

**SECTION 600**

**ANCILLARY FACILITIES  
TECHNICAL SPECIFICATIONS**

ANCILLARY FACILITIES  
SECTION 600

DIVISION I - GENERAL REQUIREMENTS

1.01 SUMMARY OF THE WORK

- A. The project consists of the design and construction of ancillary facilities located at Trail Ridge Landfill, Jacksonville, Florida. The buildings consist of a one story structural C.M.U., pre-cast concrete, and pre-engineered metal buildings.
- B. Approximate gross floor area and building types are as follows:

Administration

3,240 s.f. pre-engineered metal building on a 4 inch concrete slab-on-grade. The building exterior will be brick veneer. Roof shall consist of a standing seam galvalume roof.

Operations

7,820 s.f. pre-engineered metal building containing approximately 3,200 s.f. of office area with the balance of the space consisting of maintenance bays, wash bay and tank farm.

The following equipment has been included for the facility:

1. Structural capacity for a five ton bridge crane (quoted as an alternate) in the maintenance bays.
2. A wash water recycle unit for the wash bay.
3. Two each hose reels with five hoses each.
4. One 15,000 gallon diesel tank, five each 550 gallon tanks and a diesel fuel dispenser pump with a 30 key access system.
5. Four each 14' x 23' electrically operated rolling steel doors have been included.
6. One 8' x 8' manually operated sectional steel door has been included at the City storage area.

### The Scale Booth

100 s.f. Scale Booth and Weigh Master's Office building on a 4 inch slab-on-grade with load bearing concrete masonry unit and face brick exterior walls to match the Weigh Masters office and Administration Building. 384 s.f. Weigh Master's Office 4 inch slab-on-grade, load bearing C.M.U. and face brick construction with a single ply roof. A handicapped access toilet has also been included.

#### 1.02 CODES

- A. Work shall be performed in accordance with the Standard Building Code including latest amendments in effect at the date of this Contract, and with applicable federal, state and local requirements in effect at the date of this Contract.

#### 1.03 OWNER'S CRITERIA

The building shall be constructed in accordance with the criteria and requirements of the Owner with elaborations, alterations and adjustments to that criteria as developed and outlined in these specifications and attached drawings.

#### 1.04 PROPERTY INSURANCE

The Contractor shall obtain and pay for fire and windstorm insurance on the building during construction insuring Owner, Contractor, Subcontractors, and Sub-subcontractors as their interests may appear.

#### 1.05 PERMITS, FEES AND LICENSES

The Contractor shall obtain and pay for all permits, fees and licenses as may be required for the construction work.

#### 1.06 TEMPORARY UTILITIES

The Contractor shall arrange and pay for all temporary water, telephone and electricity used in the course of construction including the use of permanent building water and electrical service incidental to the construction operations prior to substantial completion.

If move-in (systems, furniture, etc.) occurs prior to Substantial Completion, the premium electrical usage will be paid by the operator. The premium usage shall be all usage in excess of the established monthly average consumption based on the three month period prior to the start of move-in.

#### 1.07 SURVEYS, INSPECTIONS AND TESTING

Surveys, testing and inspection required by the Engineer during design and construction shall be paid for by the Contractor. The testing shall be performed by an independent testing laboratory authorized to practice engineering in the State of Florida, and as selected by the Engineer.

#### 1.08 ALLOWANCES

- A. Allowances, as listed in the various sections of this specification and/or cost summary, have been included in the proposal amount. Allowances include design, labor, materials, sales tax, freight, unloading, installation, cutting and patching, and other work required for a complete installation.
- B. The Contractor shall keep a separate accounting of costs chargeable to allowances, and upon completion of the work, any variance from the allowances shall be adjusted by Change Order.

#### 1.09 RECORD DRAWINGS

Upon completion of the work, reproducible drawings shall be furnished by the Contractor made by a competent drafter incorporating locations of all underground and otherwise concealed conduit, pipe, duct lines, etc. which are not installed as shown on the construction drawings.

#### 1.10 WARRANTY

- A. The Contractor shall warrant that all materials and equipment furnished for the project will be new, unless otherwise specified, and that all work will be of good quality, free from faults and defects and in conformance with the Construction Documents.

- B. The Contractor further warrants that the work shall be free from defects in material and workmanship for a period of one year following substantial completion, except as listed differently in specific sections of these specifications.

## DIVISION 2 - SITE WORK

### 2.01 SUBSURFACE CONDITIONS

Foundation and paving design is based on an allowable soil bearing capacity of 2000 psf.

### 2.02 TERMITE CONTROL

Soil shall be chemically treated against subterranean termites throughout the building areas with slabs on grade.

### 2.03 UTILITIES

Sanitary waste disposal shall be provided by an on-site septic tank and drain field system consisting of the following:

1. 1,050 gallon septic tank.
2. Distribution box.
3. Drain field.
4. Sanitary piping shall be PVC, SDR 35.

One septic tank shall be provided for the Administration Building and one for the Operations Building.

### 2.04 LANDSCAPING

Landscaping and irrigation is included in accordance with the attached landscape plan.

## DIVISION 3 - CONCRETE

### 3.01 CAST IN PLACE CONCRETE

- A. Concrete shall conform to ASTM C 94 normal weight concrete for foundations, slabs on grade, sidewalks and curbs. All concrete shall be 3000 psi except as noted.

- B. Reinforcing: Bars - deformed billet steel shall conform to ASTM A 615, Grade 60. Welded wire fabric shall conform to ASTM A 185.

### 3.02 PRECAST CONCRETE

Precast concrete canopy shall consist of 24 inch deep double tees and shall conform to appropriate ASTM designations.

### 3.03 SLAB ON GRADE

Slab on grade shall be 3,000 psi concrete with thickness and reinforcing as follows:

Slab-on-grade in the office area will be 4 inch concrete with a 3 inch concrete slab over a metal deck for the second floor. Maintenance bay slabs shall consist of a 12 inch reinforced concrete sub-slab with a 4 inch concrete topping and embedded steel rails for protection from track mounted vehicles. The wash bay shall also consist of a 12 inch slab with a 4 inch topping with steel rails. Tank farm slab shall be 6 inch concrete with appropriate footings and tank supports. The partitioning between the wash bay, maintenance bays and tank farm bay shall be unpainted, 8 inch concrete block.

## DIVISION 4 - MASONRY

### 4.01 UNIT MASONRY

Masonry units shall be standard weight, hollow, load bearing. Walls shall have cells concrete filled with (1) #5 rebar at 4.0' O.C.

### 4.02 MORTAR

Mortar shall be "N" with admix per manufacturer's recommendations.

### 4.03 FACE BRICK

Face brick shall be standard size brick in a running bond with 1 inch air space and galvanized ties.

#### 4.04 LOCATIONS

- A. Load bearing masonry walls shall be provided at Weigh Masters Office and Scales Building.
- B. Horizontal reinforcement shall be parallel wire type every second course.
- C. Anchors shall be dovetail shape galvanized steel as required.

#### DIVISION 5 - METALS

##### 5.01 METAL FABRICATIONS

Miscellaneous metal items including embedded items shall conform to appropriate ASTM designations.

##### 5.02 BASIC STRUCTURE (PRE-ENGINEERED METAL BUILDINGS)

The structure shall consist of a pre-engineered metal building system with rod bracing, standing seam steel galvalume roof panels and metal wall panels. The structure in the Service Bay shall accommodate a 5 ton overhead crane.

#### DIVISION 6 - WOOD AND PLASTIC

##### 6.01 CARPENTRY - GENERAL

- A. Concealed rough carpentry shall be standard light framing or stud grade Southern Yellow Pine or Douglas Fir, pressure treated where in contact with masonry or concrete. Plywood veneer "C" or "D" grade shall be used where concealed.
- B. Fastening devices shall be nails, screws, power actuated expansion anchors, or wall anchors as required, galvanized where exposed to the exterior.
- C. Plywood sheathing shall be "CDX."

##### 6.02 FINISHED CARPENTRY

- A. Lavatory counters shall be provided in central toilet rooms, and shall be fabricated from exterior plywood with plastic laminate finish.

- B. Casework shall be fabricated in accordance with "custom" grade standards of the Architectural Woodwork Institute (AWI), with plastic laminate finish.

#### DIVISION 7 - THERMAL AND MOISTURE PROTECTION

##### 7.01 INSULATION

Thermal insulation shall be provided with 2 inch thick blanket fiberglass vinyl faced insulation applied to the inside face of the pre-engineered metal building roof and wall panels.

##### 7.02 ROOFING SYSTEM

Roofing at the Scale House and Weigh Master Office shall be a single ply membrane mechanically attached system and shall be placed over rigid foam insulation as indicated.

##### 7.03 SEALANTS

Exterior concrete masonry unit joints shall be caulked with one-part or two-part urethane sealant. Other exterior joints shall receive one or two part urethane, or silicone base sealant. Interior sealants shall be acrylic latex base.

#### DIVISION 8 - DOORS AND WINDOWS

##### 8.01 HOLLOW METAL DOORS AND FRAMES

- A. Flush hollow metal doors shall be provided at all exterior and interior doors. Fire rated doors shall be provided where required. Doors shall be 18 gauge.
- B. Hollow metal frames shall be provided for all hollow metal doors and shall be 16 gauge roll formed steel with welded corners and prepared for hardware, fire rated as required.

##### 8.02 OVERHEAD ROLLING DOORS

- A. Four 14' 0" x 23' 0" electrically operated overhead rolling doors shall be provided and one 8' 0" x 8' 0" manually operated sectional roll-up door.
- B. Material: Galvanized steel.



### 8.03 GLAZING AND FRAMING, GENERAL

- A. Design Criteria, Doors and Framing Members: In accordance with wind load requirements of local Building Code.
- B. Safety Glazing: Install safety glazing materials where required by 16 CFR 1201 - Safety Standard for Architectural Glazing Materials and in all other locations required by local, state or federal law.
- C. Exposed Aluminum Finish: Finish and color to be selected by Owner and Architect.

### 8.04 ALUMINUM ENTRANCE DOORS (SWINGING)

Standard: Office entrance doors shall be aluminum, narrow stile, single acting, 1-3/4 inches thick including all door hardware except lock cylinder.

### 8.05 STOREFRONT METAL

Aluminum windows shall be operable single glazing system and sash members complete with all fastening devices.

### 8.06 FINISH HARDWARE

- A. Locksets and Latchsets: Medium duty, lever type, brushed stainless steel finish.
- B. Closers: Rectangular case, surface mounted.
- C. Hinges: Heavy duty steel butts, ball bearing type at doors with closers.
- D. Push, Kick and Mop Plates: Brushed stainless steel, mounted with stainless steel screws.
- E. Keying System: Separate keys shall be provided for the City offices and the operator's offices.

### 8.07 GLAZING

- A. Glass:
  - 1. All exterior vision glass shall be gray tinted, single glazing, float/plate glass, tempered where required by code.

2. Exterior glass/aluminum doors to be glazed with tempered 1/4 inch, single, clear, float/plate glass.
- B. Unframed Mirrors: Type I, Class 1, Quality q<sup>2</sup> or better, 1/4 inch thick with edges ground smooth.
- C. A 3 foot by 3 foot interior window in the Operation Manager's office is included.

8.08 GLASS FRAMING SEALANTS

- A. Sealant and backing material as required to provide weathertight joints between glass framing systems and adjoining building surfaces.
- B. Single component, silicone base sealant conforming to Fed. Spec. TT-S-1543, Class A, 1500 percent (minimum) elongation Spec. TT-S-230(c), Class A, Type II.

DIVISION 9 - FINISHES

9.01 INTERIOR FINISH SCHEDULE

In general, the following finishes shall be provided in the Contract.

<u>Area</u>	<u>Floor</u>	<u>Base</u>	<u>Walls</u>	<u>Ceilings</u>
City Offices Conf. Rm.	Carpet	Vinyl	Painted Gyp Bd & Wall Covering (accent 1 wall)	2x4 lay-in acoustical tile @ 9' height
Reception, Corridors Clerks, Operation Mgr, Controller, Landfill Mgr.	VCT	Vinyl	Painted Gyp Bd	2x4 lay-in acoustical tile at 9' height
Toilet Rooms at Admin. Office	Ceramic tile	Ceramic tile	Ceramic tile at fixture wall/wall covering @ others	Painted gyp. bd @ 8' 0" height

Toilet Rooms at Operations	VCT	Vinyl	Painted Gyp board	2x4 lay-in acoustical tile @ 9' 0" height
Break Room, Mail Room/Storage, Janitor, Mechanics, Operations Mgr.	VCT	Vinyl	Painted Gyp board	2x4 lay-in acoustical tile @ 9' 0" height
City Storage, Parts	Conc.	-----	Unfinished	Exposed
Service Bays	Conc.	-----	Unfinished	Exposed

#### 9.02 GYPSUM DRYWALL

- A. Gypsum wallboard shall be ASTM C 36, 1/2 inch thickness unless required otherwise by Code, tapered edges, fire rated, where required. Gypsum board shall be screw applied and finished with ready mixed all purpose joint compound. Fixture walls of toilet rooms shall receive moisture resistant gypsum board.
- B. Standard metal studs shall be electro-galvanized steel, cold rolled channel shaped, screw type, gauge as recommended by the manufacturer for all interior (and exterior) partition framing.

#### 9.03 CERAMIC TILE AND PAVERS

- A. Ceramic tile shall be provided on floors, base and full height of fixture wall in all toilet rooms.
- B. Wall tile shall be 2 inches by 2 inches size with glazed finish.
- C. Floor tile shall be 4-1/4 inch by 4-1/4 inch size ceramic, solid color matte finish.
- D. Marble thresholds shall be provided at all toilet room entrance doors.

#### 9.04 ACOUSTICAL CEILING SYSTEMS

Spaces scheduled to receive acoustical tile ceiling system shall have exposed grid system, 24 inches by 48 inches, lay-in, fissured mineral board, 5/8 inch thickness, reveal or square edged, exposed steel "T" runners. Color of grid system to be selected from manufacturer's standard finishes.

#### 9.05 RESILIENT FLOORING

- A. Areas scheduled for resilient flooring shall receive 12 inches by 12 inches by 1/8 inch thick vinyl composition tile.
- B. Vinyl base, where scheduled, shall be 1/8 inch thick by 4 inches height vinyl cove type.

#### 9.06 CARPET

- A. Carpet shall be commercial grade, direct glue-down type and shall consist of a level loop height with a minimum (face) weight of 28 ounces/square yard. An allowance of \$15.00 per square yard including installation is provided.
- B. Reducer strips shall be provided at adjoining material as manufactured by Mercer Plastic Co., Inc., No. 7, "Imperial" reducer or equal.

#### 9.07 PAINTING

- A. Exterior concrete masonry units shall receive 1 coat of primer and 1 coat of exterior latex paint.
- B. Metal doors, frames, exposed framing, miscellaneous metals, shall be shop primed to receive 2 coats alkyd resin (eggshell enamel).
- C. Interior gypsum board shall receive 1 coat sealer and 2 coats eggshell low luster acrylic latex base paint.
- D. Painted woodwork shall receive 1 coat enamel undercoater and 2 coats semi-gloss alkyd enamel.

#### 9.08 WALL COVERING

Walls scheduled to receive wall covering shall be prepared per manufacturer's written recommendations. Wall coverings shall conform to Type I or II, Class "A."

An allowance of \$1.00 per square foot including installation is included for fabric or vinyl wall covering.

### DIVISION 10 - SPECIALTIES

#### 10.01 TOILET PARTITIONS

Plastic laminate toilet partitions and urinal screens shall be floor mounted, overhead braced. Partitions in the Administration Building restrooms shall be City standard solid partitions. Urinal is wall hung. Hardware shall be polished non-corrosive metal.

#### 10.02 TOILET ROOM ACCESSORIES

Brushed stainless steel toilet room accessories shall be provided as follows (Bobrick or equal):

1. Surface Mounted Paper Holder (B-274): One each water closet.
2. Combination Recessed Paper Towel Dispenser and Waste Receptacle (B-3944): One each toilet room.
3. Surface Mounted Feminine Napkin Disposal (B-270): One each women's water closet.
4. Grab Bars (B-6293): One pair per handicapped toilet stall.
5. Janitor Shelf and Mop Hooks (B-244x30): One per janitor's closet.
6. Counter Mounted Soap Dispenser (B-822): One for every two lavatories.

### 10.03 SIGNAGE

An allowance of \$5,000.00 has been provided for exterior signage and project identification. The signage allowance includes one brick identification sign at US 301, speed limit signs, informational signs and all signage required by regulatory agencies.

### 10.04 FIRE EXTINGUISHERS

- A. Fire extinguishers shall be provided as required by Code. Final locations shall be as directed by Fire Marshall.
- B. Fire extinguishers in finished areas are to be located in recessed enameled (cabinet trim and door - polished chrome) steel cabinets with proper signage.

### DIVISION 11 - EQUIPMENT

- 1. Air Compressor
- 2. Wash Equipment

### DIVISION 12 - FURNISHINGS (OPERATION AND ADMINISTRATION BUILDINGS)

A \$50,000.00 furnishings allowance is included (including furniture, window coverings, kitchen equipment and lockers).

### DIVISION 13 - SPECIAL CONSTRUCTION

#### 13.01 FUEL FARM EQUIPMENT

Fuel farm equipment shall consist of:

- 1. (1) 15,000 gallon diesel tank.
- 2. (5) 550 gallon tanks.
- 3. (1) Diesel pump with 30 key access system.
- 4. (2) each hose reels with 5 hoses each.

### DIVISION 14 - CONVEYING SYSTEMS

None Included.

DIVISION 15 - MECHANICAL

15.01 PLUMBING

A. General:

1. Design and Installation: Shall meet all local code requirements.
2. Pipe and Fittings:
  - a. Sanitary, waste, vent and rainwater piping above and below floor shall be Schedule 40 PVC.
  - b. Domestic cold and hot water piping above grade shall be hard-drawn type "L" seamless copper tube with cast brass or wrought copper fittings joined with lead-free solder. Domestic cold water below grade shall be Schedule 40 PVC.
3. All domestic hot water piping shall be insulated.

B. Electric water heater (one for Operations and one for Administration) shall be located in mechanical closet nearest toilet area and have a 30 gallon capacity.

C. Floor drains in Service Bay and Wash Bay along with sand trap shall flow through the Wash Water Recovery System.

D. The Administration Office and Operations Building will have gutters and downspouts.

E. Plumbing Fixtures:

1. Provide white vitreous china floor mounted water closets with flush valve and elongated bowl.
2. Provide white vitreous china wall-hung flush valve urinals.
3. Provide white vitreous china counter top lavatories in toilet area.
4. Provide 2 wall-hung electric water coolers with 8.0 gallons per hour capacity outside toilet area; one in Operations and one in office Administration area.

5. A single compartment stainless steel sink is provided in the Break Room.
6. A wall-mounted service sink is provided in the Service Bay. Sink is to be fiberglass type.
7. An emergency shower/eyewash unit is provided in the Service Bay.
8. Provide water supply lines for coffee machine and ice maker at Break Room.
9. Four pre-fab shower units.
10. One 36 inch diameter semi-circular gang-type handwash sink.

#### 15.02 HVAC

##### A. General:

1. The heating systems in the Administration/Operations office areas shall be designed to maintain 72° F. The cooling systems in the office areas shall be designed to maintain 78° F.
2. The systems' capacities with regard to climatic conditions shall be based upon the 97.5% value for winter and the 2.5% value for summer from the latest edition of the ASHRAE Fundamentals Handbook.

##### B. Equipment:

1. The office areas shall be heated and cooled by a heat pump with electric resistance heat strip for emergency heat backup. Unit shall be located in the mechanical closet in the office space.
2. Office supply and return ductwork shall be fiberglass ductboard. All exhaust ductwork shall be uninsulated sheet metal.
3. The toilet rooms and janitor closets shall be ventilated.



DIVISION 16 - ELECTRICAL

16.01 GENERAL

The Contractor shall provide a complete system of power, lighting and miscellaneous electrical systems as follows:

- A. General: All work shall meet the requirements of the current National Electric Code, and other National, State and Local Regulations that apply. Material and equipment shall be new and comply with Underwriters Laboratory (UL), National Electrical Manufacturer's Association Standards (NEMA), and the American Society for Testing Materials (ASTM). Fluorescent lighting ballasts shall have the label of the Certified Ballast Manufacturers (CBM), and the American National Standards Institute (ANSI).
- B. Emergency Diesel Generators with Auto Transfer:
  - a. Administration Building: 100 kW
  - b. Operations Building: 225 kW (including power for fire pump and pumping station)
- C. Panelboards: Branch circuit panelboards shall be 480/277 volt, 3 phase, 4 wire, and 208/120 volt, 3 phase, 4 wire with bolt on circuit breakers. Panelboards shall be provided with doors and latch locks. All doors shall be keyed alike.
- D. Dry-Type Transformers: 480 volt, 3 phase primary, 120/208 volt, 3 phase, 4 wire secondary, transformers shall be provided for 120 volt loads as necessary.
- E. Wire and Conduit: All lighting and power lines shall be run in conduit which shall be Schedule 40 PVC underground, EMT indoors above ground and rigid galvanized for exposed exterior locations and in locations where potential damage hazards exist.

Branch circuit wiring conductors shall be Type THHN/THWN, THWN, or XHHW copper conductors. Minimum wire size shall be #12 AWG except where otherwise approved for control circuits. All wiring in fueling area must be solid copper.

F. Wiring Devices: Receptacles shall be specification grade, 20 ampere, grounding type. Switches shall be quiet type, specification grade, 125/277 volt rated. Outlet boxes shall be galvanized sheet steel, single or ganged, sized to accommodate wiring devices indicated on the drawings. Exposed boxes shall be standard rounded corner type. Concealed boxes shall be provided with suitable extension rings or plaster covers as required. Plates shall be smooth plastic in finished area and galvanized steel in unfinished areas.

G. Lighting: Lighting in offices shall have recessed 2 x 4, four lamp fluorescent fixtures. Corridors will have 1 x 4, two lamp fluorescent fixtures. Equipment rooms, storage areas, etc., with suspended ceilings, shall be furnished with 2 x 4 fluorescent fixtures with acrylic lenses.

Footcandle levels shall be as follows:

General Office Areas.... 50 footcandles average

Storage Areas and Shop.. 30 footcandles average

Conference room lighting shall consist of 2 x 4 three tube fluorescent fixtures with acrylic lenses and six incandescent downlights. Downlights shall be controlled by a dimmer switch.

Bathroom lighting shall be strip fluorescent type fixture with egg crate lenses.

H. HVAC Equipment: Electrical power and final connections are provided to air conditioning, water heaters, etc. Low voltage control wiring will be by the mechanical contractor.

I. Electrical Service: The utility company will provide an overhead secondary service drop from pole mounted transformers. Poles and overhead cables will be routed along the entry road from U.S. 301. Secondary conduit, cables, weatherheads, etc., will be installed by the Contractor. Main service will consist of service disconnect switches and meter sockets with a 480/277 volt distribution panel at each building. 120/208 volt panels will be provided at each of the building areas with appropriate dry type transformers. Services at various pump locations will consist of a service drop, meter socket, main disconnect switch and wiring to pump control panel and pumps.

## 16.02 SPECIFIC REQUIREMENTS

Installation at each building will be as follows:

### A. Scales, Scale House and Weigh Masters Office

1. Scale Connections
2. Weigh Master's Office - Lighting and Power, Fixtures, Receptacles, etc.
3. Lighting and Power, Fixtures, Receptacles, etc. Under canopy lighting shall meet and average intensity of 4 footcandles.
4. Hi Mast Lighting: One 60 foot tower with three 1000 watt Luminaires with Raise/Lower Mechanism.

### B. Administration Building

1. Lighting and power, recessed fluorescent fixtures, telephone outlets, switches, receptacles, HVAC power, and exterior lighting.
2. Hi Mast Lighting: One 60 foot tower with three 1000 watt Luminaires with Raise/Lower mechanism.

### C. Operations Building

1. Lighting and power, wiring for fire pump, compressor, high pressure washer, fluorescent fixtures and high pressure sodium in shop. Lighting and power for diesel pump in accordance with National Electrical Code. Hazardous area wiring where necessary.
2. Hi Mast Lighting: One 60 foot tower with three 1000 watt Luminaires with Raise/Lower mechanism.

### D. Landscape and Irrigation

Provide power feed to Irrigation Pumps.

### E. Roadway System Lighting

Roadway system lighting shall be provided and installed by Clay Electric Cooperative.

F. Mechanical Power

1. Class I, Class III and Leachate Pumping Station

- a. Provide power and control wiring for pumps and controls, Hazardous Area wiring where called for by National Electric Code.
- b. Provide temporary wiring from Clay Electric Cooperative. Maintain through duration of project and remove upon completion.

G. Security System

Master Intercom System in Administration Building.  
Manufacturer - Dukane.

H. Telephone System

- 1. Twenty (20) phone sets and wiring to eight (8) trunk lines interfaced with telephone utility wire at Administration Building. Manufacturer - Trillium, Panther II System.
- 2. All electrical installation shall be in strict accordance with local and National Electrical Codes.

EXHIBIT V  
PROJECT PROGRESS SCHEDULE

THE HASKELL COMPANY



ARCHITECTS/ENGINEERS/CONTRACTORS

Job	TRAIL RIDGE LANDFILL		
Location	US 301, Jacksonville, Florida		
By	Date	Revision date	Job No.
SRH	12/26/90		58830

Construction  
Progress  
Schedule

MONTH	1	2	3	4	5	6	7	8	9	10	11	12						
Contact & N.T.P.																		
Clearing																		
Building Pads																		
Road Construction																		
Drainage																		
Factwork																		
Final Dressing Pt. 1																		
6" Clay Liner																		
Membrane Liner																		
Sand Blanket																		
Leachate Collection Pt. 1																		
Final Dressing Pt. 2																		
Leachate Collection Pt. 2																		
Final Dressing Pt. 3																		
Fence																		
Ph. I Ancillary Facil. :																		
Site Electrical																		
Scale Canopy																		
Scale Booth/House																		
Temp. Admn. Office																		
Ph. II Ancillary Facil. :																		
Admin. Building																		
Operations Building																		
Haul-off Canopy																		
Irrigation & Landscaping																		
Water Treatment Plant																		
Complete Ancil. Sitework																		
Facility Operational																		
Final Completion																		

NOTE: Phase II Construction start date is subject to receipt of permits for Phase III Ancillary Facilities

EXHIBIT VI  
TRAIL RIDGE LANDFILL  
DRAWDOWN SCHEDULES/SCHEDULE OF VALUES

<u>MONTHS</u>	<u>PERCENTAGE</u>
1	20%
2	18%
3	20%
4	8%
5	6%
6	5%
7	4%
8	5%
9	5%
10	4%
11	3%
12	2%
	100%

4.2 SCHEDULE OF VALUES  
 BASE PROPOSAL - PLAN A - ABOVE GROUNDWATER DESIGN  
 FIRST INCREMENT

				Revised Proposal
ITEM	UNIT OF MEASURE	QUANTITY	UNIT PRICE	EXTENDED \$PRICE
4.2.1	Mobilization	LS	1	<u>490,841</u>
4.2.2	Insurance and Bonding	LS	1	<u>84,469</u>
4.2.3	Construction Administration			
4.2.3.1	Administration	LS	1	<u>51,875</u>
4.2.3.2	Surveying and Lay-out	LS	1	<u>130,476</u>
4.2.3.3	Testing	LS	1	<u>58,714</u>
4.2.3.4	QA/QC during Construction	LS	1	<u>583,141</u>
4.2.4	Ancillary Facilities			
4.2.4.1	Phase I (Total)			<u>390,412</u>
	a) Scale House and Scales . . . . .		(\$330,577)	
	b) Drainage and Stormwater Management . . . . .		(\$ 59,835)	
4.2.4.2	Phase II (Total)			<u>976,631</u>
	a) Administration Building . . . . .		(\$265,680)	
	b) Operation Building . . . . .		(\$524,300)	
	c) Drop-off Area . . . . .		(\$136,651)	
	d) Furnishing Allowance . . . . .		(\$ 50,000)	
4.2.5	Leachate Collection System			
4.2.5.1	8" HDPE Collection Pipe	LF	7,488	<u>17.97</u> <u>134,559</u>
4.2.5.2	Primary & Secondary Collection Sumps	EA	3	<u>30,608.00</u> <u>91,824</u>
4.2.5.3	4" HDPE Leachate Force Main	LF	1,152	<u>6.54</u> <u>7,534</u>
4.2.5.4	Leachate Storage Facility	LF	1	<u>297,922</u>
4.2.6	Storm Drainage System	LF	1	<u>705,827</u>

	ITEM	UNIT OF MEASURE	QUANTITY	UNIT PRICE	EXTENDED \$PRICE
4.2.7	Earthwork, Excavation and Paving				
4.2.7.1	Clear and Grub	AC	174	<u>1,087.00</u>	<u>189,138</u>
4.2.7.2	Silt Fence	LF	21,200	<u>4.78</u>	<u>101,336</u>
4.2.7.3	Strip and Stockpile	CY	99,273	<u>2.18</u>	<u>216,415</u>
4.2.7.4	Cut to Fill	CY	29,918	<u>2.44</u>	<u>73,000</u>
4.2.7.5	Fill from Lakes	CY	171,343	<u>4.36</u>	<u>747,055</u>
4.2.7.6	Gumbo Clay Cap	CY	14,925	<u>16.31</u>	<u>243,427</u>
4.2.7.7	Cut to Fill Roads	CY	14,741	<u>2.76</u>	<u>40,685</u>
4.2.7.8	Roadway Excess	CY	9,062	<u>3.69</u>	<u>33,439</u>
4.2.7.9	Seed and Mulch	SY	137,917	<u>0.29</u>	<u>39,996</u>
4.2.7.10	Final Dressing	LS	1		<u>217,355</u>
4.2.7.11	Concrete Roadway Crossing	LS	1		<u>23,909</u>
4.2.7.12	12" Stabilization	SY	75,966	<u>3.16</u>	<u>240,053</u>
4.2.7.13	8" Lime Rock Base	SY	53,612	<u>7.03</u>	<u>376,892</u>
4.2.7.14	1.5" S-1 Asphalt	SY	51,998	<u>3.43</u>	<u>178,353</u>
4.2.7.15	Concrete Ditch Pavement	SY	20,300	<u>21.42</u>	<u>434,826</u>
4.2.7.16	Enkamat	SY	10,333	<u>4.07</u>	<u>42,055</u>
4.2.7.17	Cut, Fill, Grade and Paving US301	LS	1		<u>105,734</u>
4.2.7.18	Striping and Parking Bumpers	LS	1		<u>19,507</u>
4.2.8	Water Treatment Plant & Distribution System	LS	1		<u>74,988</u>
4.2.9	Electrical Systems inclusive of emergency generator	LS	1		<u>405,392</u>
4.2.10	Irrigation and Landscaping	LS	1		<u>166,770</u>



	ITEM	UNIT OF MEASURE	QUANTITY	UNIT PRICE	EXTENDED \$PRICE
4.2.11	Liner System				
	4.2.11.1 Membrane Liner inclusive of geotextile, polynet and claymax	AC	57	<u>102,000.00</u>	<u>5,814,000</u>
	4.2.11.2 Protective Sand Cover and Clay Liner	LS	1		<u>1,052,454</u>
4.2.12	Fencing	LS	1		<u>219,363</u>
4.2.13	Monitoring Wells	LS	1		<u>46,000</u>
4.2.14	Wetland Mitigation	AC	5	<u>22,953.00</u>	<u>114,765</u>
4.2.15	Fire Pump System	LS	1		<u>118,187</u>
4.2.16	Demobilization	LS	1		<u>110,233</u>
			TOTAL PRICE		<u>15,449,552</u>

**EXHIBIT VII  
TRAIL RIDGE LANDFILL  
SCHEDULE OF CONTRACTOR SUBMITTALS**

**I. Shop Drawings/Certifications**

<u>NO.</u>	<u>ITEM</u>
1.	Fencing Submittals
2.	Landscape Plans
3.	Concrete Mix Design
4.	Rebar Shop Drawings
5.	Pre-Engineered Metal Building Shop Drawings
6.	Roofing Submittals
7.	Door and Hardware Shop Drawings
8.	Overhead Door Shop Drawings
9.	Window Shop Drawings
10.	Finish Material Samples
11.	Specialty Shop Drawings
12.	Fuel Equipment Shop Drawings
13.	Wash Water REcycle Unit Shop Drawings
14.	H.V.A.C. Submittals
15.	Plumbing Submittals
16.	Telephone Submittals
17.	Burglar/Fire Alarm Submittals
18.	Electrical Submittals
19.	Scale
20.	Generators
21.	Fire Pump
22.	Leachate Pumps and Piping
23.	Leachate Storage Tanks
24.	Limerock
25.	Asphaltic Concrete
26.	Geomembrane Liner
27.	Items purchased by CITY

**II. Approved Plans**

<u>NO.</u>	<u>ITEM</u>
1.	Project Specific Geomembrane Liner Quality Assurance Plan
2.	Soils Quality Assurance Plan
3.	Turbidity Control Plan

**III. Operation and Maintenance Manuals**

<u>NO.</u>	<u>ITEM</u>
1.	Pumps and Control Panels
2.	H.V.A.C. Equipment
3.	Instrumentation
4.	Generators and Transfer Switches
5.	Fire Pumps and Controller
6.	Water Treatment Plant
7.	Valves and Appurtenance
8.	Items purchased by CITY

EXHIBIT VIII  
TRAIL RIDGE LANDFILL  
SCHEDULE OF CITY PURCHASED MATERIALS AND EQUIPMENT

1. Ready Mix Concrete
2. Chain Link Fence Materials
3. Precast Concrete Items
4. Masonry Materials
5. Pre-Engineered Metal Buildings
6. Overhead Doors
7. Storefront and Windows
8. Hollow Metal Doors and Frames
9. Paint
10. Acoustical Ceiling and Materials
11. Gypsum Wallboard and Accessories
12. Carpet and Resilient Flooring
13. Toilet Accessories
14. Washwater Recycle Unit
15. Camera System
16. 5 Ton Crane
17. Fuel Farm Equipment
18. Truck Scales
19. Irrigation materials
20. Landscape Materials
21. Plumbing Materials and Fixtures
22. HVAC Materials and Equipment
23. Electrical Emergency Generators
24. Electrical Lighting Fixtures
25. Electrical Conduit, Wire and Materials
26. Telephone System
27. Security System
28. Project Sign
29. Toilet Partitions and Accessories
30. Miscellaneous Steel Items
31. Precast Concrete Structures
32. Submersible Pumps and Piping
33. Control Panels
34. Leachate Tanks
35. Leachate Pumps and Piping
36. Drainage Pipe
37. Fire Pump
38. Package Water Treatment Plant
39. Pipe, Valves, Fittings and Fire Hydrants
40. Filter Sand and Stone
41. Limerock
42. Asphalt
43. HDPE Liner
44. HDPE Geonet
45. Claymax
46. HDPE Piping

EXHIBIT IX  
TRAIL RIDGE LANDFILL

FORM OF APPLICATION FOR PAYMENT

The CONTRACTOR's endorsement and recommendation of payment shall be in the form:

"Recommendation for Payment No. (insert number, numbered consecutively). Attached hereto are (insert number) copies of (insert supplier name) Invoice No. \_\_\_\_\_, dated \_\_\_\_\_. The items invoiced were purchased under provisions of City Purchase Order No(s). (insert number) and are approved for incorporation in the Work by CONTRACTOR Submittal No(s) \_\_\_\_\_, approved by the Design Engineer on (insert date(s) of approval and the word "respectively," if appropriate). The invoiced items were received at (insert the words "the site," or "approved temporary storage location," as appropriate) on (insert date(s) of receipt and the word "respectively," if appropriate), were accepted for incorporation into the Work on that (those) date(s), and to the extent not previously incorporated said items are suitably stored at (insert physical location where stored). This Invoice has been reviewed and found to be in order; payment in the amount of (insert amount), is hereby recommended. It is understood that the amount of this recommended payment will be deducted by the CITY from the amount otherwise due for value of work completed and stored materials on the next CONTRACTOR's Application for Progress Payment.

TRAIL RIDGE LANDFILL, INC., CONTRACTOR

/s/ \_\_\_\_\_  
Typed Name and Title of Endorser  
Date: \_\_\_\_\_

**EXHIBIT X  
TRAIL RIDGE LANDFILL  
FORM OF PERFORMANCE AND PAYMENT BONDS AND INSURANCE CERTIFICATION**

Contract Bond will be provided within 10 days of City notification in accordance with contract provision.

# ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY)  
1/11/91

**PRODUCER**

NEAR NORTH INSURANCE AGENCY  
875 NORTH MICHIGAN, 23RD FLOOR  
CHICAGO, IL 60611

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW

**COMPANIES AFFORDING COVERAGE**

CONTACT: M. PATTISON 312-280-5540  
INSURED

BAF

- COMPANY LETTER A
- COMPANY LETTER B
- COMPANY LETTER C
- COMPANY LETTER D
- COMPANY LETTER E

CONTINENTAL CASUALTY COMPANY  
TRANSPORTATION INSURANCE CO.

- Trail Ridge Landfill, Inc.  
P.O. Box 6987  
Jacksonville, FL 32236

**COVERAGES**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS	
	GENERAL LIABILITY				GENERAL AGGREGATE	\$ 5,000
A X	COMMERCIAL GENERAL LIABILITY	GL0001605584	1/01/90	1/01/92	PRODUCTS-COMP/OPS AGGREGATE	\$ 5,000
X	CLAIMS MADE X OCCUR.				PERSONAL & ADVERTISING INJURY	\$ 5,000
X	OWNER'S & CONTRACTOR'S PROT.				EACH OCCURRENCE	\$ 5,000
X	PROD/COMP OPERATIONS				FIRE DAMAGE (Any one fire)	\$ 2,000
X	CONTRACTUAL				MEDICAL EXPENSE (Any one person)	\$
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	\$ 5,000
A X	ANY AUTO	EUA6001605581	1/01/90	1/01/92	BODILY INJURY (Per person)	\$
	ALL OWNED AUTOS				BODILY INJURY (Per accident)	\$
	SCHEDULED AUTOS				PROPERTY DAMAGE	\$
X	HIRED AUTOS					
X	NON-OWNED AUTOS					
	GARAGE LIABILITY					
	EXCESS LIABILITY				EACH OCCURRENCE	\$
	OTHER THAN UMBRELLA FORM				AGGREGATE	\$
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	WC4001605579	1/01/90	1/01/92	STATUTORY	\$
B					\$ 1,000 (EACH ACCIDENT)	
					\$ 5,000 (DISEASE-POLICY LIMIT)	
					\$ 1,000 (DISEASE-EACH EMPLOYEE)	
	OTHER					

**DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS**

All Operations and the Equipment of the Insured.  
The City of Jacksonville is an additional insured for liability arising out of operations performed by the Contractor for the City pursuant to this Agreement.

CERTIFICATE HOLDER 00620

City of Jacksonville  
Office of Insurance and Risk Management  
Room 605, City HALL  
220 East Bay St.  
Jacksonville, FL 32202

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 90 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE





# CERTIFICATE OF INSURANCE

SET TAB STOPS AT ARROWS  
 ISSUE DATE (MM/DD/YY)  
 1/11/91

**PRODUCER**  
 GREAT LAKES AGENCY, INC.  
 120 S. Riverside Plaza  
 Chicago, Illinois 60606

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

### COMPANIES AFFORDING COVERAGE

- COMPANY LETTER **A** National Union Fire Insurance Company of Pittsburgh, PA.
- COMPANY LETTER **B**
- COMPANY LETTER **C**
- COMPANY LETTER **D**
- COMPANY LETTER **E**

**INSURED**  
 Trail Ridge Landfill, Inc.  
 P.O. Box 6987  
 Jacksonville, FL 32236

### COVERAGES

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS		
						EACH OCCURRENCE	AGGREGATE
	<b>GENERAL LIABILITY</b>						
	<input type="checkbox"/> COMPREHENSIVE FORM				BOODY INJURY	\$	\$
	<input type="checkbox"/> PREMISES/OPERATIONS UNDERGROUND EXPLOSION & COLLAPSE HAZARD				PROPERTY DAMAGE	\$	\$
	<input type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS				BI & PD COMBINED	\$	\$
	<input type="checkbox"/> CONTRACTUAL				PERSONAL INJURY		\$
	<input type="checkbox"/> INDEPENDENT CONTRACTORS						
	<input type="checkbox"/> BROAD FORM PROPERTY DAMAGE						
	<input type="checkbox"/> PERSONAL INJURY						
	<b>AUTOMOBILE LIABILITY</b>				BOODY INJURY (PER PERSON)	\$	
	<input type="checkbox"/> ANY AUTO				BOODY INJURY (PER ACCIDENT)	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (PRIV. PASS.)				PROPERTY DAMAGE	\$	
	<input type="checkbox"/> ALL OWNED AUTOS (OTHER THAN PRIV. PASS.)				BI & PD COMBINED	\$	
	<input type="checkbox"/> HIRED AUTOS						
	<input type="checkbox"/> NON-OWNED AUTOS						
	<input type="checkbox"/> GARAGE LIABILITY						
	<b>EXCESS LIABILITY</b>				BI & PD COMBINED	\$	\$
	<input type="checkbox"/> UMBRELLA FORM						
	<input type="checkbox"/> OTHER THAN UMBRELLA FORM						
	<b>WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY</b>				STATUTORY		
					\$	(EACH ACCIDENT)	
					\$	(DISEASE-POLICY LIMIT)	
					\$	(DISEASE-EACH EMPLOYEE)	
<b>A</b>	<b>OTHER POLLUTION LEGAL LIABILITY</b>	PRM 9210461	4/25/90	4/25/91	\$10,000, Any one claim \$10,000, Annual aggreg		

### DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

The City of Jacksonville is an additional insured for liability arising out of operations performed by the Contractor for the City pursuant to this Agreement.

### CERTIFICATE HOLDER

City of Jacksonville  
 Office of Insurance and Risk Management  
 Room 605, City Hall  
 220 East Bay St.  
 Jacksonville, FL 32202

### CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 60 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS, OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

T.N. Thoelecke

EXHIBIT XI  
TRAIL RIDGE LANDFILL  
LIST OF EXTENDED WARRANTIES

<u>NO.</u>	<u>ITEM</u>
1.	Single-Ply Roof System
2.	Standing Seam Single-Ply Roof
3.	Scale System
4.	Fuel Tanks Excluding Pumps and Equipment
5.	HVAC



EXHIBIT XII

NOTICE TO PROCEED

To: TRAIL RIDGE LANDFILL, INC.  
c/o Waste Management of North America, Inc.  
500 Cypress Creek Road, W., Suite 300  
Fort Lauderdale, Florida 33309

CERTIFIED MAIL  
CERTIFICATE No. \_\_\_\_\_  
DATE OF NOTICE: \_\_\_\_\_  
CITY CONTRACT NO. \_\_\_\_\_

In accordance with provisions of Article 4.3 of the Agreement (referenced City Contract) dated \_\_\_\_\_, you are hereby notified to commence construction of the Initial Landfill Project within thirty (30) days following the date of your receipt of this Notice to Proceed. You are requested to acknowledge receipt by completing, signing and returning one copy of this Notice to the CITY as provided in Article 10.1 of the Agreement. The thirtieth day of said period shall be considered the effective date of this Notice, i.e., \_\_\_\_\_ (CONTRACTOR shall enter the date of the thirtieth day prior to return of the Acceptance copy).

Further, you are directed to accomplish the Work so as to achieve:

- (a) Certification to FDER that the facility has been completed to a degree which will allow Initial Operations (as defined in the Agreement) to commence within one hundred eighty (180) days from and including the effective date. Thus, certification shall be achieved on or before \_\_\_\_\_ (CONTRACTOR shall enter the date of the 180th day prior to return of the Acceptance copy).
- (b) Substantial Completion of the Work within three hundred sixty-five (365) days from and including the effective date. Thus, Substantial Completion shall be achieved on or before \_\_\_\_\_ (CONTRACTOR shall enter the date of the 365th day prior to return of the Acceptance copy).

CITY OF JACKSONVILLE, FLORIDA

By: \_\_\_\_\_  
Director of Public Utilities

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed on \_\_\_\_\_ (insert date of receipt, as evidenced by Certified Mail Return Receipt) is hereby acknowledged by TRAIL RIDGE LANDFILL, INC.

By: \_\_\_\_\_/s/

\_\_\_\_\_  
Print or Type Name

Title: \_\_\_\_\_

Date of Execution: \_\_\_\_\_