attached as part of Addenda 2.**

6. Addenda 1 Proposal Form item #14 is an ADD for a portion of the Pole barn. Item #15 is an ADD for the entire Pole barn. Item #17 will therefore have a portion of the Pole barn calculated twice. Please clarify.

a. **ANSWER: Addenda 1 included a Proposal Form. Addenda 2 revises the Proposal Form. Use the attached form that clarifies this question. The base Proposal does not include alternates. Alternates will be added to the Proposal Total as is possible with available funding. If Alternate item 15 is accepted Alternate item 14 will not be relevant. The revised Proposal form dated June 26, 2014 is attached as part of Addenda 2.**

7. Alternate #7 has been deleted by Addenda #1 Does this mean the base material will be included or excluded from the Base Bid Proposal?

    a. **ANSWER: base material is included in the Base Proposal.**

8. Page 3 of the Proposal Form, under the Signature Line, says a Proposal Evaluation Waiver and other documents must accompany this form. Please provide Section 00104 and any other documents required.

    a. **ANSWER: Addenda 1 included a Proposal Form. Addenda 2 revises the Proposal Form. Use the attached form that includes an Evaluation Waiver and Qualification Statement. This is attached as part of addenda 2. Each Proposer must provide supportive documentation to allow the questions included in the evaluation process to be answered. Those question are listed in the Evaluation Waiver as items a through i. Galveston County does not need 8 x 10 glossy photographs of you previous work. Please answer item a through i with a simple client list or sentence declaring your answer.**

9. Arriscraft International is a very expensive product. We are running short of time to submit substitutions. Will you accept locally manufactured cast stone that meets the size and color requirements?

    a. **ANSWER: Not at this time. The Arriscraft product has particular properties not available in other products. Galveston County might consider another product at a later date if it can be shown to be equivalent and saves Galveston County money.**

10. Can you clarify who purchase "all Risk" Property Insurance; the Owner or the Contractor? Section 10300 General terms and Conditions of the Contract, Subsection 26, Paragraph P.1 (page 37 of 52) states "Unless otherwise provided. The Owner will purchase and maintain Property Insurance upon the entire work at the site to the full insurable value thereof". County of Galveston Purchasing Department Vendor Qualification Packet on page 1 states "Successful vendor agrees to keep in full force and effect, a policy of public liability and property damage insurance issued by a casualty company authorized to do business in the State of Texas…".

    a. **ANSWER: Galveston County intends to purchase "Builders Risk" insurance on accepted work in place. Note that the deductible is the responsibility of the Contractor or Sub-Contractor. This insurance does not include Contractor or Sub-Contractor tools or equipment. Galveston County will not insure materials that are not in place or that are not approved. Please remember that we will be proceeding during hurricane season and any materials not secured against loss due to storm or theft will not be insured by Galveston County.**

11. Please clarify the number of sets of proposals to be submitted

    a. **ANSWER: 1 original and 8 copies.**

12. The recent addendum states: *Sanitary sewer grinder pump and force main extension shall be installed by Bolivar Utility Services, LLC (BUS). Contractor shall coordinate with BUS for permits and all permit fees. Contact Number is 409-684-9941.* Please clarify if above statement means that BUS will be purchasing and installing the Duplex Sanitary Grinder Station or performing installation only. If installation only, who is responsible for purchasing the Grinder Station.

    a. **ANSWER: Galveston County has spoken with BUS about this item. The waste water capacity fee is $8,000 and is an expense included in the project. The Proposer must include that in his Base Proposal. A simplex grinder pump, installation of same, and sanitary sewer line (without clean outs)**

from the grinder pump location to the main on the far side of Crystal Beach Road (including boring under the street) is included in the $4,200 payment to BUS. The Proposer must include that in his Base Proposal. The total payment to BUS is therefore $12,200.

b. **That leaves the question of the lift station indicated on drawing P4.1. To the best of Galveston County knowledge at this time the BUS provided "standard" equipment is all that is required on the project.**

13. I would like to know the AIC rating of the panels for this project

    a. **ANSWER: Pending**

14. The branch circuit feeding from MDP to the transfer switch and then to DP1is a 350 amp breaker. The fused disconnect the generator is feeding calls for 450 amp fuses and this feeds the other side of the transfer switch. I would like to verify this is accurate information

    a. **ANSWER: Pending**

15. On the lighting drawings there is lights labeled LT-7, LT-9, and LT-10 that I cannot find on the lighting schedule

    a. **ANSWER: Pending**

16. On E1.0 there are a number of locations that have a symbol of what I believe is a disconnect but there is no symbol on the electrical schedule. There are some that have only 1 circuit and others that have 2 and 3 circuits (PB-55, PB-58, PB-60)

    a. **ANSWER: Pending**

17. We were told by Gulf Coast Overhead Door that a 14' X 14' sectional door would not withstand the wind load. They asked if the door size could be reduced to 12', if not they would need to change to rolling steel door in order to meet 14' X 14' opening that is required by the spec. Roll steel door would be three times the price and most likely warrant an electric operator as well. Could you please advise if this is an issue that has been discussed

    a. **ANSWER: Galveston County requires a 14' x 14' insulated sectional door that will withstand the wind loads specified. Various manufacturers may or may not provide this door. You may need to consider another manufacturer such as Clopay "Commercial Windcode". The 14' width is necessary and the wind resistance is necessary.**

18. After reviewing the specs and literature for the recommended manufacturer Duraco. Their literature/specs calls for a 12' X 12' Concrete Slab with metal embeds for the feet to be welded to. Can you please advise if this is correct? In addition, the literature suggest an engineered slab for this tank, which could weigh well over 20 tons full. Please advise on foundation requirements specifically

    a. **ANSWER: Provide Duraco published recommendations for a 12' X 12' concrete slab with metal embeds for the feet to be welded to. The slab is 12" thick with bottom bars #6 @ 9" O.C.E.W. and top bars #5 @ 5" O.C.E.W. Include the concrete pad and foundation in the cost of the Alternate.**

19. The specs call for (.60 pcf. CCA) Rated Pilings. (Freshwater). Can you please confirm this spec is correct and that you would not require 2.5 pcf. CCA Rated for Brackish/Salt Water?

    a. **ANSWER: The specified 0.60 pcf CCA is the desired product.**

20. Clarify the location of Panel DP1 which shows a 350 amp MCB.

    a. **ANSWER Pending**

21. Please explain Circuit 19, 21, 23 which show (6) 300 MCM conductors feeding generator #1.

a. ANSWER: Pending

22. We will need 120 volts for the battery charger and block heater in the Generator.

    a. ANSWER: Pending

23. On the one line drawing it shows a Fuel panel and feeder by others, does this mean another contractor is going to run the conduit from panel PB #2 to the fuel panel and from the fuel panel to the pumps? One the E0.1 drawing the note states that the Fuel contractor to confirm location type & size conduit leading me to believe the Electrical contractor is responsible for the conduit runs. Can you please clarify the Electrical contractor's responsibilities?

    a. ANSWER: Pending

24. Can you give me the mounting height for the LT-4 fixtures on the 6' wall?

    a. ANSWER: Pending

25. At the Gate locations are there going to be any raceways needed for gate entry and exit controls (key pads, magnetic loops, photo eye controls)?

    a. ANSWER: No

26. At the Office exterior entrees the lighting plans show 1 fixture at each door and the reflected ceiling drawing shows 2 at one door and 1 at the other door please confirm requirements please. Also how are they controlled?

    a. ANSWER: Pending

27. The reflective drawing also shows a 6" x 4' fixture and the lighting plan shows the fixture but there is ID by the fixture.

    a. ANSWER: Pending

28. How do you want to control the lights in the Wash area?

    a. ANSWER: Pending

29. You have several notes referring to Astro Timer, Photo cell. Please specify what you would like a time clock with a photo cell over ride?

    a. ANSWER: Pending

30. Would like to confirm the use of M/C cable in the office area.

    a. ANSWER: Pending

31. Panel PB calls for EMT feed and panel PL calls for RMC feed these panels are next to each other and would like to know which one you would like us to quote.

    a. ANSWER: Pending

32. Specs on new light pole.

    a. ANSWER: Pending

33. Location of generator disconnect.

    a. ANSWER: Pending

34. Per my information at this time this lift with these specs does not exist. (High Tech Equipment) – I have contacted a couple of vendors about furnish & installation of the vehicle lift section 14600, and am being told that without a manufacturer and model #, it is difficult at best to provide an accurate quote since they have been unable to accommodate all the parameters I provided. Would it be possible to get the manufacturer and model # used for the spec information?

    a. ANSWER: Pending

35. On the new proposal form included with Addenda #1 – Alternate #1 Landscaping references spec section 02711 which is not in the document package. Sections 02937 and 02950 are in the package. Please confirm/clarify if 02711 is to be issued, or if we are to reference landscape related specs.

    a. **ANSWER: The Proposal Form in addenda 2 clarifies this item. Sections 02937 and 02950 are listed in the description of the alternate.**

36. Spec 02950-3.09.A. states that maintenance will be required from time of planting until the initial acceptance. 3.10-A. states that the contractor shall provide 100% replacement guarantee for a period of one year, beginning at the date of substantial completion. Note that in the heat of the summer, plants could potentially die between rain events if no maintenance watering is performed on a regular basis. With no irrigation system provided, meaning maintenance is an uncertain thing after initial acceptance, how can the contractor be expected to guarantee the plants for any length of time, much less one year

    a. **ANSWER: Galveston County will provide maintenance during the one year warranty period. The County expects to be provided with vigorous and healthy plants prior to accepting the plants. The Contractor will be within his rights to question the quality of the maintenance and if it is found lacking than the County will not require replacement. However, if the plants fail to prosper with reasonable maintenance efforts the plants will need to be replaced by the Contractor.**

37. Addenda #1– The new proposal form has eliminated alternate #7 which existed on the original form. Please confirm/clarify if this is indeed correct.

    a. **ANSWER: There is no longer an Alternate #7.**

END OF ADDENDUM

Attachments:
Bid Proposal Form

Proposal Number B141025
Proposal Date – July 8, 2014
Proposal Time - 10:00 a.m.

Galveston County Road and Bridge Department
Crystal Beach Facility

SECTION 00101
REVISED PROPOSAL FORM

1. **OWNER:** **Galveston County**
2. **PROJECT:** **Galveston County Road and Bridge Dept. – Crystal Beach Facility**
3. **Design Professional** Brax Easterwood Architects, ShelMark Engineering, LLC, & IBIS Engineering, LLC.

4. **SUBMITTED BY:** _____
Proposer Name
_____
_____
_____
Proposer Address
_____
Proposer Phone Number
_____
Proposer e-mail or website

5.

A. Having examined the Instructions to Proposers, Contract Documents, and Conditions of the Contract of the Project listed above, dated March 26, 2013 including Addenda and having visited and fully inspected the site and examined all conditions affecting the Project, the undersigned, proposes to perform the complete Work of the Project required by the said Documents for the sum or sums set forth below.

B. In submitting this proposal, the undersigned, agrees to the following:
   01. Hold the proposal open for acceptance for 60 days from the submission of Proposal.
   02. Accept the right of the Owner to reject any, or all proposals, to waive formalities, and to accept the proposal which the Owner considers most advantageous to him.
   03. Accept the right of the Owner to reject any Subcontractor. A new Subcontractor may be contracted with the difference in proposal amount added to, or subtracted from, the Contract.
   04. Enter into and execute a Contract if awarded, on the basis of the Base Proposal and selected Alternate Proposals, if any.
   05. Complete the Work in accordance with the Contract Documents within the stipulated Contract Time.

C. Furnish specified insurance.
   01. Furnish specified insurance, performance, and payment bonds as per the Agreement between Galveston County and Trade Contractor..

D. The undersigned acknowledges that being notified that he has the best responsible Proposal does not convey upon him any property right to an award of the Contract or anything of value. The undersigned also acknowledges that no rights rest under the Proposal or tentative award and that any rights the Proposer may obtain will arise only upon execution of the Contract.

6. **ADDENDA:** The undersigned acknowledges receipt of:

Addenda 1 ..... June 24, 2014 initial here _____
Addenda 2 ..... June 26, 2014 initial here _____
Addenda _ ..... _____, 2014 initial here _____

7. **CONTRACT TIME:** Undersigned agrees to commence work upon receipt of Notice to Proceed and be Substantially complete within _____calendar days

Galveston County Road and Bridge Department
Crystal Beach Facility

8. **Base Proposal:** The undersigned agrees to perform the complete Work of this Project, for the lump sum price of (The Base Proposal includes all allowances listed in the Section 01020 except for the Contingency Allowance):

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

9. **Contingency Allowance:** The undersigned agrees to include a Contingency Allowance equal to 5% of the Base Proposal lump sum (item 8) to be utilized by Galveston County for unforeseen items of work as per Section 01020 of the Project manual:

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

Proposal Total

10. **TOTAL:** The sum of items 8 **and 9** above:

_____ Dollars & no/100 $_____
(Amount written in words governs) (Amount in figures)

11. **Alternate No. 1:** The undersigned agrees to provide Landscape work described in Section 02937, 02950 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

12. **Alternate No. 2:** The undersigned agrees to provide Asphalt in parking areas to the south of the building described in Section 02510 and drawing C1.0A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

13. **Alternate No. 3:** The undersigned agrees to provide chain link fencing described in Section 02831 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

14. **Alternate No. 4:** The undersigned agrees to provide Pole barn Storage shed from column line 1 through 12 described on drawings C1.0A, S3.1A, S3.2A, A0.1A, and E01.A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

15. **Alternate No. 5:** The undersigned agrees to provide Pole barn Storage shed described on drawings C1.0A, S3.1A, S3.2A, A0.1A, and E01.A for the lump sum price of:

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

16. **Alternate No. 6:** The undersigned agrees to provide the Asphalt Emulsion Tank described in Section 11501 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

Galveston County Road and Bridge Department
Crystal Beach Facility

17. OH&P FOR CHANGES IN THE WORK:
The reasonable overhead and profit allowable under Article VIII of the Agreement will be set as follows:

____% Overhead

____% Profit

Proposers Printed Name:.....

Proposers Address:
.....

.....

Proposers Phone Number.....

Signatory's Printed Name:.....

Signatory's Position/Title:.....

Seal:

Signature:..... date.....

Note that Section 00104 - Proposal Evaluation Waiver and other documents must accompany this form.

STATE OF TEXAS TAX STATEMENT OF MATERIALS and other charges:

The cost of in-place materials to be incorporated into the project in the Base Proposal $_____

The cost of labor, profit, materials
not in-place and all other charges in the Base Proposal ..... $_____

TOTAL: (Must agree with Proposal (para. 8) total above)..... $_____

Galveston County Road and Bridge Department
Crystal Beach Facility

NOTE: The Statement of Affirmation Must Be Notarized.

STATEMENT OF AFFIRMATION

"The undersigned affirms that he/she is duly authorized to execute this waiver by the person(s) or business entity making the proposal.

Proposer's Name:.....

Proposers Address: .....

.....

.....

Signatory's Name:.....

Signatory's Position/Title:.....

Signature:.....date.....

Subscribed and sworn to me on this _____ day of _____

_____
Notary Public

My Commission expires _____

NOTE: THIS FORM MUST BE EXECUTED AND SUBMITTED WITH PROPOSAL.

END OF SECTION

Galveston County Road and Bridge Department
Crystal Beach Facility

SECTION 00104
PROPOSAL EVALUATION WAIVER AND QUALIFICATION STATEMENT

By submitting a proposal, the Proposer indicated below agrees to waive any claim it has or may have against the Owner, Architect, Engineers, Consultants, or Construction Manager and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any proposal. The Proposer further agrees the Owner reserves the right to waive any requirements under the proposal documents or the Contract Documents, acceptance or rejection of any proposals, and recommendation or award of the contract.

In order to evaluate proposals the following items **must** be turned in along with the proposal form to allow Galveston County to determine the best overall proposal.

The information below shall be provided on the Proposer's letterhead. Failure to provide the information may result in no points awarded for that item in the evaluation process. Each item below will be researched for each Trade Contractor and assigned a relative value more fully described on the Proposal Tabulation Form attached for information only in Section 00300.

a) References from **all or the most recent 20** previous contracts comparable to this contract size and scope during the last five years. (including complete Owner name, individual Owner contact, current phone numbers, project size, etc.). This item accounts for **10%** of the evaluation scoring.

b) References from **all or the most recent 20** previous contracts with Galveston County and other political subdivisions located within Galveston County. (include Entity name, individual Entity contact, current phone numbers, project size, etc.). This item accounts for **5%** of the evaluation scoring.

c) Single page resume of superintendent, Project Manager, and Project Executive for this project. The quality of personnel accounts for **5%** of the evaluation scoring.

d) Listing of proposed subcontractors, suppliers, and other team members. The quality of subcontractors, suppliers, and other team members (if none then the quality of personnel above will be duplicated here) accounts for **5%** of the evaluation scoring.

e) Based upon references listed above the probability of satisfactory post construction maintenance, repair, and service for emergency warranty work. The probability of satisfactory response to warranty work accounts for 5% of the evaluation scoring.

f) Based upon references listed above the probability of satisfactory timely completion of the work. The probability of satisfactory timely completion of the work accounts for **5%** of the evaluation scoring.

g) The Proposer's safety record including the current EMR (experience modifier rate). The EMR relative to 1 accounts for **5%** of the evaluation scoring.

h) The Proposer's history of claims, mediation, litigation or arbitration with any Owner in the past 5 years. This item accounts for **5%** of the evaluation scoring.

i) The Proposer's historic compliance with laws and codes governing construction activities, including any current or past (within the past year) asbestos violations with the Department of State Health Services. This item accounts for **5%** of the evaluation scoring.

Galveston County Road and Bridge Department
Crystal Beach Facility

NOTE: The Statement of Affirmation Must Be Notarized.

STATEMENT OF AFFIRMATION

"The undersigned affirms that he/she is duly authorized to execute this waiver by the person(s) or business entity making the proposal.

Proposer's Name:.....

Proposers Address: .....

.....

.....

Signatory's Name:.....

Signatory's Position/Title:.....

Signature:.....date.....

Subscribed and sworn to me on this _____ day of _____

_____
Notary Public

My Commission expires _____

NOTE: THIS FORM MUST BE EXECUTED AND SUBMITTED WITH PROPOSAL.

END OF SECTION

Galveston County Road and Bridge Department
Crystal Beach Facility

SAMPLE OF PROPOSAL EVALUATION WORKSHEET

Galveston County Road and Bridge Dept. Crystal Beach Facility

RFP # B1412025 - General Contract
Evaluation Team Member 1 of 4

Grading:					50	5	10	5	5	5	5	5	5	0	100
Budget	$1.00	Proposal Bond	Addenda 1	Addenda 2	Base Proposal and selected alternates (if any)	References from previous contracts comparable in size and scope	Quality of performance with County (or other political subdivisions in County) on previous contracts	Quality of Proposed personnel	Quality of Proposed suncontractor, supplier, or team members personnel	Probability of satisfactory future maintenance, repair, & service, including time for emergency or warranty work	Compliance with laws on previous contracts	Proposer performance record of timely completion on previous projects similar in size and scope	Proposer safety record including current EMR	Proposer history of claims, litigation, or arbitration with any Owner in the last 5 years	Proposer attendance at Pre-Proposal Conference	Total Score
Lowest Base proposal and selected alternates (if any)																
Proposer																
					Cost											
					Grading Score											
					Rating											
					Grading Score											
					Cost											
					Grading Score											
					Rating											
					Grading Score											
					Cost											
					Grading Score											
					Rating											
					Grading Score											

The Base Proposal Cost rating is from lowest dollar to highest dollar. The scoring for the Base Proposal Costs is accomplished by dividing the lowest proposed cost by the individual proposer cost to obtain the grading and multiplying that fraction by the 50 points possible. Therefore the proposal cost proposal will receive 50 points.

The Safety record will be scored based upon all EMR below 1 being awarded 5 points, an EMR of 1 awarded 4 points, an EMR of 1.1 awarded 3 points, an EMR of 1.2 awarded 2 points, an EMR of 1.3 awarded 1 point.

No team is perfect.	100	Perfect
What we want	90	Quality Work and willingly contributes to the team effort
If above not available	80	Quality work and causes the rest of the team extra effort to deal with them.
Acceptable	70	Good work and willingly advances the team effort
Mediocre	60	Good work and causes the rest of the team extra effort to deal with them.
Only if we have to	50	Marginally acceptable work and willingly contributes to the team effort
Prefer not	40	Marginally acceptable work and causes the rest of the team extra effort to deal with them.
No	30	Poor work and attempts to contribute to the team effort
This will just waste time please don't submit	20	Poor work and causes the rest of the team extra effort to deal with them.
	0	

W:\Architecture\0 PROJECTS\004-012 Crystal Beach Road & Bridge\Standard Specifications\Proposal Evaluation Form

THE COUNTY OF GALVESTON

RUFUS G. CROWDER, CPPO CPPB
PURCHASING AGENT

GWEN MCLAREN, CPPB
ASST. PURCHASING AGENT

COUNTY COURTHOUSE
722 Moody (21st Street)
Fifth (5th) Floor
GALVESTON, TEXAS 77550
(409) 770-5371

July 3, 2014

RE: ADDENDUM #3
RFP #B141025 Galveston County Road & Bridge Department Crystal Beach Facility

To All Prospective Proposers,

Attached you will find Addendum #3 for RFP # B141025 Galveston County Road & Bridge Department Crystal Beach

As a reminder, all questions regarding this proposal must be submitted in writing to:

Rufus G. Crowder, CPPO CPPB
Galveston County Purchasing Agent
722 Moody, Fifth (5th) Floor
Galveston, Texas 77550
E-mail: rufus.crowder@co.galveston.tx.us

If you have any further questions regarding this proposal, please address them to Rufus Crowder, CPPO CPPB, Purchasing Agent, via e-mail at rufus.crowder@co.galveston.tx.us, or contact the Purchasing Department at (409) 770-5371.

Please excuse us for any inconvenience that this may have caused.

Sincerely,

Rufus Crowder rgh

Rufus G. Crowder, CPPO CPPB
Purchasing Agent
Galveston County

County Architect

ADDENDUM NO. 3
July 3, 2014

- **Proposal Packages**
- RFP #B141025 Road and Bridge Department – Crystal Beach Facility

Project:

Prepared by: Galveston County Architect, Brax Easterwood Architects, Shelmark Engineering, LLC, and IBIS Engineering, LLC.
Project No.: SME 12-324

Prepared for: Prospective Proposers

PART A: NOTICE TO BIDDERS:

1. The Proposal Date remains **July 8, 2014** at 10:00 am.

2. Receipt of this Addendum shall be acknowledged on the Bid Proposal Form. Failure to do so may subject Bidders to disqualification. Each Proposer shall make necessary adjustments and submit his proposal with full knowledge of all modifications, clarification, and supplemental data included therein.

3. This Addendum forms part of the Contract Documents and shall be incorporated integrally therewith. Where provisions of the following supplemental data differ from those of previously issued documents, this Addendum shall govern.

4. The following Contract Documents have been issued to date delineating the Work (Project).

Contract Documents	**May 19, 2014**
Addenda 1	**June 24, 2014**
Addenda 2	**June 26, 2014**

5. This Addendum consists of 4 type written pages and 1 Proposal Form attached

PART B: CHANGES TO THE PROJECT MANUAL

1. None included

PART C: CHANGES TO BID PROPOSAL FORM (B141025)

1. None included.

PART D: RE-ISSUED DRAWING SHEETS

1. None included

PART E: NEWLY ISSUED DRAWING SHEET

1. None included

PART F: Questions, answers, and clarifications from proposal period. Note that this addenda and the information included becomes a portion of the contract documents.

QUESTIONS DURING PROPOSAL PERIOD AND CLARIFICATIONS (ANSWERS IN BOLD)

1. I would like to know the AIC rating of the panels for this project

    a. **ANSWER:** Refer to short circuit analysis, analysis may vary based on actual utility transformer supplied by Entergy. Coordinate with Entergy and engineer. MDP and DP1 use 42 kAIC.

2. The branch circuit feeding from MDP to the transfer switch and then to DP1is a 350 amp breaker. The fused disconnect the generator is feeding calls for 450 amp fuses and this feeds the other side of the transfer switch. I would like to verify this is accurate information

    a. **ANSWER:** May use 400A dual-element fuse, two-parallel 300MCM THHN CU cond.

3. On the lighting drawings there is lights labeled LT-7, LT-9, and LT-10 that I cannot find on the lighting schedule

    a. **ANSWER:** LT 7 and LT 9 references are circuit reference, the T is a typo the correct reference is LP 7 and LP 9. LT-10 is a pole light in the parking lot and shall match the existing in the adjacent lot.

4. On E1.0 there are a number of locations that have a symbol of what I believe is a disconnect but there is no symbol on the electrical schedule. There are some that have only 1 circuit and others that have 2 and 3 circuits (PB-55, PB-58, PB-60)

    a. **ANSWER:** Correct, all fixed equipment requires disconnect switches, portable equipment requires plug/receptacle. 1 circuit label number indicates 120V equipment (single pole breaker), 2 number label indicates 208V single phase equipment (two pole breaker), three number labels indicates 208V three phase equipment (3 pole breaker), refer to the appropriate panel schedule.

5. Clarify the location of Panel DP1 which shows a 350 amp MCB.

    a. **ANSWER:** Locate adjacent to transfer switch, in electrical panel room.

6. Please explain Circuit 19, 21, 23 which show (6) 300 MCM conductors feeding generator #1.

    a. ANSWER: The generator feeds DP1 via the transfer switch. The circuit reference in the panel schedule is an artifact of the software.

7. We will need 120 volts for the battery charger and block heater in the Generator.

    a. ANSWER: Yes, provide additional receptacle.

8. On the one line drawing it shows a Fuel panel and feeder by others, does this mean another contractor is going to run the conduit from panel PB #2 to the fuel panel and from the fuel panel to the pumps? One the E0.1 drawing the note states that the Fuel contractor to confirm location type & size conduit leading me to believe the Electrical contractor is responsible for the conduit runs. Can you please clarify the Electrical contractor's responsibilities?

    a. ANSWER: Provide only the 3 pole 125A breaker for the Fuel panel feeder in PB. No details regarding the fueling facility are available at this time, so please disregard any fuel-related items past the 125A breaker in PB for this proposal.

9. Can you give me the mounting height for the LT-4 fixtures on the 6' wall?

    a. ANSWER: 12', provide post or extension.

10. At the Office exterior entrees the lighting plans show 1 fixture at each door and the reflected ceiling drawing shows 2 at one door and 1 at the other door please confirm requirements please. Also how are they controlled?

a. ANSWER: Provide two LT-6 fixtures at the main entrance canopy and one LT-6 at the side entry, per the rcp. Provide two additional switches, one for each canopy. Feed from the same circuits as shown on the electrical lighting drawing (PA 2 and PA 3).

11. The reflective drawing also shows a 6" x 4' fixture and the lighting plan shows the fixture but there is ID by the fixture.

    a. ANSWER: Disregard the 6"x4' fixture over the copy machine.

12. How do you want to control the lights in the Wash area?

    a. ANSWER: Provide exterior/waterproof switch at wash building exterior entrance.

13. You have several notes referring to Astro Timer, Photo cell. Please specify what you would like? A time clock with a photo cell over ride?

    a. ANSWER: Yes.

14. Would like to confirm the use of M/C cable in the office area.

    a. ANSWER: EMT. 6' FMC whips for lights is acceptable.

15. Panel PB calls for EMT feed and panel PL calls for RMC feed these panels are next to each other and would like to know which one you would like us to quote.

    a. ANSWER: EMT

16. Specs on new light pole.

    a. ANSWER: Match existing adjacent equipment. Lithonia #KSF1 175M R2 SCWA SP O4 – Pole #SSS 25 5G – Metal Halide Architectural area light with aluminum rectilinear housing – 277 volt – 25' pole mounted

17. Location of generator disconnect.

    a. ANSWER: Locate on wall adjacent to generator, outside of electrical panel room.

18. Per my information at this time this lift with these specs does not exist. (High Tech Equipment) – I have contacted a couple of vendors about furnish & installation of the vehicle lift section 14600, and am being told that without a manufacturer and model #, it is difficult at best to provide an accurate quote since they have been unable to accommodate all the parameters I provided. Would it be possible to get the manufacturer and model # used for the spec information?

    a. ANSWER: See acceptable substitution below.

    b. MODEL: TD1000AH – tire dolly

19. Contractor would like to submit the attached specification for the Vehicle Lift Section 14600 for approval.

    a. ANSWER: The following lift is acceptable - 30,000 LB. FOUR POST SURFACE MOUNTED DRIVE ON GENERAL SERVICE LIFTS SM30S/SM30L/SM30EL SERIES - Rotary Lift, located at: 2700 Lanier Dr. ; Madison, IN 47250; Toll Free Tel: 800-640-5438; Tel: 812-273-1622; Fax: 800-578-5438; Email: request info (lkendall@vsgdover.com); Web:www.rotarylift.com

20. Question Responses, not addressed elsewhere:

    a. Where do we have to provide red concrete encasement of electric lines?

        i. Bedding with red warning tape is acceptable for runs under pavement, gate operators, and for the extension to LT-10. Use red concrete for the service feeder, coordinate with Entergy

b. Contractor shall provide CT and meter can per Entergy requirements and specifications. CT and meter may be located adjacent to MDP. Coordinate meter location with Entergy.

c. Asphalt pot is from PB, circuits 13 and 15, per panel schedule.

21. Please advise, who is responsible for providing Steamer in RM. (117), and will water and/or a drain need to be piped into room.

    a. ANSWER: No water supply is indicated on the plan to this Owner supplied piece of equipment.

22. Page 10 of the Geotechnical Study recommends a 7" reinforced concrete pavement at the dumpster areas. The plans or specs don't elaborate. Should we include 3 dumpster slabs in our bid?

    a. ANSWER: Provide only paving as shown on the plans whether base bid or alternate.

23. Will FM Global requirements be required for this project? Per specifications (13341-15 2.06 METAL ROOF SYSTEM, A, 3) FM Global requirements are specified. Per addenda #1 Question/Answer #31 Item D answers the FM rating to be I-90 (which relates to a 90 PSF roof uplift). This answer cannot be correct because in order to be approved for Factory Mutual insurance the roof system has to be run through a program at the FM web site called Roof Nav. The uplift rating I-90 I-120 etc. will be based on wind speed and building geometry. There are also other requirements that FM Global requires such as partially enclosed buildings and increased important factors above what code would normally call for. This building has up to 240 PSF uplift in corner zones and 180 PSF uplift in edge zones per Roof Nav. Our Supplier (MBCI) does not have a roof panel assembly rated that high.

    a. ANSWER: The Metal Roof System requirement for FM I-90 in addenda 2 is removed as part of this addenda. The FM Global requirement from the specification is also removed as part of this addenda. Provide a wind rated metal roof system that meets or exceeds the requirements in Section 13341 para2.03.D and can be certified in compliance with the requirements of Texas Department of Insurance and the Texas Windstorm Insurance Association.

    b. ANSWER: If the metal roof slope is less than 1" in 12" there shall be no laps in the length of the panels. Refer to Section 13341 para 2.06.A.4.C.3

    c. ANSWER: Provide a metal roofing system designed and sized to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of roof as calculated in accordance with the 2009 IBC code. Design pressures to be calculated using sustained wind speed of 110 mph, with 3 second gust wind speed of 130 mph exposure C. Table showing positive and negative wind pressures as calculated by Shelmark Engineering are included in construction drawings for reference and information purposes; supplier responsible for determining actual design wind pressures. Maximum Allowable Deflection shall be 1/180 span.

END OF ADDENDUM

Attachments:
Bid Proposal Form

Proposal Number B141025
Proposal Date – July 8, 2014
Proposal Time - 10:00 a.m.

Galveston County Road and Bridge Department
Crystal Beach Facility

SECTION 00101
REVISED PROPOSAL FORM

1. **OWNER:** **Galveston County**
2. **PROJECT:** **Galveston County Road and Bridge Dept. – Crystal Beach Facility**
3. **Design Professional** Brax Easterwood Architects, ShelMark Engineering, LLC, & IBIS Engineering, LLC.

4. **SUBMITTED BY:** _____
Proposer Name
_____
_____
_____
Proposer Address
_____
Proposer Phone Number
_____
Proposer e-mail or website

5.

A. Having examined the Instructions to Proposers, Contract Documents, and Conditions of the Contract of the Project listed above, dated March 26, 2013 including Addenda and having visited and fully inspected the site and examined all conditions affecting the Project, the undersigned, proposes to perform the complete Work of the Project required by the said Documents for the sum or sums set forth below.

B. In submitting this proposal, the undersigned, agrees to the following:
   01. Hold the proposal open for acceptance for 60 days from the submission of Proposal.
   02. Accept the right of the Owner to reject any, or all proposals, to waive formalities, and to accept the proposal which the Owner considers most advantageous to him.
   03. Accept the right of the Owner to reject any Subcontractor. A new Subcontractor may be contracted with the difference in proposal amount added to, or subtracted from, the Contract.
   04. Enter into and execute a Contract if awarded, on the basis of the Base Proposal and selected Alternate Proposals, if any.
   05. Complete the Work in accordance with the Contract Documents within the stipulated Contract Time.

C. Furnish specified insurance.
   01. Furnish specified insurance, performance, and payment bonds as per the Agreement between Galveston County and Trade Contractor..

D. The undersigned acknowledges that being notified that he has the best responsible Proposal does not convey upon him any property right to an award of the Contract or anything of value. The undersigned also acknowledges that no rights rest under the Proposal or tentative award and that any rights the Proposer may obtain will arise only upon execution of the Contract.

6. **ADDENDA:** The undersigned acknowledges receipt of:

Addenda 1	June 24, 2014	initial here _____
Addenda 2	June 26, 2014	initial here _____
Addenda 3	July 3, 2014	initial here _____

7. **CONTRACT TIME:** Undersigned agrees to commence work upon receipt of Notice to Proceed and be Substantially complete within _____calendar days

Galveston County Road and Bridge Department
Crystal Beach Facility

8. **Base Proposal:** The undersigned agrees to perform the complete Work of this Project, for the lump sum price of (The Base Proposal includes all allowances listed in the Section 01020 except for the Contingency Allowance):

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

9. **Contingency Allowance:** The undersigned agrees to include a Contingency Allowance equal to 5% of the Base Proposal lump sum (item 8) to be utilized by Galveston County for unforeseen items of work as per Section 01020 of the Project manual:

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

Proposal Total

10. **TOTAL:** The sum of items 8 **and 9** above:

_____ Dollars & no/100 $_____
(Amount written in words governs) (Amount in figures)

11. **Alternate No. 1:** The undersigned agrees to provide Landscape work described in Section 02937, 02950 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

12. **Alternate No. 2:** The undersigned agrees to provide Asphalt in parking areas to the south of the building described in Section 02510 and drawing C1.0A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

13. **Alternate No. 3:** The undersigned agrees to provide chain link fencing described in Section 02831 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

14. **Alternate No. 4:** The undersigned agrees to provide Pole barn Storage shed from column line 1 through 12 described on drawings C1.0A, S3.1A, S3.2A, A0.1A, and E01.A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

15. **Alternate No. 5:** The undersigned agrees to provide Pole barn Storage shed described on drawings C1.0A, S3.1A, S3.2A, A0.1A, and E01.A for the lump sum price of:

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

16. **Alternate No. 6:** The undersigned agrees to provide the Asphalt Emulsion Tank described in Section 11501 and drawing A0.1A for the lump sum price of :

_____ Dollars and no/100 $ _____
(Amount written in words governs) (Amount in figures)

Galveston County Road and Bridge Department
Crystal Beach Facility

17. OH&P FOR CHANGES IN THE WORK:
The reasonable overhead and profit allowable under Article VIII of the Agreement will be set as follows:

____% Overhead

____% Profit

Proposers Printed Name:.....

Proposers Address:

.....

.....

Proposers Phone Number.....

Signatory's Printed Name:.....

Signatory's Position/Title:.....

Seal:

Signature:.....date.....

Note that Section 00104 - Proposal Evaluation Waiver and other documents must accompany this form.

STATE OF TEXAS TAX STATEMENT OF MATERIALS and other charges:

The cost of in-place materials to be incorporated into the project in the Base Proposal $_____

The cost of labor, profit, materials
not in-place and all other charges in the Base Proposal.....$_____

TOTAL: (Must agree with Proposal (para. 8) total above).....$_____

Galveston County Road and Bridge Department
Crystal Beach Facility

NOTE: The Statement of Affirmation Must Be Notarized.

STATEMENT OF AFFIRMATION

"The undersigned affirms that he/she is duly authorized to execute this waiver by the person(s) or business entity making the proposal.

Proposer's Name:.....

Proposers Address: .....

.....

.....

Signatory's Name:.....

Signatory's Position/Title:.....

Signature:.....date.....

Subscribed and sworn to me on this _____ day of _____

_____
Notary Public

My Commission expires _____

NOTE: THIS FORM MUST BE EXECUTED AND SUBMITTED WITH PROPOSAL.

END OF SECTION

Galveston County Road and Bridge Department
Crystal Beach Facility

SECTION 00104
PROPOSAL EVALUATION WAIVER AND QUALIFICATION STATEMENT

By submitting a proposal, the Proposer indicated below agrees to waive any claim it has or may have against the Owner, Architect, Engineers, Consultants, or Construction Manager and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any proposal. The Proposer further agrees the Owner reserves the right to waive any requirements under the proposal documents or the Contract Documents, acceptance or rejection of any proposals, and recommendation or award of the contract.

In order to evaluate proposals the following items **must** be turned in along with the proposal form to allow Galveston County to determine the best overall proposal.

The information below shall be provided on the Proposer's letterhead. Failure to provide the information may result in no points awarded for that item in the evaluation process. Each item below will be researched for each Trade Contractor and assigned a relative value more fully described on the Proposal Tabulation Form attached for information only in Section 00300.

a) References from **all or the most recent 20** previous contracts comparable to this contract size and scope during the last five years. (including complete Owner name, individual Owner contact, current phone numbers, project size, etc.). This item accounts for **10%** of the evaluation scoring.

b) References from **all or the most recent 20** previous contracts with Galveston County and other political subdivisions located within Galveston County. (include Entity name, individual Entity contact, current phone numbers, project size, etc.). This item accounts for **5%** of the evaluation scoring.

c) Single page resume of superintendent, Project Manager, and Project Executive for this project. The quality of personnel accounts for **5%** of the evaluation scoring.

d) Listing of proposed subcontractors, suppliers, and other team members. The quality of subcontractors, suppliers, and other team members (if none then the quality of personnel above will be duplicated here) accounts for **5%** of the evaluation scoring.

e) Based upon references listed above the probability of satisfactory post construction maintenance, repair, and service for emergency warranty work. The probability of satisfactory response to warranty work accounts for 5% of the evaluation scoring.

f) Based upon references listed above the probability of satisfactory timely completion of the work. The probability of satisfactory timely completion of the work accounts for **5%** of the evaluation scoring.

g) The Proposer's safety record including the current EMR (experience modifier rate). The EMR relative to 1 accounts for **5%** of the evaluation scoring.

h) The Proposer's history of claims, mediation, litigation or arbitration with any Owner in the past 5 years. This item accounts for **5%** of the evaluation scoring.

i) The Proposer's historic compliance with laws and codes governing construction activities, including any current or past (within the past year) asbestos violations with the Department of State Health Services. This item accounts for **5%** of the evaluation scoring.

Galveston County Road and Bridge Department
Crystal Beach Facility

NOTE: The Statement of Affirmation Must Be Notarized.

STATEMENT OF AFFIRMATION

"The undersigned affirms that he/she is duly authorized to execute this waiver by the person(s) or business entity making the proposal.

Proposer's Name:.....

Proposers Address: .....

.....

.....

Signatory's Name:.....

Signatory's Position/Title:.....

Signature:..... date.....

Subscribed and sworn to me on this _____ day of _____

_____
Notary Public

My Commission expires _____

NOTE: THIS FORM MUST BE EXECUTED AND SUBMITTED WITH PROPOSAL.

END OF SECTION

Galveston County Road and Bridge Department
Crystal Beach Facility

SAMPLE OF PROPOSAL EVALUATION WORKSHEET

Galveston County Road and Bridge Dept. Crystal Beach Facility

RFP # B1412025 - General Contract
Evaluation Team Member 1 of 4

Grading:						50	5	10	5	5	5	5	5	5	5	0	100
Budget	$1.00	Proposal Bond	Addenda 1	Addenda 2		Base Proposal and selected alternates (if any)	References from previous contracts comparable in size and scope	Quality of performance with County (or other political subdivisions in County) on previous contracts	Quality of Proposed personnel	Quality of Proposed suncontractor, supplier, or team members personnel	Probability of satisfactory future maintenance, repair, & service, including time for emergency warranty work	Compliance with laws on previous contracts	Proposer performance record of timely completion on previous projects similar in size and scope	Proposer safety record including current EMR	Proposer history of claims, litigation, or arbitration with any Owner in the last 5 years	Proposer attendance at Pre-Proposal Conference	Total Score
Lowest Base proposal and selected alternates (if any)																	
Proposer																	
					Cost												
					Grading Score												
					Rating												
					Grading Score												
					Cost												
					Grading Score												
					Rating												
					Grading Score												
					Cost												
					Grading Score												
					Rating												
					Grading Score												

The Base Proposal Cost rating is from lowest dollar to highest dollar. The scoring for the Base Proposal Costs is accomplished by dividing the lowest proposed cost by the individual proposer cost to obtain the grading and multiplying that fraction by the 50 points possible. Therefore the proposal cost proposal will receive 50 points.
The Safety record will be scored based upon all EMR below 1 being awarded 5 points, an EMR of 1 awarded 4 points, an EMR of 1.1 awarded 3 points, an EMR of 1.2 awarded 2 points, an EMR of 1.3 awarded 1 point.

No team is perfect.	100	Perfect
What we want	90	Quality Work and willingly contributes to the team effort
if above not available	80	Quality work and causes the rest of the team extra effort to deal with them.
Acceptable	70	Good work and willingly advances the team effort
Mediocre	60	Good work and causes the rest of the team extra effort to deal with them.
Only if we have to	50	Marginally acceptable work and willingly contributes to the team effort
Prefer not	40	Marginally acceptable work and causes the rest of the team extra effort to deal with them.
No	30	Poor work and attempts to contribute to the team effort
This will just waste time	20	Poor work and causes the rest of the team extra effort to deal with them.
please don't submit	0	

W:\Architecture\0 PROJECTS\00-012 Crystal Beach Road & Bridge\Standard Specifications\Proposal Evaluation Form

ATTACHMENT A

RFP #B141025
PRE-PROPOSAL DATE: 06/17/2014
10:00 a.m.

PRE-PROPOSAL CONFERENCE
GALVESTON COUNTY ROAD & BRIDGE DEPARTMENT CRYSTAL BEACH FACILITY
GALVESTON COUNTY, TEXAS

PRINTED NAME	SIGNATURE	COMPANY NAME	PHONE #	E-MAIL ADDRESS
Rufus Crowder		Galveston County	409 770-5372	Rufus.crowder@co.galveston.tx.us
Dudley Anderson		Galveston County	409 770-5330	Dudley.anderson@co.galveston.tx.us
Norm Hoffman		JBIS ENG.	409-621-6740	NHOFFMAN@ JBISENGINEERS.COM
Geoffrey Daenen		RLN Industries, Inc.	409-316-0555	gdaenen@rlnindustries.com
Dave Ogden		Teal Construction Co.	713 465 8306	daveogden@tealcon.com
Lewis Coleman		J.W. Kelso Co	409/740-0260	lcoleman@jwkelso.com
Timmon LaFleur		Mesa	832/624-0192	Timmon@mesamechanical.com
Pete Chamnock		Chamnock & Co. Inc.	409.935.3101	Pchamnock@Comcast.NET
Jake Brown		Ardent Construction LLC	281-702-3064	jbrown@ardentcs.com
A.E. Eblinger		Hugh Patrick Construction	409 948-1949	Hupatco@comcast.net
K-Waylie Woodstel		Hugh Patrick	409.948-7949	HUPATCO@COMCAST.NET
Thomas Williams		Total Cabinets	409-948-3904	tom@totalcabinetsinc.com
Grady Mack		Crescent Electric	409-935-2416	Grady@Crescent-electric.com
Marcus Michna		Shelmark Engineering	409.935.9986	mjmichna@shelmark.net
Lee Crowder		GCRB	409 682 3690	Lee.Crowder@co.galveston.tx.us
B Max Easterwood		Blax Easterwood Archt.	409 354 8976	EASTERWOOD@BEAIA.COM
ANDREW GRIFFIN		BMAX EASTERWOOD DESIGN	281-702-5745	ANDREW@BEAIA.COM.

RFP #B141025
PRE-PROPOSAL DATE: 06/17/2014
10:00 a.m.

PRE-PROPOSAL CONFERENCE
GALVESTON COUNTY ROAD & BRIDGE DEPARTMENT CRYSTAL BEACH FACILITY
GALVESTON COUNTY, TEXAS

PRINTED NAME	SIGNATURE	COMPANY NAME	PHONE #	E-MAIL ADDRESS
Joey Stralsky	Joey Stralsky	Shelmark Engineering	5323477482	ejstralsky@shelmark.net
Ernesto Frias Jr		Mesa Mechanical Inc.	281-900-4963	ernestof@mesamechanical.com
Charles Konnerth		County of Galveston	409-766-2385	Charles.Konnerth@co.galveston.tx.us

Proposal Number B141025
Proposal Date – July 1, 2014
Proposal Time - 10:00 a.m.

Galveston County Road and Bridge Department
Crystal Beach Facility

SECTION 00101
PROPOSAL FORM

1. **OWNER:** **Galveston County**
2. **PROJECT:** **Galveston County Road and Bridge Dept. – Crystal Beach Facility**
3. **DESIGN PROFESSIONALS:** Brax Easterwood Architects, Shelmark Engineering, LLC, & IBIS Engineering, LLC.

4. **SUBMITTED BY:** _____
Proposer Name
_____
_____
_____
Proposer Address
_____
Proposer Phone Number
_____
Proposer E-mail or Website

5.

A. Having examined the Instructions to Proposers, Contract Documents, and Conditions of the Contract of the Project listed above, dated May 19, 2014 including Addenda and having visited and fully inspected the site and examined all conditions affecting the Project, the undersigned, proposes to perform the complete Work of the Project required by the said Documents for the sum or sums set forth below.

B. In submitting this proposal, the undersigned, agrees to the following:
   01. Hold the proposal open for acceptance for 60 days from the submission of Proposal.
   02. Accept the right of the Owner to reject any, or all proposals, to waive formalities, and to accept the proposal which the Owner considers most advantageous to him.
   03. Accept the right of the Owner to reject any Subcontractor. A new Subcontractor may be contracted with the difference in proposal amount added to, or subtracted from, the Contract.
   04. Enter into and execute a Contract if awarded, on the basis of the Base Proposal and selected Alternate Proposals, if any.
   05. Complete the Work in accordance with the Contract Documents within the stipulated Contract Time.

C. Furnish specified insurance.
   01. Furnish specified insurance, performance, and payment bonds as per the Agreement between Galveston County and Trade Contractor.

D. The undersigned acknowledges that being notified that he has the best responsible Proposal does not convey upon him any property right to an award of the Contract or anything of value. The undersigned also acknowledges that no rights rest under the Proposal or tentative award and that any rights the Proposer may obtain will arise only upon execution of the Contract.

6. **ADDENDA:** The undersigned acknowledges receipt of:

Addendum 1	June 24, 2014	initial here _____
Addendum 2	_____, 2014	initial here _____
Addendum 3	_____, 2014	initial here _____

Galveston County Road and Bridge Department
Crystal Beach Facility

7. **CONTRACT TIME:** Undersigned agrees to commence work upon receipt of Notice to Proceed and be Substantially complete within _____calendar days

8. **Base Proposal for Crystal Beach Facility associated with B141025:** The undersigned agrees to perform the complete Work of this Project, for the lump sum price of (The Base Proposal includes all allowances listed in the Section 01020 except for the Contingency Allowance):
_____ _Dollars and no/100 $
(Amount written in words governs) (Amount in figures)

9. **Contingency Allowance for Crystal Beach Facility associated with B141025:** The undersigned agrees to include a Contingency Allowance equal to 5% of the Base Proposal lump sum (item 8) to be utilized by Galveston County for unforeseen items of work as per Section 01020 of the Project manual:
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

10. **Testing Allowance for Crystal Beach Facility associated with B141025:** The undersigned agrees to include a Testing Allowance equal to $24,000 as per Section 01020 of the Project manual:
Twenty - four thousand _____ Dollars and no/100 $ 24,000.00
(Amount written in words governs) (Amount in figures)

11. **Alternate #1 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Landscape" specified under section 02711 and A0.1A:
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

12. **Alternate #2 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Asphalt in parking area to the south of building" specified under section 02510 and shown on C1.0A.
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

13. **Alternate #3 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Chain Link Fencing" specified under section 02831 and shown on drawing C1.0A and A0.1A.
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

14. **Alternate #4 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Pole-barn Storage shed from column line 1 through 12" as shown on the drawings C1.0A, S3.1A, S3.2A and A0.1A
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

15. **Alternate #5 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Pole-barn Storage shed" as shown on the drawings C1.0A, S3.1A, S3.2A and A0.1A
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

16. **Alternate #6 for Crystal Beach Facility associated with B141025:** The undersigned agrees to include "Asphalt Emulsion Tank" specified under section 11501.
_____ Dollars and no/100 $_____
(Amount written in words governs) (Amount in figures)

Galveston County Road and Bridge Department
Crystal Beach Facility

Proposal Total

17. TOTAL: The sum of items **8 through 16** above:

_____Dollars & no/100 $_____
(Amount written in words governs) (Amount in figures)

18. OH&P FOR CHANGES IN THE WORK:
The reasonable overhead and profit allowable under Article VIII of the Agreement will be set as follows:

____% Overhead

____% Profit

Proposers Printed Name: .....

Proposers Address:
.....

.....

Proposers Phone Number.....

Signatory's Printed Name:.....

Signatory's Position/Title:.....

Seal:

Signature:.....date.....

Note that Section 00104 - Proposal Evaluation Waiver and other documents must accompany this form.

STATE OF TEXAS TAX STATEMENT OF MATERIALS and other charges:

The cost of in-place materials to be
incorporated into the project in the Base Proposal ..... $_____

The cost of labor, profit, materials
not in-place and all other charges in the Base Proposal..... $_____

TOTAL: (Must agree with Proposal (para. 8) total above) ..... $_____

Galveston County Road and Bridge Department
Crystal Beach Facility

NOTE: The Statement of Affirmation Must Be Notarized.

STATEMENT OF AFFIRMATION

"The undersigned affirms that he/she is duly authorized to execute this waiver by the person(s) or business entity making the proposal.

Proposer's Name:.....

Proposers Address: .....

.....

.....

Signatory's Name: .....

Signatory's Position/Title: .....

Signature: .....date.....

Subscribed and sworn to me on this _____ day of _____

_____
Notary Public

My Commission expires _____

NOTE: THIS FORM MUST BE EXECUTED AND SUBMITTED WITH PROPOSAL.

END OF SECTION

Agreement between Galveston County and Contractor

Agreement for Galveston County Project # B141025

This contract is entered into between Galveston County and the Contractor named below pursuant to Subchapter B, Chapter 271, Texas Local Government Code, and the referenced Request for Competitive sealed Proposal.

Contract No:_____

Proposal No: _____

Contractor:_____

Galveston County Authorized Representative: J. Dudley Anderson, AIA, County Architect

Article I.

The Work

Section 1.01 The Contractor and Galveston County agree that the materials and equipment to be furnished and the work to be done by the Contractor are as follows:

Construct Road and Bridge Department – Crystal Beach Facility as represented in the Contract Documents

Section 1.02 The Contractor shall be held accountable for the following Project related responsibilities: furnish all labor and supervision; furnish, supply and install all equipment, material, supplies, tools, scaffolding, hoisting, transportation, unloading and handling; do all things required to complete the work described above on the Project all in accordance with the drawings and Project Manual prepared by the Architect or Engineer; and furnish all necessary information, shop drawings, details, samples, brochures, etc. For Owner/Architect or Engineer approval, as may be required.

Article II.

Time of Commencement and Completion

Section 2.01 The Contractor shall start the work upon notice to proceed and shall execute the work with diligence and dispatch so as to maintain such schedules and milestones as established by Galveston County's authorized Representative. The Contractor agrees to complete portions and the whole of the work by the following anticipated dates:

NO MILESTONES

Section 2.02 The Contractor is cautioned that schedules and milestones are subject to review and revision, and in such event, such revisions will be made available for the Contractor's information at the office of Galveston County's authorized Representative. It is the sole responsibility of the Contractor to attend job meetings, keep itself informed of any revisions, and conform to any such revisions.

Section 2.03 In the event the Contractor should fail to maintain Galveston County's authorized Representative's progress schedule or the schedule as established above, Galveston County reserves the right, after 48 hours formal notice, either by letter or telegram to the Contractor, to procure the materials, equipment, and labor necessary to proceed with, or to complete the work, or any portion thereof from other sources and charge the cost thereof to the Contractor.

Section 2.04 Time is of the essence in this Agreement.

Article III.

The Contract Sum

Section 3.01 Galveston County agrees to pay the Contractor for the satisfactory performance of his work the total sum of:

_____Dollars and xx/100

($_____), payments to be made as described herein in current funds subject to additions and deductions for changes, as may be agreed upon in writing, and to make payments on account thereof as follows:

Section 3.02 On the established day of each month, the Contractor shall deliver to Galveston County through Galveston County's authorized Representative a detailed, quadruplicate statement acceptable to Galveston County's authorized Representative, and if required, supported by receipts, vouchers, etc. showing values of all materials delivered and work completed up to the established billing date for which payment is requested. Monthly and final payments will be made to the Contractor from Galveston County. It is specifically understood and agreed that prior to submission of the first statement, the Contractor will deliver to Galveston County's authorized Representative, for review and approval, a detailed breakdown of this contract sum showing a schedule of values for the various parts of the work Once accepted by Galveston County's authorized Representative, this schedule of values will be used as a basis for checking the Contractor's monthly statement.

Section 3.03 The Contractor shall, with the second and each succeeding monthly request for payment, submit receipts and/or an affidavit and waiver of bond claim showing all payments made for labor and materials and on account for all work covered in the previous months request for payment. Affidavit and waiver of bond claims may be required to be submitted from Contractors, suppliers, and/or Sub-Contractors (all tier). The Contractor shall be required to execute a general release satisfactory to Owner, prior to receiving final payment.

Section 3.04 Five percent (5%) of each payment shall be retained, unless specific provisions to the contrary are indicated in the contract documents.

Section 3.05 No payment made under this Agreement, including the final payment, shall be conclusive evidence of the performance of the work, either wholly or in part, and no payment shall be construed as an acceptance of defective work or improper materials.

Section 3.06 The Contractor shall save and keep Galveston County's authorized Representative, Galveston County and Galveston County's property free from all claims, including bond claims, legal or equitable, arising out of the Contractor's work hereunder. I n the e vent any such claim is filed by anyone claiming by, through, or under the Contractor, the Contractor shall remove and discharge same, by bonding or otherwise, within five (5) days of the filing thereof.

Article IV.

The Contract Documents

Section 4.01 The contract documents consist of this Agreement and any exhibits attached hereto; Proposal Documents, Proposal Form, General Conditions of the Contract, the Project Manual, the Drawings, and all addenda issued prior to and all modifications issued after execution of the Agreement between Galveston County and Galveston County's authorized Representative and agreed upon by the parties.

Section 4.02 The Contractor agrees to perform the work under the general direction of Galveston County's authorized Representative and subject to the final approval of the Architect, Engineer, or other specified representative of Galveston County, in accordance with the contract documents.

Section 4.03 Contract documents are available, at reasonable times, at the office of Galveston County's authorized Representative for examination by the Contractor.

Section 4.04 No extra work shall be performed under this Agreement, except upon receipt of a written order from Galveston County's authorized Representative or Galveston County.

The Specifications and Drawings are enumerated as follows:

Project Manual ..... Dated 05/19/2014

Drawings ..... Dated 05/19/2014

CIVIL

C1.0 ..... CIVIL SITE PLAN
C1.0A ..... CIVIL SITE PLAN – ALTERNATES
C1.1 ..... DEMOLITION PLAN
C1.2 ..... UTILITY PLAN
C1.3 ..... PAVING AND DRAINAGE PLAN
C1.4 ..... SWPP PLAN
D3.0 ..... WATER DETAILS
D3.1 ..... SANITARY DETAILS
D3.2 ..... PAVING DETAILS
D3.3 ..... STORM SEWER DETAILS
D3.4 ..... SWPPP DETAILS

STRUCTURAL

S1.0 ..... GENERAL NOTES
S1.1 ..... MAIN BLDG FOUNDATION PLAN

S1.2 .....MAIN BLDG FOUNDATION SECTIONS
S1.3 .....MAIN BLDG FOUNDATION SECTIONS
S2.1 ..... MAIN BLDG MEZZANINE PLAN
S2.2 .....MAIN BLDG OVERHEAD PLAN
S2.3 ..... MAIN BLDG MEZZANINE DETAILS
S2.4 .....OFFICE PLAN
S3.1A ..... TRUCK SHED PLAN AND ELEVATIONS
S3.2A ..... TRUCK SHED SECTION AND DETAILS
S3.3 .....TRUCK SHED SECTION & DETAILS
S4.1 .....TRUCK WASH PLAN
S4.2 ..... TRUCK WASH DETAILS
S5.1 ..... ELECTRICAL ROOM FOUNDATION / FRAMING PLAN
S5.2 .....ELECTRICAL ROOM FOUNDATION / FRAMING DETAILS
S6.1 ..... RETAINING WALL SECTIONS
S6.2 ..... MISC. DETAILS & SECTIONS

ARCHITECTURAL

G1.0 ..... ACCESSIBILITY REQUIREMENTS
G1.1 ....CODE/AREA AND EGRESS CALCULATIONS
A0.0 .....OVERALL CAMPUS PLAN
A0.1 ..... ARCHITECTURAL SITE PLAN
A0.1A .....ARCHITECTURAL SITE PLAN – ALTERNATES
A0.2 .....ENLARGED PARTIAL SITE PLAN
A1.1 .....FIRST FLOOR AND MEZZANINE FLOOR PLANS
A1.2 .....STRUCTURAL GRID AND ROOF PLAN
A1.3 .....ENLARGED OFFICE PLAN
A1.4 ..... OFFICE REFLECTED CEILING PLAN
A2.1 ..... EXTERIOR ELEVATIONS
A3.1 ..... BUILDING SECTIONS
A3.2 ..... WALL SECTIONS
A3.3 ..... WALL SECTIONS
A3.4 ..... WALL SECTIONS
A3.5 ..... WALL SECTIONS
A5.1 .....ENLARGED DRAWINGS
A5.2 .....ENLARGED DRAWINGS
A9.1 .....DOOR SCHEDULE AND DETAILS
A9.2 ..... ROOM FINISH SCHEDULE AND INTERIOR ELEVATIONS
A9.3 ..... WALL TYPES

ELECTRICAL

E0.1 .....SITE POWER PLAN
E0.1A ..... SITE POWER PLAN - ALTERNATE
E1.0 .....CRAB BLDG POWER PLANS
E1.1 ..... CRAB BLDG LIGHTING PLANS
E2.0 ..... ELECTRICAL PANEL AND LIGHTING SCHEDULES
E2.1 .....ELECTRICAL PANEL SCHEDULES
E2.2 .....ELECTRICAL PANEL LOAD SUMMARYS & ONE LINE DIAGRAM
E2.3 .... ELECTRICAL PANEL LOAD SUMMARYS & LIGHTING PROTECTION
E2.4 .... ELECTRICAL SHORT CIRCUIT ANALYSIS REPORTS
E3.0 ....ELECTRICAL SPECIFICATIONS
E3.1 ....ELECTRICAL SPECIFICATIONS & GENERATOR REPORT

MECHANICAL

M1.0 ..... MECHANICAL PLAN
M2.0 ..... MECHANICAL SCHEDULES, DETAILS, & NOTES
M3.0 ..... MECHANICAL SPECIFICATIONS

PLUMBING
P0.1 ..... PLUMBING SITE PLAN
P1.0 ..... CRAB BLDG SEWER PLAN
P1.1 ..... CRAB BLDG HOT & COLD WATER PLAN
P1.2 ..... PLUMBING RISER DIAGRAMS
P2.0 ..... PLUMBING LEGEND, GENERAL NOTES, & REQUIREMENTS
P2.1 ..... PLUMBING FIXTURE SPECIFICATIONS & DATA
P3.0 ..... PLUMBING SPECIFICATIONS
P4.0 ..... SAND – OIL INTERCEPTOR DETAILS
P4.1 ..... SEWER GRINDER

Article V.

Insurance and Indemnity

Section 5.01 The Contractor agrees to, at the time of execution of this Agreement, furnish Galveston County's authorized Representative with certificates of insurance from an insurance company (or other source) acceptable to Galveston County. These certificates should certify that the Contractor is protected on the work with worker's compensation and employer's liability, public liability and bodily injury, property damage insurance, and any other insurance as required by the contract documents and in accordance with the attachment to this Agreement. The Contractor will not be permitted to start work at the site until these certificates are filed with Galveston County. Compliance by the Contractor with the foregoing requirements, as to carrying insurance and furnishing certificates, shall not relieve the Contractor of its liabilities and obligations.

Section 5.02 For ten ($10.00) dollars and other good and valuable consideration, the receipt whereof is hereby acknowledged, and to the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless Galveston County, Galveston County's authorized Representative, the Architect or Engineer, and all of their agents and employees from and against claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of or resulting from the performance or failure in performance of the Contractor's work under this Agreement provided that any such claim, damage, loss, or expense (1) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom, (2) is caused, in whole or in part, by any negligent act or omission of the Contractor or anyone directly or indirectly employed by the Contractor, or anyone for whose acts the Contractor may be liable, regardless of whether caused in part by a party indemnified hereunder. Such obligations shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph. In any and all claims against Galveston County's authorized Representative, or any of its agents or employees, by any employee of the Contractor, or anyone directly or indirectly employed by the Contractor, or anyone for whose acts he may be liable, the indemnification obligation under this paragraph 5.02 shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor under worker's compensation acts, disability benefit acts, or other employee benefit acts.

Section 5.03 The obligations of the Contractor, under paragraph 5.02, shall not extend to the liability of the Architect or Engineer, his agents, or employees, arising out of the preparation or approval of maps, drawings, opinions, reports surveys, change orders, designs, or Project Manual and/or the giving of or failure to give directions or instructions by the Architect or Engineer, his agents or employees, providing such giving or failure to give is the primary cause of the injury or damage

Section 5.04 The Contractor agrees to obtain, maintain, and pay for such contractual liability insurance coverage and endorsements as will insure the indemnification obligation of the Contractor pursuant to paragraph 5.02 above.

Article VI.

Performance Bond and Labor and Material Payment Bond

Section 6.01 The Contractor agrees to furnish and pay for a 100% Performance Bond and a 100% Labor and Material Payment Bond on the bond forms issued with this Agreement naming the Galveston County as Obligee. Bonds must be issued by a company acceptable to Galveston County and must be accompanied by a Power of Attorney. The bonds are to be delivered with this executed Agreement.

Article VII.

Warranty

Section 7.01 The Contractor agrees to promptly make good, without cost to Galveston County, any and all defects, due to faulty workmanship and/or materials, which may appear within the guarantee or warranty period so established in the contract documents. If no such period is stipulated in the contract documents, then such guarantee shall be for a period of one (1) year from date of substantial completion and acceptance of the work by Galveston County. The Contractor further agrees to provide any and all guarantees as required by the terms of the contract documents, as a condition precedent to final payment

Article VIII.

Changes in the Work

Section 8.01 The Contractor may be ordered in writing by Galveston County, without invalidating this Agreement, to make changes in the work within the general scope of this Agreement. These changes may consist of additions, deletions, or other revisions, the contract sum and the contract time being adjusted accordingly. The Contractor, prior to the commencement of such changed or revised work, shall submit promptly to Galveston County's authorized Representative written copies of any claim for adjustment to the contract sum and contract time for such revised work in a manner consistent with the contract documents

Section 8.02 Where changes in the work involve both additions and deletions, percentages for overhead and profit shall be applied to the net increase of such values for labor and materials.

Section 8.03 The amount to be paid by Galveston County for changes in the work, as outlined in paragraph 8.01 above, shall be made on the basis of one of the following methods:

a) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation and agreed upon by Galveston County's authorized Representative and the Contractor, or
b) by unit prices stated in the contract documents, or
c) if no such unit prices are set forth and if the parties cannot agree upon a lump sum, then the actual net cost in money to the Contractor of materials and labor (including insurance and applicable taxes) required, plus rental of plant equipment (other than small tools and small equipment) plus compensation for overhead and for profit as noted in Article 12. (Field overhead will not be considered as part of actual net cost), or
d) by the method provided in subparagraph 8.04.

Section 8.04 If none of the above methods set forth in clauses 8.03 (a), 8.03 (b), 8.03 (c) is agreed upon, the Contractor, provided he receives a written order signed by Galveston County shall promptly proceed with the work involved. The cost of such work shall be determined by Galveston County's authorized Representative on the basis of reasonable expenditures and savings of those performing the work attributable to the change, including, in the case of an increase in the contract sum, a reasonable allowance for overhead and profit. In such case, and also under clauses 8.03 (c) and 8.03 (d) above, the Contractor shall keep and present, in such form as Galveston County's authorized Representative may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a change order. Unless otherwise provided in the contract documents, cost shall be limited to the following: cost of materials including cost of delivery, cost of labor including social security, old age and unemployment insurance and fringe benefits required by Agreement or custom; workers or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost, payments, on account shall be made as determined by Galveston County. The amount of credit to be allowed by the Contractor for any deletion or change which results in a net decrease in the contract sum will be the amount of the actual net cost as confirmed by Galveston County. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any with respect to that change.

Section 8.05 Owner's Audit

a) Owner's duly authorized representative shall have access, at all reasonable times, to all Contractor's personnel, books, records, correspondence, instructions, plans, drawings, receipts, vouchers and memoranda of every description pertaining to any change(s) for the purpose of auditing and verifying Contractor's net cost of change or for any other reasonable purpose. Owner's representative shall have the right to reproduce any of the aforesaid documents. Contractor shall preserve, and shall cause its Contractors to preserve all the aforesaid documents for a period of two years after the completion and acceptance or termination of work.

Section 8.06 For work performed by a Sub-Contractor, the Contractor will be allowed to add 5% only and said Sub-Contractor mark-up shall not exceed the agreed upon percentages noted in Article 12 for overhead and profit.

Article IX.

Contractor Responsibilities

Section 9.01 The Contractor shall provide sufficient, safe, and proper facilities at all times for the inspection of the work by Galveston County and Galveston County's authorized Representative , or their authorized representatives. The Contractor shall, within a 24-hour

notice from Galveston County's authorized Representative, proceed to take down all portions of the work and remove from the grounds or buildings, all materials, whether worked or un-worked, which Galveston County's authorized Representative, Galveston County, or their authorized representatives shall condemn as unsound or improper, or as in any way failing to conform to the contract documents. The Contractor shall make good at its own expense, all work damaged or destroyed thereby

Section 9.02 The Contractor agrees, in the performance of this Agreement, to comply with all federal, state, municipal, and local laws, ordinances, codes and governing regulations, to pay all costs and expenses required thereby; to pay all fees, charges, assessments, and taxes, and to pay all fringe and other benefits required by Agreement or law.

Section 9.03 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save Galveston County, Galveston County's authorized Representative, and Architect or Engineer harmless from loss on account thereof, except that Galveston County shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to Galveston County.

Section 9.04 Should the Contractor become insolvent, or at any time, refuse or neglect to supply a sufficiency of properly skilled workers, or equipment and materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the Agreements herein contained, Galveston County shall be at liberty, after 48 hours written notice to the Contractor, to provide any such labor, equipment,, and materials and deduct the cost thereof, from any money then due or thereafter to become due to the Contractor, under this Agreement. In the event of such refusal, neglect, or failure Galveston County shall also be at liberty to terminate the employment of the Contractor. Consequently, Galveston County may enter upon the premises to take possession, for the purpose of completing the work included under this Agreement, of all materials, tools, and appliances thereon, and to employ any other person or persons to finish the work and provide the materials therefore. In case of such discontinuance of the employment, the Contractor shall not be entitled to receive any further payment under this Agreement until the said work shall be wholly finished. If the unpaid balance of the amount to be paid under this Agreement shall exceed the expense incurred by Galveston County in finishing the work, such excess shall be paid by Galveston County to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to Galveston County. The expense incurred by Galveston County, as herein provided, either for furnishing materials, or finishing the work, and any damage incurred through such default, shall be chargeable to the Contractor

Section 9.05 Notwithstanding the above paragraph, Galveston County reserves the right to terminate this Agreement for its convenience upon written notice to the Contractor. In such instance the Contractor will be paid its share of the contract amount proportionate to the percentage of its work completed and other reasonable cancellation costs incurred as a result of said termination. No payments shall be made for anticipated overhead and profit. Prior to making any payments under this clause, the Owner shall have the right to audit the records of the Contractor

Section 9.06 The Contractor agrees to adhere to the federal Occupational Safety & Health Act, state and local safety regulations and Galveston County's authorized Representative's safety

and health program so as to avoid injury or damage to persons or property, and to be directly responsible for damage to persons and property resulting from failure to do so.

Section 9.07 In the event the Contractor after a 24-hour written notice from Galveston County, Galveston County's authorized Representative, or duly authorized representative, fails to take corrective action to insure compliance with said safety regulations or removal of rubbish and debris resulting from his work, Galveston County shall undertake these obligations and charge the cost of same to the Contractor's account without further notice to the Contractor.

Section 9.08 The Contractor agrees to notify Galveston County's authorized Representative's representative on the jobsite of all accidents which may occur to persons or property and shall provide Galveston County's authorized Representative's representative with a copy of all accident reports on appropriate forms. All reports shall be signed by the Contractor or his authorized representative and submitted within five (5) days of occurrence

Section 9.09 The Contractor shall procure its materials from such sources, and employ such labor subject to contract terms and conditions in order to ensure harmonious labor relations on the site and prevent strikes or labor disputes by its employees or other trade employees. The Contractor, in the event of a labor dispute including strikes, shall take whatever action is required in order to prevent the disruption of work on the Project site.

Section 9.10 The Contractor will not assign this Agreement, nor any moneys due or to become due under this Agreement, nor sublet the whole or any part of the work to be performed hereunder, without the written consent of the Owner and Galveston County's authorized Representative. In the event of such a consent, a Sub-Contractor must comply with all the requirements of this Agreement.

Section 9.11 The Contractor agrees that all disputes concerning the jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect either nationally or in the locality in which the work is being done. The Contractor shall be bound by, and shall abide by, all such adjustments and settlements of jurisdictional disputes, whether or not the Contractor is signature bound by the Agreement establishing the impartial jurisdictional disputes board and/or its successors. The Contractor agrees not to cause a work stoppage, due to the jurisdictional assignment of work

Section 9.12 The Contractor shall submit to Galveston County's authorized Representative upon request, copies of orders placed for the various materials required for the Project or authentic stock lists if such material is normally a stock item. Order copies need not reflect prices but should indicate type of material, quantity, vendor name, and address, etc. The Contractor shall be required to submit to Galveston County's authorized Representative a monthly material status report, or more often if required by Galveston County's authorized Representative, as a prerequisite for the monthly progress payment. The Contractor shall notify Galveston County's authorized Representative immediately upon learning of a change of status of any material, equipment, or supplies

Section 9.13 The Contractor shall continuously and adequately protect all his work and will immediately replace all damaged and defective work

Section 9.14 The Contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies, and equipment to meet the requirements of Galveston County's authorized Representative and other trades in order to maintain construction progress

schedules, as established by Galveston County's authorized Representative. In the event that his force is, in the judgment of Galveston County's authorized Representative , inadequate to meet the established schedules during the regular working hours, the Contractor agrees to work sufficient overtime hours or increase his work force to meet such schedules at no extra cost to Galveston County. If for reasons not already stated, Galveston County's authorized Representative requires and directs the Contractor to work overtime, including Saturdays, Sundays or Holidays, the Contractor will be reimbursed the net premium rate only. The net premium rate is understood to mean the actual premium labor cost, including applicable taxes and wage additives required by trade Agreement or by law, but without additives for overhead, labor efficiency, or profit.

Section 9.15 The Contractor agrees to employ competent administrative, supervisory, and field personnel to accomplish the work, including layout and engineering and preparation and checking of shop drawings. If required, the Contractor shall substantiate this employment of competent personnel to Galveston County's authorized Representative's satisfaction before initiating any work

Section 9.16 The Contractor shall insure that all construction tools, equipment, temporary facilities, and other items used in accomplishing the work, whether purchased, rented, or otherwise provided by the Contractor or provided by others, are in a safe, sound, and good condition, must be capable of performing the functions for which they are intended and must be maintained in conformance with applicable laws and regulations

Section 9.17 If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner, Galveston County's authorized Representative, or the Architect or Engineer, or by any employee of either, or by any separate contractor employed by the Owner, or by changes ordered in the work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the Owner or Galveston County's authorized Representative, or by any other cause which Galveston County's authorized Representative determines may justify the delay, then the contract time shall be extended by amendment for such reasonable time as Galveston County's authorized Representative and Owner may determine.

Section 9.18 Right-To-Know each Contractor is required to implement the provisions of the right-to-know law, if any, as enacted by the state in which the work is being performed. Before using on site any material listed in the right-to-know substance list, each Contractor will furnish Galveston County's authorized Representative a copy of the material safety data sheet for that substance

Section 9.19 In the event the Contractor employs independent contractors, as well as payroll labor, to discharge its obligations hereunder, the Contractor acknowledges and understands that it does so at its own risk and that federal, state and/or local agencies may dispute the independent contractor status and assess penalties, fines, and costs should there be a determination to reclassify such workers. In that event, the Contractor agrees that it will defend, indemnify and hold Galveston County harmless from any fines, costs, damages, penalties, attorneys fees, and causes of action, including without limitation, personal injury or property damage, arising out of or relating in any way to such a determination.

Article X.

Galveston County's Authorized Representative Responsibilities

Section 10.01 Galveston County's authorized Representative will be the Owner's representative and will administer the contract as described in the contract documents. Galveston County's authorized Representative will advise and consult with the Owner. Galveston County's authorized Representative will have authority to act on behalf of the Owner to the extent provided in the contract documents, as they may be modified by change order in accordance with other provisions of the trade contract

Section 10.02 The Contractor agrees to perform the work under the general direction and coordination of Galveston County's authorized Representative in accordance with the contract documents. Any directive given by Galveston County's authorized Representative shall be binding on the Contractor.

Section 10.03 Galveston County's authorized Representative, acting for the Owner and subject to the Owner's delegation of such authority, may perform all tasks necessary or appropriate to administer and manage the trade contract, and undertake any action with respect to the Contractor, that the Owner is entitled to undertake.

Section 10.04 Galveston County's authorized Representative shall not give instructions or orders directly to employees or workers of the Contractor, except to persons designated as authorized representatives of the Contractor.

Article XI.

Equal Opportunity

Section 11.01 During the performance of this Agreement, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to insure that applicants are employed without regard to their race, color, religion, sex, or national origin. The Contractor will comply with all provisions of Executive Order No. 11246, Section 503 of the Rehabilitation Act of 1973, as Amended, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as Amended, (38 U.S.C. 4212) and their implementing regulations at 41 CFR Chapter 60.

Article XII.

Alterations

Section 12.01 Refer to the Bid Proposal Form for the overhead and profit allowable under Article 8.03. A, 8.03 B, 8.03 C: _____% Overhead, _____ % Profit

Article XII.

Complete Agreement

Section 12.01 This Agreement, together with all documents, Project Manual, drawings, incorporated herein by reference, constitute the entire Agreement between Galveston County and Contractor. There are no terms, conditions, or provisions, either oral or written, between the parties hereto, other than those contained herein. This Agreement supersedes any and all written representations, inducements, or understandings of any kind or nature between the parties hereto, relating to the particular Project involved herein

Section 12.02 The said parties for themselves, their heirs, successors, executors, administrators and assigns, do hereby agree to the full performance of the covenants herein contained.

This Contract is issued pursuant to award made by Commissioners' Court on _____, 20___.

EXECUTED this _____ day of _____, 20___.

COUNTY OF GALVESTON, TEXAS

BY: _____
Mark Henry, County Judge

ATTEST: _____
Dwight Sullivan, County Clerk

CONTRACTOR

_____

BY: _____
Signature - Title

_____
Printed Name

SECTION 01030
ALTERNATES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. This Section specifies administrative and procedural requirements for Alternates.

B. Definition: An Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.

C. Coordination: Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.

D. Notification: Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.

E. Schedule: A "Schedule of Alternates.' is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the Work described under each Alternate.

F. Include as part of each Alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SCHEDULE OF ALTERNATES

A. Alternate No. 1: Provide "Landscape" specified under section 02711 and A0.1A.

B. Alternate No. 2: Provide "Asphalt in parking area to the south of building" specified under section 02510 and shown on C1.0A.

C. Alternate No. 3: Provide "Chain Link Fencing" specified under section 02831 and shown on drawing C1.0A and A0.1A.

D. Alternate No. 4 Provide "Pole-barn Storage shed from column line 1 through 12" as shown on the drawings C1.0A, S3.1A, S3.2A and A0.1A

E. Alternate No. 5: Provide "Pole-barn Storage shed" as shown on the drawings C1.0A, S3.1A, S3.2A and A0.1A

F. Alternate No. 6: Provide "Asphalt Emulsion Tank" specified under section 11501.

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

END OF SECTION

SECTION 04720

CAST STONE MASONRY

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Cast Stone Units features, trim, ornamentation and facings.

1.02 RELATED SECTIONS

A. Section 04065 - Mortar and Masonry Grouting.

B. Section 07900 – Joint Sealants.

1.03 REFERENCES

A. ASTM C1364 current edition, Standard Specification for Architectural Cast Stone.

B. ASTM C1194 current edition, Standard Test Method for Compressive Strength of Architectural Cast Stone.

C. ASTM C1195 current edition, Standard Test Method for Absorption of Architectural Cast Stone.

D. Masonry Advisory Council: Hot and Cold Weather Construction, Current Edition.

1.04 DEFINITIONS

A. Cast Stone Units – manufactured from zero slump concrete.
   1. Vibrant Dry Tamp (VDT) casting method: Vibratory ramming of earth moist, zero- slump concrete against a rigid mold until it is densely compacted.

1.05 SAMPLES

A. Selection Samples: (3) 8" x 5-5/8" size samples, illustrating available finishes and colors for selection by Architect.

1.08 QUALITY ASSURANCE

A. Manufacturer Qualifications: manufacturer having sufficient plant facilities to produce the shapes, quantities and size of Products required in accordance with the project schedule.

B. Mock-up: Supply sufficient quantity of full size cast stone units for use in constructing a sample panel that may be part of the final wall construction.

1.09 DELIVERY, STORAGE AND HANDLING

A. Deliver Cast Stone units in protective film. Prevent damage to units.

B. Lift skids with proper and sufficiently long slings or forks with protection to prevent damage to units. Protect edges and corners.

C. Store units on level ground in a manner designed to prevent damage and staining of units.

D. Stack units on timbers or platforms at least 3 inches above grade.

E. Place polyethylene or other plastic film between wood and other finished surfaces of units when stored for extended periods of time.

F. Cover stored units with protective enclosure if exposed to weather.

1.10 ENVIRONMENTAL REQUIREMENTS

A. Maintain materials and surrounding air temperature at minimum 52 degrees F prior to and 48 hours after completion of masonry work.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers of Cast Stone units having Products considered acceptable for use:

1. Arriscraft International

B. Substitution Procedures: refer to section 01630

2.02 MATERIALS

A. Portland Cement: to ASTM C150, Type I or Type III, [White] [Grey] color.

B. Coarse Aggregate: Limestone, to ASTM C33, except for gradation.

C. Fine Aggregate: Manufactured or natural sands, to ASTM C33, except for gradation.

D. Pigments: Inorganic iron oxide pigments, to ASTM C979. Do not use carbon black pigment.

E. Retarding, Accelerating and High-Range Admixtures: to ASTM C494/C495M, Types A - G.

F. Water Repellents and Other Chemical Admixtures: previously established as suitable for use in concrete by proven field performance or through laboratory testing.

G. Dark Mineral Admixtures: to ASTM C618.

H. Water: Potable.

2.03 COMPONENTS

A. Arris-Cast Units: Sizes, profiles and textures as indicated on Drawings; Arris•cast by Arriscraft International, and having the following physical properties:

1. Compressive Strength (ASTM C1194): > 6,500 psi at 28 days.
2. Absorption (ASTM C1195): < 6.0% percent at 28 days.

B. Mortar: Portland cement-hydrated lime-sand mix, Type N to ASTM C270, as specified in Section 04065

C. Grout: maximum 6,500 psi at 28 days, as specified in Section 04065

D. Anchors: stainless steel type.

E. Joint Sealants and Backer Rods: non-staining type, as specified in Section 07900

F. Flashing, Vents, and Accessories: as specified in Section 04200

2.04 FABRICATION

A. Fabricate cast stone masonry units to sizes and profiles as indicated on Drawings.

B. Fabricate Arris-cast units using the Vibrant Dry Tamp Casting method.

C. Do not use dark mineral admixtures in surfaces intended to be exposed to view

D. Alternately, cure units in a 95 percent moist environment at a minimum temperature of 70 degrees F for 16 hours after casting.

F. Yard cure units for 350 degree-days prior to shipping.

2.05 FABRICATION TOLERANCES

A. Cross Section Dimensions: not deviating by more than plus or minus 1/8 inch from approved dimensions.

B. Length of Units: not deviating by more than L/360 or plus or minus 1/8 inch, whichever is greater, maximum plus or minus 1/4 inch.

C. Maximum Length of any Unit: maximum 15 times the average thickness of the unit.

D. Warp, Bow or Twist of Units: maximum L/360 or plus or minus 1/8 inch, whichever is greater.

E. Location of Dowel Holes, Anchor Slots, Flashing Grooves, False Joints: maximum deviation as follows:

1. On Formed Sides of Unit: 1/8 inch,

2. On Unformed Sides of Unit: 3/8 inch.

2.06 FINISHES

A. Exposed Surfaces: fine-grained texture similar to natural stone, Buff color as selected by Architect, free of cracks, chips or other defects that would affect the strength or serviceability of the unit or become exposed once installed and visible when viewed from a distance of not less than 15 feet under diffused light.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify site conditions are ready to receive work.

B. Inspect materials for fit and finish prior to installation. Do not set unacceptable units.

C. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

A. Install Arris-cast units where indicated on Drawings. Conform to TMS 402/ACI 530/ASCE 5, Building Code Requirements for Masonry Structures and TMS 602/ACI 530.1/ASCE 6, Specifications for Masonry Structures.

B. Drench units with clean water prior to setting.

C. Fill dowel holes and anchor slots completely with mortar or non-shrink grout.

D. Set units in full bed of mortar, unless otherwise detailed. Flush vertical joints full with mortar.

E. Maintain 3/8 inch wide joints.

F. Leave joints with exposed tops or under relieving angles open for sealant.

G. Leave head joints in copings and projecting components open for sealant.

H. Rake mortar joints 3/4 inch for pointing or sealing.

F. Remove excess mortar from unit faces immediately after setting.

G. Tuck point unit joints to a slight concave profile, except those designated to receive joint sealant.

H. Seal remaining joints with backer rod and joint sealant.

3.03 SITE TOLERANCES

A. Variation in Alignment from Unit to Adjacent Unit: 1/16 inch maximum.

B. Variation of Mortar Joint Thickness: 1/8 inch every 3 feet.

3.04 FIELD QUALITY CONTROL

A. Perform daily inspection .

B. Architect Review: Architect will observe installed masonry and reject masonry that is chipped, cracked, or blemished (streaked, stained or otherwise damaged), as described below.

1. Masonry will be inspected to be free of chips, cracks or other blemishes on the finished face or front edges of the masonry units exceeding 3/8 inch or that can be seen from a distance of 10 feet.

2. Units shall exhibit a texture approximately equal to the approved sample when viewed under direct daylight illumination at a 10 feet distance.

3. Minor chipping resulting from shipment and delivery shall not be grounds for rejection. Minor chips shall not be obvious under direct daylight illumination from a 20 feet distance.

4. Crazing and efflorescence will not be cause for rejection.

C. Make Good rejected masonry as directed by Architect

3.05 ADJUSTING AND CLEANING

A. Repair chips with touchup materials furnished by manufacturer.

C. Clean after mortar has set and cured, clean masonry as follows:

1. Protect windows, sills, doors, trim and other work from damage.

2. Remove large particles with [stiff fiber brushes] [wood paddles] without damaging surface.

3. Saturate masonry with clean water and flush off loose mortar and dirt.

4. Dilute cleaning agent with clean water in controlled proportions.

5. Apply solution to pre-soaked wall surface using [soft-bristled brush] [low pressure acid-resistant sprayer].

6. Thoroughly rinse cleaning solution and residue from wall surface.

C. Use alternative cleaning solutions and methods for difficult to clean masonry only after consultation with cast stone masonry unit manufacturer.

3.06 PROTECTION

A. Protect units from damage resulting from subsequent construction operations.

B. Use protection materials and methods which will not stain or damage units.

C. Remove protection materials upon Substantial Completion, or when risk of damage is no longer present.

END OF SECTION

SECTION 05400

COLD FORMED METAL FRAMING

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Load bearing formed steel stud exterior wall framing. As noted on drawings.

B. Exterior wall sheathing and roof parapet.

C. Exterior canopy framing.

1.02 REFERENCES

A. AISI SG-971 - Specification for the Design of Cold-Formed Steel Structural Members; American Iron and Steel Institute; 1996, with 2000 supplement.

B. ASTM A 153/A 153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2003.

C. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2003.

D. ASTM C 955 - Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases; 2003.

E. AWS D1.1 - Structural Welding Code - Steel; American Welding Society; 2004.

F. AWS D1.3 - Structural Welding Code - Sheet Steel; American Welding Society; 1998.

G. PS 1 - Construction and Industrial Plywood; National Institute of Standards and Technology (Department of Commerce); 1995.

H. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); Society for Protective Coatings; 2002.

1.03 SYSTEM DESCRIPTION

A. Size components to withstand design loads as follows:

B. Horizontal Deflection: Design to permit maximum deflection of 1/600 span.

C. Vertical Deflection: Design non-axial loadbearing framing to accommodate not less than 1/4 in vertical deflection.

D. Design wall system to provide for movement of components without damage, failure of joint seals, undue stress on fasteners, or other detrimental effects when subject to seasonal or cyclic day/night temperature ranges.

E. Design system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.

F. Design System to accommodate wind loads - see Structural Drawings.

1.04 SUBMITTALS

A. See Section 01300 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on standard framing members; describe materials and finish, product criteria, limitations.

C. Product Data: Provide manufacturer's data on factory-made framing connectors, showing compliance with requirements.

D. Shop Drawings: Indicate component details, framed openings, bearing, anchorage, loading, welds, and type and location of fasteners, and accessories or items required of related work.

1. Indicate stud and joist layout.

2. Describe method for securing studs to tracks and for welded framing connections.

3. Provide details and calculations for factory-made framing connectors, stamped by a Professional Structural Engineer.

E. Manufacturer's Installation Instructions: Indicate special procedures, conditions requiring special attention.

1.05 QUALITY ASSURANCE

A. Calculate structural properties of framing members in accordance with requirements of AISI Specification for the Design of Cold-Formed Steel Structural Members.

1. Maintain one copy of document on project site.

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

C. Installer: Company specializing in performing the work of this section with minimum five years of experience.

1.06 PROJECT CONDITIONS

A. Verify that field measurements are as indicated on the drawings.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. Metal Framing:

1. Dietrich Metal Framing, Inc: www.dietrichindustries.com.

2. Marino-Ware: www.marinoware.com.

3. MiTek Industries, Inc: www.mitek-us.com.

4. Substitutions: See Section 01600 - Product Requirements.

B. Metal Framing Connectors and Accessories:

1. Same manufacturer as framing.

2. The Steel Network Inc: www.SteelNetwork.com.

3. Substitutions: See Section 01600 - Product Requirements.

2.02 FRAMING MATERIALS

A. Studs and Track: ASTM C 955; studs formed to channel shape with punched web; U-shapedtrack in matching nominal width and compatible height.

1. Gage and depth: As indicated on the drawings.

2. Galvanized in accordance with ASTM A 653/A 653M G90/Z275 coating.

B. Framing Connectors: Factory-made formed steel sheet, ASTM A 653/A 653M SS Grade 50, with G60/Z180 hot dipped galvanized coating and factory punched holes.

1. Structural Performance: Maintain load and movement capacity required by applicable code, when evaluated in accordance with AISI Specification for the Design of Cold Formed Steel Structural Members; minimum 16 gage, 0.06 inch thickness.

2. Movement Connections: Provide mechanical anchorage devices that accommodate movement using slotted holes, screws and anti-friction bushings, while maintaining structural performance of framing. Provide movement connections at the following locations:

a) Where continuous studs bypass elevated floor slab, connect stud to slab in manner allowing vertical movement of slab without affecting studs; allow for minimum movement of 1/2 inch.

b) Where top of stud wall terminates below structural floor or roof, connect studs to structure in manner allowing vertical movement of slab without affecting studs; allow for minimum movement of 1/2 inch.

c) Provide top track preassembled with connection devices spaced to fit stud spacing indicated on drawings; minimum track length of 12 feet.

d) Acceptable Products: VertiClip(r) or DriftClip(tm) manufactured by The Steel Network Inc.

3. Provide non-movement connections for tie-down to foundation, floor-to-floor tie-down, roof-to-wall tie-down, joist hangers, gusset plates, and stiffeners.

C. Roofing Joists: Factory-made formed steel sheet, ASTM A 653/A 653M SS Grade 50, with G60/Z180 hot dipped galvanized coating and factory punched holes.

1. Gage and depth: As indicated on the drawings.

2. Galvanized in accordance with ASTM A 653/A 653M G90/Z275 coating.

2.03 SHEATHING

A. Plywood Wall Sheathing: PS 1, Grade C-D, Exposure I.

B. 1-1/2" deep Metal Decking.

2.04 ACCESSORIES

A. Bracing, Furring, Bridging: Formed sheet steel, thickness determined for conditions encountered; finish to match framing components.

B. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

2.05 FASTENERS

A. Self-Drilling, Self-Tapping Screws, Bolts, Nuts and Washers: Hot dip galvanized per ASTM A 153/A 153M.

B. Anchorage Devices: Power actuated, Drilled expansion bolts, and Screws with sleeves.

C. Welding: In conformance with AWS D1.1 and AWS D1.3.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Verify that building framing components are ready to receive work.

3.02 INSTALLATION OF STUDS

A. Install components in accordance with manufacturers' instructions.

B. Align floor and ceiling tracks; locate to wall layout. Secure in place with fasteners at maximum 16 inches on center. Coordinate installation of sealant with floor and ceiling tracks.

C. Place studs at spacings as indicated on Structural drawings; not more than 2 inches from abutting walls and at each side of openings. Connect studs to tracks using fastener method.

D. Construct corners using minimum of three studs. Install double studs at wall openings, door and window jambs.

E. Install studs full length in one piece. Splicing of studs is not permitted.

F. Install studs, brace, and reinforce to develop full strength and achieve design requirements.

G. Coordinate placement of insulation in multiple stud spaces made inaccessible after erection.

H. Install intermediate studs above and below openings to align with wall stud spacing.

I. Provide deflection allowance in stud track, directly below horizontal building framing at nonload bearing framing.

J. Attach cross studs to studs for attachment of fixtures anchored to walls.

K. Install framing between studs for attachment of mechanical and electrical items, and to prevent stud rotation.

L. Touch-up field welds and damaged galvanized surfaces with primer.

3.03 WALL SHEATHING

A. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using self-tapping screws.

3.04 ERECTION TOLERANCES

A. Maximum Variation from True Position: 1/4 inch.

B. Maximum Variation of any Member from Plane: 1/8 inch.

END OF SECTION

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SECTION 08360
OVERHEAD DOORS

PART 1 - GENERAL

1.01 SECTION SUMMARY

A. Overhead sectional doors manually operated insulated and or electrically operated as noted or shown on the drawings. Windstorm Approved

B. Operating hardware and supports for complete single source responsibility.

C. Reference Division 5-Metals for miscellaneous supports

1.02 REFERENCES

A. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2004a.

B. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2002.

C. DASMA 102 - American National Standard Specifications for Sectional Overhead Type Doors; Door & Access Systems Manufacturers' Association, International; 2003.

D. Windload design ANSI/DASMA 102 Standards and as required by local and state codes.

1.03 SUBMITTALS

A. See Section 01300 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details. Provide Texas Windstorm approval product data sheets.

C. Product Data: Show component construction, anchorage method, and hardware.

D. Manufacturer's Installation Instructions: Include any special procedures required by project conditions.

E. Operation Data: Include normal operation, troubleshooting, and adjusting.

F. Maintenance Data: Include data for motor and transmission, shaft and gearing, lubrication frequency, spare part sources.

G. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Overhead Door Co.; Product 418 Series Steel Insulated.

B. Other Acceptable Manufacturers:

1. Clopay Building Products Company, Inc: www.clopaycommercial.com.
2. Substitutions: See Section 01600 - Product Requirements.

2.02 STEEL DOOR COMPONENTS

A. Steel Doors: Flush steel, sectional insulated; standard lift and high lift operating style with track and hardware; complying with DASMA 102, Commercial application.

1. Performance: Withstand positive and negative wind loads of 140 mph sustained with 170 mph gust without damage or permanent set, when tested in accordance with ASTM E 330, using 3 second duration of maximum load.
2. Door Nominal Thickness: 2 inches thick.
3. Exterior Finish: Pre-finished with baked enamel of color as selected.
4. Manual Operation: Pull rope.

B. Door Panels: Flush steel construction; outer steel sheet of minimum 24 ga. (0.0239 inch thick), ribbed profile; inner steel sheet of minimum 26 ga. (0.0179 inch thick), flat profile; core reinforcement of minimum 16 ga. (0.0598 inch thick) sheet steel roll formed to channel shape, rabbeted weather joints at meeting rails; insulated.

C. Series 418 Trolley for (3) 14 x 10 (3) EMS Bays and 14 x 14 (6) Overhead doors high lift track 3" (3) Bay Fire Station; total (6) units all State Windstorm approved for Galveston, color Buckskin or as approved. Manual operation chain hoist.

2.03 DOOR COMPONENTS

A. Hinge and Roller Assemblies: Heavy duty hinges and adjustable roller holders of galvanized steel; floating hardened steel bearing rollers, located at top and bottom of each panel, each side.

B. Lift Mechanism: Torsion spring on cross head shaft, with braided stainless steel lifting cables.

1. For Manual Operation: Requiring maximum exertion of 25 lbs force to open.

C. Sill Weather-stripping: Resilient hollow rubber strip, one piece; fitted to bottom of door panel, full length contact.

D. Jamb Weather-stripping: Roll formed steel section full height of jamb, fitted with resilient weather-stripping, placed in moderate contact with door panels.

E. Head Weather-stripping: EPDM rubber seal, one piece full length.

F. Panel Joint Weather-stripping: Neoprene foam seal, one piece full length.

G. Lock-Interior mounted slide locks

2.04 MATERIALS

A. Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A 653/A 653M, with G90/Z275 coating, plain surface.

B. Insulation: Isocyanurate, bonded to facing (all door assembles).

1. R value of 7.35
2. Same thickness as core framing members.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

3.02 PREPARATION

B. A. Prepare opening to permit correct installation of door unit to perimeter air and vapor barrier seal.

3.03 INSTALLATION

A. Install door unit assembly in accordance with manufacturer's instructions.

B. Anchor assembly to wall construction and building framing without distortion or stress.

C. Securely brace door tracks suspended from structure. Secure tracks to structural members only.

D. Fit and align door assembly including hardware.

E. Coordinate locking devices with Owner and Hardware Section.

3.04 ERECTION TOLERANCES

A. Maximum Variation from Plumb: 1/16 inch.

B. Maximum Variation from Level: 1/16 inch.

C. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch from 10 ft straight edge.

D. Maintain dimensional tolerances and alignment with adjacent work.

3.05 ADJUSTING

A. Adjust door assembly for smooth operation and full contact with weather-stripping.

B. Have manufacturer's field representative present to confirm proper operation and identify adjustments to door assembly for specified operation.

3.06 CLEANING AND PROTECTION

A. Clean doors, frames.

B. Remove labels and visible markings.

C. Do not permit construction traffic through overhead door openings after adjustment and cleaning.

END OF SECTION

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SECTION 10280

TOILET ROOM ACCESSORIES

CONDITIONS OF THE CONTRACT AND DIVISION 1, as indexed, apply to this Section.

PART 1 - GENERAL

1.01 SUBSTITUTION

Refer to Section 01630 Substitutions for substitutions.

1.02 SCOPE

A. Furnish all labor, materials, equipment and services necessary or incidental to completion of toilet room accessories listed below in the item list.

1.03 SUBMITTALS

A. Comply with Section 01300.

B. Shop Drawings: Indicate size, material and finish. Show locations, installation procedures. Include details of joints, attachments, fasteners, clearances, and mounting heights and compliance with ADA.

C. Product Data: Submit manufacturer's technical data and installation instructions. Rough in for most accessories is complete, therefore any substitutions of Bobrick must be the exact same size for rough-in.

D. Operation and Maintenance Instructions: Provide printed or written instructions for operation and maintenance of units specified.

1.04 MINIMUM COMPLIANCE STANDARDS

Comply with ANSI A117.1

PART 2 – PRODUCTS

2.01 MATERIALS

A. Stainless Steel:

1. Alloy: AISI, Type 302 or 304 (18-08) ASTM A167
2. Finish: No. 4 satin, unless otherwise specified
3. Thickness: US Stainless 22 gauge minimum

B. Aluminum:

1. Extruded: 6463-T5 alloy, anodized

2. Cast: 356 or 356-T6 alloy

C. Chromium Plating:

1. Method: Over nickel

2. Standard: ASTM C456, Type SC 2

D. Brass:

1. Cast or forged

2. QQ-B-626C

E. Mirrors: (Framed)

1. Standard: FS DD-G-451-C, silvering quality No. 1 float or plate

2. Thickness: 1/4 inch

3. Backing: Electrolytic cooper

4. Protection: Padding and filler strips

2.02 MANUFACTURERS

A. A & J Washroom Accessories

B. Bobrick Dispensers, Inc.

C. Bradley Washfountain Co.

D. Charles Parker Co.

E. Watrous, Inc.

F. GAMCO, General Accessory Mfg. Co.

G. American Specialties

2.03 QUALITY STANDARDS

A. Design, finish and keying of items shall be the same.

B. Furnish items from one manufacturer only, unless otherwise specified or directed by Architect.

PART 3 - EXECUTION

3.01 MOUNTING LOCATIONS

A. Refer to drawings for mounting locations. When not shown, submit supplier's recommendations for locations and mounting height before proceeding.

B. Contractor shall be responsible for supplying all opening, blocking, and other components necessary for installation of all toilet accessories.

C. Use approved theft-resistant type fasteners.

D. Comply with ADA requirements.

PART 4 - SCHEDULES

4.01 As a standard, model numbers shown are American Specialties, Inc. Other manufacturers are approved but must provide equivalent products to those listed.

GB36	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 1 - 36" wide
GB42	Grab Bar - 1 1/4" diameter concealed mounting model 3100 - Type 1 - 42" wide
MR1	Frameless Mirror 60"L x 40"H - 8287
MR2	Frameless Mirror 48"L x 40"H - 8287
PTD	Recessed Paper Towel Dispenser and Waste Receptacle model 20469
SD	Wall Mounted Soap Dispenser model 20363
TPH	Surface Mounted model 20030

END OF SECTION

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SECTION 13341

METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Metal Building System:

1. Structural steel framing system.
2. Metal roof system.
3. Metal wall system.

1.02 RELATED REQUIREMENTS

A. Section 07210 – Thermal Insulation.

1.03 REFERENCE STANDARDS

A. American Institute of Steel Construction (AISC):

1. AISC Specification for Structural Steel Buildings.
2. AISC Serviceability Design Considerations for Low-Rise Buildings.

B. American Iron and Steel Institute (AISI):

1. AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

C. American Welding Society (AWS):

1. AWS D1.1 / D1.1M – Structural Welding Code – Steel.
2. AWS D1.3 / D1.3M – Structural Welding Code – Sheet Steel.

D. Association for Iron & Steel Technology (AISE):

1. AISE 13 – Specifications for Design and Construction of Mill Buildings.

E. ASTM International (ASTM):

1. ASTM A 325 – Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.

2. ASTM A 653 / A 653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

3. ASTM A 792 / A 792M – Standard Specification for Steel Sheet, 55 % Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.

4. ASTM B 117 – Standard Practice for Operating Salt Spray (Fog) Apparatus.

5. ASTM D 522 – Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings.

6. ASTM D 523 – Standard Test Method for Specular Gloss.

7. ASTM D 968 – Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive.

8. ASTM D 1308 – Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.

9. ASTM D 2244 – Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.

10. ASTM D 2247 – Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.

11. ASTM D 2794 – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).

12. ASTM D 3361 – Standard Practice for Unfiltered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings.

13. ASTM D 4214 – Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.

14. ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

15. ASTM E 1592 – Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.

16. ASTM G 87 – Standard Practice for Conducting Moist SO2 Tests.

F. FM Global:

1. FMRC Standard 4471 – Approval Standard for Class 1 Roofs for Hail Damage Resistance, Combustibility, and Wind Uplift Resistance.

G. Metal Building Manufacturers Association (MBMA):

1. MBMA Metal Building Systems Manual.

H. The Society for Protective Coatings (SSPC):

1. SSPC-Paint 15 - Primer for Use Over Hand Cleaned Steel performs to SSPC-Paint 15 standards.

2. SSPC-SP2 – Hand Tool Cleaning.

I. Underwriters Laboratories (UL):

1. UL 580 – Standard for Tests for Uplift Resistance of Roof Assemblies.

2. UL 723 – Standard for Test for Surface Burning Characteristics of Building Materials.

1.04 PREINSTALLATION MEETINGS

A. Convene preinstallation meeting 2 weeks before start of installation of metal building system.

B. Require attendance of parties directly affecting work of this section, including Contractor, Architect, Engineer, installer, and metal building system manufacturer's representative.

C. Review materials, installation, protection, and coordination with other work.

1.05 SUBMITTALS

A. Comply with Section 01300 – Submittal Procedures.

B. Product Data: Submit metal building system manufacturer's product information, specifications, and installation instructions for building components and accessories.

C. Erection Drawings: Submit metal building system manufacturer's erection drawings, including plans, elevations, sections, and details, indicating roof framing, transverse cross-sections, covering and trim details, and accessory installation details to clearly indicate proper assembly of building components.

D. Certification: Submit written "Certificate of design and manufacturing conformance" prepared and signed by a Professional Engineer, registered to practice in Texas verifying that the metal building system design and metal roof system design (including panels, clips, and support system components) meet indicated loading requirements and codes of authorities having jurisdiction.

1. Certification shall reference specific dead loads, live loads, snow loads, wind loads/speeds, tributary area load reductions (if applicable), concentrated loads, collateral loads, seismic loads, end-use categories, governing code bodies, including year, and load applications.

2. Submit certification on the metal building system manufacturer's letterhead.

E. Submit certification verifying that the metal roof system has been tested and approved by Underwriter's Laboratory as Class 90.

F. Submit certification verifying that the metal standing seam roof system has been tested in accordance with ASTM E 1592 test protocols.

G. Installer Certification: Submit certification 1 week before bid date that the metal building system or roof system installer has been regularly engaged in the installation of building systems of the same or equal construction to the system specified.

H. Warranty Documentation: Submit manufacturer's standard warranty.

1.06 QUALITY ASSURANCE.

A. Manufacturer's Qualifications:

1. Manufacturer regularly engaged, for past 10 years, in manufacture of metal building systems of similar type to that specified.

2. Accredited based on IAS Accreditation Criteria AC472 and requirements in International Building Code (IBC), Chapter 17.

B. Installer's Qualifications:

1. Installer regularly engaged, for past 5 years, in installation of metal building systems of similar type to that specified.

2. Employ persons trained for installation of metal building systems.

C. Certificate of design and manufacturing conformance:

1. Metal building system manufacturer shall submit written certification prepared and signed by a Professional Engineer, registered to practice in Texas verifying that building system design and metal roof system design (including panels, clips, and support system components) meet indicated loading requirements and codes of authorities having jurisdiction.

2. Certification shall reference specific dead loads, live loads, snow loads, wind loads/speeds, tributary area load reductions (if applicable), concentrated loads, collateral loads, seismic loads, end-use categories, governing code bodies, including year, and load applications.

3. Certificate shall be on metal building system manufacturer's letterhead.

4. Refer to Submittals article of this specification section.

D. Material Testing:

1. In addition to material certifications of structural steel, metal building system manufacturer shall provide, upon request at time of order, evidence of compliance with specifications through testing.

2. This quality assurance testing shall include testing of structural bolts, nuts, screw fasteners, mastics, and metal coatings (primers, metallic coated products, and painted coil products).

1.07 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.

2. Keep materials in manufacturer's original, unopened containers and packaging until installation.

3. Do not store materials directly on ground.

4. Store materials on flat, level surface, raised above ground, with adequate support to prevent sagging.

5. Protect materials and finish during storage, handling, and installation to prevent damage.

1.08 WARRANTY

A. Metal building system manufacturer shall provide a written weathertightness warranty for a maximum of 20 years against leaks in roof panels, arising out of or caused by ordinary wear and tear under normal weather and atmospheric conditions.

1. Warranty shall be signed by both the metal roof system manufacturer and the metal roof system installer.

2. Maximum liability of warranty shall be no less than $0.70 per square foot of roof area.

B. Metal building system manufacturer shall provide a written warranty for 25 years against perforation of metal roof panels due to corrosion under normal weather and atmospheric conditions.

1. Warranty shall be signed by metal roof system manufacturer.

C. Metal building system manufacturer shall provide a paint film written warranty for 25 years against cracking, peeling, chalking, and fading of exterior coating on painted roof and wall panels.

1. Warranty shall be signed by metal building system or roof system manufacturer and state that the coating contains 70 percent "Kynar 500" or "Hylar 5000" resin.

2. Metal building system manufacturer shall warrant that the coating shall not peel, crack, or chip for 25 years.

3. For a period of 25 years, chalking shall not exceed ASTM D 4214, #8 rating and shall not fade more than 5 color difference units in accordance with ASTM D 2244.

D. Metal Building System Manufacturer's Certification: Metal building system manufacturer shall submit a signed written Certification, stating that the metal roof system manufacturer or approved representative will provide warranties and Inspection and Report Service specified in this specification section.

1. Warranty terms shall be submitted with bid.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Metal Building System Manufacturer:

1. Rigid Global Buildings, 18933 Aldine Westfield, Houston, Texas 77073, Phone 281-443-9065, Website www.rigidbuilding.com

2. Or Approved Equal.

2.02 BUILDING DESCRIPTION

A. Building Dimensions: Indicated on the Drawings.

1. Horizontal Dimensions: Measure to inside face of wall sheets.

2. Eave Height: Measure from top of finished floor to intersection of insides of roof and sidewall sheets.

3. Clear Height Between Finished Floor and Bottom of Roof Steel: Indicated on the Drawings.

B. Primary Structural Members:

1. Primary Framing System: Butler Manufacturing framing system as specified in this specification section.

2. Frames: Welded-up plate section columns and roof beams, complete with necessary splice plates for bolted field assembly as specified in this specification section.

3. Bolts for Field Assembly of Primary Steel: High-strength bolts as indicated on erection drawings of metal building system manufacturer.

4. Beam and Post Endwall Frames: Endwall corner posts, endwall roof beams, and endwall posts as required by design criteria.

5. Exterior Columns: Welded-up "H" sections or cold-formed "C" sections.

6. Interior Columns: "H" sections or tube columns.

7. Connection of Primary Structural Members: ASTM A 325 bolts through factory-punched holes.

8. Primary Structural Members: Paint with metal building system manufacturer's standard primer with surface preparation as specified in this specification section.

C. Secondary Structural Members:

1. Secondary Framing System: Butler Manufacturing framing system as specified in this specification section.

2. C/Z Purlins and Girts: Acrylic-coated G30 galvanized finish.

D. Metal Roof System: Metal roof system as specified in this specification section.

E. Metal Wall System: Metal wall system as specified in this specification section.

F. Where metal panels are required to be painted, use coating system as specified in this specification section.

2.03 DESIGN LOADS

A. Governing Design Code:

1. Structural design for the building structural system shall be provided by the metal building system manufacturer for the following design criteria:

a. Governing Building Code: International Building Code

b. Year/Version: 2009.

c. Occupancy Category: Business.

B. Roof Live Load:

1. Roof live loads are loads produced during the life of the structure by moveable objects.

2. Wind, snow, seismic, or dead loads are not live loads.

3. Roof live loads are applied based on the Tributary Area as follows:

   a. 0 to 200 Square Feet: 20 psf.

   b. 201 to 600 Square Feet: Interpolation between 200 sq ft and 600 sq ft numbers.

   c. 601 Square Feet or Greater: 12 psf.

C. Roof Snow Load:

1. Roof snow load used for designing the structure shall not be reduced and shall be the product of the following criteria:

   a. Snow Load Coefficient (Ce): 1.0.

   b. Thermal Factor (C_t): 1.0.

   c. Snow Importance Factor (I): 1.0.

   d. Ground Snow Load (Pg): 0.0.

   e. Roof Snow Load (Pf): 0.0 psf.

2. Design snow load shall include the effects of minimum flat roof load limits, rain on snow, drifting snow, and unbalanced snow load as defined in the governing building code specified above.

D. Wind Load:

1. Wind load used for designing the structure shall be the product of the following criteria:

   a. Wind Exposure Category: C.

   b. Wind Velocity Pressure Exposure Coefficient (K_z): 0.94.

   c. Wind Topographic Factor (K_{zt}): 1.20.

   d. Wind Directionality Factor (K_d): 0.85.

   e. Wind Velocity (V), miles per hour: 130.

   f. Wind Importance Factor (I_w): 1.0.

   g. Bilding Wind Load (q_z): 41.5 psf.

2. Wind Pressure Coefficients and the design pressures shall be applied in accordance with the governing code.

E. Seismic Load:

1. Seismic load used for designing the structure shall be based on the following criteria:

   a. Spectral response acceleration for short periods (S_s): 0.087 % g.

   b. Spectral response acceleration for 1-sec. period (S_1): 0.038 % g.

   c. Site Class: A.

   d. Seismic Importance Factor (I): 1.0.

2. Seismic loads shall be applied in accordance with the governing code.

F. Dead Load: Dead load shall consist of the weight of building system construction, such as roof, framing, and covering members.

G. Collateral Load:

1. Collateral load in pounds per square foot shall be applied to the entire structure to account for the weight of additional permanent materials other than the building system, such as sprinklers, mechanical systems, electrical systems, hung partitions, and ceilings.

2. This allowance does not include the weight of hung equipment weighing 50 pounds or more.

3. Equipment loads of 50 pounds or more shall be indicated on the Drawings and the structure shall be strengthened as required.

4. Architect will provide the metal building system manufacturer with the magnitude and approximate location of concentrated loads greater than 50 pounds before design of the building starts.

H. Auxiliary Loads: Auxiliary loads shall include dynamic loads, such as cranes and material handling systems, and will be defined in the Contract Documents.

I. Crane Loads:

1. Crane loads shall be a function of the Service Class as defined by the governing code and Crane Manufacturers Association of America (CMAA) and the rated tonnage (A- Standby or Infrequent service, B- Light service, C- Moderate service, D- Heavy Service, E- Severe Service, F- Continuous Severe Service).

2. Cranes in Service Class E or F shall be in accordance with AISE 13.

   a. Service Class of Crane: 5 Ton.

   b. Deflection Criterion for Crane: L/600.

3. Crane loads will be obtained from the crane manufacturer and supplied by the Architect to the metal building system manufacturer at the time of bid.

4. Building structure shall be designed for the crane loads in accordance with the governing code.

5. Multiple cranes in the same bay or aisle shall be designed in accordance with the governing code.

6. If the governing code does not address multiple crane design practices, MBMA Metal Building Systems Manual shall be used.

J. Load Combinations: Load combinations used to design primary and secondary structural members shall be in accordance with the governing code.

2.04 DEFLECTIONS

A. Structural Members:

1. Maximum deflection of main framing members shall not exceed H/60 of their respective spans.

2. Maximum deflection due to snow load in roof panels and purlins shall not exceed L/150 of their respective spans.

3. Maximum deflection due to wind load in wall panels and girts shall not exceed H/120 of their respective spans.

B. Lateral deflections, or drift, at the roof level of the structure in relation to the floor or slab on grade, caused by deflection of horizontal force resisting elements, shall not exceed L/180.

C. Calculations for deflections shall be done using only the bare frame method.

1. Reductions based on engineering judgment using the assumed composite stiffness of the building envelope shall not be allowed.

2. Drift shall be in accordance with AISC Serviceability Design Considerations for Low-Rise Buildings.

3. Use of composite stiffness for deflection calculations is permitted only when actual calculations for the stiffness are included with the design for the specific project.

4. When maximum deflections are specified, calculations shall be included in the design data.

2.05 STRUCTURAL STEEL FRAMING SYSTEM

A. General:

1. Design of Structural System: Clear or multi-span rigid frame with tapered or straight columns and roof beams, with gable or single-slope roof.

2. Actual Building Length:

   a. Structural line to structural line.

   b. Same as nominal; i.e., number of bays times length of bays.

   c. Structural Line: Defined as inside face of wall sheets.

3. Actual Building Width:

   a. Structural line to structural line.

   b. Nominal building width.

4. Minimum Roof Slope: 1 inch in 12 inches.

5. Maximum Roof Slope: 1 inch in 12 inches.

6. Components and Parts of Structural System:

   a. Indicated on the Drawings or the Specifications.

   b. Clearly marked.

   c. Erection Drawings: Supply for identification and assembly of parts.

   d. Drawings: Carry stamp of a registered professional engineer.

7. Foundations:

   a. Foundations, Including Anchor Bolt Embedment Length: Properly designed by qualified engineer, retained by other than metal building system manufacturer, in accordance with specific soil conditions for building site.

   b. Reactions for Proper Design of Foundations: As shown on Structural Drawings

   c. Anchor Bolts:

      1) Anchor Bolt Diameter: Indicated on anchor bolt layout drawings furnished by metal building system manufacturer.

      2) Anchor Bolts: Supplied by Contractor, not metal building system manufacturer.

      3) Anchor Bolts on Moment-Resisting Column Bases: Nuts above and below base plates.

B. Structural Steel Design:

1. Structural Mill Sections or Welded-up Plate Sections: Design in accordance with AISC Specification for Structural Steel Buildings.

2. Cold-Formed Steel Structural Members: Design in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

3. Structural System: Design in accordance with specified building code (Refer to Design Loads and Building Codes).

C. Primary Framing:

1. Rigid Frames:

   a. Frames: Welded-up plate section columns and roof beams, complete with necessary splice plates for bolted field assembly.

2. Base Plates, Cap Plates, Compression Splice Plates, and Stiffener Plates: Factory welded into place and connection holes factory fabricated.

3. Columns and Roof Beams: Fabricated complete with holes in webs and flanges for attachment of secondary structural members and bracing, except for fieldwork as noted on erection drawings furnished by metal building system manufacturer.

   a. Bolts for Field Assembly of Frame Members: ASTM A 325 high-strength bolts as indicated on erection drawings furnished by metal building system manufacturer.

4. Endwall Structural Members: Cold-formed channel members designed in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members or welded-up plate sections designed in accordance with AISC Specification for Structural Steel Buildings.

   a. Endwall Frames: Endwall corner posts, endwall roof beams, and endwall posts as required by design criteria.

5. Splice Plates and Base Clips: Shop fabricated complete with bolt connection holes.

6. Base Plates, Cap Plates, Compression Splice Plates, and Stiffener Plates: Factory welded into place and connection holes shop fabricated.

7. Beams and Posts: Factory fabricated complete with holes for attachment of secondary structural members, except for field work as noted on erection drawings furnished by metal building system manufacturer.

   a. Intermediate Frames: Substituted for end-wall roof beams, when specified.

8. Factory fabricate necessary endwall posts and holes for connection to intermediate frame used in endwall.

D. Secondary Structural Members:

1. Purlins:

a. Purlins:

1) "Z"-shaped, precision-roll-formed, acrylic-coated G30 galvanized steel in different gauges to meet specified loading conditions.

2) 8-1/2-inch, 10-inch, or 11-1/2-inch-deep "Z" sections.

b. Outer Flange of Purlins: Factory-punched holes for panel connections.

c. Attach purlins to main frames and endwalls with 1/2-inch-diameter bolts.

d. Brace purlins at intervals indicated on erection drawings furnished by metal building system manufacturer.

e. Concentrated Loads: Hung at purlin panel points.

2. Eave Members:

a. Eave Struts: Factory punched 7-inch, 8-1/2-inch, 10-inch, or 11-1/2-inch-deep "C" sections, precision-roll-formed, acrylic-coated G30 galvanized steel in different gauges to meet specified loading conditions.

3. Girts:

a. "Z" or "C"-shaped, precision-roll-formed, acrylic-coated G30 galvanized steel in different gauges to meet specified loading conditions.

b. 7-inch, 8-1/2-inch, 10-inch, or 11-1/2-inch-deep "Z" or "C" sections.

c. Outer Flange of Girts: Factory-punched holes for panel connections.

4. Bracing:

a. Locate bracing as indicated on the Drawings.

b. Diagonal Bracing:

1) Hot-rolled rods of sizes indicated on the Drawings.

2) Attach to columns and roof beams as indicated on the Drawings.

c. Optional fixed-base wind posts or pinned-base portal frames may be substituted for wall rod bracing on buildings as required.

d. Flange Braces and Purlin Braces: Cold formed and installed as indicated on the Drawings.

E. Welding:

1. Welding Procedures, Operator Qualifications, and Welding Quality Standards: AWS D1.1 - Structural Welding Code – Steel and AWS D1.3 - Structural Welding Code – Sheet Steel.

2. Welding inspection, other than visual inspection as defined by AWS D1.1, paragraph 6.9, shall be identified and negotiated before bidding.

3. Certification of Welder Qualification: Supply when requested.

F. Painting of Structural Steel Framing System:

1. General:

a. Structural Steel: Prime paint as temporary protection against ordinary atmospheric conditions.

b. Perform subsequent finish painting, if required, in field as specified in the painting section.

c. Before painting, clean steel of loose rust, loose mill scale, dirt, and other foreign materials.

d. Steel Fabricator: Not required to sand blast, flame clean, or pickle steel before painting, unless otherwise specified.

2. Primary Frames:

a. Clean steel in accordance with SSPC-SP2.

b. Factory cover steel with 1 coat of gray water-reducible alkyd primer paint formulated to equal or exceed performance requirements SSPC-Paint 15.

c. Minimum Coating Thickness: 1.0 mil.

3. Secondary Structural Members – Roll-Formed:

a. Hot-dipped zinc coating, ASTM A 653, G30; followed by 1 coat of clearacrylic finish.
b. Acrylic-Coated G30 Galvanized Steel: Equal or exceed performance requirements of SSPC Paint-15.

4. Truss Purlins:

a. Clean steel in accordance with SSPC-SP2.

b. Factory cover steel with 1 coat of gray primer by spray, dip, or electrodeposition method.

c. Minimum Coating Thickness: 1.0 mil.

2.06 METAL ROOF SYSTEM

A. Metal Roof System: Wind Rated roof system.

1. Roof System Design:

a. Design roof panels in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

b. Design roof paneling system for a minimum roof slope of 1/4 inch in 12 inches.

c. Design roof paneling system to support design live, snow, and wind loads.

d. Endwall Trim and Roof Transition Flashings: Allow roof panels to move relative to wall panels and/or parapets as roof expands and contracts with temperature changes.

2. Roof System Performance Testing:

a. UL Wind Uplift Classification Rating, UL 580: Class 90.

b. Structural Performance Under Uniform Static Air Pressure Difference: Test roof system in accordance with ASTM E 1592.

3. FM Global (Factory Mutual):

a. Roof system has been tested in accordance with FMRC Standard 4471 and approved as a Class 1 Panel Roof.

b. Metal Building System Manufacturer: Provide specific assemblies to meet required wind rating in accordance with FM Global.

c. Installation modifications or substitutions can invalidate FM Global approval.

4. Roof Panels:

a. Factory roll-formed, 24 inches wide, with 2 major corrugations, 2 inches high (2-3/4 inches including seam), 24 inches on center.

b. Flat of the Panel: Cross flutes 6 inches on center, perpendicular to major corrugations in entire length of panel to reduce wind noise.

c. Variable Width Panels:

1) For roof lengths not evenly divisible by the 2'-0" panel width, factory-manufactured variable-width (9-inch, 12-inch, 15-inch, 18-inch, and 21-inch-wide) panels shall be used to ensure modular, weathertight roof installation.

2) Minimum Length: 15 feet.

3) Supply maximum possible panel lengths..

5. Panel Material and Finish:

a. 24-gauge steel coated both sides with layer of acrylic-coated Galvalume aluminum-zinc alloy (approximately 55 percent aluminum, 45 percent zinc) applied by continuous hot-dip method.

b. Minimum 0.55-ounce coated weight per square foot as determined by triple-spot test, ASTM A 792.

c. Apply clear acrylic film for additional protection.

6. Panel Material and Finish:

a. 24-gauge galvanized steel, G90 coating, ASTM A 653, G90.

b. Coating Warranty: Metal building system manufacturer shall warrant coating for 25 years for the following.

1) Use panels of maximum possible lengths to minimize end laps.

2) Extend eave panels beyond structural line of sidewalls.

3) Factory punch panels at panel end to match factory-punched holes in eave structural member.

4) Panel End Splices: Factory punched and factory notched.

5) Panel End Laps: Locate directly over, but not fastened to, a supporting secondary roof structural member and be staggered, to avoid 4-panel lap-splice condition.

6) End Laps: Floating. Allows roof panels to expand and contract with roof panel temperature changes.

7) Self-Drilling Fasteners: Not permitted.

7. Ridge Assembly:

a. Design ridge assembly to allow roof panels to move lengthwise with expansion and contraction as roof panel temperature changes.

b. Factory punch parts for correct field assembly.

c. Install panel closures and interior reinforcing straps to seal panel ends at ridge.

d. Do not expose attachment fasteners on weather side.

e. Use lock seam plug to seal lock seam portion of panel.

f. High-Tensile Steel Ridge Cover: Span from panel closure to panel closure and flex as roof system expands and contracts.

8. Provision for Expansion and Contraction:

a. Provision for Thermal Expansion Movement of Roof Panels: Clips with movable tab.

1) Stainless Steel Tabs: Factory centered on roof clip when installed to ensure full movement in either direction.

2) Maximum Force of 8 Pounds: Required to initiate tab movement.

3) Each Clip: Accommodates a minimum of 1.25-inch movement in either direction.

b. Roof: Provide for thermal expansion and contraction without detrimental effects on roof panels, with plus or minus 100-degree F temperature difference between interior structural framework of building and of roof panels.

B. Fasteners:

1. Make connections of roof panels to structural members, except at eaves, with clips with movable stainless steel tabs, seamed into standing seam side lap.

2. Fasten panel clips to structural members with fasteners in accordance with erection drawings furnished by metal building system manufacturer, using factory-punched holes in structural members.

a. Fasteners: Metal-backed rubber washer to serve as torque indicator.

3. Exposed fasteners penetrating metal roof membrane at the following locations do not exceed the frequency listed:

a. Basic Panel System: 0 per square foot.

b. High Eave Trim, No Parapet: 2 per linear foot.

c. Exterior Eave Gutter: 2 per linear foot.

d. Panel Splices: 2 per linear foot.

e. Gable Trim: 0 per linear foot.

f. High Eave with Parapet: 0 per linear foot.

g. Ridge: 0 per linear foot.

h. Low Eave Structural: 1.5 per linear foot.

C. Accessories:

1. Accessories (i.e., gutters, fascia): Standard with metal building system manufacturer, unless otherwise noted and furnished as specified.

2. Exterior Metal Coating on Gutters, Downspouts, Gable Trim, and Eave Trim: Full-strength, 70 percent "Kynar 500" or "Hylar 5000" fluoropolymer (PVDF) coating.

3. Location of Standard Accessories: Indicated on erection drawings furnished by metal building system manufacturer.

4. Material used in flashing and transition parts and furnished as standard by metal building system manufacturer may or may not match roof panel material.

a. Parts: Compatible and not cause corrosive condition.

b. Copper and Lead Materials: Do not use with Galvalume panels.

2.07 METAL WALL SYSTEM

A. Exterior Metal Wall System: 'Type 1" wall system.

B. Wall System Design: Design wall panels in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

C. Wall Panels:

1. Roll-formed panels, 3 feet wide with 4 major corrugations, 1-1/4 inches high, 12 inches on center, with 2 minor corrugations between each of the major corrugations entire length of panel.

2. One piece from base to building eave.

3. Factory punch or field drill wall panels at panel ends and match factory-punched or field-drilled holes in structural members for proper alignment.

4. Panel Material and Finish:

a. 26-gauge or 24-gauge painted Galvalume aluminum-zinc alloy (approximately 55 percent aluminum, 45 percent zinc), ASTM A 792.

b. 'Kynar' Coating Warranty: Metal building system manufacturer shall warrant coating for 25 years for the following.

1) Not to peel, crack, or chip.

2) Chalking: Not to exceed ASTM D 4214, #8 rating.

3) Fading: Not more than 5 color-difference units, ASTM D 2244.

4) Panel Material and Finish: Special materials, gauges, or colors as applicable for custom designs.

D. Fasteners:

1. Wall Panel-to-Structural Connections: Torx-head "ScruboltTM" fasteners.

2. Wall Panel-to-Panel Connections: Torx-head self-drilling screws.

3. Fastener Locations: Indicated on erection drawings furnished by metal building system manufacturer.

4. Exposed Fasteners: Factory painted to match wall color.

E. Accessories:

1. Accessories (i.e., door and window trim): Standard with metal building system manufacturer, unless otherwise noted and furnished as specified.

2.08 METAL WALL SYSTEM

A. Exterior Metal Wall System: 'Type 2' wall system.

B. Wall System Design: Design wall panels in accordance with AISI North American Specification for the Design of Cold-Formed Steel Structural Members.

C. Wall Panels:

1. Roll-formed panels, 3 feet wide with 7 major corrugations, 1-1/4 inches high, 6 inches on center, Reversed corrugations face inward.

2. One piece from base to building eave.

3. Each Panel Corrugation: Fastener alignment groove to center fastener within corrugation.

4. Exposed Panel Side Laps: Hemmed to eliminate raw cut panel edge.

5. Factory punch or field drill wall panels at panel ends and match factory-punched or field-drilled holes in structural members for proper alignment.

6. Panel Material and Finish:

   a. 26-gauge or 24-gauge painted Galvalume aluminum-zinc alloy (approximately 55 percent aluminum, 45 percent zinc), ASTM A 792.

   b. 'Kynar' Coating Warranty: Metal building system manufacturer shall warrant coating for 25 years for the following.

      1) Not to peel, crack, or chip.

      2) Chalking: Not to exceed ASTM D 4214, #8 rating.

      3) Fading: Not more than 5 color-difference units, ASTM D 2244.

      4) Panel Material and Finish: Special materials, gauges, or colors as applicable for custom designs.

D. Fasteners:

1. Wall Panel-to-Structural Connections: Torx-head or Torx-head self-drilling screws.

2. Wall Panel-to-Panel Connections: Torx-head self-drilling screws.

3. Fastener Locations: Indicated on erection drawings furnished by metal building system manufacturer.

4. Exposed Fasteners: Factory painted to match wall color.

E. Accessories:

1. Accessories (i.e., doors and window flashing): Standard with metal building system manufacturer, unless otherwise noted and furnished as specified.

2. Location of Standard Accessories: Indicated on erection drawings furnished by metal building system manufacturer.

2.09 METAL COATING SYSTEM

A. Metal Coating System: finish system a factory-applied, exterior metal coating system

B. Substrate Preparation:

1. G90 Hot-Dipped Galvanized Steel or AZ50 Galvalume: Factory-controlled chemical-conversion treatment.

C. Coating:

1. Material: "Fluropon". Full-strength, 70 percent, "Kynar 500" or "Hylar 5000" fluoropolymer (PVDF) color coating.

2. After steel preparation, coat exterior exposed surface with primer and "Fluropon".

   a. Nominal Total Dry Film Thickness: 1.0 mil.

3. Interior Exposed Surfaces: Coat with polyester color coat.

4. Apply coatings to entire material dimensions of steel sheets before forming of panels.

D. Physical Characteristics of Exterior Coating:

1. Resistance to failure through cracking, checking, peeling, and loss of adhesion.

2. Measure by the following laboratory weather-simulating tests to obtain test results justifying metal building system manufacturer's 25-year warranty:

   a. Humidity resistance at 100 degrees F and 100 percent relative humidity, ASTM D 2247.

   b. Salt-spray resistance at 5 percent salt fog, ASTM B 117.

   c. Reverse impact resistance, ASTM D 2794.

   d. Resistance to accelerated weathering, Atlas Model XW-R Dew Cycle Weather-O-Meter, ASTM D 3361.

   e. Resistance to dry heat.

   f. Abrasion resistance, ASTM D 968.

   g. Chemical/acid/pollution resistance, ASTM D 1308 and G 87.

   h. Maintain gloss of finish evenly over entire surface, ASTM D 523

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine area to receive metal building system.

B. Notify Architect of conditions that would adversely affect installation or subsequent use.

C. Do not begin installation until unacceptable conditions are corrected.

3.02 ERECTION – STRUCTURAL STEEL FRAMING SYSTEM

A. Erect structural steel framing system in accordance with the Drawings and metal building system manufacturer's erection drawings.

B. Field Modifications:

1. Require approval of metal building system manufacturer.

2. Responsibility of building erector.

3. Field Modifications to Truss Purlins: Not allowed, unless indicated on erection drawings furnished by metal building system manufacturer.

C. Fixed Column Bases: Grout flush with floor line after structural steel erection is complete.

3.03 INSTALLATION – METAL ROOF SYSTEM

A. Metal Roof System Installation: roof system.

1. Install roof system in accordance with metal building system manufacturer's instructions at locations indicated on the Drawings.

2. Install roof system weathertight.

3. Position panel clips by matching hole in clip with factory-punched holes in secondary structural members.

4. Position and properly align panels by matching factory-punched holes in panel end with factory-punched holes in eave structural member and by aligning panel with panel clip.

5. Field seam panel side laps by self-propelled and portable electrical lock-seaming machine.

a. Machine field forms the final 180 degrees of a 360-degree Pittsburgh double-lock standing seam.

b. Factory apply side lap sealant.

6. Panel End Laps: Minimum of 6 inches, sealed with sealant (weather sealing compound), and fastened together by clamping plates.

a. Sealants: Contain hard nylon beads, which prevent mastic from flowing out due to clamping actions.

b. Join panel laps by 2-piece clamped connection consisting of a bottom reinforcing plate and a top panel strap.

c. Locate panel end laps directly over, but not fastened to, supporting secondary roof structural member and stagger, to avoid 4-panel lap-splice condition.

3.04 INSTALLATION – METAL WALL SYSTEM

A. Metal Wall System Installation: wall system.

1. Install wall system in accordance with metal building system manufacturer's instructions at locations indicated on the Drawings.

2. Install wall system weathertight.

3. Verify structural system is plumb before wall panels are attached.

4. Align and attach wall panels in accordance with erection drawings furnished by metal building system manufacturer.

5. Install side laps with minimum of 1 full corrugation.

6. Seal wall panels at base with metal trim and foam or rubber closures.

7. Exterior Trim: Apply same finish as exterior color of wall panels, except the following:

a. Gutters, Downspouts, Eave Trim, Gable Trim, Door-Side Flashings, and Header Flashings: Paint with exterior colors of finish system, full-strength, 70 percent "Kynar 500" or "Hylar 5000" fluoropolymer (PVDF) coating in standard color of metal building system manufacturer.

8. Flashings, Trim, Closures, and Similar Items: Install as indicated on erection drawings furnished by metal building system manufacturer.

3.05 PROTECTION

A. Protect installed metal building system to ensure that, except for normal weathering, metal building system will be without damage or deterioration at time of Substantial Completion.

END OF SECTION

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ATTACHMENT B

GALVESTON COUNTY ROAD AND BRIDGE DEPARTMENT

CRYSTAL BEACH FACILITY

COUNTY PROJECT #: B141025

BOLIVAR PENINSULA, TEXAS

EAB PROJECT # - B4804187

PROPOSAL SET -- MAY 19, 2014

LIST OF DRAWINGS

GALVESTON COUNTY - PROPERTY OWNER
DUDLEY ANDERSON - COUNTY ARCH, PROJECT MANAGER
SHELMARK ENGINEERING - CIVIL AND STRUCTURAL ENGINEER
BRAX EASTERWOOD DESIGN - ARCHITECT
IBIS ENGINEERING - M.E.P. ENGINEER

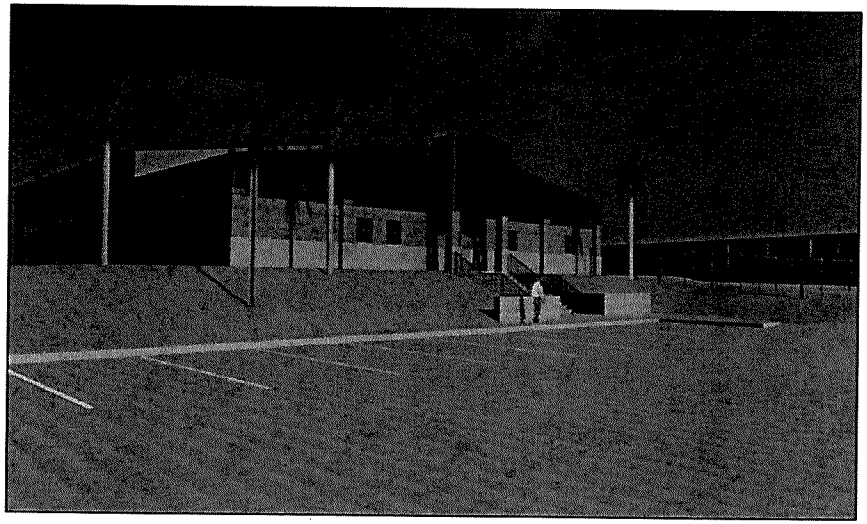
1

APPLICABLE CODES

2009 INTERNATIONAL BUILDING CODE
2009 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2009 UNIFORM MECHANICAL CODE
2009 UNIFORM PLUMBING CODE
2009 NATIONAL ELECTRIC CODE
2003 INTERNATIONAL FIRE CODE
2010 AMERICANS WITH DISABILITY ACT

PROJECT DESCRIPTION / SCOPE OF WORK

IN GENERAL, THE PROJECT INCLUDES SITEWORK, CONSTRUCTION OF 2,800 SF OF OFFICE/MEETING SPACE, 7,200 SF REPAIR AND MAINTENANCE WAREHOUSE AND STORAGE, OUTDOOR BULK STORAGE, COVERED PARKING FOR DEPARTMENT VEHICLES AND A WASH BAY. CONSTRUCTION ENTAILS A COMBINATION OF PRE-ENGINGEERED METAL BUILDING AND SITE BUILT ELEMENTS.

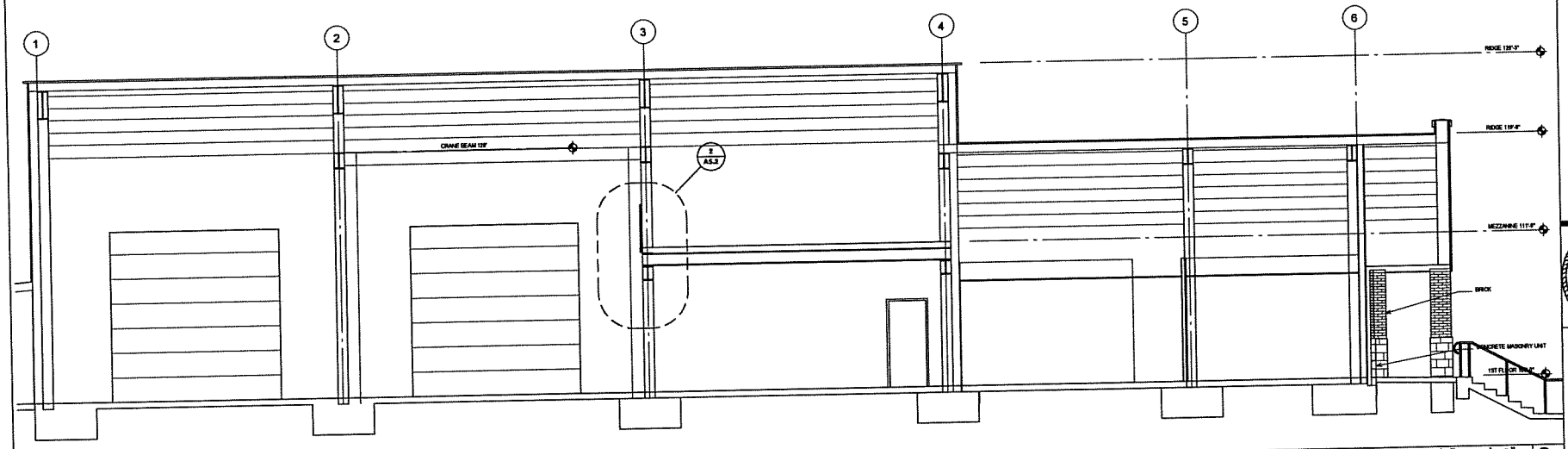


NORTHWEST PERSPECTIVE NTS

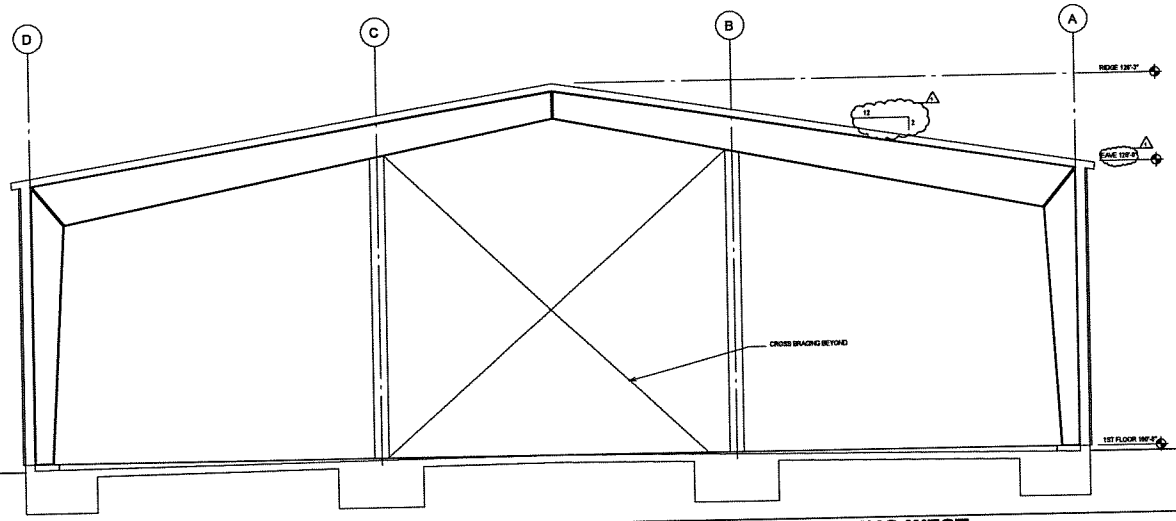
SHELMARK ENGINEERING, L.L.C.
CIVIL | MARINE | PLANNING | STRUCTURAL
921 FM 517 Road East | Dickinson, Texas 77539
TX Firm No. F-2115

Ibis Engineering

BRAX EASTERWOOD DESIGN
TX ARCH # 19694
2728 AVENUE Q SUITE 2
GALVESTON TEXAS 77550
PHONE 409-354-8976
EASTERWOOD@BEAL.COM



LONGITUDNAL BUILDING SECTION LOOKING SOUTH 1/4" = 1'-0" 2



2 BUILDING CROSS SECTION LOOKING WEST 1/4" = 1'-0" 1

COUNTY ROAD AND BRIDGE
CRYSTAL BEACH FACILITY
BOLIVAR, TEXAS
BE-Arc LLC Project No : C-13-007.01

REGISTERED ARCHITECT
ALEXANDER B. EASTERWOOD
1984
STATE OF TEXAS

BRAX EASTERWOOD
DESIGN
2728 AVENUE Q SUITE 2
GALVESTON TEXAS 77550
PHONE 409.354.4978
EASTERWOOD@BEARR.COM

CONSULTANT SEAL

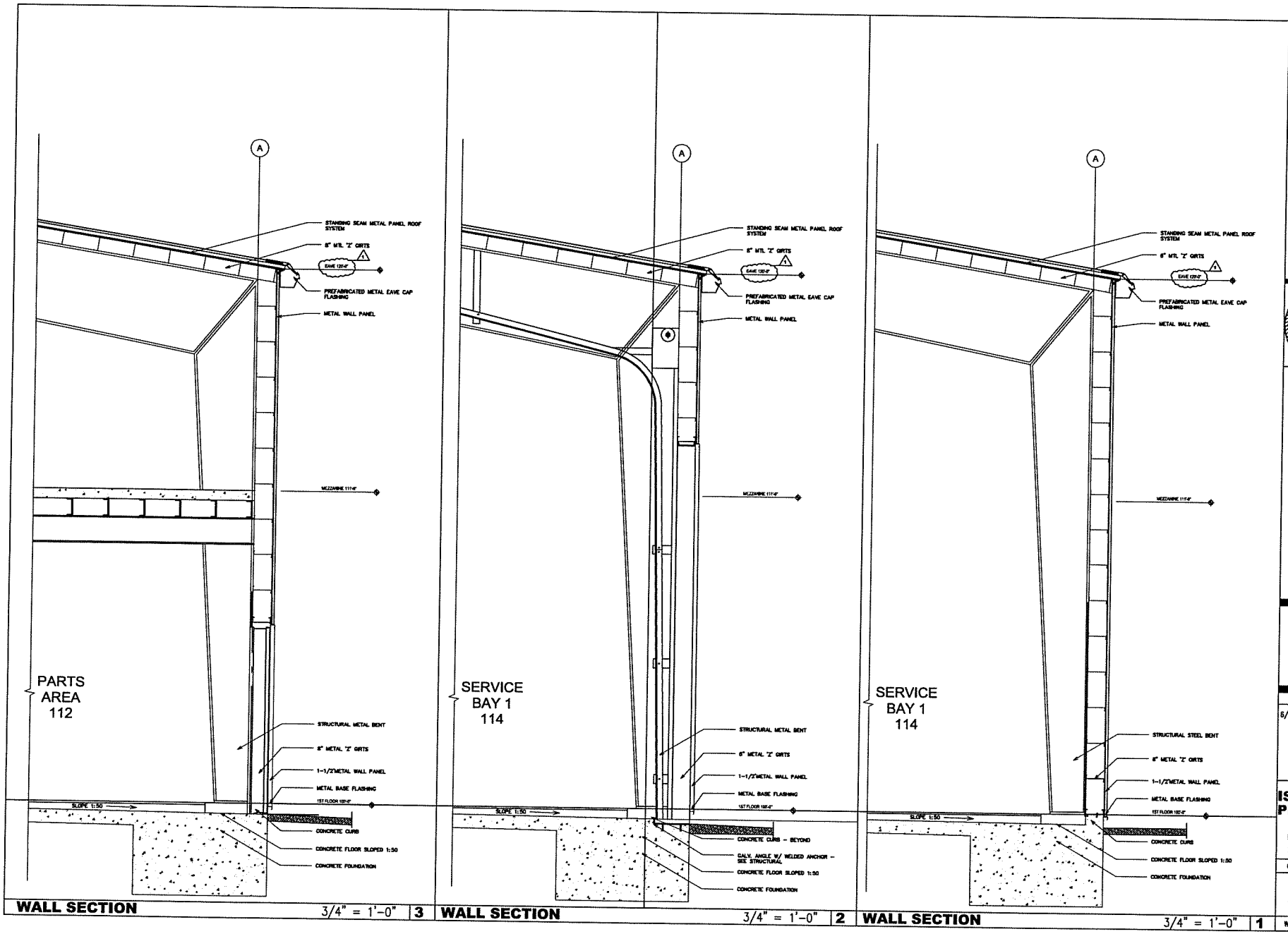
DATE	REVISION
6/24/14	ADDEND #1 1

ISSUED FOR PROPOSALS

DATE ISSUED:
5/19/2014

A3.1

BUILDING SECTIONS



COUNTY ROAD AND BRIDGE
CRYSTAL BEACH FACILITY
BOLIVAR, TEXAS
BE-Arc LLC Project No : C-13-007.01

BRAX EASTERWOOD
DESIGN
2728 AVENUE O SUITE 2
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PHONE 409-354-8976
EASTERWOODBRAX.COM

CONSULTANT SEAL

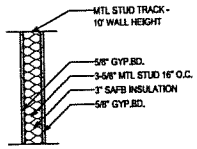
DATE	REVISION
6/24/14	ADDEND #1 1

ISSUED FOR PROPOSALS

DATE ISSUED:
5/19/2014

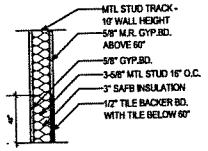
A3.5

WALL SECTIONS



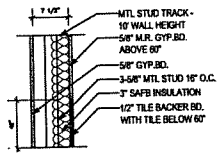
0 = RATING
A = 5/8" GYP.BD.
4 = NOMINAL STUD SIZE
A = 5/8" GYP.BD.

0A4A



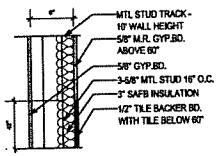
0 = RATING
A = 5/8" GYP.BD.
4 = NOMINAL STUD SIZE
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"

0A4C / 0C4A



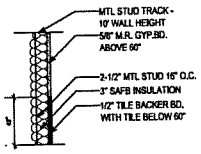
0 = RATING
A = 5/8" GYP.BD.
7 = (2) 2-2/2" METAL STUD WALLS
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"

0A7C / 0C7A



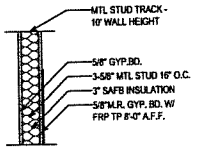
0 = RATING
A = 5/8" GYP.BD.
7 = (2) 2-2/2" METAL STUD WALLS
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"

0A9C / 0C9A



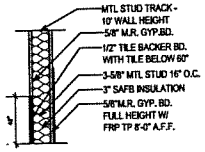
0 = RATING
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"
3 = NOMINAL STUD SIZE
0 - NO SHEATHING ON INSIDE OF WALL

0C30 / 003C



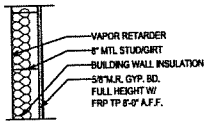
0 = RATING
A = 5/8" GYP.BD.
4 = NOMINAL STUD SIZE
D = 5/8" M.R. GYP BD W/ 1/4" FRP TO 8'-0" A.F.F

0A4D / 0D4A



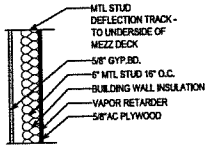
0 = RATING
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"
4 = NOMINAL STUD SIZE
D - 5/8" M.R. GYP BD W/ 1/4" FRP TO 8'-0" A.F.F.

0C4D / 0D4C



0 = RATING
0 = NO FINISH
8 = METAL BUILDING WALL
D = 5/8" M.R. GYP BD W/ 1/4" FRP TO 8'-0" A.F.F

008D / 0D80



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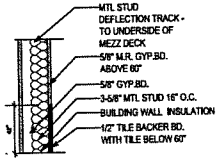
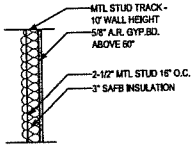
A = 5/8" GYP.BD.
6 = NOMINAL STUD SIZE
B = 5/8" AC PLYWOOD

OA6B / 0B6A



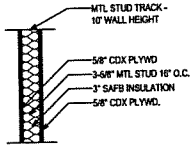
0 = RATING
A = 5/8" GYP.BD.
4 = NOMINAL STUD SIZE
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"

0B6C / 0C6B



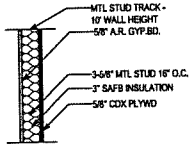
0 = RATING
A = 5/8" A.R. GYP.BD.
EE3 = NOMINAL STUD SIZE
0 - NO SHEATHING ON INSIDE OF WALL

0A30 / 003A



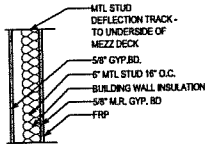
0 = RATING
B = 5/8" CDX PLYWD
4 = NOMINAL STUD SIZE
B = 5/8" CDX PLYWD

0B4B



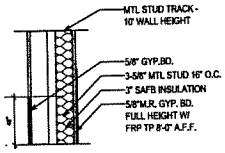
0 = RATING
A = 5/8" A.R. GYP.BD.
4 = NOMINAL STUD SIZE
B - 5/8" CDX PLYWD

0A4B / 0B4A



0 = RATING
A = 5/8" GYP.BD.
6 = NOMINAL STUD SIZE
D = 5/8" M.R. GYP BD W/ FRP

OA6D / 0D6A



0 = RATING
C = 5/8" M.R. GYP.BD. ABOVE 60" - 1/2" TILE BACKER BOARD AND TILE BELOW 60"
9 = (2) 3-5/8" STUD WALLS
D - 5/8" M.R. GYP BD W/ 1/4" FRP TO 8'-0" A.F.F.

0C9D / 0D9C

NTS

WALL TYPES

COUNTY ROAD AND BRIDGE
CRYSTAL BEACH FACILITY
BOLIVAR, TEXAS
BE-Arc LLC Project No : C-13-007.01

REGISTERED ARCHITECT
CLAUDE B. EASTERWOOD
18694
STATE OF TEXAS

BRAX EASTERWOOD
DESIGN
2728 AVENUE Q SUITE 2
GALVESTON TEXAS 77550
PHONE 409-354-1978
EASTERWOOD@BEAA.COM

CONSULTANT SEAL

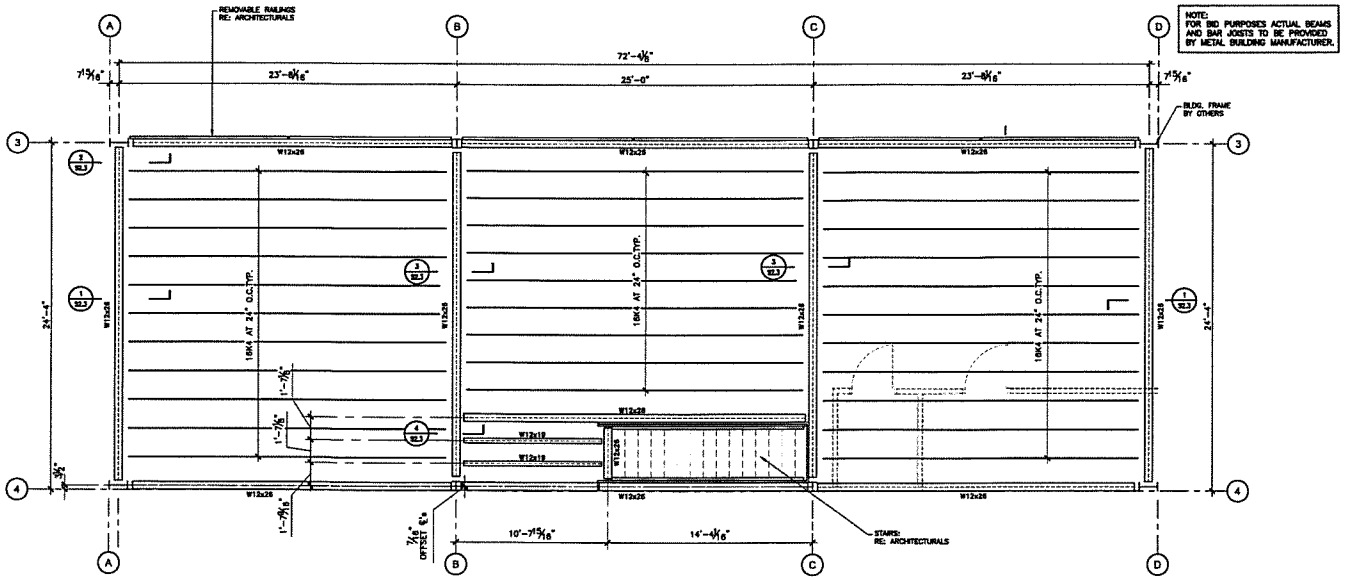
DATE	REVISION
6/24/14	ADDEND #1 (1)

ISSUED FOR PROPOSALS

DATE ISSUED:
5/19/2014

A9.3

WALL TYPES



MEZZANINE FRAMING PLAN

1/4" = 1'-0" | 1

MAIN BLDG. MEZZANINE PLAN

COUNTY ROAD AND BRIDGE
CRYSTAL BEACH FACILITY
BOLIVAR, TEXAS

BE-Arc LLC Project No : C-13-007.01

SHELMARK ENGINEERING, L.L.C.
CIVIL | MARINE | PLANNING | STRUCTURAL
921 FM 517 Road East | Dickinson, Texas 77539
TX Firm No.F-2113

SME NO. 12-324

STATE OF TEXAS
MARCUS J. MICHNA
84739
LICENSED PROFESSIONAL ENGINEER
6/24/14

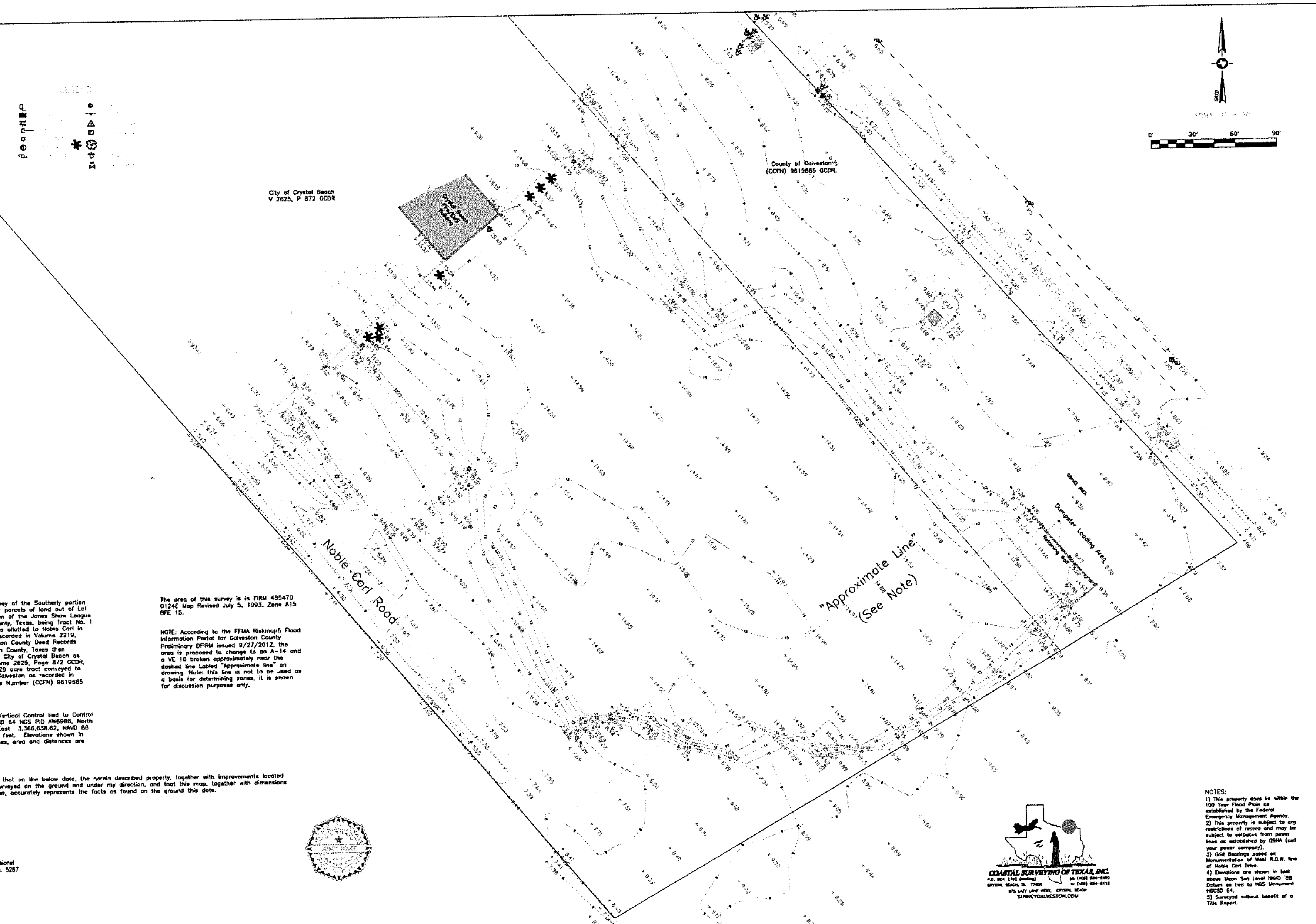
DATE	REVISION
6/24/14	BAR JOIST SIZE

ISSUED FOR PROPOSALS

DATE ISSUED:
05/19/2014

S2.1

ATTACHMENT C



Topographic Survey of the Southerly portion of Two tracts or parcels of land out of Lot 2 of the Partition of the Jones Shaw League in Galveston County, Texas, being Tract No. 1 on Exhibit "C" as allotted to Noble Corl in Partition Deed recorded in Volume 2219, Page 14 Galveston County Deed Records (GCDR) Galveston County, Texas then conveyed to the City of Crystal Beach as recorded in Volume 2625, Page 872 GCDR, and a called 3.29 acre tract conveyed to the County of Galveston as recorded in County Clerk File Number (CCFN) 9619665 GCDR.

The area of this survey is in FIRM 485470 0124E Map Revised July 5, 1993, Zone A15 BFE 15.

NOTE: According to the FEMA Riskmap6 Flood Information Portal for Galveston County Preliminary DFIRM issued 9/27/2012, the area is proposed to change to an A-14 and a VE 16 broken approximately near the dashed line Labled "Approximate line" on drawing. Note: this line is not to be used as a basis for determining zones, it is shown for discussion purposes only.

Horizontal and Vertical Control tied to Control Monument HGCSD 64 NGS PID AW6988, North 13,744577.83, East 3,366,638.62, NAVD 88 elevation 5.1 in feet. Elevations shown in feet. Coordinates, area and distances are Grid.

I hereby certify that on the below date, the herein described property, together with improvements located thereon, was surveyed on the ground and under my direction, and that this map, together with dimensions as shown hereon, accurately represents the facts as found on the ground this date.

Sidney Bouse
Registered Professional
Land Surveyor No. 5287

NOTES:
1) This property does lie within the 100 Year Flood Plain as established by the Federal Emergency Management Agency.
2) This property is subject to any restrictions of record and may be subject to setbacks from power lines as established by OSHA (call your power company).
3) Grid Bearings based on Monumentation of West R.O.W. line of Noble Corl Drive.
4) Elevations are shown in feet above Mean Sea Level NAVD '88 Datum as tied to NGS Monument HGCSD 64.
5) Surveyed without benefit of a Title Report.

SURVEY DATE	May 1, 2013
FILE No.	0179-0056-0000-000
DRAFTING	sdb
JOB No.	13-0252

ATTACHMENT D

GEOTECHNICAL ENGINEERING STUDY

Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Drive
Crystal Beach, Texas

Reported to:
Galveston County
Galveston, Texas

Prepared by:
QC Laboratories, Inc.
10810 Northwest Freeway
Houston, Texas 77092
(713) 695-1133

PROJECT NO.: 13G9733
June 2013

QC LABORATORIES, INC.
Engineering and Testing Services

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

June 3, 2013

Galveston County
722 Moody Avenue
Galveston, Texas 77550

Attn: Mr. Dudley Anderson

Re: Geotechnical Engineering Study
Proposed Office/Maintenance Building – Crystal Beach Annex
Noble Carl Drive
Crystal Beach, Texas
QCL No. 13G9733

Dear Mr. Anderson:

We are pleased to submit our geotechnical engineering report for the above referenced project. This study was performed at the request and authorization to proceed in general accordance with QCL Document No. 39087, dated March 27, 2013.

We appreciate the opportunity to be of service to you on this phase of the project. If we may be of additional assistance, please call us.

Sincerely,
QC LABORATORIES, INC.
(Texas Registered Engineering Firm F-3601)

Damon Dolat
Graduate Engineer

John D. Guida, P.E.
Director of Engineering

STATE OF TEXAS
JOHN D. GUIDA
100292
LICENSED
PROFESSIONAL ENGINEER
6/3/13

Copies Submitted: Addressee - (1) Electronic

HOUSTON
Tel: 713-695-1133
Fax: 713-695-0808
10810 Northwest Freeway – Houston, Texas 77092

LEAGUE CITY
Tel: 281-332-8378
Fax: 281-332-8399
400 Hobbs Road, Suite 210 – League City, Texas 77573

www.qclabs.com

Table of Contents

1.0 INTRODUCTION

1.1 Project Description and Scope of Services:

We understand the project consists of the proposed construction of a one-story, office/maintenance building along the east side of Noble Carl Drive, approximately ¼-mile south of the intersection of State Highway (SH) 87 and Noble Carl Drive in Crystal Beach, Texas. A vicinity map of the project site is provided on Plate No. 1 in the Appendix.

Based on information provided, we understand the proposed building is planned to have a footprint area of approximately 1,900 square feet. For structural loading conditions, we anticipate maximum column loads of 50 kips and floor slab pressures no greater than 125 pounds per square feet. We understand the proposed building is planned to be supported on driven timber piles. This project also consists of the construction of adjacent pavements.

Final grade information was not available at the time of this study. However, we anticipate that the final grade of the proposed building is planned to be at or near the existing grade.

Our scope of services included evaluating the subsurface conditions by drilling and sampling soil borings, laboratory tests of selected soil samples, engineering analysis, and preparing a geotechnical engineering report for this project. Our report addresses site and subgrade preparation, foundation design and construction, and pavement design guidelines.

2.0 INVESTIGATION TECHNIQUES

2.1 Field Exploration:

The subsurface conditions at this site were evaluated by drilling and sampling three soil borings, B-1 through B-3, to depths of about 40 feet within the area of the proposed building, along with two test borings, B-4 and B-5, to depths of about 5 feet within the proposed pavement area. At the completion of drilling the boreholes were backfilled with soil cuttings. The boring locations are shown on the Plan of Borings, Plate No. 2, provided in the Appendix.

The soil sample intervals are shown on the boring logs. Soils were generally obtained using a split-spoon sampler by means of the Standard Penetration Test (SPT). The SPT test consists of measuring the number of blows required for a 140-pound hammer falling 30 inches to drive the split spoon sampler 12 inches into the subsurface soils, after being seated 6 inches. This blow count is used to evaluate the stratum.

A selected sample from boring B-3 was obtained using a 3-inch diameter thin-walled tube sampler. Pocket penetrometer tests were performed on the soil sample in the field to serve as a general measure of consistency.

Each sample was removed from the sampler in the field, examined and classified by an experienced technician. The samples were transported to our laboratory in Houston.

2.2 Laboratory Tests:

In the laboratory, each sample was observed and classified by a qualified engineer. Laboratory tests were performed on selected soil samples to evaluate the physical properties of the soils. The geotechnical engineering properties of the soils were evaluated by performing the following tests:

- Moisture Content (ASTM D2216)
- Dry Density (ASTM D2937)
- Atterberg Limits (ASTM D4318 - Method B)
- Unconfined Compression (ASTM D2166)

Detailed soil descriptions and results of the tests are presented on the boring logs, Plate Nos. 3 through 7, in the Appendix.

3.0 GENERAL SITE AND SUBSURFACE CONDITIONS

At the time of our field program the site had an elevation ranging from about 2 to 8 feet above existing adjacent grades. The site generally contained grass, weeds, and exposed ground surface.

The subsurface soils at borings B-1 through B-5 consisted of silty sand fill soils at the ground surface and extended to depths that ranged from about 5 feet (termination depth of borings B-4 and B-5) to 8 feet below existing grade (grade existing at the time of our field program). These soils were underlain by sand soils that extended to depths of about 33 feet. Lean clay, sandy lean clay, and fat clay soils were observed below the sand soils and extended to depths of about 40 feet, the termination depth of borings B-1 through B-3.

A key to the terms and symbols used to aid in soil classifications on the boring logs are provided on Plate No. 8 in the Appendix

4.0 WATER-LEVEL MEASUREMENTS

The borings at this site were drilled using both dry drilling and wet rotary drilling techniques. Dry drilling was generally used to the depth of groundwater. Upon reaching groundwater, drilling was suspended to facilitate observation of groundwater levels prior to switching to wet rotary. Outlined in the table below are the water level observations for the borings drilled at this site.

Boring No.	Boring Depth[1] (feet)	Dry Drilling Depth[1] (feet)	Water Level Observations (feet)	
			During Drilling	After Wet Cave-In
B-1	40	15	15	8
B-2	40	15	13	9[2]
B-3	40	15	15	11
B-4	5	5	N.O.[3]	---
B-5	5	5	N.O.[3]	---

1. Depth below existing grade.
2. Depth of groundwater after waiting approximately 15-minutes.
3. N.O. = Not Observed.

Fluctuations in the groundwater levels may occur due to variations in rainfall and surface water run-off. The actual depth of the groundwater should be evaluated prior to construction.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations contained in this report are prepared based on conditions encountered in the borings drilled at this site, our field and laboratory test results, and our past experience with geotechnical conditions similar to those at this site. In the event that any changes in the nature, design or location of the structures are made from those originally described to us, the conclusions and recommendations contained in this report shall not be considered valid until the changes are reviewed and the conclusions are verified in writing.

5.1 Geotechnical Considerations (Existing Fill and Scour):

Existing Fill - As stated previously, undocumented fill soils were observed at this site and extended to depths of upwards of 8 feet below existing grade (grade existing at the time of our field program). Fill may be present at different depths and at other locations not explored during our field program. There is an increased risk associated with supporting the slab, foundation elements, and pavements on or above undocumented fill soils, especially if there is compressible material or unknown buried debris present. Due to the extent of the fill soils, we recommend that at least 36 inches of the existing sand fill within the building area be reworked. Recommendations pertaining to the existing fill soils are presented in the "**5.4 At-Grade Floor Slab**" and "**5.5 Subgrade Preparation and Fill**" sections of this report.

Scour - The foundations for the proposed building will be susceptible to scour and should be sized to account for potential soil loss associated with scour action over the anticipated life-span of the structure. The anticipated scour depth was not available to us at the time of this report. In addition, detailed recommendations regarding scour protection were beyond the scope of this report.

5.2 Design of Driven Piles:

As mentioned previously, we understand that driven timber piles are planned to be utilized to support the proposed building. Outlined in the table below are the recommended allowable capacities for the driven pile foundations.

Allowable Unit Skin Friction and End Bearing for Driven Piles				
Depth Below Existing Grade[1] (feet)	**Effective Unit Weight (pcf)**	**Net Allowable End Bearing Pressure (psf)**	**Allowable Side Friction (psf)**	**Allowable Passive Pressure (psf)**
0 - 5	105	Disregard		
5 - 8	105	Disregard	50	700
8 – 20	53[2]	Disregard	105 psf @ 8 ft + 6 psf/ft	1,300 psf @ 8 ft + 80 psf/ft
20 – 25	53[2]	4,500		
25 – 33	48[2]	3,000	175 psf @ 25 ft + 5 psf/ft	2,400 psf @ 25 ft + 65 psf/ft
33 – 40	48[2]	2,100	200	700

1. Grade existing at the time of our field program.
2. Submerged unit weight.

Lateral resistance of driven piles is primarily developed by passive resistance of the soil against the side of the pile. We recommend that the lateral resistance within the upper 5 feet be neglected due to the potential for scour. A detailed lateral load analysis of the proposed piles was beyond the scope of this study. If requested, a detailed lateral capacity analysis of the proposed driven piles can be provided for this project.

Design of piles should also include an evaluation of the structural capacity of the pile, which may limit the allowable capacity.

Pile groups subjected to axial loads can be affected by numerous factors which may include pile type, size and length, pile spacing, overall group size, loading conditions, installation procedures and soil type and strength. With a center-to-center spacing of at least 3 pile widths, the group effect will be insignificant on the bearing capacity of the piles. Therefore, the group capacity for axial load may be taken as the sum of the individual pile capacities in the group.

Post construction settlements of single, isolated piles will depend on the elastic properties of the pile, the applied load and the interaction of the soil and pile. Settlement is anticipated to be primarily elastic and will occur relatively rapidly as load is applied. Significant consolidation settlement due to applied load is not anticipated at this site for the pile capacities given. Our experience indicates that single, isolated piles loaded to about one-half of their ultimate capacity should experience settlement of less than one inch.

Post construction settlements of groups of piles are generally greater than single isolated piles for the same load per pile. Based on the previously recommended spacing, we anticipate that settlement of the pile group should be one inch or less under working loads. In general, differential settlements should be on the order of one-half to two-thirds of the total settlement.

5.3 Installation of Driven Piles:

The installation of driven piles should preferably be accomplished by driving alone. The effects and methods of pile installation should be given proper consideration when choosing and designing pile foundation systems. In most situations, the greatest stress a driven pile will experience is during installation. Pile and soil properties, embedment length requirements and driving equipment are only a few of the many variables to consider in determining the most efficient method of pile installation.

Production piles should be driven to a predetermined depth with blow count as a secondary consideration. Because set-up during interruption can produce increased resistance to driving, a pile should be driven to its design depth without any delays, if possible.

Also, if a pile exhibits a resistance lower than the terminal resistance values given by driving formulas at an appreciable depth below the predetermined depth, the pile may be re-tapped after a suitable elapsed time and after the installation of other nearby piles. The re-tap should be performed at the contractor's discretion to prove the acceptability of the pile. Should, in the Geotechnical Engineer's judgment, the re-tap not indicate adequate capacity, additional piles may need to be installed to provide capacity.

In addition, we recommend the use of a "Pile Driving Analyzer (PDA)" during pile installation. The PDA can monitor driving stresses and hammer energy during pile installation, and also provides a continuous record of the pile installation.

The performance of the driven pile foundation system will be highly dependent upon the quality of construction. Thus, we recommend that pile installation be closely monitored by a qualified technician experienced in pile installation techniques. At a minimum, the technician should record blows, note any unusual installation occurrences, monitor hammer operation and generally evaluate if pile installation is being performed in accordance with the specifications.

5.4 At-Grade Floor Slab:

We understand that plans are to utilize an at-grade floor slab for the proposed building in lieu of a structurally-suspended floor slab system. Final grade information was not available at the time of this study. However, we anticipate that the final grade of the proposed building is planned to be at or near the existing grade.

As started previously, undocumented fill soils were observed at this site and extended to depths of upwards of about 8 feet below existing grade (grade existing at the time of our field program). Due to the extent of the fill soils observed, we recommend that at least 36 inches of the existing fill be removed from within the proposed building area and replaced with properly compacted fill prior to constructing the at-grade floor slab. The excavated sand fill may be stockpiled and reused to achieve final grade within the proposed building area provided it is clean and free of debris. Recommendations for subgrade preparation and fill placement are presented in the "**5.5 Subgrade Preparation and Fill**" section of this report.

Due to the potential for soil loss around the structure caused by scour action, we recommend that the grade beams be extended to a depth of at least 36 inches below final exterior grade. Deeper grade beams will help to retain sand subgrade in hurricane events against soil erosion. Grade beams bearing upon properly compacted on-site sand soils, as outlined previously, may be sized for a net allowable bearing capacity of 1,000 psf.

We recommend that the following additional features be included in the project design and specifications:

1. Place sidewalks or pavement adjacent to the building (added protection against scour);

2. Maintain a positive slope away from the building;

3. Discharge roof downspouts into storm sewers;

2. Keep vegetation at least 10-feet from the slab;

3. Keep trees a "drip line" distance from the slab; and

6. Keep irrigation systems at least 5-feet away from the face of the building exterior.

Long-Term Maintenance: Following the completion of the building slab, the building owner/operator must maintain the grounds and the area near the building (within 20 feet) so that the recommendations in this report are followed. Vegetation type and location will be critical to the proper slab performance and the recommendations in this report should be followed. Positive slopes, drain systems, and vegetation should be properly maintained. Pavement and sidewalk joints must all be maintained so that the joint material is pliable and helps shed water. The addition of decorative drainage material or flower beds that are bordered in such way as to obstruct the flow of water away from the slab should not be installed without a discussion with the Geotechnical Engineer and a full understanding by the owner/operator of the effects of such features.

We recommend that the owner and facility operator be made aware of the long-term maintenance recommendations in this report. If they should have any questions, they should contact the Geotechnical Engineer.

5.5 Subgrade Preparation and Fill:

In general, site preparation should consist of stripping vegetation, topsoil, and any other debris or unsuitable material.

As mentioned previously, due to the extent of the fill soils observed, we recommend that at least 36 inches of the existing fill be removed from within the proposed building pad area and replaced with properly compacted fill prior to constructing the floor slab. The excavated sand fill may be stockpiled and reused to achieve final grade within the proposed building area provided it is clean and free of debris.

Subsequent to the removal of at least 36 inches of existing sand fill within the building area and once final subgrade elevations have been achieved, the exposed subgrades should be proof-rolled with a 20-ton pneumatic roller or equivalent equipment to detect local weak areas. Special care should be taken to proofroll areas containing existing fill soils to detect weak or soft soils. Weak areas detected as well as fill areas containing organics should be removed and replaced with soils exhibiting similar classification, moisture content, and density as the adjacent in-situ soils.

As mentioned previously, grade adjustments within the building area may be accomplished with on-site sand soils. Sand fill should be placed in loose lifts of approximately eight-inches in thickness and compacted to a minimum of 95% standard proctor density (ASTM D 698) at moisture contents within 2% of the optimum moisture content.

Samples of the subgrade and fill materials should be obtained prior to the compaction operations for laboratory moisture/density testing (Proctor tests). The tests will then provide a basis for evaluating the in-place density requirements during compaction operations. A qualified soil technician should perform sufficient in-place density tests during the filling operations to verify that proper levels of compaction are being attained.

5.6 Wet Weather Construction Considerations:

During wet weather, the near surface soils will likely become wet/weak. This will likely result in difficult ground conditions for construction traffic and pumping action may occur during compaction thus affecting the overall construction schedule and associated costs. Such type of ground conditions will likely require special approaches to mitigate the soil conditions and aid rapid construction. These approaches may include removal and replacement with select fill and/or chemical treatment to dry and improve the stability of the subgrade. If wet/weak soil conditions are encountered, QC Laboratories, Inc. should be contacted to evaluate the actual site conditions and provide necessary recommendations.

5.7 Site Drainage:

We recommend that site drainage be well developed. Surface water should be directed away from the building foundation by using a minimum slope of 5% within 10 feet of foundation. No ponding of surface water should be allowed near the structures.

5.8 Vegetation Control:

We recommend that trees be planted no closer than about 20 feet from the building or approximately one-half of a canopy diameter of a mature tree. This will reduce possible foundation distress caused by the tree root system.

5.9 Pavement Recommendations:

The near-surface soils at this site consist of silty/sandy soils. These soils will require chemical stabilization to allow for long-term pavement performance. Chemical stabilization will increase the supporting value of the subgrade and decrease the effect of moisture on subgrade soils. We recommend that the top 8 inches of the finished subgrade soils directly beneath the pavement be chemically stabilized.

The on-site silty/sandy soils should be chemically stabilized using lime-flyash in accordance with TxDOT 2004 Standard Specifications Item 265. For estimating purposes, we recommend 2% lime and 8% flyash by dry weight be utilized.

In lieu of lime-flyash, the on-site silty/sandy soils may be chemically stabilized using cement. For estimating purposes, we recommend 4 to 5% cement by dry weight be utilized. The subgrade should be treated in accordance with TxDOT Standard Specification Item 275 for cement treated subgrade.

We recommend that chemical stabilization of the subgrade be extended approximately 1½ to 2 feet outside the limits of the pavement.

Once the subgrade is properly prepared both asphaltic concrete and reinforced concrete pavements may be considered for this project. Traffic information was not available for the design of the pavements at this site. However, we assume traffic will consist primarily of passenger vehicles in parking areas with occasional large multi-axle trucks in drive areas. The assumptions utilized in our pavement thickness analysis are summarized on Plate No. 9 in the Appendix. If the actual traffic conditions are different from that assumed, the client should contact QCL so that we can revise and provide appropriate recommendations.

Outlined in the tables below are the various pavement thicknesses based on our traffic assumptions for this project.

Dumpster areas should consist of a minimum of 7 inches of reinforced concrete pavement.

Flexible Pavement		
Component	**Parking Lots**	**Light to Medium-Duty Areas**
Asphaltic Concrete	1.5"	2"
Base Material	8"	8"
Stabilized Subgrade	8"	8"

Rigid Pavement			
Component	**Parking Lots**	**Light to Medium-Duty Areas**	**Medium-Duty Areas**
Reinforced Concrete	5"	6"	7"
Stabilized Subgrade	8"	8"	8"

It is estimated that the service life for a properly constructed and maintained pavement will be on the order of about 20 years. Related civil design factors such as subgrade drainage, shoulder support, cross-sectional configurations, and surface elevations must be included in the preparation of the construction drawings/specifications. These pavements will require normal periodic maintenance.

Outlined below are the material requirements for the paving layers.

1.0 **Base Material** - Base material should be composed of crushed limestone or crushed concrete meeting the requirements of TxDOT 2004 Standard Specifications Item 247, Type A or D, Grade 1. The base material should be compacted to at least 95 percent of the Modified Proctor (ASTM D 1557) at a moisture content within 2 percent of the optimum moisture content.

2.0 **Hot Mix Asphaltic Concrete Surface Course** - The asphaltic concrete course should be plant mixed, hot laid Type D meeting the specifications requirements in TxDOT 2004 Standard Specifications Item 340. Specific criteria for the job specifications

should include compaction to within an air void range of 5 to 9 percent calculated using the maximum theoretical gravity mix measured by TxDOT Tex-227-F. The asphalt cement content by percent of total mixture weight should be within ± 0.5 percent asphalt cement from the job mix design.

3.0 **Concrete** - The materials and properties of concrete shall meet the applicable requirements in the ACI Manual of Concrete Practice. The concrete shall have a minimum modulus of rupture of 500 psi at 28 days. It is our experience that concrete with a compressive strength of 3,500 psi will meet these criteria. The mixture shall contain 3 to 5 percent entrained air.

4.0 **Reinforcing Steel** - Reinforcing steel should consist of the following:

Pavement Thickness (inches)	Bar Size	Bar Spacing (On-center and in both directions)
5	#3	18
6	#3	12
7	#4	18

5.0 **Control (Contraction) Joint Spacing** - ACI recommends the following control joint spacing:

Pavement Thickness (inches)	Maximum Spacing (feet)
5	12½
6	15
7	15

6.0 **Expansion Joint Spacing** – Regularly spaced expansion joints may be deleted from concrete pavements per ACI. Therefore, the installation of expansion joints is optional and should be evaluated by the design team.

7.0 **Dowels at Expansion Joints** - The dowels at expansion joints should be spaced at 12-inch centers and consist of the following:

Pavement Thickness (inches)	Diameter (inches)	Length (inches)	Embedment (inches)
5	5/8	12	5
6	3/4	14	6
7	7/8	14	6

8.0 **Lime-Flyash Stabilized Subgrade** - The on-site silty/sandy soils should be stabilized with lime-flyash in accordance with the TxDOT 2004 Standard Specifications Item 265. We recommend 2% lime and 8% flyash by dry weight be used. The pulverization, mixing, and curing of the lim-flyash treated subgrade is critical to proper stabilization. The subgrade should be compacted to a minimum of 95 percent of the Standard Proctor (ASTM D 698) at a moisture content between optimum and 4 percent of optimum.

9.0 **Cement Stabilized Subgrade** - The on-site silty/sandy soils may also be stabilized with cement, in lieu of lime-flyash, in accordance with the TxDOT 2004 Standard Specifications Item 275. We recommend 4 to 5% cement by dry weight be used. The cement-subgrade mixture should be placed and compacted within 4 hours from mixing. The subgrade should be compacted to a minimum of 95 percent of the Standard Proctor (ASTM D 698) at a moisture content within 2 percent of optimum.

6.0 BASIS FOR RECOMMENDATIONS

The recommendations provided in this report are based on project information provided to us and only apply to the specific project and site discussed in this report. If the project information in this report contains incorrect information or if additional information is available, we should be contacted to review and/or revise our recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is always a possibility that conditions between borings will be different from those at specific boring locations and that conditions will not be as anticipated by the designers or contractors. In addition, the construction process may itself alter soil conditions. Therefore, experienced QC geotechnical personnel should observe and document the construction procedures used and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team in a timely manner in order to solve the problems created.

We will be happy to discuss our recommendations with you and are prepared to provide any additional studies or services to complete this project. We look forward to serving as your geotechnical engineer and construction materials consultant for the remainder of this project as well as on future projects.

7.0 OBSERVATION DURING CONSTRUCTION

The recommendations are based on the subsoil data in the field exploration and laboratory testing. Due to the geological deposition of the soils in the area, variances may occur between boring locations. Therefore, the excavations should be observed under the supervision of a QCL geotechnical engineer to confirm that the bearing soils are similar to those observed during our field exploration and that the footing areas have been properly prepared.

The QCL geotechnical engineer should be immediately notified should any subsoil conditions be uncovered that will alter the conclusions and recommendations contained in this report. Further investigation and supplemental recommendations may be required if such a condition is encountered.

Samples of the subgrade soil and structural fill material should be obtained prior to the compaction operations for laboratory moisture/density testing (Proctor tests). The tests will then provide a basis for evaluating the in-place density requirements during compaction operations. A qualified soil technician should perform sufficient in-place density tests during the filling operations to verify that proper levels of compaction are being attained.

7.1 Construction Materials Testing:

The recommendations provided in this geotechnical report were based on the assumption that QCL would be employed to monitor the installation of the building foundation and to provide Construction Material Testing (CMT) services during the foundation and pavement construction. It may be occasionally required that QCL provide addendums to the original geotechnical recommendations based on the CMT observations or CMT test results which uncover site conditions that were not known when the geotechnical report as originally issued. New or changed site information, which is not properly communicated to the Geotechnical Engineer of Record, may result in a foundation that does not perform as originally intended.

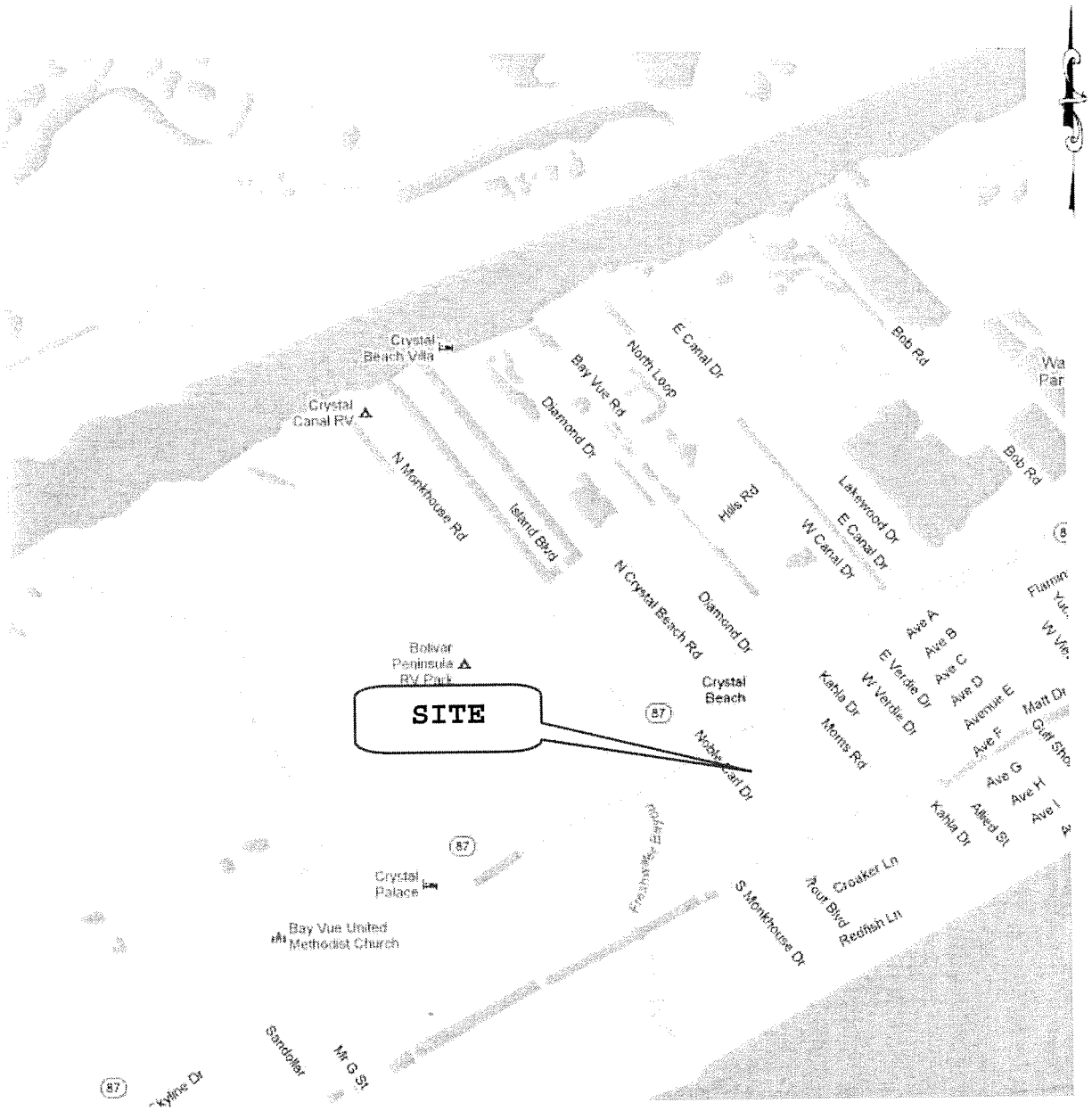
8.0 DISCLAIMER

The recommendations provided in this report are based on the site-specific field and laboratory test data, our engineering analysis, information provided to us by our client and the design team, and our previous experience on similar projects in the locality. Interaction of the soil with the foundation system termed as soil-structure interaction most likely will affect the performance of the foundation system and the superstructure it supports. Recommendations presented in this report are collectively intended for use in the design and construction of the structures at this site. If the recommendations presented in this report are not followed properly, then it is very likely for foundation elements to move in excess of the acceptable service-state limits. If our recommendations are not clear or if the designers and contractors need more clarification(s), they are encouraged to contact us during the design and construction process.

QCL has developed the recommendations contained in this report based on an understanding that QCL personnel will be retained to review construction specifications and drawings for compliance with our geotechnical recommendations. Therefore, it is recommended that QCL be retained to review the construction specifications for foundations and related structural elements to identify areas of conflict, if any, between the geotechnical recommendations and the final foundation design and construction specifications. These services will be invoiced separately from this report of our geotechnical engineering service.

During the course of using the recommendations in our report, person or the entity, who has ordered services for self, agent of others or builder for third party beneficiary from QCL acknowledges that the terms and conditions of services of QCL have been agreed, negotiated and explained to owner and/or the ultimate beneficiary of the work performed or ordered. Terms and conditions of QCL services are published in our website www.qclabs.com or contact us at (713) 695-1133, and a copy will be faxed to our client and the design team.

Appendix



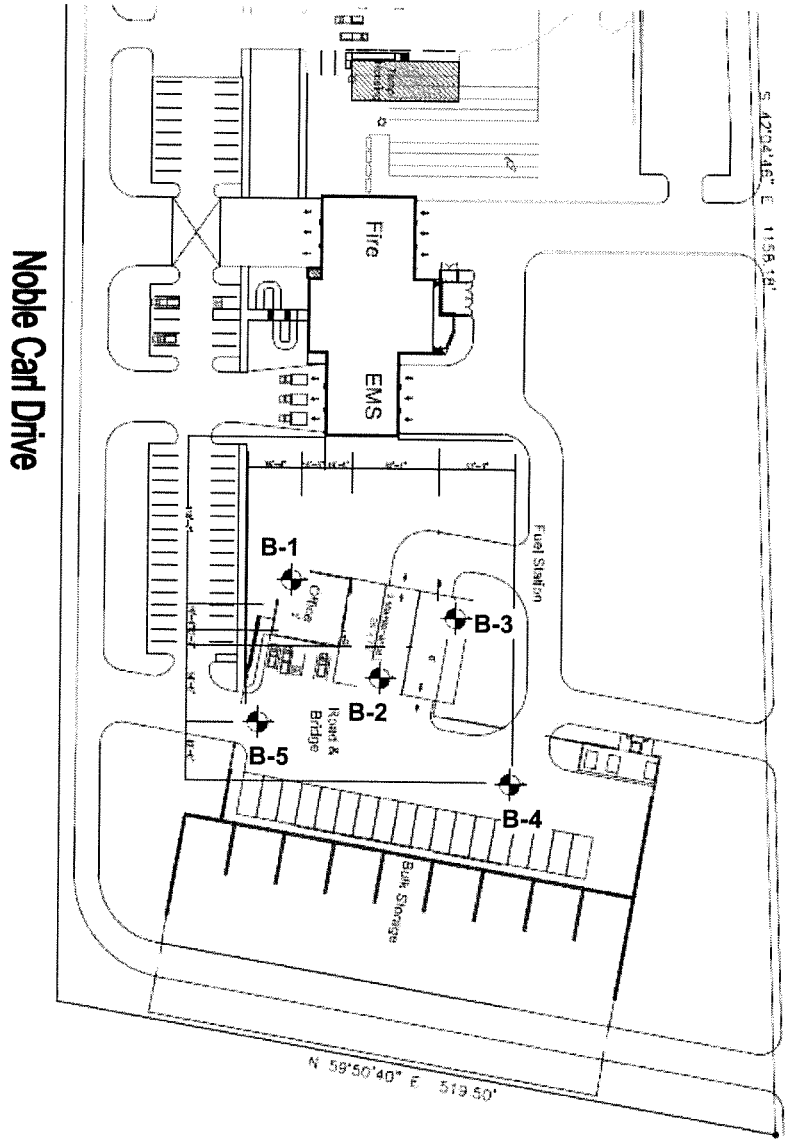
VICINITY MAP

PROJECT: **Proposed Office/Maintenance Building**
Crystal Beach Annex
Noble Carl Drive
Crystal Beach, Texas

Project No.: 13G9733

QC LABORATORIES, INC.
Engineering and Testing Services

Plate No. 1



PLAN OF BORINGS

PROJECT: **Proposed Office/Maintenance Building**
Crystal Beach Annex
Noble Carl Drive
Crystal Beach, Texas

Project No.: 13G9733

QC **LABORATORIES, INC.**
Engineering and Testing Services

Plate No. 2

LOG OF BORING NO. **B-1**

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

PROJECT: Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Road
Crystal Beach, Texas

QCL NO.: 13G9733 DATE DRILLED: 5-16-13

ELEVATION, ft	DEPTH, ft	SYMBOL	DESCRIPTION	SAMPLES	HAND PENETROMETER (tsf)	SPT N-VALUE (bpf)	DRY UNIT WEIGHT (pcf)	NATURAL MOISTURE CONTENT (%)	ATTERBERG LIMITS (%) LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	PERCENT PASSING NO. 200 SIEVE	UNCONFINED COMPRESSION (tsf)	STRAIN AT FAILURE (%)	CONFINING PRESSURE (psi)	OTHER TESTS
			SURFACE ELEVATION: Existing Grade													
	0		**FILL: SILTY SAND (SM)** brown, very loose to loose - with crushed concrete pieces 0 to 2 feet			6		9				14				
						3										
	5					7		18				13				
			SILTY SAND (SM) gray and brown, medium dense to very dense			18		13								
						60						19				
	10		- with scattered gravel below 8 feet			43										
			SAND w/ SILT (SP-SM) brown, loose to medium dense			19		23				8				
	15															
			- gray below 18 feet			17										
	20															
			- with shell pieces below 23 feet			25		28				11				
	25															
			- with clay pockets below 28 feet			9										
	30															
			SANDY LEAN CLAY (CL) gray, very soft, with scattered shell pieces and gravel			WOH		31				50				
	35															
			FAT CLAY (CH) dark gray, very soft			2		43	55	17	38					
	40		Boring Terminated at 40 feet													
	45															

WATER OBSERVATIONS:

▽ 15' While Drilling
▼ 8' Wet Cave-In

NOTES:

Dry augered 0 to 15 feet; wet rotary thereafter.

LOG OF BORING NO. B-2

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

PROJECT: Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Road
Crystal Beach, Texas

QCL NO.: 13G9733 DATE DRILLED: 5-16-13

ELEVATION, ft	DEPTH, ft	SYMBOL	DESCRIPTION	SAMPLES	HAND PENETROMETER (tsf)	SPT N-VALUE (bpf)	DRY UNIT WEIGHT (pcf)	NATURAL MOISTURE CONTENT (%)	ATTERBERG LIMITS (%) LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	PERCENT PASSING NO. 200 SIEVE	UNCONFINED COMPRESSION (tsf)	STRAIN AT FAILURE (%)	CONFINING PRESSURE (psi)	OTHER TESTS
	0		SURFACE ELEVATION: Existing Grade													
			FILL: SILTY SAND (SM) brown, dark brown, and gray, loose			9		13				22				
						5										
	5					5		24				23				
			- with scattered metal pieces below 6 feet			10										
			SILTY SAND (SM) brown and gray, medium dense			25		14				14				
	10					21										
			SAND w/ SILT (SP-SM) gray and brown, medium dense to very dense			15		24				7				
			- with shell pieces below 18 feet			51										
	20															
						32		24				8				
	25															
			- loose, with clay pockets and scattered gravel below 28 feet			5										
	30															
			LEAN CLAY (CL) dark gray, very soft			2		29								
	35															
			FAT CLAY (CH) dark gray, very soft, with shell pieces			2		48	60	20	40					
	40		Boring Terminated at 40 feet													
	45															

WATER OBSERVATIONS:

▽ 13' While Drilling
▼ 9' After waiting 15 minutes

NOTES:

Dry augered 0 to 15 feet; wet rotary thereafter.

PLATE NO. 4

LOG OF BORING NO. B-3

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

PROJECT: Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Road
Crystal Beach, Texas

QCL NO.: 13G9733 DATE DRILLED: 5-16-13

ELEVATION, ft	DEPTH, ft	SYMBOL	DESCRIPTION	SAMPLES	HAND PENETROMETER (tsf)	SPT N-VALUE (bpf)	DRY UNIT WEIGHT (pcf)	NATURAL MOISTURE CONTENT (%)	ATTERBERG LIMITS (%) LIQUID LIMIT	ATTERBERG LIMITS (%) PLASTIC LIMIT	ATTERBERG LIMITS (%) PLASTICITY INDEX	PERCENT PASSING NO. 200 SIEVE	UNCONFINED COMPRESSION (tsf)	STRAIN AT FAILURE (%)	CONFINING PRESSURE (psi)	OTHER TESTS
			SURFACE ELEVATION: Existing Grade													
	0		**FILL: SILTY SAND (SM)** brown, very loose to medium dense - with scattered asphalt pieces 0 to 2 feet			15										
						7						25				
	5					4		18								
						3						18				
			SILTY SAND (SM) brown, dense, with scattered gravel			36		14								
	10					34						18				
			SAND w/ SILT (SP-SM) gray and brown, medium dense to dense			17										
	15															
						26		24				6				
	20															
						39										
	25															
			- gray, with scattered shell pieces and gravel below 28 feet			29						9				
	30															
			SANDY LEAN CLAY (CL) dark gray, very soft			2		31	34	15	19	52				
	35															
			FAT CLAY (CH) dark gray, very soft		0.25		71	53	77	22	55		0.7	9	0	
	40		Boring Terminated at 40 feet													
	45															

WATER OBSERVATIONS:

▽ 15' While Drilling

▼ 11' Wet Cave-In

NOTES:

Dry augered 0 to 15 feet; wet rotary thereafter.

PLATE NO. 5

LOG OF BORING NO. B-4

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

PROJECT: Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Road
Crystal Beach, Texas

QCL NO.: 13G9733 DATE DRILLED: 5-16-13

ELEVATION, ft	DEPTH, ft	SYMBOL	DESCRIPTION	SAMPLES	HAND PENETROMETER (tsf)	SPT N-VALUE (bpf)	DRY UNIT WEIGHT (pcf)	NATURAL MOISTURE CONTENT (%)	ATTERBERG LIMITS (%) LIQUID LIMIT	ATTERBERG LIMITS (%) PLASTIC LIMIT	ATTERBERG LIMITS (%) PLASTICITY INDEX	PERCENT PASSING NO. 200 SIEVE	UNCONFINED COMPRESSION (tsf)	STRAIN AT FAILURE (%)	CONFINING PRESSURE (psi)	OTHER TESTS
			SURFACE ELEVATION: Existing Grade													
	0		**FILL: SILTY SAND (SM)**													
			brown, loose, with scattered organics			9		10				17				
						6		19				23				
						7		23				28				
	5		Boring Terminated at 5 feet													
	10															
	15															
	20															
	25															
	30															
	35															
	40															
	45															

WATER OBSERVATIONS: No free water observed during drilling

NOTES:
Dry augered to 5 feet.

PLATE NO. 6

LOG OF BORING NO. B-5

QC LABORATORIES, INC.
Geotechnical & Materials Engineers

PROJECT: Proposed Office/Maintenance Building
Crystal Beach Annex
Noble Carl Road
Crystal Beach, Texas

QCL NO.: 13G9733 DATE DRILLED: 5-16-13

ELEVATION, ft	DEPTH, ft	SYMBOL	DESCRIPTION	SAMPLES	HAND PENETROMETER (tsf)	SPT N-VALUE (bpf)	DRY UNIT WEIGHT (pcf)	NATURAL MOISTURE CONTENT (%)	ATTERBERG LIMITS (%) LIQUID LIMIT	ATTERBERG LIMITS (%) PLASTIC LIMIT	ATTERBERG LIMITS (%) PLASTICITY INDEX	PERCENT PASSING NO. 200 SIEVE	UNCONFINED COMPRESSION (tsf)	STRAIN AT FAILURE (%)	CONFINING PRESSURE (psi)	OTHER TESTS
			SURFACE ELEVATION: Existing Grade													
	0		**FILL: SILTY SAND (SM)** brown, loose to medium dense			11		11				17				
						4		14				22				
						4		16				19				
	5		Boring Terminated at 5 feet													
	10															
	15															
	20															
	25															
	30															
	35															
	40															
	45															

WATER OBSERVATIONS: No free water observed during drilling

NOTES:
Dry augered to 5 feet.

PLATE NO. 7

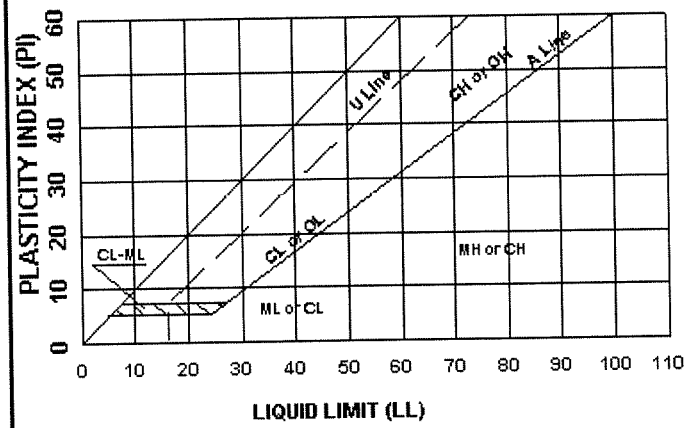
CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

ASTM Designation D-2487

MAJOR DIVISIONS				GROUP SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS (Less than 50% passes No. 200 sieve)	GRAVELS (Less than 50% of coarse fraction passes No. 4 sieve)	CLEAN GRAVELS (Less than 5% passes No. 200 sieve)		GW	WELL-GRADED GRAVEL, WELL-GRADED GRAVEL WITH SAND
				GP	POORLY-GRADED GRAVEL, POORLY-GRADED GRAVEL WITH SAND
		GRAVELS WITH FINES (More than 12% passes No. 200 sieve)	Limits plot below "A" line & hatched zone on plasticity chart	GM	SILTY GRAVEL, SILTY GRAVEL WITH SAND
			Limits plot above "A" line & hatched zone on plasticity chart	GC	CLAYEY GRAVEL, CLAYEY GRAVEL WITH SAND
	SANDS (50% or more of coarse fraction passes No. 4 sieve)	CLEAN SANDS (Less than 5% passes No. 200 sieve)		SW	WELL-GRADED SAND, WELL-GRADED SAND WITH GRAVEL
				SP	POORLY-GRADED SAND, POORLY-GRADED SAND WITH GRAVEL
		SANDS WITH FINES (More than 12% passes No. 200 sieve)	Limits plot below "A" line & hatched zone on plasticity chart	SM	SILTY SAND, SILTY SAND WITH GRAVEL
			Limits plot above "A" line & hatched zone on plasticity chart	SC	CLAYEY SAND, CLAYEY SAND WITH GRAVEL
FINE-GRAINED SOILS (50% or more passes No. 200 sieve)		SILTS AND CLAYS (Liquid Limit Less than 50%)		ML	SILT, SILT WITH SAND, SILT WITH GRAVEL SANDY SILT, GRAVELLY SILT
				CL	LEAN CLAY, LEAN CLAY WITH SAND, LEAN CLAY WITH GRAVEL, SANDY LEAN CLAY, GRAVELLY LEAN CLAY
				OL	ORGANIC CLAY, ORGANIC CLAY WITH SAND, SANDY ORGANIC CLAY, ORGANIC SILT, SANDY ORGANIC SILT
		SILTS AND CLAYS (Liquid Limit 50% or More)		MH	ELASTIC SILT, ELASTIC SILT WITH SAND, SANDY ELASTIC SILT, GRAVELLY ELASTIC SILT
				CH	FAT CLAY, FAT CLAY WITH SAND, FAT CLAY WITH GRAVEL, SANDY FAT CLAY, GRAVELLY FAT CLAY
				OH	ORGANIC CLAY, ORGANIC CLAY WITH SAND, SANDY ORGANIC CLAY ORGANIC SILT, SANDY ORGANIC SILT

NOTE: Coarse soils with between 5% & 12% passing the No. 200 sieve and fine grained soils with limits plotting in the hatched zone of the plasticity chart are to have dual symbols.

PLASTICITY CHART



Equation of A-Line Horizontal at PI=4 to LL=25.5, PI=0.73(LL-20)

Equation of U-Line: Vertical at LL=16 to PI=7, then PI=0.9(LL-8)

DEGREE OF PLASTICITY OF COHESIVE SOILS

DEGREE OF PLASTICITY	PLASTICITY INDEX
None	0 - 4
Slight	5 - 10
Medium	11 - 20
High	21 - 40
Very High	>40

SOIL SYMBOLS

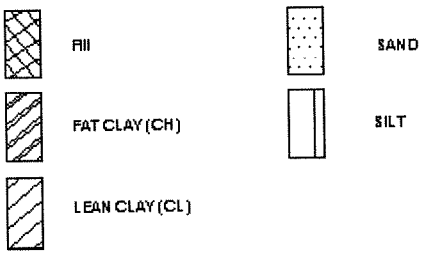


PLATE NO. 8

PAVEMENT ASSUMPTIONS

(TRAFFIC CONDITIONS)

1.0 **Parking Lots:**

Light traffic - Few vehicles heavier than cars. No regular use by trucks.
(Daily EAL = 6 or less)

2.0 **Driveways:**

Light to Medium Duty - Maximum of 1,000 vehicles per day, including not more than 10 percent two axle loaded trucks or larger vehicles carrying light loads or empty.
(Daily EAL = 6 to 20)

3.0 **Driveways and Truck Traffic Areas:**

Medium Duty - Maximum of 200 two axle trucks plus lightly loaded trucks with three or more axles or no more than 20 heavily loaded trucks with more than three axles per day.
(Daily EAL = 21 to 75)

ATTACHMENT E

Bolivar Peninsula Special Utility District

1840 Highway 87 • P.O. Box 1398 • Crystal Beach, TX 77650
Telephone: (409) 684-3515 Fax: (409) 684-7515

NEW CONSTRUCTION
APPLICATION FOR TEMPORARY SERVICE

In accordance with Texas Administrative Code (TAC) 290.46, Bolivar Peninsula Special Utility District shall complete a Customer Service Inspection prior to providing continuous water service to new construction, existing services where there may be a cross-connection or other potential contaminant hazard, or after any material improvement, correction, or addition to the private water distribution facilities.

Therefore, temporary service may be provided at the location listed on this application for ninety (90) calendar days. ***After this time, if the Applicant has not called for either an extension or a Customer Service Inspection, service will be disconnected with no further notice.*** Reconnection of service will be subject to a $75.00 account fee.

DATE OF APPLICATION:_____

APPLICANT'S NAME:_____

SERVICE ADDRESS:_____

PHONE NO.:_____ALTERNATE PHONE NO.:_____

CERTIFICATION

I understand that until a Customer Service Inspection is performed at the above location, I am receiving temporary water service. The temporary service will expire on the date indicated below and if an inspection has not been performed or I have not called the District office for an extension of time, my service will be disconnected with no further notice. Reconnection of service will be subject to a fee of $75.00 and I will be required to re-apply for water service.

I further certify that I am authorized to obtain service at the above location and authorized to sign this agreement.

_____ _____

Applicant's Signature Date

TO BE COMPLETED BY DISTRICT PERSONNEL

Temporary Service is hereby granted at _____ for ninety (90) days. Temporary Service will expire on:

_____

(Expiration Date)

_____ Date: _____

District Representative Signature

ACCOUNT NUMBER:

The District shall sell and deliver water and/or wastewater service to the Applicant and the Applicant shall purchase, receive and/or reserve reserve service from the District in accordance with the bylaws and service policy of the District as amended from time to time by the Board of Directors of the District.

The Customer shall pay the District for service hereunder as determined by the District's service policy and upon the terms and conditions set forth. A copy of this agreement shall be executed before service may be provided to the Applicant.

The Board of Directors shall have the authority to discontinue service to any customer not complying with any policy or not paying any utility fees or charges as required by the District's published rates, fees and conditions of service. At any time service is discontinued, terminated or suspended, the District shall not re-establish service unless it has a current, signed copy of this agreement.

All water shall be metered by meters to be furnished and installed by the District. The meter and/or wastewater connection is for the sole use Of the Customer to whom it was provided under this agreement and is to provide service to only one (1) residential dwelling or one (1) commercial dwelling. Extension of pipe(s) to transfer utility service from one property to another, to share, resell or submeter water to any other persons, dwellings, businesses or property, etc. is prohibited and is grounds for immediate disconnection of service.

Water shall be provided to the type establishment indicated on the front of this application form (i.e. residential, commercial, etc.). Customer must notify the District prior to converting the establishment type (for example converting a residence to a business) by completing a new Service Application and Agreement. Additional fees may be required.

The District shall have the right to locate a water service meter and the pipe necessary to connect the meter on the Customer's property at a point to be chosen by the District, and shall have access to its property and equipment located upon Customer's premises at all necessary times for any purpose connected with or in the furtherance of its business operations, and upon discontinuance of service the District shall have the right to remove any of its equipment from the Customer's property. The Customer shall install, at their own expense, any necessary service lines from the District's facilities and equipment to the point of use, including any customer service isolation valves, backflow prevention devices, clean-outs, and other equipment as may be specified by the District. The District shall also have access to the Customer's property for the purpose of inspecting for possible cross-connections, potential contamination hazards and illegal lead materials.

It is the customer's responsibility to ensure District personnel has access to the meter at all times without hindrance. The customers is also responsible for keeping the meter box free of debris and overgrowth and the meter free of dirt, mud, etc.

The District is responsible for protecting the drinking water supply from contamination or pollution which could result from improper practices. This service agreement serves as notice to each customer of the restrictions which are in place to provide this protection. The District shall enforce these restrictions to ensure the public health and welfare. The following undesirable practices are prohibited by State regulations:

a. No direct connection between the public drinking water supply and a potential source of contamination is permitted. Potential sources of contamination shall be isolated from the public water system by an air gap or an appropriate backflow prevention assembly in accordance with State regulations.
b. No cross connection between the public drinking water supply and a private water system is permitted. These potential threats to the public drinking water supply shall be eliminated at the service connection by the proper installation of an air gap or a reduced pressure zone backflow prevention assembly and service agreement must exist for annual inspection and testing by a certified backflow prevention device tester.
c. No connection which allows condensing, cooling, or industrial process water to be returned to the public water supply is permitted.
d. No pipe or pipe fitting which contains more than 8.0% lead may be used for the installation or repair of plumbing on or after July 1, 1988 at any connection that provides water for human consumption.
e. No solder or flux that contains more than 0.2% lead may be used for the installation or repair of plumbing on or after July 1, 1988 at any connection that provides water for human consumption.

The District may immediately disconnect service, without prior notification, if an actual or potential health hazard exists.

The District shall maintain a copy of this agreement as long as the Customer and/or premises is connected to the public water system. The Customer shall allow their property to be inspected for possible cross-connections, potential contamination hazards and illegal lead materials. These inspections shall be conducted by the District or its designated agent prior to initiating service and periodically thereafter.

The District shall notify the Customer in writing of any cross-connections or other undesirable practices which have been identified during the initial or subsequent inspection. The Customer shall immediately correct any undesirable practice on their premises. The Customer shall, at their own expense, properly install, test and maintain an appropriate backflow prevention device at the service connection. Any expenses Associated with the enforcement of this agreement shall be billed to the Customer.

By execution hereof, the Applicant shall hold the District harmless from any and all claims for damages caused by service interruptions due to waterline breaks by utility or contractors, tampering by other Customers/Users of the District, normal failures of the system, or other events beyond the District's control.

The Customer shall grant to the District, now or in the future, any easements of right-of-way for the purpose of installing, maintaining and operating pipelines, meters, valves and other equipment which may be deemed necessary by the District to extend or improve service for existing or future Customers, on such forms as are required by the District.

Bolivar Utility Services, LLC

Request for Installation of Sewer System "Grinder Unit"

Date: _____

Customer: _____

Service Address: _____

Subdivision: _____

Customer Contact: _____ **TEL:** _____

Installation Date: **Not before:**_____

Customer and/or its authorized representative does hereby request that Bolivar Utility Services, LLC ("B.U.S.") schedule the installation and connection of the Sewer System "Grinder Unit" to the B.U.S. wastewater treatment sewer system.

Customer has attached to this Request a check payable to B.U.S. in the amount of $4,000.00 as payment for the installation of the Unit.

Customer and/or its authorized representative does hereby represent to B.U.S. that a **site plan is attached hereto indicating the desired "Location" for the Unit to be installed** and that the **Base Flood Elevation** is _____.

By **initialing** each item below, Customer represents that the Location is:

_____ Accessible by our installation equipment and personnel
_____ Adjacent to your home within 10 feet from edge of ground level slab
_____ Free of overhead obstructions
_____ Removed from any vehicular traffic, where cars and other vehicles will damage the Unit
_____ Within 10 feet from the terminus of wastewater plumbing discharge
_____ Within 10 feet from an installed, dedicated 30amp disconnect and power source
_____ On the opposite side of the house from the water meter
_____ Water connection from BPSUD is "ON"
_____ Permanent electricity from Entergy to the disconnect is "ON"

Customer acknowledges that BUS will charge Customer, and Customer agrees to pay, a fee equal to $350.00 if BUS installation contractor is not able to complete the installation as scheduled due to the fact that any of the above conditions are not met at the time of the scheduled installation.

_____ _____

BY: Customer/Authorized Representative Date

P.O. Box 22858 – Beaumont, TX 77720 409-924-9421 office www.bolivarsewer.com

WASTEWATER CAPACITY RESERVATION APPLICATION FOR RESIDENTIAL AND COMMERCIAL DEVELOPMENT
Bolivar Utility Services, LLC

Note: The NON REFUNDABLE processing fee of $250 must accompany this application.
Instructions are provided on Page 4 (Please print legibly in ink or use typewriter).

PLEASE SUBMIT PROOF OF PROPERTY OWNERSHIP: Recorded Deed, Title Report or Title Insurance

To: Bolivar Utility Services, LLC

Date: _____

FEE SIMPLE TITLE OWNER _____

MAILING ADDRESS _____

CITY _____ *STATE* _____ *ZIP* _____

COMPANY _____

BUSINESS PHONE _____

HOME PHONE _____

E-MAIL ADDRESS _____

**SIGNATURE* _____

PRINT NAME _____

AGENT'S NAME _____

ADDRESS _____

CITY _____ *STATE* _____ *ZIP* _____

COMPANY _____

BUSINESS PHONE _____

HOME PHONE _____

E-MAIL ADDRESS _____

SIGNATURE _____

PRINT NAME _____

**Application submitted by anyone other than the property owner must be accompanied by written notification from the property owner that designates the applicant as an "authorized representative".*

PLEASE NOTE: SUBMITTAL OF FALSE INFORMATION WILL RESULT IN INVALIDATION OF THIS APPLICATION

LEGAL DESCRIPTION

PLEASE SUBMIT A PROPER LEGAL DESCRIPTION OF THE PROPERTY IN QUESTION:

Lot(s) _____

Block(s) _____

Reserve(s) _____

Subdivision _____

Tract(s) _____

Survey _____

Abstract # _____

Tract size _____
Acres or square feet

Property tax account #(s) _____

_____

_____

_____

Street Address _____

A SURVEY AND LOCATION MAP MUST BE SUBMITTED WITH THIS APPLICATION. THE LOCATION MAP MUST INDICATE ALL STREETS ADJACENT AND INTERNAL TO THE PROPOSED DEVELOPMENT.

Check Here to Indicate Survey and Location Map are attached: _____ *SURVEY* _____ *LOCATION MAP*

BELOW THIS LINE ON THIS PAGE TO BE COMPLETED BY BOLIVAR UTILITY SERVICES, LLC

Date Received _____

Project ID No. _____

Fee Paid _____

Receipt No. _____

Sewer Line Size and Location: _____

PROPOSED DEVELOPMENT

TO BE FILLED OUT BY APPLICANT

Is the proposed development new construction? _____ remodeling? _____ lease space completion? _____

Repairing? _____ replacement? _____ conversion? _____ other? (specify) _____

Additional Information _____

_____

Proposed Residential Development

No. of Units	*Type of Units*
	Houses *Size (Approx. s.f.) -*
	Townhouses
	Condominiums
	Apartments
	Duplex
	Mobile or Manuf. Homes
	Other:

Proposed Commercial Development

Type of Development (i.e., office, retail, warehouse, mfg.)*	*Square Footage of each type of development*	*High Volume Water user Information*****

**Any request to construct manufacturing facilities must include information on the type of manufacturing proposed the estimated quantity (gallons per day) and quality of discharge to the sanitary sewer.*

***High volume water user information must include number of chairs in a beauty shop, square footage of dining area in a full service restaurant, number of washing machines in a Washateria., and number of rooms in a motel. See attached Wastewater Discharge criteria Sheet (Page 3) for the information that is needed. (i.e., Bowl, per Bed, per Occupant, per Station, per Room, etc.)*

PRIOR CORRESPONDENCE

Attach copies of any prior correspondence with the Bolivar Utility Services, LLC, concerning this request.

In this request in place of any previous requests? _____ If so, explain _____

_____

_____

_____

_____

BOLIVAR UTILITY SERVICES, LLC
WASTEWATER DISCHARGE CRITERIA SHEET

TYPE OF DEVELOPMENT	SERVICE UNIT EQUIVALENCY	
BARBER SHOP OR BEAUTY SHOP	0.480000	Per Chair
CAR REPAIR	0.001600	per Sq. Ft.
CARWASH, TUNNEL, SELF SERVE	6.350000	per Carwash
CARWASH, WAND TYPE, SELF SERVE	1.220000	per Carwash Bay
TAVERN, BAR (no Kitchen)	0.001500	per Sq. Ft.
CONVENIENCE STORE	0.000500	per Sq. Ft.
GAS STATION WITH CARWASH	2.500000	per Wash Station
GAS STATION WITHOUT CARWASH	1.750000	per Sq. Ft.
GROCERY STORE	0.001250	per Sq. Ft.
HOTEL, MOTEL W/KITCHENETTES	0.800000	per Room
HOTEL, MOTEL	0.500000	per Room
MOBILE HOME PARK	1.000000	per Space
OFFICE	0.000375	per Sq. Ft.
RECREATIONAL VEHICLE PARK	0.200000	per Vehicle Space
RESIDENCE-CONDO., T/HOUSE, APART.	1.000000	per Unit
RESIDENCE-SINGLE FAMILY	1.000000	per Unit
RESIDENCE-DUPLEX	2.000000	per Duplex
RESIDENCE-TRIPLEX	3.000000	per Triplex
RESTAURANT, FAST FOOD (BURGER, CHICKEN, ETC.)	0.002500	per Sq. Ft.
RESTAURANT, FULL SERVICE/DINING/BAR AREA	0.002000	per Sq. Ft.
RETAIL	0.000500	per Sq. Ft.
TOILET	0.250000	per Toilet
WASHATERIA	0.500000	per Machine

NOTES: 1 Service Unit= $5,000.00 per unit

A Minimum Capacity Utilization Fee of $10,000 will be assessed for all Commercial Customers.

Procedures and Instructions for Completing the Wastewater Capacity Reservation Application for Residential and Commercial Development

1. The Wastewater capacity Reservation Application for Residential and Commercial Development is a two page from with the wastewater discharge criteria sheet and instructions included. This application must be completed by the current property owner or by an authorized representative of the owner. Please note that if the applicant is not the current owner of the subject property, a notarized Letter of Authorization from the property owner must accompany the application.

2. When submitting the Wastewater Capacity Reservation Application, a processing fee of $250.00 will be due. This is a non-refundable fee made payable to Bolivar Utility Services, LLC and covers the cost of processing this application only. Any utilization fees, Inspection fees, etc., are separate and are NOT included in this processing fee.

3. A site plan or survey, indicating the dimensions of the property must be attached to the Wastewater Capacity Reservation Application for Residential and Commercial Development.

4. A location map must be attached showing adjacent and internal streets for the proposed development site.

5. The application must be filled out completely and accurately. The application will returned if the owner or agent is not able to personally correct the application. This will increase processing time for your application.

   The following information is often missing:

   a. The street address is not indicated (page 1 of application).
   b. The tract size is not provided (Page 1).
   c. Survey and Location Map is not attached (Page 1).
   d. Appropriate information on high volume water users are not included (Page 2). See item 6 below.
   e. Prior letters regarding this site are not attached or, if attached, their relationship to the present request is not indicated.
   f. An acceptable form of proof of ownership of the property, i.e. warranty deed, deed of trust, title report, or title opinion is not attached.

6. Include all site and building layouts or calculations showing square footage, occupancy loads, seats, beds, etc. for the uses specified so the service unit equivalency can be calculated based on the wastewater discharge criteria sheet.

7. An Original and one copy of the completed application and supporting documentation with the application fee shall be submitted to the following:

   Bolivar Utility Services, LLC
   Attn: Manager of Operations
   P.O. Box 22858
   Beaumont, TX 77720

8. Should an applicant need any additional information concerning the submittal of the Wastewater Capacity Reservation Application for Residential and Commercial Development, please contact the Bolivar Utility Services, LLC, office.

   Bolivar Utility Services, LLC Ph: 409-924-9421 Fax: 409-861-4002

9. After this application is reviewed, any changes in use for the development from what is submitted in this application will require a new application with new attachments and another processing fee.

10. This application should be submitted and reviewed prior to any application for water or sewer taps.

Bolivar Utility Services, LLC

Requirements and Specifications for Installation of Sewer System "Grinder Unit"

General:

The following are the technical requirements you and your contractor will need to properly prepare your home for the installation of your Sewer Service Grinder Unit ("Unit"). Please contact us with any questions or comments. info@bolivarsewer.com 409-924-9421

Location:

The Grinder Unit will occupy a net area of 4 feet x 4 feet. The actual dimension of the Unit is 24 inches in diameter. **You will need to provide us with a site plan of your house that includes the Base Flood Elevation and the proposed location of where you intend to install your Unit. It must be located on the opposite side of the house from your water meter.** The Unit will be installed level with the finished grade of the concrete slab of your house.

This Unit should be located in an area that is:

- Accessible by our installation equipment and personnel.
- Adjacent to your home within 10 feet from edge of ground level slab.
- On the opposite side of the house from the water meter.
- Free of overhead obstructions (no decks, porches, or stairways overhead).
- Removed from any vehicular traffic.

An ideal location would be in a flower bed within close proximity to the elevated platform supporting your air conditioning compressor.

Electrical:

Our installation contractor will install and connect the Control Panel for the Unit at an elevated area on your home. The controls must be installed at or above the Base Flood Elevation required by FEMA and Galveston County. You or your contractor will need to install and provide one (1) 230V, 30 Amp Disconnect. This is the same type connection required for most air conditioner compressors. We recommend that the Disconnect and Control Panel be installed on or adjacent to your air conditioner compressor platform.

EXPLANATION: The 230V feed should have a black, red, white and ground wire coming to the Disconnect. Black and red are powered with 115V each, totaling 230V. White is neutral. Ground to ground is standard. ALL 4 WIRES MUST BE CONNECTED AND THE POWER "ON". THIS IS NOT NEGOTIABLE. OUR CONTRACTOR WILL NOT BE ABLE TO COMPLETE THE INSTALLATION UNLESS THIS REQUIREMENT IS MET AND A SECOND TRIP CHARGE OF $350.00 WILL BE ASSESSED EACH TIME THEY HAVE TO RETURN TO COMPLETE THE JOB. Please insure your electrical contractor is aware of this requirement and that it has been done correctly before you request the grinder installation.

Plumbing:

Our installation contractor will install and connect the outflow of your plumbing system to the Unit. Your plumbing contractor should install your internal plumbing system to terminate into one (1) 4 inch sewer line within a distance of not more than 10 feet from the location of the Unit and should flag the line. The unit has a watertight seal which requires the system to be vented. It is sealed to prevent sewer from leaking onto your property and to prevent groundwater from leaking into the Unit. Our installation contractor will install and connect to your house a 2 inch diameter pipe to vent the Unit. The top of the Vent pipe will be extended to the Base Flood Elevation. An internal vent may be provided by your plumbing contractor. If you are interested in an internal vent, please have your contractor contact us for detailed specifications.

Bolivar Utility Services, LLC.
WASTE WATER UTILITY SYSTEMS
CONSULTATION - CONSTRUCTION - OPERATION
2155 IH 10 East, Beaumont, TX 77701

CONTRACT/APPLICATION FOR SEWER UTILITY SERVICE

This Contract/Application for Utility Service ("Contract/Application") is by and between Bolivar Utility Services, LLC., a corporation organized under the laws of the State of Texas, its successors and assigns ("Utility") and the applicant ("Customer" or "Applicant") whose name and signature is shown below on the last page of this document.

CUSTOMER LIABILITY: Customer shall be liable for any damage or injury to Utility-owned property or personnel shown to be caused by the customer his invitees, his agents, his employees, or others under his control.

PLUMBING CODE: Utility has adopted the Uniform Plumbing Code. Any extensions and/or new facilities shall comply with that code and all standards established by the TCEQ. Where conflicts arise, the more stringent standard must be followed.

ASSIGNMENT: No application, agreement or contract for service may be assigned ortransferred without the written consent of Utility.

RIGHT OF ACCESS AND EASEMENTS: Utility will have the right of access to the Customer's premises at all reasonable times for the purpose of installing, inspecting or repairing water/sewer mains or other equipment used in connection with its provision of water/sewer service, or for the purpose of removing its property and disconnecting lines, and for all other purposes necessary to the operation of Utility's system, including inspection the customers plumbing for code, plumbing or tariff violations.

SEWER REGULATIONS: The disposal into the utility's sewer collection system of bulk quantities of food or food scraps not previously processed by a grinder or similar garbage disposal unit and grease and oils, except as incidental waste in process or wash water, used in or resulting from food preparation by sewer utility customers engaged in the preparation and/or processing of food for other than domestic consumption for sale to the public shall be prohibited. Specifically included in this prohibition are grease and oils from grease traps to other grease and/or oil storage containers.

THE COLLECTION AND DISPOSAL OF STORM WATERS OR RUN OFF WATERS MAY NOT BE DIVERTED INTO OR DRAINED INTO THE UTILITY'S COLLECTION SYSTEM. NO GREASE, OIL, SOLVENT, PAINT, OR OTHER **TOXIC** CHEMICAL COMPOUND MAY BE DIVERTED INTO OR DRAINED INTO THE UTILITY'S COLLECTION SYSTEM.

Pursuant to TCEQ Rule 291.86(n), the utility may charge for all labor, material, equipment, and other costs necessary to repair to replace all equipment damaged due to service diversion or the 'discharge of wastes that the system cannot properly treat.

Pursuant to TCEQ Rule 291.85(b) (3), the customer's service line and appurtenances shall be construed in accordance with the laws and regulations of the State of Texas, local plumbing

codes, or, in the absence of such local codes, the Uniform Plumbing Code. It shall be the customer's responsibility to maintain the service line and appurtenances in good. operating condition, i.e., clear of obstruction, defects, or blockage. If the utility can provide evidence of excessive, infiltration or inflow or failure to provide proper pretreatment, the utility may, with the written approval of the TCEQ's executive director, require the customer to repair the line or eliminate the infiltration or inflow or take such actions necessary to correct the problem. If the customer fails to correct the problem within a reasonable time, the utility may disconnect service after proper notice.

CUSTOMER AGREEMENT: BY SIGNING THIS APPLICATION FOR PUBLIC UTILITY SERVICE, I AGREE TO COMPLY WITH UTILITY'S RULES AND TARIFF AND ALL RULES AND REGULATIONS OF THE TCEQ AND OTHER APPLICABLE REGULATORY AGENCIES. I GUARANTEE PROMPT PAYMENT OF ALL UTILITY BILLS FOR THE SERVICE ADDRESS PRINTED ABOVE. I AGREE TO REMAIN RESPONSIBLE FOR UTILITY BILLS FOR THIS SERVICE ADDRESS FROM THE DATE SERVICE IS STARTED UNTIL THE DAY SERVICE IS TERMINATED AT MY REQUEST.

I AGREE TO TAKE NO ACTION TO CREATE A HEALTH HAZARD OR OTHERWISE THREATEN OR ENDANGER UTILITY'S PLANT, ITS PERSONNEL, OR ITS CUSTOMERS. I AGREE TO PUT NO UNSAFE, NON-DOMESTIC SERVICE DEMANDS ON UTILITY'S SYSTEM WITHOUT NOTICE TO AND PERMISSION FROM UTILITY. ANY ACTION BY OTHERS OR ME UNDER MY CONTROL IN VIOLATION OF THIS PARAGRAPH MAY RESULT IN THE TERMINATION OF MY UTILITY SERVICE WITHOUT NOTICE.

I HAVE BEEN SHOWN A COPY OF UTILITY'S TCEQ-APPROVED TARIFF AND I AGREE TO PAY THE RATES IN THE TARIFF AND ABIDE BY THE REQUIREMENTS IN THIS APPLICATION. I ACKNOWLEDGE THAT THE RATES AND/OR TERMS OF SERVICE IN THE TARIFF MAY BE CHANGED BY FUTURE ORDER OF THE TCEQ OR OTHER REGULATORY AUTHORITY HAVING JURISDICTION OVER UTILITY'S RATES. I AGREE TO ABIDE BY SUCH CHANGES AS THEY OCCUR.

1. Name of applicant: _____

Applicant is: Landowner _____ Tenant _____

Drivers Lic. # _____ SS # _____

Telephone (____) ____-_____ Home _____ Business _____

2. Address or location of requested service. (Attach plat or drawing if new development or construction site):

_____

Is this the billing address? yes _____ no _____

Subdivision: _____ Block: _____ Lot: _____

3. Type of sewer service:

Bolivar Peninsula Special Utility District Service Application and Agreement

Date:		BPSUD ACCOUNT NO.:
Applicant's Name:		
Driver's Lic. No.:	State of Issuance:	Expiration Date:
Social Security No.:		Date of Birth:
Home Telephone: ( )		Alternate Telephone: ( )
E-mail Address:		
Co-Applicant's Name:		
Driver's Lic. No.:	State of Issuance:	Expiration Date:
Social Security No.:		Date of Birth:
Home Telephone: ( )		Alternate Telephone: ( )
E-mail Address:		
Emergency Contact Name:		Emergency Contact Telephone: ( )
Type of Account: Single Family Residential	Commercial	RV Only Irrigation Only
If commercial, type of business:		
Subdivision where service is requested:		
Legal Description of Property (Include name of road and lot and block number).		

Service Address: Billing Address:

AGREEMENT made this _____ day of _____, 20____, between Bolivar Peninsula Special Utility District, (the "District") a District organized under the laws of the State of Texas and _____ (herein after called the Applicant and/or Customer). By execution hereof, the Applicant agrees that he/she has read and understands the terms of this agreement as stated on the back of this form, and understands that noncompliance shall constitute denial or discontinuance of service until such time as the violation(s) is corrected to the satisfaction of the District. Any misrepresentations of the facts by the Applicant shall result in discontinuance of service pursuant to the terms and conditions of the District's current service policy.

Applicant Signature _____ Date _____

Co-Applicant's Signature _____ Date _____

STATE OF TEXAS **COUNTY OF GALVESTON**

This instrument was acknowledged before me on the ___ day of _____, 20_____, by _____.

Notary Seal:

_____

Notary Public, State of Texas

DISTRICT USE ONLY: ___Septic Permit ___Building Permit ___Easement *Meter Size:*_____

FEES: Deposit: $_____ Set-Up: $_____ CSI: $_____ TAP: $_____

Other: TOTAL: $_____

Revised 4/06

Bolivar Utility Services, LLC.
WASTE WATER UTILITY SYSTEMS
CONSULTATION - CONSTRUCTION -OPERATION
2155 IH 10 East, Beaumont, TX 77701

Residential _____ permanent _____ Commercial _____ temporary _____
Industrial _____ Developer _____
temporary service termination date: _____

4. List all toxic or hazardous chemicals to be used at service location excluding normal domestic cleaning agents typically used in a home or office.

_____

5. Will any waste generated at this service location require special treatment?
yes _____ no _____ water borne or solid waste _____

6. Will service location have food grinder (garbage disposal unit) or grease trap?
yes _____ no _____ type _____

7. Person responsible for utility service bills:
Name: _____

Relationship to Applicant: _____

Drivers Lic. # _____ SS # _____

Telephone (____)____-_____ Home _____ Business _____

Billing address if different from service location address.

_____

_____

8. Date of application: _____ Date to begin service: _____

9. Misc. fees required as a condition of service:

Amount: $ _____ Type: _____ Refundable: yes __ no __

Amount: $ _____ Type: _____ Refundable: yes __ no __

10. Is public utility easement required? yes _____ no _____

_____ _____
Applicant Guarantor

_____ _____
Title Landlord

SEWER UTILITY TARIFF
FOR

Bolivar Utility Services, LLC
(Utility Name)

2155 I H 10 East
(Business Address)

Beaumont, Texas 77701
(City, State, Zip Code)

(409) 924-9421
(Area Code/Telephone)

This tariff is effective for utility operations under the following Certificate of Convenience and Necessity:

21026

This tariff is effective in the following county:

Galveston

This tariff is effective in the following cities or unincorporated towns (if any):

None

This tariff is effective in the following subdivisions or water quality permit numbers:

Laguna WWTP WQ0014452001
Crystal Palace WWTP WQ12936-001

TABLE OF CONTENTS

The above utility lists the following sections of its tariff (if additional pages are needed for a section, all pages should be numbered consecutively):

SECTION 1.0 - RATE SCHEDULE

Meter Size	Monthly Minimum Charge	Gallonage Charge
5/8" or 3/4"	$30.00 (per connection for all water meter sizes)	$4.00 per 1000 gallons

FORM OF PAYMENT: The utility will accept the following forms of payment:
Cash X , Check X , Money Order X , Other (Specify) X - Prearranged Automatic Bank Draft
THE UTILITY MAY REQUIRE EXACT CHANGE FOR PAYMENTS AND MAY REFUSE TO ACCEPT PAYMENTS MADE USING MORE THAN $1.00 IN SMALL COINS. A WRITTEN RECEIPT WILL BE GIVEN FOR CASH PAYMENTS.

REGULATORY ASSESSMENT 1.0%
TCEQ RULES REQUIRE THE UTILITY TO COLLECT A FEE OF ONE PERCENT OF THE RETAIL MONTHLY BILL.

Section 1.02 - Miscellaneous Fees

TAP FEE (Gravity Sewer) $550.00
TAP FEE COVERS THE UTILITY'S COSTS FOR MATERIALS AND LABOR TO INSTALL A STANDARD RESIDENTIAL CONNECTION AN ADDITIONAL FEE TO COVER UNIQUE COSTS IS PERMITTED IF LISTED ON THIS TARIFF.

TAP FEE (Large Meter) ..... Actual Cost
TAP FEE IS THE UTILITY'S ACTUAL COST FOR MATERIALS AND LABOR FOR TAP SIZE INSTALLED.

TAP FEE (Pressure Sewer) ..... Actual Cost
TAP FEE IS THE UTILITY'S ACTUAL COST FOR MATERIALS AND LABOR FOR TAP SIZE INSTALLED

RECONNECTION FEE
THE RECONNECT FEE MUST BE PAID BEFORE SERVICE CAN BE RESTORED TO A CUSTOMER WHO HAS BEEN DISCONNECTED FOR THE FOLLOWING REASONS (OR OTHER REASONS LISTED UNDER SECTION 2 0 OF THIS TARIFF)

a) Non payment of bill (Maximum $25.00) $25.00
b) Customer's request that service be disconnected $45.00

TRANSFER FEE ..... N/A
THE TRANSFER FEE WILL BE CHARGED FOR CHANGING AN ACCOUNT NAME AT THE SAME SERVICE LOCATION WHEN THE SERVICE IS NOT DISCONNECTED

RATES LISTED ARE EFFECTIVE ONLY
IF THIS PAGE HAS TCEQ APPROVAL STAMP

TEXAS COMM. ON ENVIRONMENTAL QUALITY
35542-C, CCN 21026, OCTOBER 7,2008
APPROVED TARIFF BY __LF/SP__

SECTION 1.0 - RATE SCHEDULE

LATE CHARGE (EITHER $5.00 OR 10% OF THE BILL) $5.00
TCEQ RULES ALLOW A ONE-TIME PENALTY TO BE CHARGED ON DELINQUENT BILLS. A LATE CHARGE MAY NOT BE APPLIED TO ANY BALANCE TO WHICH THE PENALTY WAS APPLIED IN A PREVIOUS BILLING

RETURNED CHECK CHARGE $25.00
RETURNED CHECK CHARGES MUST BE BASED ON THE UTILITY'S DOCUMENTABLE COST.

CUSTOMER DEPOSIT RESIDENTIAL (Maximum $50) $50.00

SERVICE RELOCATION FEE ..... Actual cost to relocate that service connection
THIS FEE MAY BE CHARGED IF A CUSTOMER REQURESTS RELOCATION OF AN EXISTING SERVICE CONNECTION.

SEASONAL RECONNECTION FEE
BASE RATE TIMES NUMBER OF MONTHS OFF THE SYSTEM NOT TO EXCEED SIX MONTHS WHEN LEAVE AND RETURN WITHIN A TWELVE MONTH PERIOD.

COMMERCIAL & NON-RESIDENTIAL DEPOSIT ..... 1/6TH OF ESTIMATED ANNUAL BILL

GOVERNMENTAL TESTING, INSPECTION AND COSTS SURCHARGE:
WHEN AUTHORIZED IN WRITING BY TCEQ AND AFTER NOTICE TO CUSTOMERS, THE UTILITY MAY INCREASE RATES TO RECOVER INCREASED COSTS FOR INSPECTION FEES AND WATER TESTING [30 TAC 291 21(K)(2)]

LINE EXTENSION AND CONSTRUCTION CHARGES:
REFER TO SECTION 3 0--EXTENSION POLICY FOR TERMS, CONDITIONS, AND CHARGES WHEN NEW CONSTRUCTION IS NECESSARY TO PROVIDE SERVICE.

RATES LISTED ARE EFFECTIVE ONLY
IF THIS PAGE HAS TCEQ APPROVAL STAMP

TEXAS COMM. ON ENVIRONMENTAL QUALITY
35542-C, CCN 21026, OCTOBER 7,2008
APPROVED TARIFF BY __LF/SP__

SECTION 2.0 -- SERVICE RULES AND POLICIES

Section 2.01--Texas Commission on Environmental Quality Rules

The utility will have the most current Texas Commission on Environmental Quality (TCEQ) Rules, Chapter 291, Water Utility Regulations, available at its office for reference purposes. The Rules and this tariff shall be available for public inspection and reproduction at a reasonable cost. The latest Rules or Commission approved changes to the Rules supersede any rules or requirements in this tariff.

Section 2102--Application for and Provision of Sewer Service

All applications for service will be made on the utility's standard application or contract form (attached in the Appendix to this tariff) and will be signed by the applicant before sewer service is provided by the utility. A separate application or contract will be made for each service at each separate location.

After the applicant has met all the requirements, conditions and regulations for service, the utility will install service connections, which may include a utility cut-off valve and/or take all necessary actions to initiate service. The utility will serve each qualified applicant for service within 5 working days unless line extensions or new facilities are required. If construction is required to fill the order and if it cannot be completed within 30 days, the utility will provide the applicant with a written explanation of the construction required and an expected date of service.

Where service has previously been provided, the utility will reconnect the service within one working day after the applicant has met the requirements for reconnection.

The customer will be responsible for furnishing and laying the necessary customer service pipe from the connection location to the place of use.

Section 2.03--Refusal of Service

The utility may decline to serve an applicant until the applicant has complied with the regulations of the regulatory agencies (state and municipal regulations) and for the reasons outlined in the TCEQ Rules. In the event that the utility refuses to serve an applicant, the utility will inform the applicant in writing of the basis of its refusal. The utility is also required to inform the applicant that a complaint may be filed with the Commission.

Section 2.04--Customer Deposits

If a residential applicant cannot establish credit to the satisfaction of the utility, the applicant will be required to pay a deposit as provided for in Section 1.02 of this tariff. The utility will keep records of the deposit and credit interest in accordance with TCEQ Rules.

Residential applicants 65 years of age or older may not be required to pay deposits unless the applicant has an outstanding account balance with the utility or another water or sewer utility which accrued within the last two years.

SECTION 2.0--SERVICE RULES AND REGULATIONS (Cont.)

Nonresidential applicants who cannot establish credit to the satisfaction of the utility may be required to make a deposit that does not exceed an amount equivalent to one-sixth of the estimated annual billings.

Refund of deposit. - If service is not connected, or after disconnection of service, the utility will promptly refund the customer's deposit plus accrued interest or the balance, if any, in excess of the unpaid bills for service furnished. The utility may refund the deposit at any time prior to termination of utility service but must refund the deposit plus interest for any customer who has paid 18 consecutive billings without being delinquent.

Section 2.05--Meter Requirements, Readings, and Testing

It is not a requirement that the utility use meters to measure the quantity of sewage disposed of by individual customers. One connection is required for each residential, commercial or industrial facility in accordance with the TCEQ Rules.

Section 2.06--Billing

Bills from the utility will be mailed monthly unless otherwise authorized by the Commission. The due date of the bills for utility service will be at least twenty (20) days from the date of issuance. The postmark on the bill or, if there is no postmark on the bill, the recorded date of mailing by the utility will constitute proof of the date of issuance. If the due date falls on a holiday or weekend, the due date for payment purposes will be the next work day after the due date.

A late penalty of $5.00 will be charged on bills received after the due date. The penalty on delinquent bills will not be applied to any balance to which the penalty was applied in a previous billing. The utility must maintain a record of the date of mailing to charge the late penalty.

Each bill will provide all information required by the TCEQ Rules. For each of the systems it operates, the utility will maintain and note on the monthly billing a telephone number (or numbers) which may be reached by a local call by customers. At the utility's option, a toll-free telephone number or the equivalent may be provided.

In the event of a dispute between a customer and a utility regarding any bill for utility service, the utility will conduct an investigation and report the results to the customer. If the dispute is not resolved, the utility will inform the customer that a complaint may be filed with the Commission.

Section 2.07--Service Disconnection

Utility service may be disconnected if the bill has not been paid in full by the date listed on the termination notice. The termination date must be at least 10 days after the notice is mailed or hand delivered.

SECTION 2.0--SERVICE RULES AND REGULATIONS (Cont.)

The utility is encouraged to offer a deferred payment plan to a customer who cannot pay an outstanding bill in full and is willing to pay the balance in reasonable installments. However, a customer's utility service may be disconnected if a bill has not been paid or a deferred payment agreement entered into within 30 days from the date of issuance of a bill and if proper notice of termination has been given.

Notice of termination must be a separate mailing or hand delivery in accordance with the TCEQ Rules.

Utility service may also be disconnected without notice for reasons as described in the TCEQ Rules.

Utility personnel must be available to collect payments and to reconnect service on the day of and the day after any disconnection of service unless service was disconnected at the customer's request or due to a hazardous condition.

Section 2.08--Reconnectionof Service

Service will be reconnected within 24 hours after the past due bill and any other outstanding charges are paid or correction of the conditions which caused service to be disconnected.

Section 2.09--Service Interruptions

The utility will make all reasonable efforts to prevent interruptions of service. If interruptions occur, the utility will re-establish service within the shortest possible time. Except for momentary interruptions due to automatic equipment operations, the utility will keep a complete record of all interruptions, both emergency and scheduled and will notify the Commission in writing of any service interruptions affecting the entire system or any major division of the system lasting more than four hours. The notice will explain the cause of the interruptions.

Prorated Bills - If service is interrupted or seriously impaired for 24 consecutive hours or more, the utility will prorate the monthly base bill in proportion to the time service was not available to reflect this loss of service.

Section 2.10--Quality of Service

The utility will plan, furnish, and maintain and operate a treatment and collection facility of sufficient size and capacity to provide a continuous and adequate service for all reasonable consumer uses and to treat sewage and discharge the effluent at the quality required by its discharge permit issued by the Commission. Unless otherwise authorized by the Commission, the utility will maintain facilities as described in the TCEQ Rules.

SECTION 2.0--SERVICE RULES AND REGULATIONS (Cont)

Section 2.11--Customer Complaints and Disputes

If a customer or applicant for service lodges a complaint, the utility will promptly make a suitable investigation and advise the complainant of the results. Service will not be disconnected pending completion of the investigation. If the complainant is dissatisfied with the utility's response, the utility must advise the complainant that he has recourse through the TCEQ complaint process. Pending resolution of a complaint, the commission may require continuation or restoration of service.

The utility will maintain a record of all complaints which shows the name and address of the complainant, the date and nature of the complaint and the adjustment or disposition thereof, for a period of two years after the final settlement of the complaint.

SECTION 2.20--SPECIFIC UTILITY SERVICE RULES AND REGULATIONS

This section contains specific utility service rules in addition to the rules previously listed under Section 2.0. It must be reviewed and approved by the Commission and in compliance with the TCEQ Rules to be effective.

The utility adopts the administrative rules of the TCEQ, as the same may be amended from time to time, as its company specific service rules and regulations. These rules will be kept on file at the company's offices for customer inspection during regular business hours. In the event of a conflict between the TCEQ's amended rules and the provisions of this tariff, the amended rules shall prevail. Where necessary, any conflicting provision of this tariff shall be deemed to have been superseded by the TCEQ rule in question to the degree that the Utility may conduct its lawful business in conformance with all requirements of said rule.

All payments for utility service shall be delivered or mailed to the utility's business office. If the business office fails to receive payment prior to the time of noticed disconnection for non-payment of a delinquent account, service will be terminated as scheduled. Utility service crews shall not be allowed to collect payments on customer accounts in the field.

Payment of an account by any means that has been dishonored and returned by the payor or payee's bank, shall be deemed to be delinquent. All returned payments must be redeemed with cash or valid money order. If a customer has two retumed payments within a twelve month period, the customer shall be required to pay a deposit if one has not already been paid.

Customer shall be liable for any damage or injury to utility-owned property or personnel shown to be caused by the customer, his invitees, his agents, his employees, or others directly under his control.

Limitation on Product/Service Liability. - The utility will not accept liability for any injury or damage to individuals or their property occurring on the customer's premises. The utility makes no representations or warranties (expressed or implied) that customer's appliances will not be damaged by disruptions of or fluctuations in sewer service whatever the cause. The utility will not accept liability for injuries or damages to persons or property due to disruption of sewer service caused by: (1) acts of God, (2) acts of third parties not subject to the control of the utility if the utility has undertaken such preventive measures as are required by TCEQ rules, (3) electrical power failures in sewer systems not required by TCEQ rule to have auxiliary power supplies, or (4) termination of sewer service pursuant to the utility's tariff and the TCEQ's rules.

If the services of a registered professional engineer are required as a result of an application for service received by the Utility for service to that applicant's service extension only, such engineer will be selected by the Utility and the applicant, and the applicant shall bear all expenses incurred therein.

If an applicant requires service other than the standard service provided by the utility, such applicant will be required to pay all expenses incurred by the utility in excess of the expenses that would be incurred in providing the standard service and connection.

SECTION 2.20--SPECIFIC UTILITY SERVICE RULES AND REGULATIONS (Cont.)

Any applicant who places unique or non-standard service demands on the system may be required to provide contributions in aid of construction (as may be allowed by TCEQ rule) for the actual costs of any additional facilities required to maintain compliance with the TCEQ minimum design criteria for sewer collection, treatment, pumping and discharge.

Any applicant or existing customer required to pay for any costs not specifically set forth in the rate schedule pages of this tariff shall be entitled to a written explanation of such costs prior to payment and/or commencement of construction. If the applicant or existing customer does not believe that these costs are reasonable or necessary, the applicant or existing customer shall have the right to appeal such costs to the TCEQ or such other regulatory authority having jurisdiction over the utility's rates in that portion of the utility's service area in which the applicant's or existing customer's property(ies) is located.

Tap fees may be increased by unique costs not normally incurred as may be permitted by 30 TAC 291.86(b)(1)(C).

The Utility adopts the Uniform Plumbing Code pursuant to TCEQ Rule 290.46(i). The piping and other equipment on the premises furnished by the customer will be maintained by the customer at all times in conformity with the requirements of the TCEQ, the Uniform Plumbing Code and with the service rules and regulations of the Utility. The customer will bring out his service line to his property line at the point on the customer's property mutually acceptable to the customer and the Utility subject to such requirements as may exist by TCEQ rule.

The utility will have the right of access to the customer's premises at all times reasonable for the purpose of installing, testing, inspecting or repairing sewer mains or other equipment used in connection with its provision of sewer service, or for the purpose of removing its property and disconnecting lines, and for all other purposes necessary to the operation of the utility system including inspecting the customer's plumbing for code, plumbing or tariff violations. The customer shall allow the utility and its personnel access to the customer's property to conduct any tests or inspections required by law. Unless necessary to respond to equipment failure, leak or other condition creating an immediate threat to public health and safety or the continued provision of adequate utility service to others, such entry upon the customer's property shall be during normal business hours. The customer may require any utility representative, employee, contractor, or agent seeking to make such entry identify themselves, their affiliation with the utility, and the purpose of their entry.

Threats to or assaults upon utility personnel shall result in criminal prosecution.

Except in cases where the customer has a contract with the utility for reserve or auxiliary service, no other sewer service will be used by the customer on the same installation in conjunction with the utility's service, either by means of a cross-over valve or any other connection. Customer shall not connect, or allow any other person or party to connect, onto any sewer lines on his premises. Two places shall not be permitted to be supplied with one service pipe where there is a sewer main abutting the premises.

SECTION 2.20--SPECIFIC UTILITY SERVICE RULES AND REGULATIONS (Cont.)

No application, agreement or contract for service may be assigned or transferred without the written consent of the utility.

It is agreed and understood that any and all sewer lines and other equipment furnished by the utility (excepting the customer's individual service lines from the point of connection to customer's structures on customer's premises) are and shall remain the sole property of the utility, and nothing contained herein or in a contract/application for service shall be construed to reflect a sale or transfer of any such lines or equipment to any customer. All tap and extension charges shall be for the privilege of connecting to said sewer lines and for installation, not purchase, of said lines.

Service applicants may be required to comply with any pre-condition to receiving service not printed herein as may exist under TCEQ rule (customer service, health and safety or environmental), USEPA rule, TWDB rule, local regulatory district rule or health department rule. Existing customer shall be required to comply with such rules, including modification of their plumbing and/or consumption patterns, after notice.

The disposal into the utility's sewer collection system of bulk quantities of food or food scraps not previously processed by a grinder or similar garbage disposal unit and grease and oils, except as incidental waste in process or wash water, used in or resulting from food preparation by sewer utility customers engaged in the preparation and/or processing of food for other than domestic consumption for sale to the public shall be prohibited. Specifically included in this prohibition are grease and oils from grease traps to other grease and/or oil storage containers. These substances are defined as "garbage" under Section 361.003 (12) of the Solid Waste Disposal Act, Texas Health and Safety Code, and are not "sewage" as defined by Section 26.001 (7) of the Texas Water Code. The utility only provides "sewage" collection and disposal service to the public. This service is limited to the collection, treatment and disposal of waterborne human waste and waste from domestic activities such as washing, bathing, and food preparation. This service does not include the collection, treatment or disposal of waste of such high BOD or TSS characteristics that it cannot reasonably be processed by the utility's state-approved waste water treatment plant within the parameters of the utility's state and federal waste water discharge permits. **THIS SERVICE DOES NOT INCLUDE THE COLLECTION AND DISPOSAL OF STORM WATERS OR RUN OFF WATERS, WHICH MAY NOT BE DIVERTED INTO OR DRAINED INTO THE UTILITY'S COLLECTION SYSTEM.**

Pursuant to TCEQ Rule 291.87(n), the utility may charge for all labor, material, equipment, and other costs necessary to repair to replace all equipment damaged due to service diversion or the discharge of wastes which the system cannot properly treat. This shall include all repair and clean up costs associated with discharges of grease and oils, except as incidental waste in process or wash water, used in or resulting from food preparation by sewer utility customers engaged in the preparation and/or processing of food for other than domestic consumption or for sale to the public discharged from grease traps or other grease and/or oil storage containers. The utility may charge for all costs necessary to correct service diversion or unauthorized taps where there is no equipment damage, including incidents where service is reconnected without authority.

SECTION 2.20--SPECIFIC UTILITY SERVICE RULES AND REGULATIONS (Cont.)

The utility may not charge any additional penalty or charge other than actual costs unless such penalty has been expressly approved by the regulatory authority having rate/tariff jurisdiction and filed in the utility's tariff.

Pursuant to TCEQ Rule 291.86(b)(3)(A) and (B), the customer's service line and appurtenances shall be construed in accordance with the laws and regulations of the State of Texas, local plumbing codes, or, in the absence of such local codes, the Uniform Plumbing Code. It shall be the customer's responsibility to maintain the service line and appurtenances in good operating condition, i.e., clear of obstruction, defects, or blockage. If the utility can provide evidence of excessive infiltration or inflow or failure to provide proper pretreatment, the utility may, with the written approval of the TCEQ's executive director, require the customer to repair the line or eliminate the infiltration or inflow or take such actions necessary to correct the problem. If the customer fails to correct the problem within a reasonable time, the utility may disconnect service after proper notice.

In accordance with the requirements of Utility's Wastewater discharge Permit, any and all repairs and maintenance of Utility's lines, tanks, pumps and equipment located on Customer's premises shall be performed exclusively by the Utility. Copies of the utility's state and federal waste water discharge permits shall be available for public inspection and copying in the utility's business office during normal business hours.

Non-residential customers electing the pretreatment option for sewage with non-standard characteristics may be charged those costs set forth in the utility's extension policy if such pretreatment fails or otherwise causes the utility's facilities to violate their waste-water discharge permits.

RESIDENTIAL SINGLE FAMILY GRINDER / SEWAGE STATIONS
Prior to the installation of a grinder / sewage station, the utility must be given a complete listing of all materials and equipment that will be used.

In order to prevent inflow and infiltration, the materials must comply with standard specifications, approved by the TCEQ.

After the utility has approved the proposed grinder / sewage station, the construction may begin. Once the work has been completed, the utility will do an inspection of the grinder / sewage station to ensure the complete installation was as specified.

The customer will retain ownership of receiving tanks or lift stations on the customer's property, and all maintenance, repairs and replacement are the customer's responsibility. The repairs may be performed by anyone selected by the customer, who is competent to perform such repairs. The utility requires that parts and equipment meet the minimum standards approved by the TCEQ, to insure proper and efficient operation of the sewer system.

SECTION 2.20--SPECIFIC UTILITY SERVICE RULES AND REGULATIONS (Cont.)

MULTI-FAMILY AND COMMERCIAL RECEIVING TANK / LIFT STATIONS
Prior to the installation of a grinder / sewage station, the utility must be given a complete listing of all materials and equipment that will be used, along with the storage for that development.

In order to minimize inflow and infiltration into the collection system, the installation and materials must comply with standard specifications approved by the TCEQ.

After the utility has approved the proposed grinder / sewage station, the construction may begin Once the work has been completed, the utility will do an inspection of the grinder / sewage station to ensure the complete installation was as specified.

Prior to acceptance of an existing receiving tank or lift station that is being used as an interceptor tank for primary treatment, waste water storage or pump tanks prior to discharge into an alternative or conventional sewage system must be cleaned, inspected, repaired, modified, or replaced if necessary to minimize inflow and infiltration into the collection system.

Existing pumps and tanks must be of adequate size to insure proper pumpage in the event of high flow or if one pump is out of service. If the existing pumps and receiving tanks or lift stations are of inadequate size the utility will not accept liability for backups due to: high flows, one pump out of service, rainfall causing inflow or infiltration, power outages, lack of proper storage capacity, etc.

If the collection system that discharges into the receiving tank / lift station has an inflow or infiltration problem and collects rainfall discharge, the owner or P.O.A. will correct it within 90 days of written notice from the utility. If no action is taken to correct the problem within 90 days, the utility may take the responsibility to make corrections at the owner's / P.O.A.'s expense.

The utility is not responsible for the collection system that discharges into the receiving tank / lift station.

The owner / P.O.A. shall be responsible for the monthly electric bill.

An adequate easement must encompass the receiving tank / lift station by a 15 foot radius and also a 15 foot access easement to the receiving tank / lift station site. If this easement does not exist, one must be created and filed of record

SECTION 3 0--EXTENSION POLICY

Section 3.01--Standard Extension Requirements

LINE EXTENSION AND CONSTRUCTION CHARGES No contribution in aid of construction may be required of any customer except as provided for in this approved extension policy.

The customer will be given an itemized statement of the costs, options such as rebates to the customer, sharing of construction costs between the utility and the customer, or sharing of costs between the customer and other applicants prior to beginning construction.

The utility will bear the full cost of any oversizing of collection mains necessary to serve other customers in the immediate area. The individual residential customer shall not be charged for any additional treatment capacity or facilities. Contributions in aid of construction may not be required of individual residential customers for treatment capacity or collection facilities unless otherwise approved by the Commission under this specific extension policy.

COST UTILITIES SHALL BEAR. Within its certificate area, the utility will pay the cost of the first 200 feet of any sewer collection line necessary to extend service to an individual residential customer within a platted subdivision. However, if the residential customer requesting service purchased the property after the developer was notified of the need to provide facilities to the utility, the utility may charge for the first 200 feet. The utility must also be able to document that the developer of the subdivision refused to provide facilities compatible with the utility's facilities in accordance with the utility's approved extension policy after receiving a written request from the utility.

Developers may be required to provide contributions in aid of construction in amounts to furnish the system with all facilities necessary to comply with the TCEQ's Rules.

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY

This section contains the utility's specific extension policy which complies with the requirements already stated under Section 3.01. It must be reviewed an approved by the Commission and in compliance with TCEQ Rules to be effective.

Residential customers not covered under Section 3.01 will be charged the equivalent of the costs of extending service to their property from the nearest collection line even if that line does not have adequate capacity to serve the customer. However, if the customer places unique, non-standard service demands upon the system, the customer may be charged the full cost of extending service to and throughout their property, including the cost of all necessary treatment capacity necessary to meet the service demands anticipated to be created by that property.

Developers will be required to provide contributions in aid of construction in amounts sufficient to furnish the development with all facilities necessary to provide for reasonable local demand requirements and to comply with TCEQ's minimum design criteria for facilities used in collecting, treating, transmitting, and discharging of wastewater effluent. For purposes of this subsection, a developer is one who subdivides or requests more than two connections on a piece of property. Commercial, industrial, and wholesale customers will be treated as developers.

The utility adopts the administrative rules of the TCEQ, as amended from time to time, as its company specific extension policy. These rules will be kept on file at the company's business office for customer inspection during normal business hours.

Non-residential customers generating sewage creating unique or non-standard treatment demands which might reasonably be expected to cause the utility's treatment facilities to operate outside their current waste-water discharge permit parameters may be charged the cost of all studies, engineering plans, permit costs, and collection treatment or discharge facilities construction or modification costs necessary to enable the utility to treat said sewage within permit limits acceptable to the TCEQ, EPA and other regulatory agencies. In the alternative, the customer may have the option of pre-treating said sewage in such a manner to that it may not reasonably be expected to cause the utility's facilities to operate outside their permit parameters. In such case, the customer shall be required to pay the utility's costs of evaluating such pretreatment processes and cost of obtaining regulatory approval of such pretreatment processes. In the event of the pretreatment facilities of a customer making this election fail and cause the utility's facilities to operate outside their permit parameters, the customer shall indemnify the utility for all costs incurred for clean ups or environmental remediation and all fines, penalties, and costs imposed by regulatory or judicial enforcement actions relating to such permit violations.

Non-residential sewer customers producing water borne waste significantly different from waste generated by residential customers may be required to provide a suitable sampling point at the property line for testing the customer's waste for chemicals or substances, e.g., grease, oils, solvents, pesticides, etc., which can reasonably be believed to have an injurious effect on the Utility's plant and/or its ability to treat and dispose of such wastes within the parameters of the Utility's permit. Utility shall have reasonable access to the sampling point at all times.

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY (Cont.)

Any service extension to a subdivision (recorded or unrecorded) may be subject to the provisions and restrictions of 30 TAC 291.86(d) and this tariff. When a developer wishes to extend the system to prepare to service multiple new connections, the charge shall be the cost of such extension, plus a pro-rata charge based upon the capacities of collection, transmission, storage, treatment and discharge facilities, compliant with the TCEQ minimum design criteria, which must be committed to such extension. As provided by 30 TAC 291.86(d)(4), for purposes of this section, commercial, industrial, and wholesale customers shall be treated as developers.

The imposition of additional extension costs or charges as provided by Sections 2.20 and 3.20 of this tariff shall be subject to appeal as provided in this tariff, TCEQ rules, or the rules of such other regulatory authority as may have jurisdiction over the utility's rates and services. Any applicant required to pay for any costs not specifically set forth in the rate schedule pages of this tariff shall be entitled to a written explanation of such costs prior to payment and/or commencement of construction. If the applicant does not believe that these costs are reasonable or necessary, the applicant shall have the right to appeal such costs to the TCEQ or such other regulatory authority having jurisdiction over the utility's rates in that portion of the utility's service area in which the applicant's property(ies) is located. Unless the TCEQ or other regulatory authority enters interlocutory orders to the contrary, service to the applicant may be delayed until such appeal is resolved.

The Utility will provide a written service application form to the applicant for each request for service received by the Utility's business offices. A separate application shall be required for each potential service location if more than one service connection is desired by any individual applicant. Service applications forms will be available for applicant pick up at the Utility's business office during normal weekday business hours. Service applications will be sent by prepaid first class United States mail to the address provided by the applicant upon request. Completed applications should be returned by hand delivery in case there are questions which might delay fulfilling the service request. Completed service applications may be submitted by mail if hand delivery is not possible.

The Utility shall serve each qualified service applicant within its certificated service area as soon as practical after receiving a completed service application. All service requests will be fulfilled within the time limits prescribed by TCEQ rules once the applicant has met all conditions precedent to achieving "qualified service applicant" status. If a service request cannot be fulfilled within the required period, the applicant shall be notified in writing of the delay, its cause and the anticipated date that service will be available. The TCEQ service dates shall not become applicable until the service applicant has met all conditions precedent to becoming a "qualified service applicant" as defined herein or by TCEQ rules.

The Utility is not required to extend service to any applicant outside of its certificated service area and will only do so, at the Utility's sole option, under terms and conditions mutually agreeable to the Utility and the applicant and upon extension of the Utility's certificated service area boundaries by the TCEQ. Service applicants may be required to bear the cost of the service area amendment.

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY (Cont.)

A "qualified service applicant" is an applicant who has: (1) met all of the Utiliry's requirements of service contained in this tariff, TCEQ rules and/or TCEQ order, (2) has made all payments for tap fees and extension charges, (3) has provided all necessary easements and rights-of-way necessary to provide service to the requested location, including staking said easements or rights-of-way where necessary, and (4) has executed a customer service application for each location to which service is being requested.

Where a new tap or service connection is required, the service applicant shall be required to submit a written service application and request that a tap be made. The tap request must be accompanied with a plat, map, diagram or written metes and bounds description of precisely where the applicant desires each tap or service connection is to be made and, if necessary, where the connection is to be installed, along the applicant's property line. The actual point of connection must be readily accessible to Utility personnel for inspection, servicing and testing while being reasonably secure from damage by vehicles and mowers. If the Utility has more than one main adjacent to the service applicant's property, the tap or service connection will be made to the Utility's near service main with adequate capacity to service the applicant's full potential service demand. If the tap or service connection cannot be made at the applicant's desired location, it will be made at another location mutually acceptable to the applicant and the Utility. If no agreement on location can be made, applicant may refer the matter to the TCEQ for resolution. Unless otherwise ordered by the TCEQ, the tap or service connection will not be made until the location dispute is resolved.

The Utility shall require a developer (as defined by TCEQ rule) to provide permanent recorded public utility easements as a condition of service to any location within the developer's property. The Developer shall be required to obtain all necessary easements and rights-of-way required to extend the Utility's existing service facilities from their nearest point with adequate service capacity (as prescribed by TCEQ rules and local service conditions) to and throughout the Developer's property. The easements shall be sufficient to allow the construction, installation, repair, maintenance, testing, and replacement of any and all utility plant necessary to provide continuous and adequate service to each and every potential service location within the property at full occupancy. Unless otherwise restricted by law, sewage treatment, holding tank sites, lift station sites shall convey with all permanent easements and buffers required by TCEQ rules. Unless otherwise agreed to by the Utility, pipe line right-of-way easements must be at least 15 feet wide to allow adequate room to facilitate backhoe and other heavy equipment operation and meters. Easements must be provided for all storage, treatment, pressurization and disposal sites which are sufficient to construct and maintain all weather roads as prescribed by TCEQ rules. All easements shall be evidenced, at Developer's expense, by recorded county-approved subdivision plat or by specific assignment supported by metes and bounds survey from a surveyor licensed by the State of Texas.

Prior to the extension of utility service to developers (as defined by TCEQ rules) or new subdivisions, the Developer shall comply with the following:

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY (Cont.)

(a) The Developer shall make a written request for service to property that is to be subdivided and developed. The Developer shall submit to the Utility a proposed plat on a scale of one inch (1") to two hundred feet (200') for review and determination of required easements, utility plant, and plant location. If sewer service is requested, the plat must contain elevation data. A reconcilable deposit in an amount set by the Utility may be required to cover preliminary engineering, legal and copy cost to be incurred by the Utility in reviewing and planning to meet this service request. The plat and/or accompanying information shall identify the type, location and number of houses and other planned structures that will be requiring utility service. If other than residential structures are to be located on the property, all other types of anticipated businesses and their service demands shall be identified with specificity. All areas requiring special irrigation and/or other unique water demands must be identified. To the extent reasonably possible, this information must be precise so that adequate facilities can be designed and constructed to meet all future service demands without hazard to the public, other utility customers and/or the environment.

(b) After the requirements of easements and rights-of-way have been determined, a red line copy will be returned by the Utility to the Developer for final plat preparation.

(c) Copies of all proposed plats and plans must be submitted to the Utility prior to their submission to the county for approval to insure that they are compatible with the adequate long-term utility needs of potential service customers. Copies will be returned after review by the Utility so that necessary changes may be incorporated into the Developer's final submitted plat(s) and plans.

(d) The Utility shall be provided with three (3) certified copies of the final plat(s) approved by the County Commissioners Court. At this time, the Utility will begin engineering the facilities necessary to serve the property. Plans and specifications will be prepared and submitted to the TCEQ by the Utility if required by law. If further plat or plans changes are necessary to accommodate the specific service needs of the property and the anticipated customer demands, the Developer will be so notified. Plat amendments must be obtained by the Developer. The Developer shall be notified when all required TCEQ or other governmental approvals or permits have been received. No construction of utility plant which requires prior TCEQ plans approval shall be commenced until that approval has been received by the Utility and any conditions imposed by the TCEQ in association with its approvals have been satisfied.

(e) The Developer shall be required to post bond or escrow the funds necessary to construct all required utility plant, except individual sewer connections, required to serve the property. Construction shall not commence until funds are available. If the construction is to be done in coordination with the phased development of the property, funds must be provided in advance which are sufficient to complete each phase. No phase or facilities for any phase shall be constructed prior to the bonding or escrowing of all funds associated with that phase.

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY (Cont.)

(f) At the sole option of the Utility, the Developer may be required to execute a Developer Extension Contract setting forth all terms and conditions of extending service to their property including all contributions-in-aid of construction and developer reimbursements, if any.

(g) The Utility may require the Developer to commence construction of subdivision improvements within three (3) months of utility plans approval or the Utility may abate its construction activities until full development construction begins. If the Developer stops construction of subdivision improvements for any purpose, the Utility may abate its construction for a similar period.

(h) As soon as the roads are rough cut and prior to paving, extension lines will need to be constructed at each road crossing. The Developer must notify the Utility sufficiently in advance of this development stage to allow for the necessary utility construction without disruption to other service operations of the Utility. Failure to provide adequate advance notice and cooperation in the construction of necessary utility plant may result in additional delays in obtaining service to the property. The Developer shall be required to pay for all additional costs of road boring or other remedial construction necessary to install adequate utility plant throughout the affected property.

Within its certificated area, the Utility shall bear the cost of the first 200 feet of any water main or sewer collection line necessary to extend service to an individual residential service applicant within a platted subdivision unless the Utility can document:

(a) that the developer of the subdivision refused to provide facilities compatible with the utility's facilities in accordance with the Utility's approved extension policy after receiving a written request from the Utility; or,

(b) that the Developer defaulted on the terms and conditions of a written agreement or contract existing between the utility and the developer or the terms of this tariff regarding payment for services, extensions, or other requirements; or in the event the Developer declared bankruptcy and was therefore unable to meet obligations; and,

(c) that the residential service applicant purchased the property from the Developer after the Developer was notified of the need to provide facilities to the utility. A residential service applicant may be charged the remaining costs of extending service to his property; provided, however, that the residential service applicant may only be required to pay the cost equivalent to the cost of extending the nearest water main or wastewater collection line, whether or not that line has adequate capacity to serve that residential service applicant. The following criteria shall be considered to determine the residential service applicant's cost for extending service:

SECTION 3.20--SPECIFIC UTILITY EXTENSION POLICY (Cont.)

(1) The residential service applicant shall not be required to pay for costs of main extensions greater than 2" in diameter for pressure wastewater collection lines and 6" in diameter for gravity wastewater lines.

(2) Exceptions may be granted by the TCEQ Executive Director if:

(A) adequate service cannot be provided to the applicant using the maximum line sizes listed due to distance or elevation, in which case, it shall be the utility's burden to justify that a larger diameter pipe is required for adequate service;

(B) larger minimum line sizes are required under subdivision platting requirements or applicable building codes.

(3) If an exception is granted, the Utility shall establish a proportional cost plan for the specific extension or a rebate plan which may be limited to seven years to return the portion of the applicant's costs for oversizing as new customers are added to ensure that future applicants for service on the line pay at least as much as the initial service applicant.

For purposes of determining the costs that service applicants shall pay, commercial customers with service demands greater than residential customer demands in the certificated area, industrial, and wholesale customers shall be treated as developers.

APPENDIX A -- SAMPLE SERVICE AGREEMENT
From 30 TAC Chapter 290.47(b), Appendix B
SERVICE AGREEMENT

PURPOSE. The Bolivar Utility Services, LLC is responsible for protecting the drinking water supply from contamination or pollution which could result from improper private water distribution system construction or configuration. The purpose of this service agreement is to notify each customer of the restrictions which are in place to provide this protection. The utility enforces these restrictions to ensure the public health and welfare. Each customer must sign this agreement before the Bolivar Utility Services, LLC will begin service. In addition, when service to an existing connection has been suspended or terminated, the sewer system will not re-establish service unless it has a signed copy of this agreement.

II. RESTRICTIONS. The following unacceptable practices are prohibited by State regulations

A. No direct connection between the public drinking water supply and a potential source of contamination is permitted. Potential sources of contamination shall be isolated from the public water system by an air-gap or an appropriate backflow prevention device.

B No cross-connection between the public drinking water supply and a private water system is permitted. These potential threats to the public drinking water supply shall be eliminated at the service connection by the installation of an air-gap or a reduced pressure-zone backflow prevention device.

C No connection which allows water to be returned to the public drinking water supply is permitted.

D. No pipe or pipe fitting which contains more than 8.0% lead may be used for the installation or repair of plumbing at any connection which provides water for human use.

E. No solder or flux which contains more than 0.2% lead can be used for the installation or repair of plumbing at any connection which provides water for human use.

III. SERVICE AGREEMENT. The following are the terms of the service agreement between the Bolivar Utility Services, LLC (the Sewer System) and NAME OF CUSTOMER (the Customer).

A. The Sewer System will maintain a copy of this agreement as long as the Customer and/or the premises is connected to the Sewer System.

B. The Customer shall allow his property to be inspected for possible cross-connections and other potential contamination hazards. These inspections shall be conducted by the Sewer System or its designated agent prior to initiating new water service; when there is reason to believe that cross-connections or other potential contamination hazards exist; or after any major changes to the private water distribution facilities. The inspections shall be conducted during the Sewer System's normal business hours.

C. The Sewer System shall notify the Customer in writing of any cross-connection or other potential contamination hazard which has been identified during the initial inspection or the periodic reinspection.

D. The Customer shall immediately remove or adequately isolate any potential cross-connections or other potential contamination hazards on his premises.

E. The Customer shall, at his expense, properly install, test, and maintain any backflow prevention device required by the Sewer System. Copies of all testing and maintenance records shall be provided to the Sewer System.

IV. ENFORCEMENT. If the Customer fails to comply with the terms of the Service Agreement, the Sewer System shall, at its option, either terminate service or properly install, test, and maintain an appropriate backflow prevention device at the service connection. Any expenses associated with the enforcement of this agreement shall be billed to the Customer.

CUSTOMER'S SIGNATURE:_____

DATE:_____