

## Scope of Work

**ERDMAN**

HVAC / 230000

CNS Outpatient Clinic - Remodel  
Centre for Neuro Skills  
Webster, TX / Project# 652920

Scope Issuance date: 11/10/2017  
Written proposals are due: Wednesday, November 22, 2017 at 10AM CST  
Submit to: Andrew Karll at [akarll@erdman.com](mailto:akarll@erdman.com)

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This scope of work is intended to cover all **HVAC** work for this project unless noted otherwise. Subcontractor will be specifically responsible for, but not necessarily limited to the following items.

1. Safety Instructions:

- 1.1. Subcontractor will meet all safety requirements according to the "Safety" section of the attached "General Requirements" scope of work.
- 1.2. Subcontractor will perform work in a manner that complies with all federal, state, and local safety regulations.
- 1.3. Subcontractor will be familiar with and comply with all site specific hot work procedures.

2. Standard HVAC Instructions:

- 2.1. The terms "Design / Builder", "Contractor" and "Builder" are used interchangeably in this Scope of Work, in the Plans and Specifications, and all refer to the Design / Builder, Erdman.
  - 2.2. Subcontractor will provide insurance certificates in accordance with the terms of the Subcontract, including but not limited to Section 16.0 to Contractor prior to the commencement of work. No payment will be made without receipt of the insurance certificates. Payment to be as per payment letter received.
  - 2.3. Subcontractor will review and meet all subcontractor insurance requirements including mold and pollution coverage. If subcontractor currently does not have required coverage, they will obtain quotes from their insurance agent and include the cost on the proposal breakdown form. These requirements along with a sample COI are located within Procure.
  - 2.4. Subcontractor will furnish labor, material, equipment and supervision to install a complete sheet metal HVAC system according to state and local codes and according to plans and specifications.
  - 2.5. Subcontractor will rework and reuse existing ductwork and HVAC equipment per the plans and specifications. Subcontractor will be responsible to perform all necessary demo work associated with HVAC.
  - 2.6. Subcontractor's work will comply with all governing codes and regulations. Any conflicts with Contractor's documents will be noted on the proposal form.
  - 2.7. Subcontractor will perform work in phases as directed by Contractor. Subcontractor will review and perform work per phasing plan.
  - 2.8. Subcontractor will provide daily clean up and removal of debris generated by this work. All trash generated by Subcontractor will be picked up and disposed of in the dumpster furnished by ERDMAN.
  - 2.9. Subcontractor will coordinate work with Contractor and other subcontractors.
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- 2.10. Subcontractor will provide as built drawings at the project's completion. Retainage will not be released until as built drawings have been submitted.
- 2.11. Subcontractor will provide and be responsible for his own layout as developed from controls established by the Contractor.
- 2.12. Subcontractor will unload and inventory all Contractor supplied material. Subcontractor provide a certified forklift operator for their work.
- 2.13. Subcontractor will carefully coordinate his work with the job requirements and shall furnish, at all times, sufficient material, skilled workmen and equipment to perform the work to the satisfaction of Contractor so as not to delay the project in whole or part.
- 2.14. Subcontractor will coordinate the HVAC system with all structural members and sound partitions and make provisions for return air openings in such barriers to allow adequate air return in the ceiling plenum.
- 2.15. Subcontractor shall assist in documenting and following commission check list. Commissioning checklist will be provided by Builder.
- 2.16. Temperature controls and wiring will be done by others.
- 2.17. Subcontractor will have balancing done by others, "separate certified third party contractor". Subcontractor to furnish report prior to completion of project.
- 2.18. Subcontractor will furnish and install ceiling markers, pipe identification, flow arrows, brass valve tags at all valves and valve charts as specified.
- 2.19. Subcontractor shall include filter replacement of all equipment that is used during construction, Filters to be provided by Subcontractor.
- 2.20. Subcontractor will coordinate all inspections for HVAC work. Subcontractor will also assist in commissioning of systems and fill out commissioning checklists provided by ERDMAN
- 2.21. Subcontractor shall participate and assist in equipment startup, owner orientation, and provide all closeout documents.
- 2.22. Subcontractor shall layout and cut holes in steel decking as required to install main duct drops.
- 2.23. Subcontractor to include all HVAC specialties, and refrigerant piping per plans and specs.
- 2.24. Subcontractor will be responsible for HVAC controls work.

### 3. Buyout Item Instructions:

#### **1960 / Rectangular Ductwork System (15500):**

1. Subcontractor will furnish all rectangular ductwork in accordance with plans and specifications.
  2. Subcontractor will provide all necessary demo/rework to existing ductwork per plans and specifications.
  3. Subcontractor will take note and assure that duct is supplied with the proper gauge sheet metal.
  4. Subcontractor shall insulate all ductwork per specifications. Duct sizes noted are free inside area.
  5. Subcontractor will provide shop drawings for main supply and return risers. Field verification will be made before fabricating major ductwork.
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6. Subcontractor will ensure that all ductwork is supported in strict accordance with SMACNA standards. Where threaded rod is utilized, subcontractor will provide a double lock nut configuration.
7. Subcontractor will furnish and install all fire or smoke dampers per code and manufacturers requirements.
8. Subcontractor will seal all ductwork per specifications. NO SEAM TAPE WILL BE PERMITTED.
9. Subcontractor will verify that all return air openings are properly installed in drywall partitions. Subcontractor will notify Contractor's superintendent immediately if actual openings deviate from those shown and specified.
10. Subcontractor will be responsible that all duct take offs are 45 degrees.
11. Subcontractor will take EXCEPTIONAL CARE in maintaining the cleanliness of all ductwork during fabrication, transportation, installation and throughout the entire construction period. It is understood that the owner or contractor may reject any ductwork that is not clean at the time of building turnover. Ductwork openings shall be kept closed except while it is being worked on at that very moment. All open ductwork will be sealed at the end of a work day during construction, including but not limited to duct drops from RTUs. Closure shall be sufficient to prevent the infiltration of animals and insects as well as water, dirt or dust. Tarps will not be accepted.

### 1970 / Round Ductwork System (15500):

1. Subcontractor will furnish and install all round ductwork in accordance with plans and specifications.
2. Subcontractor will provide all necessary demo/rework to existing ductwork per plans and specifications.
3. Subcontractor will seal all ductwork per specifications. NO SEAM TAPE WILL BE PERMITTED.
4. Subcontractor will be allowed to use flex duct per the detail shown on the plans. It is important to install it exactly in the location shown and refer to specifications for exact brand/type allowed.
5. Subcontractor will take EXCEPTIONAL CARE in maintaining the cleanliness of all ductwork during fabrication, transportation, installation and throughout the entire construction period. It is understood that the owner or contractor may reject any ductwork that is not clean at the time of building turnover. Ductwork openings shall be kept closed except while it is being worked on at that very moment. All open ductwork will be sealed at the end of a work day during construction, including but not limited to duct drops from RTUs. Closure shall be sufficient to prevent the infiltration of animals and insects as well as water, dirt or dust. Tarps will not be accepted.

### 1000 / Firestopping (07250):

1. Subcontractor will provide firestops where rated floor and wall assemblies are penetrated by plumbing work. Subcontractor will be required to submit manufactures UL assemblies for approval for each type of penetration that will be used for their work. Subcontractor will use Hilti products only.

### 1980 / Duct Insulation (15500):

1. Subcontractor shall furnish and install all ductwork insulation per plans and specifications.

### 2020 / Test & Balance (15500):

1. Test and Balance of the equipment shall be by a separate "third party", certified Test and Balance subcontractor under this subcontract.

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**2010 / Equipment Installation (15500):**

1. Subcontractor will furnish ALL HVAC equipment and devices per the plans and specifications, including but not limited to RTU's, VAV's, dampers, grilles, and diffusers.
2. Subcontractor will receive, unload, and install all HVAC materials related to this scope of work.
3. Subcontractor will be responsible for loading, unloading, hoisting, handling, and storage of all equipment which relates to this scope of work.
4. Contractor will furnish and install any wood blocking required for curbs.
5. Subcontractor will supply all fittings and other devices to VAV units.
6. Subcontractor will install, support, and provide isolation for the VAV units, or blower coils.
7. Subcontractor will be responsible to make sure all equipment is installed per manufacturers' recommendations.

4. Miscellaneous:

- 4.1. **Work shall commence early December 2017.**
- 4.2. Contractor will provide temporary toilets.
- 4.3. Contractor will provide temporary water and power.
- 4.4. Contractor will provide dumpsters.
- 4.5. Contractor will provide surveying offsets and control points.
- 4.6. Contractor will provide building permit.
- 4.7. Subcontractor will **EXCLUDE** sales tax, project is tax exempt.

5. Exclusions:

- 5.1. Hydronic piping (N/A)
- 5.2. Roof penetration and patching work (by others)

6. Alternates:

- 6.1. N/A

7. Document List:

- 7.1. Plans dated "For Permit and Construction" 10/27/2017
- 7.2. Specifications dated 10/27/2017
- 7.3. Existing building drawings
- 7.4. Phasing plan dated 9/12/2017

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Submitting Company: \_\_\_\_\_

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 Centre for Neuro Skills  
 Webster, TX / Project# 652920

**Proposal Breakdown:**

To receive consideration, your proposal must include all labor, material, equipment, and services to complete all of the work required by the contract documents. All assumptions and/or qualifications must be itemized and included with Subcontractor's proposal.

ITEM #:	ITEM		AMOUNT:	QTY	UNIT	MH
1960/70	Rectangular & Round Ductwork System	\$				
1980	Duct insulation	\$				
2010	Equipment	\$				
1000	Firestopping	\$				
2020	Test & Balance	\$				
	HVAC Controls	\$				
	Misc., Permits/inspections fee's, etc.	\$				
	Add. Insurance Coverage (i.e. Pollution/Mold) if required	\$				
<b>TOTAL PROPOSED:</b> (please include all necessary taxes)		\$				

ALTERNATES:		AMOUNT:	QTY	UNIT	MH
	\$				
	\$				
	\$				
	\$				

ADDITIONAL ITEM UNIT PRICES:	AMOUNT:	UNIT
	\$	
	\$	
	\$	

**Extra Work Rates:**

Journeyman	_____ \$ per hour +	_____ \$ overhead +	_____ \$ profit = TOTAL	=====
Apprentice	_____ \$ per hour +	_____ \$ overhead +	_____ \$ profit = TOTAL	=====
Material Cost	_____ \$ for material	_____ % overhead +	_____ % profit	=====

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Submitted by:

Company Name \_\_\_\_\_

Company Contact \_\_\_\_\_

Street Address \_\_\_\_\_

City / State / Zip \_\_\_\_\_

Phone Number \_\_\_\_\_

Cell Phone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E Mail Address \_\_\_\_\_

Insurance Modifier Rating \_\_\_\_\_

Estimated Work Duration: \_\_\_\_\_

Federal ID Number \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Work to be completed by Union or Non-Union forces? (circle one)

Work included in this scope that would be subcontracted to others: (list all work)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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Proposal Received by Erdman:

Date: \_\_\_\_\_ Time: \_\_\_\_\_

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### General Requirements

#### **Safety:**

1. Safety is a concern to all of us. If you feel there is a problem in some area, please notify Contractor's Superintendent immediately.
2. Subcontractor will perform their work in such a manner as to meet all current OSHA, state and local safety requirements as well as the Contractor's safety program. Subcontractor must have an established safety program as well.
3. Subcontractor will report any employee injury, however minor, to Contractor immediately.
4. Subcontractor will keep corridors clean for possible emergency egress. Any floor spills must be wiped up immediately.
5. Subcontractor will wear hard hat unless otherwise notified.
6. Subcontractor shall wear safety glasses when necessary.
7. Material Safety Data Sheets (MSDS's) are on file in the Contractor's field office. Subcontractors will receive, understand and acknowledge this information. Subcontractors will provide Contractor's field office with their MSDS information at the start of the job.
8. Subcontractor will be responsible to close any safety barricades or gates they open immediately after opening.
9. Subcontractor will provide drinking water for their personnel.
10. Subcontractor will provide all fall protection including fall protection equipment as required by OSHA, including but not limited to the latest interpretation of regional and local OSHA offices.
11. Subcontractor will conduct weekly safety (i.e., tool box) meetings with his on-site employees and provide Contractor's Superintendent with safety meeting documentation.

#### **Administration:**

12. Subcontractor will name Erdman Co. as an additional insured on subcontractor's insurance policy.
13. Subcontractor will provide Contractor with a certificate of insurance prior to the start of work (Workers Compensation and Liability). Payment for work will be made per payment letter received and will be contingent upon Contractor receiving these certificates.
14. Subcontractor will submit request for payments on Contractor's payment request forms and shall include subcontract number (purchase order) and project number. All requests for payments must also include a lien waiver for previous billings.
15. Subcontractor will note that all project correspondence, including invoices, should bear the project name, project number, and Subcontractor's purchase order number.
16. Subcontractor will have all extra hourly time tickets signed by the contractor's superintendent on the day the work is performed. All extra work must be authorized in writing by contractor's project manager or superintendent using contractor's purchase order rider or field order or subcontractor's extra work order ticket.
17. Subcontractor will provide Contractor with telephone numbers where they can be reached in the event of an emergency, prior to starting any work.

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### **Housekeeping:**

18. Subcontractor will be responsible for their own cleanup, which includes materials supplied to them by Contractor. General housekeeping of your work must be done daily. All refuse is to be readily disposed of in the provided dumpster. This includes, but is not limited to, breaking down of boxes and crates. Each Subcontractor will have employees dispose of luncheon debris in garbage can or dumpster. If Subcontractor does not readily cleanup he will be back charged accordingly. Contractor will provide dumpster services, the intent will be to separate cardboard, steel, and general debris which will be separate dumpsters to be recycled. Each Subcontractor will be responsible for their own workers, to help enforce recycling on this project.
19. Subcontractor will lock up all tools and materials when not in use.
20. Subcontractor will keep storage areas neatly organized and free of trash and debris at all time.

### **General Requirements:**

21. Subcontractor will note that the job trailer and project site are non-smoking environments.
22. Subcontractor will note that alcohol and drugs are not allowed on the jobsite under any circumstances. Anyone found on the jobsite under the influence may be banned from this project.
23. Subcontractor will think not only of themselves, but fellow contractors. We are all here to be as efficient as possible. Work together.
24. Subcontractor will coordinate his operations carefully so as to cause minimal disturbance to the ongoing operations of other trades workman, and if applicable, the existing facility.
25. Subcontractor will agree to provide responsible supervision for this work.
26. All work is to be performed in a prompt and diligent manner to the satisfaction of the Contractor. The Subcontractor shall at all times provide sufficient material, skilled workmen, equipment, and supervision required to perform the Work so as not to delay the project in whole or in part. The Subcontractor shall coordinate his work with the job requirements and with other trades as required to maintain the project schedule. Time is of the essence, therefore any workdays lost due to weather or other unforeseen act may be required to be made up on Saturday at the discretion of the Contractor's Superintendent.
27. Subcontractor will supply the necessary manpower, materials and equipment to meet the attached project schedule and completion date(s), so as not to delay the project.
28. Subcontractor will do all work in accordance with drawings and specifications provided.
29. Subcontractor will note any materials or equipment that will be furnished by Contractor.
30. Subcontractor will provide all necessary or required testing of their work unless noted otherwise.
31. Subcontractor will not leave the job until the work is approved and accepted by an authorized representative of the Contractor.
32. Subcontractor will use Contractor's Superintendent as their contact person.
33. Subcontractor will note that there will be no noisy activities not directly related to work. There will be no horse-play, profanity, loud disturbances or inappropriate dress.
34. Normal working hours are between: 7:00 a.m. to 5:00 p.m.
35. Permission must be granted by Contractor to work outside of these hours.
36. Subcontractor will stay in their designated work areas.
37. Subcontractor will be responsible for traffic control on their portion of the Work as required for deliveries and completion of their work.

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**Site:**

38. Subcontractor will comply with parking rules as directed by Contractor. Company vehicles have preference to personal vehicles. Parking on site will be very limited!
39. Subcontractor will have temporary toilet facilities provided by Contractor.
40. Subcontractor will have temporary power and general lighting furnished by Contractor. Task lighting will be the responsibility of the Subcontractor.

**Materials:**

41. Subcontractor will comply with staging areas for storage of materials in building or on site, as directed by Contractor. Any materials that are in the way of another trade must be moved promptly at the request of Contractor.
42. Subcontractor will have all deliveries unloaded at the jobsite, and should coordinated them with the Contractor's Superintendent.

**Owner Relations:**

43. Subcontractor will coordinate with Contractor and the Owner's Maintenance Supervisor all cutting, burning, welding, soldering, or other disruptive activities in the existing Owner facilities.
44. Subcontractor will monitor and control noise and dust to the satisfaction of the Owner and Contractor.
45. Subcontractor will notify Contractor at least four days in advance of performing work which may activate any smoke detectors or sprinkler systems.

**Project Specific:**

46. AM/FM radios, Tape and CD Players will not be allowed.
47. No sleeveless shirts, shorts, sweat pants, or tennis shoes will be allowed while working on site.
48. Hospital campus is a "smoke free" environment and will be enforced on the project site.