

Critical Solutions International

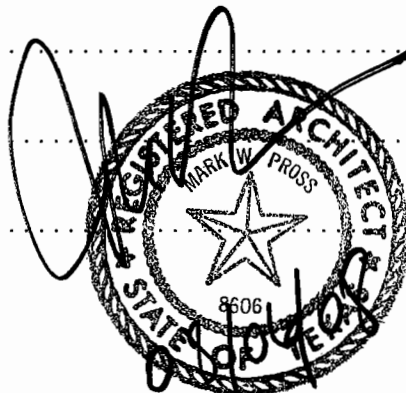
FRANKFORD TRADE CENTER BUILDING 1A

OFFICE/WAREHOUSE FINISHOUT

CARROLLTON, TEXAS

August 7th, 2008

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DIVISION 1 - GENERAL REQUIREMENTS

1.01

General Conditions of the Contract:

- A. American Institute of Architects Documents A107, "Standard Form of Agreement between Owner and Contractor, Short Form Agreement for Small Construction Contracts", April 1997 Edition, is a part of this Contract.

- B. Following supplements modify, change, delete from or add to "General Conditions" referred to above. Where text of the General Conditions is modified herein, unaltered provisions contained therein shall remain in effect.
 - 1. Article 9 - Owner: All references contained herein to "Owner" shall hereby be deemed to read "Argent Frankford, L.P."

 - 2. Article 12 - Work by Owner or by Separate Contractor: The term "N.I.C." (Not in Contract) as used in these Contract Documents shall be by others, as governed by this paragraph.

 - 3. Article 15 - Payments and Completion:
 - a. Upon Substantial Completion, the Contractor shall submit to Argent Frankford, L.P. AIA Document A704, Certificate of Substantial completion, listing, if any, the items that have not been completed and an approximate date that completion can be expected.

 - b. Contractor shall deliver the following to Argent Frankford, L.P., along with Application for Final Payment:
 - (1) Guarantees and/or bonds required on specific parts of the Work.

 - (2) All necessary Certificates of Occupancy required by governmental jurisdictional authorities for permanent filing by Argent Frankford, L.P.

 - (3) Operation and maintenance data. (Refer to 1.08).

General Conditions Of The Contract (Continued):

- (4) Project record documents. (Refer to 1.10)
 - (5) Door keys. (Refer to 8.06, A.1).
 - (6) Waiver of Lien, (Form attached to contract).
 - (7) Asset Guideline Classification. (Form attached to contract).
4. Article 17 - Insurance: Every Contractor and all furnishing services to Argent Frankford, L.P. or any of its Subsidiary Companies must provide Argent Frankford, L.P. with evidence of the following minimum insurance requirements. In no way do these minimum requirements limit the liability assumed elsewhere in this contract:
- a. Workers' Compensation and Employers Liability:
 - (1) Statutory requirements of State of Texas.
 - (2) Coverage "B"- Employers liability, limit of \$100,000.
 - b. Comprehensive General Liability:
 - (1) Comprehensive General Liability form, including Independent Contractors, Products Completed Operation, Personal Injury, (exclusions A and C deleted), Broad Form Property Damage (including Completed Operation), and afford coverage for the X, C, and U hazards.
 - (2) Contractual Liability: Blanket basis insuring the liability assumed under this contract (exclusions O, P, Q, and R deleted).
 - (3) Limits of Liability: Bodily Injury, \$250,000 each occurrence, \$500,000 each aggregate, Property Damage, \$100,000 each occurrence, \$100,000 aggregate.

General Conditions Of The Contract (Continued):

- c. **Comprehensive Automobile Liability:**
 - (1) Comprehensive Automobile Liability form, including all Owned, Non-Owned and Hired Vehicles.
 - (2) Limits of Liability: Bodily Injury, \$250,000 each person \$500,00 each occurrence, Property Damage, \$100,000 each occurrence.

- d. **Umbrella Liability:**
 - (1) Such insurance shall provide coverage with limits of not less than \$1,000,000 per occurrence \$1,000,000 aggregate, in excess of the underlying coverages listed in A, B and C above.

- e. **Additional Requirements:**
 - (1) Contractor shall require same minimum insurance requirements, as listed above, of all the Subcontractors, and these Subcontractors shall also comply with additional requirements listed below.
 - (2) All insurance coverages required as herein set forth, shall be at sole cost and expense of Contractor, Subcontractor or those providing third party services, and deductibles shall be assumed by, for account of, and at their sole risk.
 - (3) Where prohibited by law, all insurance policies shall contain provisions that insurance companies waive their rights of recovery or subrogation against Argent Frankford, L.P., its Agents, Servants, Invites, Employees, Co-lessees, Co-venturers, Affiliated Companies, Contractors, Subcontractors, and their Insurer.

1.01

General Conditions Of The Contract (Continued):

- (4) A Certificate of Insurance evidencing all of the above must be presented to Argent Frankford, L.P. prior to work commencing. Certificates shall show:

Argent Frankford, L.P. to receive thirty (30) days notice prior to cancellation or adverse material change.

- (5) Article 19 - The Contractor shall begin work to correct defects caused by errors or omissions of the Contractor within five (5) days after receipt of written notice from Argent Frankford, L.P. Such work shall be completed, without delay, in a period consistent with industry standards. Otherwise, Argent Frankford, L.P. may elect to have work corrected by others at the expense of the Contractor. The Contractor shall also repair or provide suitable replacement for damage to existing buildings and/or work of other trades, as a result of work performed by him under this article. The Contractor shall also repair or provide suitable replacement for damage to building contents as a result of work performed by him under this article unless he otherwise indemnifies himself against such damage with Owner's contents.

1.02

Contractor Requirements:

- A. The Contractor shall provide and install complete operating systems.
- B. The General Contractor's Subcontractors shall meet all applicable Codes and Ordinances.
- C. Comply with all General Conditions and Requirements of the Construction Contract.

1.03

Permits and Fees:

- A. The Contractor shall be responsible for obtaining any required building permits and shall include the cost of all necessary permits, fees, testing, cleaning, etc. in his price.

1.04

Temporary Utilities:

- A. The Contractor shall be responsible for any temporary utilities required during construction.

1.05

Substitutions:

- A. Submit five (5) copies of each request for substitution, including:
 - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
 - 2. For products:
 - a. Product identification, including name and address of manufacturer.
 - b. Product description, performance and test data, and reference standards.
 - 3. For construction methods:
 - a. Detailed description of proposed method.
 - b. Illustration drawings.
 - 4. Changes in construction schedule.
 - 5. Accurate cost data in comparison with product or method specified.
- B. In making request for substitution, Contractor represents that:
 - 1. He has investigated proposed substitution and determined that it is equal or superior to that specified in all aspects.
- C. Submission of a proposed substitution on a shop drawing or submittal without prior submission of the proposed change of materials and subsequent approval shall not be allowed and will require the Contractor to remove and replace any equipment or

1.05

Substitutions (Continued):

materials solely at his expense as directed by the Owner or the Architect, including all demolition, labor and costs to provide specified item(s) and surrounding corrective work.

- D. Where products are specified by manufacturer, brand name and model no., the Contractor shall base his Bid upon those specified. Argent Frankford, L.P. shall consider substitutions for materials in place of those specified, in order to save time or cost, provided same quality is maintained. Argent Frankford, L.P. must approve all substitutions prior to ordering material.
- E. The General Contractor will provide same warranty as for product or method as specified.
- F. The General Contractor will coordinate installation of accepted substitution into work, making all changes as may be required to complete work in all aspects.
- G. The General Contractor waives all claims for additional costs related to substitution which subsequently become apparent.
- H. Cost data is complete and includes all related costs including all other affected Subcontractors under Contract excluding Architect's redesign.
- I. Substitutions will not be considered or approved if:
 - 1. They are indicated or implied on shop drawings or data submittals without formal request.
 - 2. Acceptance will require substantial revisions of Contract Documents.
- J. The General Contractor alone shall be responsible for substantiating acceptability of proposed substitutions. The Owner's decision in acceptance or nonacceptance of substitutions shall be final.

1.06

Shop Drawings and Submittals:

- A. The Contractor shall submit shop drawings and samples of products and systems for the work to the Architect.

Shop Drawings and Submittals (Continued):

- B. Do not begin work which requires submittals until approved submittals have been received from Architect.
- C. Submit shop drawings, product data and samples sufficiently in advance of time returned copies are required to allow review by Architect and resubmittal, if required. Shop drawings affecting installations by secondary Subcontractors shall be submitted for approval to those affected Contractors.
- D. Number of copies required:
 - 1. Shop Drawings:
 - a. All shop drawings, including concrete Reinforcing, Structural Steel, Storefront, Mechanical, Electrical, Sprinkler and HVAC: One (1) reproducible transparency and two direct diazo prints each.
 - b. Interior finish materials, ceiling tile, hardware, light fixture package: 5 sets.
- E. Submittals shall contain:
 - 1. Date of submission, including previous submissions, if any.
 - 2. Project title and number.
 - 3. Names of Contractor, Supplier and Manufacturer.
 - 4. Identification of product, with specification section number where applicable.
 - 5. Field dimensions, clearly identified as such.
 - 6. Relation to adjacent or critical feature of work or materials.
 - 7. Applicable reference standards.

1.06

Shop Drawings and Submittals (Continued):

8. It shall be the General Contractor's responsibility to point out all deviations between the plans and the specifications and the material submitted. Any review by the Architect, Engineer or the Owner does not relieve the General Contractor or his Subcontractors from complying with the materials specified in the Contract Documents.
9. Identify deviations from requirements of Contract Documents in "**Bold**" or alternate color. Failure to do so will void any implied or "tacit" approval that the General Contractor may feel is indicated on the returned, reviewed submittals.
10. Identification of revision on submittals.
11. Space for Architect, Engineer and Contractor stamps.
12. The Contractor's stamp, signed or initialed, certifying to review of submittals, verification of products, field measurements and construction criteria, and coordination of information within submittal with requirements of Work and Contract Documents.

RESUBMISSION:

- A. Revise submittals as required and resubmit as specified for initial submittal.
- B. Indicate any changes which have been made other than those requested by Architect.

1.07

Coordination:

- A. The Contractor and his trades shall coordinate all work with the following entities: all Local, Municipal, State and Federal Agencies having jurisdiction over the project; all separate Contractors and/or agents of the Tenant authorized by Argent Frankford, L.P. to perform work on the project; approved Tenant representatives and/or agents of Argent Frankford, L.P. The Contractor shall be responsible for the coordination of all work necessary for the completion of the project in accordance with the plans and specifications, (including the connection of equipment and installation of materials supplied by other, unless the contract amount shall be made due to lack of coordination. Areas where problems may occur are:

1.07

Coordination (Continued):

1. Gas piping to equipment boilers, hot water heaters, HVAC equipment.
2. Water supply and drain to HVAC equipment with humidifiers.
3. Condensate drains.
4. Spaces with internal heat loads.
5. Presence of electrical starters (control wires, fans, pumps, etc.).
6. Electrical connection characteristics of equipment installed by other trades.
7. Design criteria supplied by the Owner and/or Tenant that the Contractor feels may be inadequate.
8. Items required by a municipal agency or a Federal, State, or Local Statute or Code.

1.08

Changes or Additional Work:

- A. The Contractor is not to make changes or perform additional work without written authorization from Argent Frankford, L.P. If requested by the Tenant. Refer the Tenant to the Project Manager (Project Manager shall be as designated by Argent Frankford, L.P.) at Argent Frankford, L.P.

1.09

Operation and Maintenance Data:

- A. Data: Furnish complete operation and maintenance data, including equipment guarantees, for water heaters, unit heaters, exhaust fans, A/C equipment, electrical equipment and other equipment for which the manufacturer normally supplies operation and maintenance data and/or equipment guarantees. Include model number, serial number, operating power requirements and parts data. Refer to 1.01-B-3-b for submittal.
- B. Instructions: Instruct Tenant's Designated Operating Personnel in operation, adjustment, lubrication, etc. of equipment which shall require seasonal and/or periodic inspection, adjustment and/or lubrication.

Quality Control:

- A. All Contractors are responsible, individually or collectively, for cleaning on a Day -To - Day basis. Failure to abide by this provision shall result in Argent Frankford, L.P. contracting the cleaning and pro-rating the cost to the original Contractors.
- B. Just prior to delivery of the project to Argent Frankford, L.P., the Contractor shall clean the entire project suitable for occupancy including, but not limited to:
 - 1. Replace any broken glass.
 - 2. Remove stains, spots, marks and dirt from finished surfaces; and clean hardware.
 - 3. Wash all glass inside and outside, aluminum mullions, and mirrors.
 - 4. Mop all Office and Restroom floors.
 - 5. Dispose of all waste materials.
- C. Noise and air pollution shall not be allowed on the premises of the job site during the course of construction.
- D. All deliveries and construction parking shall be at the rear of the building or at dock doors. Parking in the front of the Office Area is strictly prohibited.
- E. Employee's of the General Contractor and Subcontractors are prohibited to use Restroom facilities or phone from any Tenant in the area. All Employees are to be instructed to use the nearest pay phone and Public Restroom facilities, if none are provided on site.
- F. Temporary Restroom facilities shall be provided for each new interior finishout for use by Construction Employees. Existing Restroom facilities may be used in an unoccupied space that is being remodeled.

1.11

Project Record Documents:

- A. Maintain at the site, clean, legible copies of all drawings. Mark each sheet to indicate "Project Record Documents." Refer to 1.01-B-3-b for submittal. Legibly mark to show the following, as it occurs:
 - 1. A reproducible set of drawings for each of HVAC, Electrical and Plumbing.
 - 2. Location of underground and/or concealed utilities, referenced to visible, permanent construction features.
 - 3. Field changes of dimension and/or detail.
 - 4. Substitutions of materials in place of those originally specified.
 - 5. Other matters not on original documents.
 - 6. At completion of project, deliver to Argent Frankford, L.P. reproducible "Record Drawings" for project file.

1.12

Cutting and Patching of Existing Work:

- A. Submit a written request, fully detailed and with verbal explanation where required, for approval of Argent Frankford, L.P. where cutting and/or patching is required which shall affect aesthetic effect, weather tightness, and/or structural integrity of existing surfaces.
- B. Argent Frankford, L.P. reserves the right to require the Contractor to employ original Subcontractors to perform cutting and/or patching of these surfaces.

1.13

Final Payment:

- A. Retainage payment shall be paid after 30 days after completion and upon receipt of those items listed in 1.01-B-3 and a copy of the punch list signed by the Tenant verifying completion of all items.

Tenant Provided/Installed Materials or Equipment

- A. The following list of materials or equipment shall be provided and/or installed by the Tenant or the Tenant's Subcontractors and shall not be included in the Contractor's price:

Appliances Not Listed in Section 11
Audio and Visual Equipment
Battery Chargers
Benches and Tool Cabinets
Breakroom Table and Chairs
Burglar Alarm Systems/security Systems, Hardware or Signage
Clocks
Coffeemakers
Computer Equipment, Cabling, Terminations or Face Plates
Compressors, Air Dryers, Air Hoses
Conveyers and Conveying Equipment
Copying Machines
Display Fixtures
Draperies
Dumpster Receptacle
Equipment Listed in the Appendix
Flammable Liquid Storage Cabinets
Furniture, File Cabinets, Accessories
Intercom Systems, Sound Systems
Movable Office Partitions/Systems Furniture Including Electrical Connection from Ceiling or Wall Powered Source.
Plants and Containers
Power Failure Alarms or Emergency Generating Systems

Racks, Bins, Work Benches, Pallets
Signage Other than Restroom Signage
Storage Shelves
Studio Lighting
Surface Mounted Interior Soundproofing
Shop Equipment
Telephone Equipment, Wiring, Terminations and Face Plates
Vending Machines
Wall Mounted Marker Boards
Waste Receptacles

1.15

Alternates:

- A. Provide a deductive alternate to reduce the demising wall from full height to 12'-0" high.
- B. Provide an alternate for 9'-0" high doors set in 9½" Timely frames. The alternate should include two (2) pair of butts at each doors as opposed to 1½ pair for 7'-0" doors in the Base Bid. Include the cost to go to 9'-0" high Storefront Door #115.
- C. Provide an alternate for one (1) "LoadHog" Dock Bridge Leveler", floor mounted dock leveler at the existing dock door where indicated on the drawings as manufactured by "SPX Dock Products", Model # LH615-13.

DIVISION 2 - SITEWORK AND FENCING

2.01

Demolition:

A. Existing Shell Building:

1. Remove existing slab, as required to provide plumbing piping in Restrooms.
2. Remove existing roof deck insulation and roofing to allow for new roof top air conditioning equipment and exhaust fans.
3. Sawcut (west side) wall panels to remove sections of panel for new oversized truck door. Contractor to provide steel bracing at opening for the details in the plans.
4. Sawcut and remove or replace paving for new concrete ramp foundations.
5. Remove existing overhead doors, bumpers and concrete infill panel.

2.02

Paving Striping:

- #### **A. Striping Paint: Standard parking lot and/or street marking paint, recommended by manufacturer for type of surface.**
1. Paint type: Chlorinated rubber base paint conforming to Fed. Spec. TT-P-115E.
 2. Color: White.

DIVISION 3 - CONCRETE

3.01

General:

- A. Concrete work furnished under this contract shall conform to original specifications for the building shell, but in no case less than 6" thick, with #3 rebar 18" O.C. E.W. on chairs using 3,000 PSI concrete @ 28 days.
- B. Truck court paving shall be minimum 6" thick with #3s at 16" o.c., 3,000 psi concrete.

3.02

Concrete Ramp:

- A. Provide concrete footings, sidewalls and 6" ramp surface with steel guardrails for a new ramp. See Drawings for details and location.

3.03

Slab Removal and Replacement:

- A. Portions of existing slab to be removed for plumbing, electrical, or other purposes will be saw cut. Concrete used to replace leaveouts in the slab or pavement will conform to sections 3.01A and 3.04A. Such leaveouts are to be doweled to existing slabs with $\frac{3}{4}$ " steel rebar extending a minimum of 8" into existing concrete, 18" o.c. Where replacement concrete is required (i.e., plumbing trenches) the replacement slab is to be doweled at alternating sides of existing slab, same thickness of slab (6"). Replace the vapor barrier in areas of the Office slab where existing vapor barrier exists.

3.04

Holes Cut In Wall Panels:

- A. Holes cut in concrete wall panels, grade beams, retaining walls for piping, etc. shall be cut only with appropriate tools to ensure an even cut with clean edges. Holes larger than 2" in diameter shall be core drilled. Holes shall be cut with a tolerance no larger than $\frac{1}{2}$ " total clearance of Sonolastic NP II by Sonneborn-Contech or equal.

3.05

Interior Floors:

- A. **Clear Floor Sealer:** Provide and install two (2) coatings of "Lapidolith Clear Sealer" per manufacturer's written instructions, where scheduled.

DIVISION 4 - MASONRY

No Requirements in This Division.

DIVISION 5 - METALS

5.01 Structural Steel Framing:

- A. Additions and/or alterations to existing structural steel frame shall be fully detailed by Registered Structural Engineer.

5.02 Support of Rooftop Air Conditioning Units and Exhaust Fans:

- A. Provide angle frames 3" X 5" X ¼" LLH at all roof openings for roof top air conditioning equipment, exhaust fans or other openings 12" square or larger.

5.03 Structural Steel Bracing:

- B. Provide steel columns on either side of the new 24' X 14' Coiling Door #114. See details in plans.

5.04 Pipe Bollards:

- A. Provide 6" diameter steel pipe bollards on interior side of Warehouse at overhead door jambs. Bollards shall be concrete filled and painted "safety yellow."

DIVISION 6 - WOOD AND PLASTICS

6.01

Rough Carpentry:

- A. Blocking, framing, etc.: Any commercial softwood species, S4S, KD or S-dry.
- B. Provide materials bearing U.L. label FR-S where required by Code.
- C. Provide blocking in walls for wall mounted cabinets, handrails, and plumbing fixtures.
- D. Provide solid 2 X 4 wood blocking at both sides of the following interior doors:
 - #111
- E. Provide paint grade shelving in Storage Room #107, as shown on the drawings.
- F. Provide 2" X 6" wood base on the Warehouse side of the demising wall.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

7.01

Insulation:

- A. Thermal batts: Owens-Corning flame retardant batts 3-½" or 6" thick in partitions where indicated on plans.
- B. Acoustical batts: Owens-Corning flame retardant batts 3-½" or 6" for sound attenuation in Restrooms, Office separation walls, and demising partitions separating Offices between Leases. No paper backed insulation shall be permitted on exterior walls. Provide additional sound batts in Office walls - 107,102 and the Conference Room. See Wall types.
- C. Concrete walls: Owens-Corning flame retardant foil faced batts, 2½" or 3½" based on stud thickness. Foil to be against concrete wall where furred drywall occurs.
- D. Provide 6" batt insulation above all ceilings in air conditioned space.

7.02

Membrane Roofing:

- A. Submit drawings for penetrations, equipment and pipe supports. All details must meet the existing TPO roof standards to match the existing building system and maintain warranty.
- B. Submit standard details for the Architect's approval.
- C. Existing roofing insulation is R6 polyisocyanurate rigid board, both faces finished with non asphaltic facer.

7.03

Miscellaneous Leak Prevention Steps:

- A. At the substantial completion of the job, Argent Frankford, L.P.'s Representative shall conduct a "walk-around inspection" of the roof with a designated Representative from each of the major trades, including specifically but not limited to, the Roofing Subcontractor, the Air Conditioning Subcontractor, the Electrical Subcontractor and the Plumbing Subcontractor in order to produce a punch list for each.
- B. All flue caps and vent caps are to be screwed on tightly by the appropriate trades.
- C. All counter flashings are to be caulked and sealed by the appropriate trades.
- D. All lead flashings are to be turned down into the pipes by the Plumbing Subcontractor.

7.03

Miscellaneous Leak Prevention Steps (Continued):

- E. All condensate lines are to be sealed.
- F. All scraps on the roof resulting from various trades' work, such as screws, pieces of sheetmetal, lead, filters, bottles, cans, and miscellaneous items are to be removed by the appropriate trade.
- G. Provide walkpads around one (1) side of roof top between equipment.

DIVISION 8 - DOORS AND WINDOWS

8.01 Office Interior Doors:

- A. Typical Office doors to be flush slab solid core prefinished doors, 3'-0" x 7'-0" x 1 3/4" unless otherwise specified. See Schedule and Alternates.
- B. Office Door Frames: Timely knock down frame in standard brown finish, main parts of which are 18 ga. steel. Door frames to be 7'-2" in height.
- C. Provide view windows, as scheduled.

8.02 Breakmetal:

- A. When interior wall meets storefront provide a storefront end cap full height to glass or mullion. Color to match mullion system.

8.03 Interior Storefront Door:

- A. Provide Interior Storefront Door #115 at the Reception Area. The Door shall match the existing exterior brushed aluminum storefront door. Provide push/pull closer, stop and thumb turn deadbolt.

8.04 Coiling Overhead Door:

- A. Provide new 24' X 14' coiling motor operated, overhead truck door by Overhead Door Company or equal. Provide all required electrical and controls, including emergency automatic stopping device for obstructions.

8.05 Finish Hardware:

- A. General:
 - 1. Provide minimum keys for each lockset; label each key to indicate lockset it opens. Bundle keys and deliver to Argent Frankford, L.P. at project completion. All new storefront doors are to be keyed with appropriate keys determined by a representative of Argent Frankford, L.P..
 - 2. Furnish proper hardware, bearing U.L. label, for labeled doors.
- B. Standard of Quality:

Finish Hardware (Continued):

1. Locksets and passage sets hardware for lever type grips to meet ADA and ANSI standards shall be Schlage Everest Keyway C123 Heavy Duty and Standard Duty Commercial, or approved equal. Finish shall be 626; install with construction core. Locks to be 2 ¾" backset. Provide heavy duty at all doors wider than 3'-0" and all doors between the Office and the Production Area or air locks to the Production Area or Secured Parts Storage.
2. Deadbolts: Shall be Best Brand, or equal. Provide with keyed cylinder, trim rings, strike box, strike plate, and thumb turn where scheduled.
3. Butts at Timely Frames: Equal to Hager 4" x 4", 626 finish, on all prefinished frames. Doors scheduled to have closers shall have ball bearing butts.
4. Closer: Norton Series 1600, Reading Series 600, Russwin Series 2800, or approved equal, slim profile overhead closers, with SBL sprayed finish, to match 626 finish.
5. Stops: Wall mounted with rubber stop, 626 finish, Trimco or approved equal.
6. Silencers: Quality No., 1337A, furnish three (3) per single door.
7. Kick plates: Trimco 8" x door width, less 2", 626 finish, or approved equal.

C. Schedule of hardware by door types as follows is intended as guide and may not be complete in every detail.

<u>HARDWARE SET #1</u>		<u>DOORS</u>
1½	Pair Butts	110
1	Passage Set	
1	Stop	

Finish Hardware (Continued):

<u>HARDWARE SET #2</u>		<u>DOORS</u>
1½	Pair Butts	112,113
1	Privacy Lockset	
1	Stop	
1	Closer	
2	Kickplates	
<u>HARDWARE SET #3</u>		<u>DOORS</u>
1½	Pair Butts	100,101,102
1	Lockset	103,104,105
1	Stop	106,107,108 109
<u>HARDWARE SET #4</u>		<u>DOORS</u>
1½	Pair Butts	111,115
1	Lockset	
1	Stop	
1	Closer	
<u>HARDWARE SET #5</u>		<u>DOORS</u>
E-2	<u>Existing Door</u> Provide door buzzer at exterior door that can be heard throughout the Warehouse and the Office Space.	E2, E3
E-3	<u>Existing Storefront Door</u> Provide doorbell at the front door that can be heard throughout the Office Space.	
<u>HARDWARE SET #6</u>		<u>DOORS</u>
<u>Overhead Coiling Truck Door</u> New coiling overhead door with motorized operation and wall mounted controls by Door Manufacturer.		114

8.05

Finish Hardware (Continued):

HARDWARE SET #7

DOORS

Storefront Door

- 1 Thumb turn deadbolt with keyed side
On interior of Reception Area
 - 1 Closer
 - 1 Stop
- All other hardware by Door Supplier

8.06

Mirrors:

- A. Mirrors: FS DD-G-451, Mirror Quality float glass with two coats silver and electro-plated copper backing, ground and polished edges.
 - 1. Provide wall mirrors in Restrooms as indicated in drawings.

DIVISION 9 - FINISHES

9.01

Drywall System:

- A. Office Areas: One layer $\frac{5}{8}$ " thick gypsum board each side of 3- $\frac{5}{8}$ " x 25 gauge galvanized metal studs @ 24" o.c. extended above ceiling height unless noted otherwise on drawings.
- B. Walls up to 12' high: 3- $\frac{5}{8}$ " X 25 gauge x 24" o.c. or 6" X 25 gauge X 24" o.c. See wall types.
- C. Green board (waterproof gypsum board) shall be used in all wet installations (i.e., Restrooms wet walls).
- D. Provide gypsum board ceilings where scheduled.
- E. Provide metal studs and furring at any existing wall mounted access ports in the Office Area.
- F. Provide one (1) additional layer of gypsum board at the south wall of the Conference Room for sound control.

9.02

Acoustical Ceilings:

- A. Ceilings shall be laid out in accordance with reflected ceiling plan when provided. Ceiling to be laid out so the largest possible tile shall be around perimeter (no 6" tile or less).
- B. Suspension system:
 - 1. Class A metal "T" grid system with white baked enamel finish; Chicago Metal, Donn Products or approved equal.
- C. Acoustical panels: 24" x 48" x $\frac{5}{8}$ " thick, U.L. Class 25; U.S. GYP, Armstrong or equal.
 - 1. Fissured Miniboard.
- D. Ceiling Subcontractor shall be responsible for any damages to walls and paint while installing ceiling.
- E. Provide hold down clips at Reception Area #100.

9.03

Painting:

- A. Materials: First quality line products of Sherwin Williams, ICI, Jones Blair "Premium" colors selected by Architect.

9.03

Painting (Continued):

B. Schedule:

1. Exterior: Clean and paint new misc. metals, gas lines, rooftop equipment and all other metals exposed to weather with one coat appropriate primer and two coats alkyd exterior enamel to match existing. Touchup any walls affected by the finishout.
2. Interior gypsum board: Where scheduled, tape, bed, texture and paint unless noted otherwise, one (1) coat of primer and two (2) coats washable flat latex or eggshell enamel. (See Finish Schedule for locations.) Warehouse side of the Office walls to be taped, bedded and painted, **only**. Provide up to four (4) different colors.
 - a. Office Texture: Orange peel.
3. Restrooms: One coat appropriate primer and one coat semigloss epoxy paint as scheduled.
4. All exterior concrete to be painted or touched up, shall receive medium textured paint to match existing. Touch up exterior wall panels at new oversized door location. Touch up any other areas of interior or exterior Shell Building scratched or damaged during finishout.
5. Paint boundaries of Tenant Storage Area per Division 2.

9.04

FRP Panels:

- A. Provide 6'-0" high FRP panel facings at Janitor's Closet #118. See Schedule.

9.05

Ceramic Tile:

- A. All tile shall be installed by the thin set method and shall be grouted with colored cement grout to be selected by the Tenant.
- B. Tile Allowance: \$3.50 per square foot, **material only**.
- C. Floor Tile: Ceramic tile shall be 12" X 12" X ¼" ceramic American Olean, or equal for floors and base in colors as selected by the Tenant.

9.05

Ceramic Tile (Continued):

- D. Wall Tile: Ceramic tile shall be 12" X 12" X ¼" ceramic American Olean or equal in colors as selected the Tenant. Provide bullnose tile at the top of the ceramic tile wainscot in Restrooms.
- E. Base: Ceramic tile shall be 6" X 12" X ¼" ceramic, cut in half, American Olean or equal to match colors as selected the Tenant.

9.06

Carpet:

- A. Provide level loop carpet where specified on plans. Carpet shall be a minimum of 28 oz. Face weight, minimum 8th gauge, plie height maximum of .250, 100% nylon, color as selected by the Owner or Tenant Carpet to be direct glue down installation using Henry's 356, 270 multipurpose adhesive or equal.
- B. Carpet Allowance: \$18.00 per square yard, for carpet material only. (Excluding installation) **Contractor to provide installation.**
- C. Installation:
 - 1. Clean, smooth, float and/or seal surface as necessary before covering.
 - 2. Pre-plan installation for uniform direction of pattern and lay of pile, and proper sequencing with other work.
 - 3. Provide glue down installation by trimming and fitting widths into each space prior to application of adhesive.
 - 4. Clean adhesive and cement from face of carpet promptly replace carpet which cannot be cleaned.
 - 5. Save carpet scraps, defined as mill ends less than 9' long and pieces larger than 3 square feet in area and wider than 8", and deliver to Owner.
 - 6. Carpet Subcontractor to vacuum completed carpet.
 - 7. Carpet Subcontractor shall be responsible for any damages to walls while installing carpet.

9.07

Base:

- A. Contractor to provide and install 4" high covered rubber base at walls where scheduled, as manufactured by Roppe or Tarkett. Color as selected by Tenant.

DIVISION 10 - SPECIALTIES

- 10.01 **Toilet Accessories (Bobrick or approved equal):**
- A. Paper towel dispenser: No. B-369 fully recessed stainless steel, in all Restrooms.
 - B. Toilet paper holder: No. B-2730 in single toilet Restrooms.
 - C. Feminine napkin disposer: No. B-270 Surface mounted, recessed, stainless steel, one per water closet in Ladies Restrooms.
 - D. Soap dispenser: No. B-822, countertop mounted, liquid soap dispenser.
 - E. Grab Bars: No. B-6106 x 42", stainless steel, complete with concealed anchors or blocking where mounted on drywall partitions.
- 10.02 **Identifying Devices:**
- A. Building Address: 4" high (or height required by the City of Carrollton Fire Department) x 1/8" thick precision cut acrylic plastic "Helvetica" style white numerals. Unless otherwise required by code, mount with adhesive on glass in location shown on drawings.
 - B. Provide proper identification for Restrooms as manufactured by Rodgers 2045 Series. Must meet ADA and TAS, mounted beside strike side of door per TAS Standards.
 - C. Provide 12" high numeral(s) on rooftop air conditioning unit(s).
- 10.03 **Fire Extinguisher and Cabinets:**
- A. Provide two (2) recessed fire extinguisher cabinet for the Office Area. Provide 2A10BC extinguisher for the cabinet.
 - B. Provide column mounted Warehouse fire extinguishers at 75' o.c. minimum in all directions. Confirm the final count with the Fire Marshal.

DIVISION 11 - EQUIPMENT

11.01 Dock Equipment:

See Division 1, 1.15, Alternates, Paragraph C.

DIVISION 12 - FURNISHINGS

12.01

Blinds:

- A. Contractor shall furnish and install Levolor, Bali or approved equal, narrow slat Venetian blinds, in brushed aluminum on all exterior windows.

DIVISION 13 - SPECIAL CONSTRUCTION

No Requirements in this Division

DIVISION 14 - CONVEYING SYSTEMS

No Requirements in This Division

DIVISION 15 - MECHANICAL

15.01

HVAC Equipment and Design Requirements:

A. Design Requirements:

1. The Mechanical Subcontractor shall be responsible to provide stamped and sealed construction documents to obtain a Building permit, if required, and determine design loads to properly size equipment.
2. It shall be the Mechanical Subcontractor's responsibility to provide, at the time of Permit submittal, all required documentation forms or worksheets to the General Contractor to prove compliance with the **2006 International Energy Code**. Notify the General Contractor if any upgrades of shell construction are necessary to allow the General Contractor to price and include in his Base Bid.
3. Standard Office areas designated to be air conditioned shall be designed to maintain a 25° temperature differential at 100° FDB and 72° FWB outside and 72° during the winter season at 20° F outside based on one (1) person per 150 square feet and 4 watts per square foot total electric load.
4. Internal Heat Loads: Verify all internal heat loads on equipment to be used by the Tenant prior to the installation of equipment.
5. The Shell Building glass has an existing shading coefficient of .50.
6. The existing Shell Building roof insulation is R6.
7. In calculation of the heat loads, there shall be no consideration for any window coverings.
8. All design work must be in conformance with the 2006 International Energy Code, 2006 IBC, 2006 IMC, 2006 IPC, 2006 IRC, 2006 IFC and 2005 NEC as adopted by the City of Carrollton, ASHRAE, ANSI, NFPA, SMACNA and ADA/TAS Standards.

15.01

HVAC Equipment and Design Requirements (Continued):

- B. HVAC equipment shall be single Package Rooftop units equipped with factory curb, factory plenum, hail guards, a manual fresh air damper and gas heat in building. Provide 10" high black vinyl numerals on the face of all rooftop equipment to identify with numbers.
- C. Standard efficiency factory package equipment manufactured by Carrier or Trane with capacities as scheduled on the drawings or higher efficiency, as required by the 2006 International Energy Code.
- D. Provide a ducted return air system.

15.02

Framing, Mounting and Location of Equipment:

- A. Roof penetration for roof top equipment shall be framed with 3" x 5" x ¼" angle iron. Member shall be required to support the end of the unit opposite the roof penetration.
- B. Mount roof top units level on curbs as recommended by, or manufactured by unit manufacturer.
- C. Verify locations of units with the Structural Engineer. Units shall be placed over girders or columns.
- D. Verify top of unit is not visible from property line. Units must be placed below the sight line. **Failure to verify same will result in relocation of the unit at the Mechanical Subcontractor's expense.**

15.03

Ductwork:

- A. All ductwork shall be rectangular or round galvanized sheetmetal with 2½" of ¾# R = 6 fiberglass insulation with foil vapor barrier. **No duct board shall be permitted.**
- B. The first 10' of supply and return duct from the unit shall be lined internally for noise attenuation with Owens-Corning type 150 1½" R = 6 duct liner.
- C. All rectangular 90 degree elbows shall have turning vanes.
- D. All rectangular tee's shall have turning vanes.
- E. All flex duct shall be insulated type and a maximum length of 9'.

- 15.03 Ductwork (Continued):
- F. All installations shall meet the requirement of SMACNA for pressure applications.
 - G. Provide 1 or 2 hour rated fire dampers in any ductwork that passes through any rated walls.
- 15.04 Grilles and Diffusers:
- A. As manufactured by Kruegger, Metal Aire, Titus, Environmental Air Products or approved equal as scheduled on the drawings. Grilles shall be white.
 - B. Offices shall be designed and zoned separately from the interior zones to insure design temperatures can be maintained in both interior and exterior areas of the Office.
 - C. Louvers shall be Ruskin, drainable, motorized, insect screen or equal.
- 15.05 Condensate Piping:
- A. All condensate pipe shall be Type M Copper. Install a P-trap at AC units to prevent syphoning of drip pan. All piping within the building shall be insulated with ½" Armaflex insulation. Extend condensate piping to indirect drain at sanitary sewer vent stacks.
- 15.06 Controls:
- A. Locate the thermostat on the wall or on building columns. Show locations on Mechanical drawings. Verify locations will not conflict with Tenant systems furniture.
 - B. Each AC unit to be provided with a programmable digital night set back thermostat with clear plastic lock box. Acceptable manufacturers are Honeywell T8112.
 - C. Each thermostat to match the staging of the respective roof top unit.
- 15.07 Filters:
- A. Each unit to be provided with standard throw-away type filters mounted at the unit.
 - B. Provide final filters to replace the initial filters at the point that the Tenant receives the building for occupancy.

15.08

Balancing:

- A. Install adequate facilities for balancing air flow to provide even distribution of conditioned air and to maintain uniform space comfort condition. The Subcontractor's certified balance personnel shall return to the lease space and balance the distribution systems as often as required during the first year. System shall be adjusted using a velometer.

15.09

Smoke Alarms:

- A. See 16.05
- B. Smoke detectors are to be provided in supply air ductwork over 2000 CFM.

15.10

Exhaust Fans:

- A. Acceptable Manufacturer: Cook or approved equal with capacities as scheduled on the drawings.
- B. Provide separate exhaust fans in each Restroom, sized and installed per Code; wire on/off to room light switch. Duct Restroom exhaust fans through roof.

15.11

Gas Piping:

- A. Install gas meter and piping for rooftop units. Run gas piping exposed on outside face of wall. Pressure with gas regulators on the roof at each air conditioning unit to provide low pressure gas to equipment. Verify existing meter manifold and existing piping to complete accurate pricing. Coordinate with the Gas Company, as required.

15.12

Domestic Water Service.

- A. Size and provide water line to connect to building service. Provide type L copper domestic water piping with sweat fittings. Provide piping overhead as high as possible extending to plumbing fixtures. Provide a main 2½" isolation valve at water service riser to building. Mount valve at 9'-6" above the ceiling.
 - 1. All water piping shall be insulated with fiberglass insulation.
 - 2. Provide accessible isolation valves for water piping to each group of plumbing fixtures.
 - 3. Water piping shall be free from water hammer and adequate allowance shall be made for expansion and contraction.

15.13

Plumbing:

- A. Design Requirements:
 - 8. Plumbing Subcontractor shall visit the site and verify the existing building service to properly design the system.
 - 9. All work must be in conformance with the 2006 International Plumbing Code as adopted by the City of Carrollton and Texas Accessibility Standards (TAS).
- B. Basic Materials
 - 1. Water:
 - a. Piping to be type L copper with 95-5 No Lead solder joints.
 - b. Valves in copper piping - utilize gate valves Nibco S113 or Stockham B110. The Contractor may have the option to use ball valves.
 - c. Installation with rigidly secured water pipes in chase attached to the back side of the studs.
 - d. Insulate all water piping above ceiling tiles in joist and in exterior walls with ½" cold water and 1" hot water fiberglass insulation.

Plumbing (Continued):

- e. Provide 3/8" copper waterline with valve at the countertop in Breakroom #1125 for the Tenant's coffeemaker. Provide 3/8" valve at wall location for Tenant's refrigerator/icemaker.
 - f. Provide 12" x 12" access metal inspection panel at all shut off valves in walls for emergency use, including fire sprinkler test valves. Access panels shall be field painted to match finished walls.
 - g. Provide tempering valve on hot water to all lavatories and sinks.
2. Cleanouts: Exposed in floor cleanouts shall have brass coverplates. Wall cleanouts shall have chrome wall coverplate. Do not expose cleanout plates above the carpet. Run cleanouts in walls where possible.
10. Sanitary sewer and vent piping shall be schedule 40 PVC with solvent weld fittings. PVC piping is not allowed in return air plenum spaces. Provide no hub standard weight cast iron vent piping in plenum return spaces.
- a. Provide floor drains in each Restroom complete with trap primer line. Floor drain strainers shall be 5" chrome plated brass.
- C. **Gas Service/Piping:** Visit site and become familiar with gas service locations and type of gas service. Coordinate with appropriate utility company. Provide regulators as required by Local Codes and Ordinances. Install black schedule 40 black steel pipe with wrought iron fittings above grade. Piping up to 2" shall have threaded fittings and welded fittings above 2" piping. Support gas piping on roof mounting blocks.

The existing gas piping of the Shell Building unit heaters shall be modified:

- 1. Unit heaters for the new Lease Space shall be isolated from the other Lease Space.
- 2. Connect to existing manifold or provide new manifold, if necessary.
- 3. Run new gas service line, if required, from the manifold up the building exterior wall and connect to the isolated existing gas piping for unit heaters in the Lease Area.

15.13

Plumbing (Continued):

4. Provide additional gas distribution piping for gas heat at RTU for the Office or hot water heater, as required.
5. Relocate existing unit heater from the InterStone Lease Space, not being used, and place in the new Lease Space. Provide gas piping and power, as required.
6. Paint all new gas piping running up the exterior wall to match the concrete tiltwall panels including multiple colors if the pipe passes in front of more than one exterior color.

15.14

Plumbing Fixtures:

Plumbing fixtures shall meet the requirements of the State of Texas Water Conservation Act. Handicap fixtures shall meet the requirements of A.D.A. and T.A.S.

- A. Acceptable manufacturer's Kohler, American Standard, Crane or Eljer as scheduled on the drawings.
- B. Toilets shall be floor mounted tank type fixture. Flush lever shall be on the opposite side of the tank away from the side wall of the Restroom to meet TAS.
- C. Provide spray nozzle for Breakroom sink faucet.
- D. Furnish, install and connect, complete with working trim, a plumbing fixture at each location so indicated by a symbol. All fixtures shall have accessible shut-off valves.
- E. Provide escutcheons on all pipes. Install all fixtures plumb, level and flush to finish surface. Caulk the edge of the joint between the fixture and surface with silicone or butyl type waterproof caulking.
- F. Provide bi-level barrier free electric water coolers at Restroom Area to meet TAS Requirements, as manufactured by Elkay or equal.

15.15

Fire Sprinkler System:

- A. The building contains an existing ESFR sprinkler system. The scope of work includes:

15.15 Fire Sprinkler System (Continued):

1. Provide sprinkler drops at finished ceilings in Office. Provide chrome plated brass heads and escutcheons Grinnel or approved equal. Provide upright heads in Rooms without ceilings.
2. Modify existing system to conform to Tenant lease plan to satisfy the City of Carrollton Fire Department requirements.
3. All new sprinkler piping shall be no less than **Schedule 10**, internally coated piping. **No** pipe gage less than **Schedule 10** shall be installed. Contractor to submit sprinkler pipe product literature and piping layout and design prior to ordering material.

15.16 Roof Penetrations:

- A. Refer to the Architectural details for roof penetration details.

15.17 Submission Requirements:

- A. Contractor to provide equipment submittals and shop drawings for review.
- B. Contractor to provide the City of Carrollton required signed and sealed Engineered drawings and **2006 International Energy Code** calculation/worksheets.

15.18 Quality Control:

Records for Owner:

Provide records for the Owner in accordance with the requirements of Division 1 - General Requirements.

Maintain full set of Drawings at Project. Note daily changes made in connection with final installation.

Provide a complete set of "Record Drawings" marked up for the Architect showing exact locations of all equipment, valves, piping, ducts, etc. These drawings shall reflect all changes from contract documents and shall be complete so as to provide the Owner with quality documents of facilities at project completion.

DIVISION 16 - ELECTRICAL

16.01

General:

A. Design Requirements:

1. The Electrical Subcontractor shall be responsible to provide stamped and sealed construction documents to obtain a Building Permit, if required by the City of Carrollton.
2. The Electrical Subcontractor shall provide necessary worksheets/forms showing compliance with the **2006 International Energy Code** to the General Contractor for submittal at Permit.
3. The Electrical Subcontractor shall be responsible for verification of all electrical design loads for this project. All information contained in this outline specification is to facilitate the Bid Process and shall be verified prior to final construction documents. The Electrical Subcontractor shall provide complete operating systems including all wiring, conduit, disconnects and power.
4. Electrical Subcontractor shall visit the site and familiarize himself with all existing conditions.
5. All design work must be in conformance to the 2006 International Energy Codes and 2005 NEC as adopted by the City of Carrollton.

B. A complete wiring system shall be installed in accordance with all of the following:

1. National Electric Code.
2. All Federal, State, and/or local codes, ordinances, and regulations.
3. Latest approved standards of AIEE, AMSI, NEMA, 2006 IBC, 2006 IMC, 2006 IPC, 2006 IRC, 2006 IFC, 2006 IEC and 2005 NEC as adopted by the City of Carrollton, ASHRAE, ANSI, ASHRAE 90.1, NFPA, SMACNA, ADA/TAS Standards, and Underwriters Laboratories when applicable.

C. Conduits:

16.01

General (Continued):

1. All exposed conduits shall be run in neat, straight, symmetrical lines parallel to building walls. Make all bends uniform. Diagonal runs shall not be allowed in walls or ceilings.
2. EMT conduit shall be used in all walls for stub-ups. Lateral runs of conduit shall not be used except under windows or in short walls. MC-Flex cable is allowed.

D. Wiring:

1. All wiring shall be copper unless specified otherwise on plans.
2. Use type THW or THHN for feeder circuits.
3. Type TW shall be permitted for branch circuits.
4. All circuits shall have ground wires.

E. Wiring Devices:

1. All switches and receptacles shall be commercial specification grade.

F. Existing Building Transformer:

1. The Electrical Subcontractor shall provide Owner seven (7) days notice of building power shut down.

16.02

Service:

The Electrical Subcontractor shall size service accordingly. Provide exterior service entrance disconnect, main Tenant switchgear, panels, step down 120/208 volt transformers and equipment disconnects. Verify load prior to ordering equipment.

- A. The service voltage shall be 277/480V 3 phase 4 wire.
- B. Secondary wiring shall come from the existing transformer on the west side of the building. Power to the Lease Space shall enter the west wall and run over head along the west wall into the Lease Area. Locate main switchgear and subpanels in the Warehouse. The Electrical Subcontractor shall verify the existing Shell service and include any additional equipment to make a service connection, if not already in place in the Shell construction.

16.02

Service (Continued):

- C. Identify all panels with panel numbers and label all circuits in panels to indicate lighting, power, and equipment that is controlled by that circuit.
- D. Feeders and branch circuits to AC equipment shall not be run on roof. Liquid tight flexible conduit to be used from conduit penetration to A/C disconnect. All roof penetrations shall be made through approved flashings installed by the Roofing Contractor and Electrical Contractor. Penetration also to have approved cone to fit completely over the flashing and soldered to the conduit to provide a watertight penetration. All penetrations are to conform to 1.12 and 7.03. All penetrations through the fire walls shall be fire caulked.
- E. All panels shall have tin plated aluminum bussing.
- F. Existing Exterior Lighting:
 - 1. All exterior lights on the building shall remain on the building house panel.
- G. Provide dry type transformers for 480 volt power step down to 208 volt power.
- H. All step down transformers are to have copper wire.
- I. Provide power to wall mounted exhaust fans at the north wall of the Warehouse. Provide switching at the main panels.

16.03

Office:

- A. Power: 120/208 volts, single phase, 4 wire with dry type transformers.
 - 1. Refer to the Architectural Floor Plan for electrical outlet locations.
 - 2. Duplex outlets to be mounted 18" AFF or as shown on drawings. Duplex outlets at breakcounters and vanities to be mounted at 44" AFF.
 - 3. No more than six duplex outlets per 20A circuit on standard Office walls.
 - 4. Provide power to Tenant drinking fountains.

Office (Continued):

5. Devices and coverplates shall be white.
6. Provide power to the junction boxes above the ceiling in Office Area #114 to provide power for cubicles in this area served by power poles.
7. Provide commercial grade "doorbell" on exterior of the building at the front Storefront Door E-3. Door bell shall be audible in the Office Area.
8. Provide floor outlet for power, data and telephone in the Conference Room where shown on the Reflected Ceiling Plan.

B. Warehouse:

1. Provide 120 volt duplex convenience outlets, as shown on the Floor Plan.
2. Provide commercial grade "door bell" buzzer on the exterior of the building adjacent to the Personnel Door E-2. Buzzer shall be audible in the Warehouse and Office Area.
3. Provide 220V outlets in the Warehouse where indicated on the drawings. Electrical Subcontractor to verify the amperage requirements.

C. Telephone/ Data Outlets:

1. Provide 4" empty conduit from the Telephone Demarcation point to the Office Area.
2. Mount phone/data boxes at 18" A.F.F. or as shown on drawings. Coverplates by the Tenant's Computer, Cabling, Telephone Supplier.
3. Provide nylon pull wire (200# test) for each phone/data outlet. Provide ¾" EMT conduit to above ceiling for each stub-up at exterior and interior walls and walls with insulation. Non-insulated interior walls with outlets will be "Ring and String" installation method. Refer to Architectural for insulated wall locations.
4. The Electrical Contractor to provide one (1) 4' x 8' x 5/8" plywood board mounted on the Office wall. Verify location with the Tenant prior to mounting on the wall.

Office (Continued):

5. Provide one (1) - 110V dedicated duplex outlet at phone board for phone equipment and separate outlet for security panel.
6. Tenant's Subcontractor shall provide telephone devices, data devices, device terminations and security system device and wiring.

D. Office Lighting:

1. All lighting design, fixtures and controls shall meet **2006 International Energy Code and 2006 International Building Code.**
2. All fixtures are to be as manufactured by Columbia/Presolite or approved equal.
3. Power grid wiring for light fixtures to be EMT conduit with J-box serving a maximum of five fixtures. Wiring from J-box to fixture shall be MC cable limited to lengths not greater than 6'-0". Fixture to fixture wiring is strictly prohibited.
4. Exit lights with battery back-ups to be installed per local codes.
5. Light switches shall be mounted at 48" AFF and shall be designed to provide "bi-level switching" per Paragraph 805.2.1.1 of the **2006 International Energy Code.**
6. Office lighting shall be 2 x 4 fluorescent light fixtures with energy saving ballasts with parabolic lens to provide 65 footcandles.
7. Light switches shall be white and have white coverplates.
8. Provide emergency egress lighting to meet the City of Carrollton requirements, including the addition of exterior wall mounted egress lights at all exit doors and personnel doors per the IBC.

16.05 Fire Alarm Systems (Continued):

- D. Per the Shell Building Contractor's Submittal: The Shell Building fire alarm control panel is located in the existing Electrical Room. The building panel, specified, is Siemens FS-250 Fire Alarm Control Panel and Siemens FS-DACT Digital Alarm Communication Transmitter. The new Tenant panel must be compatible. Final location and requirement per remote panel in Tenant's space shall be verified with the City of Carrollton Fire Marshal by the Subcontractor installing the equipment.
- E. Tenant shall provide all security wiring devices and boxes for lease space.
- F. Relocate and incorporate existing strobe and alarms to Tenant's zone that are currently installed in space to be occupied.

16.06 Tenant Supplied Electrical Information:

- A. Refer to the Outlet Plan for outlet locations for duplex outlets, phone and data drops. Provide additional outlets as required by these specifications, not all outlets may be indicated since the final location not determined at the time of the Bid.

16.07 Load Calculations:

- A. All loads must be verified and confirmed in final design build drawings. No increase in final price will be accepted unless Scope of Work is modified or increased by Tenant.

16.08 Submission Requirements:

- A. Contractor to provide equipment submittals, shop drawings and calculations for review.
- B. Contractor to provide the City of Carrollton required signed and sealed engineered drawings, if required for Permit and **2006 International Energy Code** calculation/worksheets.

16.09 Quality Control:

Records for Owner:

Provide records for the Owner in accordance with the requirements of Division 1 - General Requirements.

Maintain full set of Drawings at Project. Note daily changes made in connection with final installation.

16.09

Quality Control (Continued):

Provide a complete set of "Record Drawings" marked up for the Architect showing exact locations of all equipment, valves, piping, ducts, etc. These drawings shall reflect all changes from Contract Documents and shall be complete so as to provide the Owner with quality documents of facilities at project completion.