Lee County Board Of County Commissioners
Agenda Item Summary

Blue Sheet No. 20061709

1. ACTION REQUESTED/PURPOSE: Approve and authorize the Chairman to sign Change Order No. 3 to the Construction Contract with Casey Industrial, Inc. (Lee Contract No. 3334) providing for the installation of the Dolomitic Lime Handling System to be performed as part of the WTE expansion project. Total Change Order amount is $556,824.00 and is within the planned contingency for this project.

2. WHAT ACTION ACCOMPLISHES: Provides a Contractor to construct and install equipment for the storage, handling and delivery of dolomitic lime system as part of the WTE Expansion Project.

3. MANAGEMENT RECOMMENDATION: Staff recommends approval of the requested motion.

4. Departmental Category: 8 C8D		**5. Meeting Date:** January 9, 2007
6. Agenda:	**7. Requirement/Purpose:** *(specify)*	**8. Request Initiated:**
X **Consent**	___ **Statute**	**Commissioner**
___ **Administrative**	___ **Ordinance**	**Department** Public Works
___ **Appeals**	X **Admin. Code** AC 4-4	**Division** Solid Waste
___ **Public**	___ **Other**	**By:** Lindsey J. Sampson
___ **Walk-On**		Lindsey J Sampson

9. Background:

The Solid Waste Division had design and construction documents prepared for the installation of the dolomitic lime handling system separately from the overall WTE expansion project in order to ensure timeliness of the base project and also to design the installation of this equipment around the existing facility. The County's design engineer, Burns & Roe, issued these plans and specification as a bid solicitation. On the bid date, the Engineer received only one bid along with a notice of 'no bid' from another contractor.

The County's Construction Manager, Covanta, agrees that the issuance of the change order is appropriate for the project.

Funds are available in Account: 20092340102.506540.

Attachments: Change Order No. 3 (Draft)

10. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services				County Manager/P.W. Director
					Analyst	Risk	Grants	Mgr.	
12.19.06	Cindy Logan NB	N.A.		S. Kamm 12/19/06	12.20.06	12/19	12-20-06	12/20/06	12.19.06

11. Commission Action:

___ **Approved**
___ **Deferred**
___ **Denied**
___ **Other**

RECEIVED BY COUNTY ADMIN: 12/19 1pm
COUNTY ADMIN FORWARDED TO: 12/20 3pm PR

Rec. by CoAtty
Date: 12/19/06
Time: 10:40am
Forwarded To: Admin 12/19/06

DRAFT

LEE COUNTY CONSTRUCTION CONTRACT
CHANGE ORDER No.: 03

(A Change Order requires approval by the Department Director for expenditures under $50,000, approval by the County Manger for expenditures between $50,000.01 and $100,000, or approval by the Board of County Commissioners for expenditures over $100,000).

CONTRACT/PROJECT NAME: Balance of Plant General Construction WTE Expansion Project

CONTRACTOR: Casey Industrial, Inc. PROJECT NO.:

CONTRACT NO.: 3334 BID NO.: RFP B&R 2661GC200

CHANGE REQUESTED BY: County DATE OF REQUEST: 12/18/06

Upon the completion and execution of this Change Order by both parties to the Contract the Contractor is authorized to and shall proceed to make the following changes in the Contract Documents:
(If you need space other than what has been provided, please attach additional sheets.)

Description: Install equipment for the storage and handling of dolomitic lime in accordance w/ RFP GC 200

Purpose of Change Order: Compensates Contractor for additional scope of work

Attachments: (List documents supporting change) Attachment A,

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIME:
Original Contract Price $29,696,934.00	Original Contract Time See Contract Calendar Days
Previous Change Order No. 01 to No. 02 $1,934,989.95 (NTE)	Net Change from previous Change Orders See Documents Calendar Days
Contract Price prior to this Change Order $31,631,923.95	Contract Time prior to this Change Order See Contract Calendar Days
Net Increase (Decrease) of this Change Order $556,824.00	Net Increase (Decrease) of this Change Order See Attchmt A Calendar Days
Contract Price will all approved Change Orders $32,188,747.95 Not to Exceed	Contract Time with all approved Change Orders Per Contract Documents Calendar Days

It is understood and agreed that the acceptance of this modification by the CONTRACTOR constitutes an accord and satisfaction, and represents payment in full (both time and money) for all costs arising out of, or incidental to, the above mentioned change.

RECOMMENDED:

By: N.A.
Consultant (if applicable) Date

By: Lindsay Hagan 12/18/06
Department Director Date

Cindy Logan NB 12/19/06
Contracts Management

APPROVED:

County Attorney's Office Date

ACCEPTED

By:
Contractor

Date Accepted:

(CORPORATE SEAL)

COUNTY APPROVAL:

By:
Department Director (Under $50,000)

Date Approved:

By:
County Administration (Under $100,000

Date Approved:

By:
Chairman
Board of County Commissioners
(Over $100,000)
Date Approved:

Attachment #A
Change Order No. 3, Lee Contract No. 3334
Casey Industrial, Inc., WTE Expansion Project

Provide labor, material, and equipment to receive, inspect, install, test, and start-up all of the dolomitic lime storage and handling equipment in accordance with RFP GC-200 including all referenced plans and specifications therein.

Schedule of installation of this equipment shall be:

Installation of this equipment is not to affect the "Mechanical Completion Date" as noted in the original Contract and in Change Order No. 2 of the Contract.

COVANTA ENERGY

SPEC. NO.	GC-200
ISSUE	000
DATE	11/07/06

SUMMARY OF WORK - Installation of Dolomitic Lime Feed System

Facility Name: LEE COUNTY WTE EXPANSION

Location: FORT MYERS, FLORIDA

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This document and all information contained herein are the property of Purchaser, Lee County, and are not to be used except as expressly authorized in writing by said company

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Prepared By:

A/E Name: Burns and Roe, Enterprises, Inc.
Address: 800 Kinderkamack Road
Oradell, New Jersey 07649
Telephone: 201-265-2000

A/E Approved for Release:

	Printed Name	Signature	Date
1.	P. ISOLDE		11/7/06 Issued for Bids
2.			
3.			
4.			

SUMMARY OF WORK
INSTALLATION OF DOLOMITIC LIME FEED SYSTEM

TABLE OF CONTENTS

SUMMARY OF WORK

1. SCOPE

This document summarizes the work to be performed by the General Contractor for the installation of the dolomitic lime feed system for the Lee County Waste to Energy Plant Unit 3 (636 TPD) Expansion Project and existing Units 1 & 2.

The existing plant will remain in operation during execution of the scope of work herein. Work requiring interfacing with the existing plant system(s) shall be performed during a plant outage.

2. DOCUMENTS

All Work shall conform to the requirements of the Technical Specifications, Contract Drawings and other Contract Documents.

2.1 Technical Specifications

2.1.1 Civil/Architectural

SS-408 Concrete

SA-502 Painting

2.1.2 Mechanical

SM-136 Piping

SM-137 Valves

SM-147 Mechanical Installation

SM-162 Dolomitic Lime Feed System

2.1.3 Electrical

SE-210 ELECTRICAL INSTALLATION

SE-213 POWER, CONTROL & INSTRUMENTATION CABLE

SE-290 ELECTRICAL TESTING AND CALIBRATION

2.1.4 I&C

SC-318 INSTRUMENT INSTALLATION (Including Installation Dets)

2.2 Contract Drawings

The following is a listing of the drawings supplied for the execution of the work scope:

Purchaser Drawings:

S150	A	Dolomitic Lime Feed System Blower and Day Bin Pad Plan, Sects and Dets
S690	0	Typical Anchor Bolt Details
E0033		480V BOILER #3 MCC-24 One Line Diagram
E0038		480V APC MCC-1-1 One Line Diagram
E0039		480V APC MCC-1-1 One Line Diagram
E0044		480V APC MCC-3 One Line Diagram
E1094		208/120V Power Panel PP-24 Panel Schedule (LATER)
E1095		208/120V Power Panel PP-25 Panel Schedule (LATER)
E2601		EWD - Dolo Lime - Bin Vent Exh Fan (DL-FN-003)
E2602		EWD - Dolo Lime - Bin Activator (DL-BA-006)
E2603		EWD - Dolo Lime - Rotary Airlock (DL-AL-008)
E2604		EWD - Dolo Lime - Refrigerant Dryer (DL-DR-009)
E2605		EWD - Dolo Lime - Lime Blower A (DL-BL-010)
E2606		EWD - Dolo Lime - Lime Blower B (DL-BL-011)
E2607		EWD - Dolo Lime - Miscellaneous Instrumentation
E2611		EWD - Dolo Lime - Bin Vent Exh Fan (DL-FN-102)
E2612		EWD - Dolo Lime - Bin Activator (DL-BA-103)
E2613		EWD - Dolo Lime - Rotary Airlock (DL-AL-105)
E2614		EWD - Dolo Lime - Screw Conveyor (DL-CV-106)
E2615		EWD - Dolo Lime - Filter 101 Interconnections
E2621		EWD - Dolo Lime - Bin Vent Exh Fan (DL-FN-202)
E2622		EWD - Dolo Lime - Bin Activator (DL-BA-203)
E2623		EWD - Dolo Lime - Rotary Airlock (DL-AL-205)
E2624		EWD - Dolo Lime - Screw Conveyor (DL-CV-206)

E2625	EWD - Dolo Lime - Filter 201 Interconnections
E2631	EWD - Dolo Lime - Bin Vent Exh Fan (DL-FN-302)
E2632	EWD - Dolo Lime - Bin Activator (DL-BA-303)
E2633	EWD - Dolo Lime - Rotary Airlock (DL-AL-305)
E2634	EWD - Dolo Lime - Screw Conveyor (DL-CV-306)
E2635	EWD - Dolo Lime - Filter 301 Interconnections

Delta Ducon Drawings:

Drawing No.	Title
D1367-P01	P&ID-DOLO LIME STORAGE/DISCHAR SYS
D1367-R01	GEN. ARRANGEMENT ROOF PLAN/ELEV
D1367-R02	GEN. ARRANGEMENT ELEVATION VIEW
B1367-I01	SILO LVL TRANSDUCER MOUNT/ASSEMBLY
B1367-M02	8"XT ROTARY FEED/AIRLOCK ARR'G DL-A[8"XT ROTARY FEED/AIRLOCK ARR'G DL-A]
D1367-M03	ASS'Y 8"XT ROTARY FEED/RIGID BASE
3T-1344	ZERO SPEED SWITCH ARR'G 8"XT ROTARY
3T-1269	ROTARY FEEDER SEAL AIR KIT ARR'G
B1367-M01	8"XL ROTARY AIRLOCK SUPPORT STAND
8 INCH SERIES 20 MAN.KNIFE GATE VALVE	8 INCH SERIES 20 MAN.KNIFE GATE VALV
D-21987	KBA-7 HD/7'-0"DIA.BIN ACTIVATOR
B-21988	7'-0"DIA. WELD BIN OUTLET ADAPTOR
B1367-E05	ELEC. SCHEM DIAGRAM SILO FILL PANEL
B1367-E06	ELEC. SILO FILL PANEL LAYOUT[ELEC. SILO FILL PANEL LAYOUT]
5071-0000	BIN VENT BB-36-58IIG,DL-BV-002
901-0070	ANCHOR BOLT LAYOUT-LEG TANK
B1367-E51	ELECTRICAL-MOTOR LIST
B1367-E07	ELECTL-VFD CONN DIAGRAM (DL-AL-105)
B1367-E08	ELECTL-VFD CONN DIAGRAM (DL-AL-205)
B1367-E09	ELECTL-VFD CONN DIAGRAM (DL-AL-305)
28-0011255	SCREW CONVEYOR ASMBLY 6'X8'-0"

Drawing No.	Title
MF-039711	6" SINGLE EXPANSION JOINT
D-22110	KBA-2-HD/2'0" DIA BIN ACTIVATOR
B-22111	2'0" DIA WELDED BIN OUTLET APT RING
901-0101	FILL LINE SWITCH ASSEMBLY
103-0505	TURBULENCE BOX W/CLEAN OUT
B1367-F02	8" XL ROTARY AIRLOCK SUPP STAND
B1367-F03	8"X4" TRANSITION
D1367-G01	PIPING ARRANGMENT ROOF PLAN
D1367-G02	PIPING ARRANGMENT ROOF PLAN & ELEV
1376-BOM	MASTER BILL OF MATERIAL
104-5041	PVR VALVE ASSEMBLY
104-5049	MANWAY-24"DIA(6)HOLDDOWN W/PVR OP
104-6079	4'0"SQUARE FILTER FLANGE
135-3060	FLNGE ASBLY6"-150#DRILLG(RAIS FACE)
ES-480	TANK ERECTION STANDARD
ES-650	TANK MAINTENANCE PROCEDURE
LADDER ASSEMBLY MANUAL	LADDER ASSEMBLY MANUAL
UPPER GUARDRAIL ASSEMBLY MANUAL	UPPER GUARDRAIL ASSEMBLY MANUAL
I-44793-1	14'0"DIA TANK ASSMBLY DRAWING
I-44793-2	MISC. DETAILS
I-44793-3	PIPE SUPPORT DETAILS
D1367-P02	P&ID DOLOMITRIC LIME CONVEYING SYS
T-336	STANDARD PERM/FLO COMPRESSION FIT'G
B1367-M05	6"XT ROTARY FEEDER/AIRLOCK, 10 VANE
B1367-M06	4" DIVERTER VLV ASMBLY W/4"AIR OPER
B1367-M07	ZERO SPEED SWITCH ARGMNT,6"XT ROTRY
B1367-M08	406 RAM PRESSURE BLOWR ASMBLY
575D0201	SOLIDS EDUCTR NIHARD NZLE&TAIL INST
4" SERIES 20AIR OPERATED KNIFE GATE	4" SERIES 20AIR OPERATED KNIFE GATE
6"SERIES 20 KNIFE	6"SERIES 20 KNIFE FATE VLV W/HNDWHL

Drawing No.	Title
FATE VLV W/HNDW	
5096-5098-0000	FILTER RECEIVER CBX-24-IIIG
B1367-E01	ELECTRICAL-480 VOLT TERMNL BOX SILO
B1367-E02	ELECTL-CNTRL TRMNL BOX SIL0&FILT101
B1367-E03	ELECTL-CNTRL TRMNL BOX SIL0&FILT201
B1367-E04	ELECTRICAL-480 VOLT TERMNL BOX FILT

In general, Work to be performed is indicated on these drawings. Drawings are provided to indicate the type and extent of Work required for the installation of the dolomitic lime feed system.

3. IDENTIFICATION OF THE PROJECT

The Work to be performed is for the Lee County Waste to Energy Plant Unit 3 Expansion Project with additional capacity of 636 Tons Per Day. Work also includes interfacing with the existing Unit 1 & 2 fly ash systems. The Project is to be constructed inside the existing building located in Fort Myers, Florida.

4. WORK COVERED BY THIS CONTRACT

Contractor shall furnish all labor, materials, equipment and tools required for the completion of the Work associated with the installation of the dolomitic lime feed system. Work shall include, but is not limited to the following.

4.1 Civil/Architectural

4.1.1 Foundation and Concrete Work

a. Furnish and install concrete pad doweled in to APC Area Foundation Mat/slab for Dolomitic Lime Blowers, filter receiver legs, and Dehumidifier

b. Furnish and install Drilled-in Anchor Bolts for blowers and filter receiver legs.

c. Furnish and install expansion anchors for conveyor supports, dehumidifier, filter receiver legs, and filter receiver platform access ladders, all supported from existing slab/mat

4.1.2 Structural and Miscellaneous Steel

a. Furnish and install miscellaneous/supplementary steel for conveyor and piping supports.

4.1.3 Grouting

a. Provide grouting for setting all support and equipment bases installed by Contractor.

b. All grout shall be non-shrink.

4.1.4 Architectural

a. Provide pipe, conduits, and cable tray penetrations through interior and exterior walls. All penetrations through exterior walls shall be weather tight. All penetrations through fire separation walls shall be sealed with fire-stopping material.

b. Provide necessary interface with existing walls, roofing, parapet and slabs.

4.1.5 Painting and Coating

a. Prime coat and finish paint all un-insulated piping, and ductwork furnished under this Contract, and piping and ductwork furnished by others.

b. Touch up finish paint on all equipment furnished under this Contract and furnished by others after installation as necessary.

4.2 Mechanical

4.2.1 Overall Work Description

The Contractor shall perform the work indicated below. Detailed descriptions and requirements for the system and equipment of the Work are addressed under the section titled "Systems/Equipment Description". Work shall include, but is not limited to the following:

a. Install Purchaser supplied silo and equipment. See section 5.2 for details.

b. Modify the existing fly ash screw conveyors of all three units and install new discharge flanges/spools to connect system.

4.2.2 Systems/Equipment Description

a. Dolomitic Lime Feed System

The Dolomitic Lime Feed System consists of a 3800 ft^3 capacity storage silo, truck fill line, silo vent filter, bin activator, rotary feeder, eductor and pneumatic conveying system with two (2) redundant blowers provided by Delta/Ducon along with individual day bins/filter receivers, bin activators, rotary feeders, screw conveyors, and expansion joints to serve the new combustion unit and the existing combustion units. In addition, the existing dolomitic lime feed hoppers (for the existing units) shall be removed.

The storage silo will receive periodic truck deliveries of dolomitic lime conveyed through a truck fill line extending from the outside of the APC enclosure to the top of the silo. The pneumatic conveying system feeds dolomitic lime from the storage silo to the individual filter receivers at each unit on a periodic basis. Each filter receiver is equipped with a bin activator, a variable speed rotary feeder, screw feeder at the outlet, and expansion joint to feed dolomitic lime to its respective fly ash screw conveyor at a controlled rate.

The system and equipment as supplied by Delta/Ducon includes the storage silo with bin vent filter and truck fill line, all conveying and air piping, valves, pressure relief valves, filter receivers and feed equipment, motors, process controls, etc. Additional system accessories, including pipe supports, motor starters, wiring, etc., shall be supplied and installed along with the Delta/Ducon equipment for a complete operational system.

Contractor shall install the entire dolomitic lime feed system, as noted below.

Erection and installation of complete dolomitic lime feed system shall be by Contractor including relocation, demolition and removal of equipment as described herein. The following equipment installation and demolition shall be included in Contractor's scope of supply:

- Removal of existing lime feed bins/systems at the Unit 1 & 2 fly ash conveying systems.
- Modification to fly ash screw conveyors for all three units and installation/welding of connecting pipe spool/flanges for acceptance of dolomitic lime feed.
- Installation of complete dolomitic lime storage silo and truck unloading equipment including silo, support legs, access ladder and platform, bin vent (dust collector) and jib crane. Silo equipment includes outlet hopper, and level instrumentation, bin activator to prevent compaction and bridging, manual knife gate valve at bin activator outlet for shut-off, variable speed rotary

feeder and support stand. Truck unloading equipment includes fill pipe with quick disconnect truck fittings and fill panel.

- Installation of complete dolomitic lime pneumatic conveying between storage silo and filter receivers complete with eductor, blowers, refrigerant dryer, clean air and conveying piping, valves, relief valves, etc.
- Installation of filter receivers and feed system include support to grade, vacuum/pressure relief vents, access ladders and platforms, vent filters and exhaust fans, bin activators, knife gate valves, variable speed rotary airlock feeders, screw conveyors to feed dolomitic lime to the ash screw conveyors, and expansion joints.
- Installation of all transfer chutes, transition pieces, expansion joints, required hardware, associated equipment, and other materials necessary to ensure a complete installation and operable system.
- All necessary drivers and controls.
- Instrumentation and controls including local control stations, safety switches, interlocks, etc. as required for the installation.
- Compressed air (service and instrument air) supply piping to all vent filters and air operated valves including supply of piping as part of BOP piping.
- Field adjustments, calibration, and field testing of all equipment furnished.

b. Balance of Plant (BOP) Piping

The Contractor shall furnish and install all necessary BOP piping. BOP piping includes the following systems: compressed air (service and instrument air).

BOP piping includes pipe, valves, fittings, flanges, piping specialties, bolts, nuts, washers, gaskets, in-line instruments, welded attachments, and pipe hangers and supports. Control valves and other pneumatically operated valves will be furnished by others for installation by Contractor. All other piping materials, valving and accessories shall be furnished and installed by Contractor. Systems will be complete with all necessary testing for tightness, flushing and chemical cleaning, including steam blowing of systems, if applicable.

BOP piping shall be furnished, fabricated, installed, cleaned, tested, and painted and insulated, as applicable, in accordance with Convanta Technical Specifications SM-136 "Piping", SM-137 "Valves", SM-147 "Mechanical Installation", SA-408, "Concrete", and SA-502, "Painting".

Contractor will field route and support all small bore (under 2 ½") piping. Contractor shall NOT route field run piping in a manner which constricts or interferes with access aisles, roads, service bays, headroom for personnel and vehicles, doors, hatches, service ports, observation ports, etc.

c. Mechanical Equipment

Installation of mechanical equipment shall be in accordance with Technical Specification SM-147 "Mechanical Installation".

4.3 Electrical

Contractor's scope for the Dolomitic Lime System shall include, but not be limited to, the complete supply and installation of field wiring from MCC's, DCS and distribution power panels to equipment furnished by the Dolomitic Lime System vendor. This shall include conduit, raceway, supports and installation materials. Cable estimate is based on Contract Drawings.

4.4 I&C

Instrument Installation

Contractor shall install all field mounted instrumentation associated with the Dolomitic Lime System, except if the instrumentation is included as part of a shop fabricated equipment assembly.

All instruments shall be installed in accordance with the requirements of attached Technical Specification SC-318, Instrument Installation and the attached Instrument Installation Details

4.5 Testing and Inspection

Contractor shall provide all required testing and inspection as identified in the technical specifications and as required by the applicable codes and standards.

4.6 Submittals

Furnish all submittals as identified in the technical specifications.

5. WORK BY OTHERS

The work listed hereinafter will be performed by other:

5.1 Furnish and Erect

The following work will be furnished and erected/installed by others:

a. Furnish and install the complete ash handling screw conveyor system.

5.2 Furnish

The following equipment will be furnished by Purchaser, which shall be installed by the Contractor. Installation, by the Contractor, shall include receiving, unloading, on-site transportation, and storage of the Purchaser's furnished equipment.

a. Dolomitic lime storage silo including support legs, access ladder and platform, bin vent (dust collector) and jib crane.
b. Truck unloading equipment including fill pipe with quick disconnect truck fittings and fill panel, outlet hopper, and level instrumentation.
c. Bin activator to prevent compaction and bridging.
d. Manual knife gate valve at bin activator outlet for shut-off.
e. Variable speed rotary feeder and support stand.
f. Pneumatic conveying system between storage silo and filter receivers complete with eductor, blowers, refrigerant dryer, clean air and conveying piping, valves, relief valves, etc.
g. Filter receivers with support to grade, vacuum/pressure relief vents, access ladders and platforms, vent filters and exhaust fans, bin activators, knife gate valves, variable speed rotary airlock feeders, screw conveyors to feed dolomitic lime to the ash screw conveyors, and expansion joints.
h. Electrical and control equipment including local control panels and jog stations, variable speed drives, motors, safety and control switches and level indicators, solenoid valves, etc.
i. Prime and finish painting of silo, filter receivers and equipment.

6. SITE INSPECTION

Prior to submitting a bid, Contractor shall visit the site of the proposed Work and shall familiarize itself, in detail, with the extent of the Work to be performed; including existing and anticipated conditions and difficulties that might affect the execution of the Work.

7. PERMITS

Contractor shall be responsible for obtaining all necessary construction permits, including preparation of permit application forms, submission, and all costs associated with the preparation of permits. Permit fees paid by Contractor will be a pass through cost to Purchaser. All permit Work shall be coordinated with Purchaser.

8. ON-SITE STORAGE AND LAYDOWN

Unsurfaced, open storage and laydown area(s) for Contractor's use will be as designated by Purchaser. Contractor shall confine all storage to within the area(s) designated.

9. RESTRICTIONS

a. All Work shall be performed in accordance with Purchaser's Site-Specific Safety and Health Standards, and local, state, and federal laws and regulations.

b. Contractor shall perform the Work with minimum interference to existing roads, traffic, and adjacent occupied premises and operations. Materials and equipment shall not be placed or stored in the roads, fire aisles, or passageways.

c. All Work shall be performed in a manner and sequence such that impact to the operation of the existing plant is minimized.

d. Contractor shall confine all activities and vehicle movement to within the area(s) designated by Purchaser.

e. Contractor shall maintain emergency and fire egress, and access, at all times.

10. SEQUENCE OF WORK

Contractor shall perform the Work in a sequence as reviewed and approved by Purchaser.

11. VERIFICATION OF EXISTING CONDITIONS

Contractor shall field verify existing condition prior to fabrication of new Work interfacing with the existing work.

12. COORDINATION

Contractor shall coordinate all its construction activities with Purchaser and other Contractors on the site. Contractor shall not

shut and/or disconnect any existing utility without written approval from Purchaser.
All work requiring tie-in to the existing plant systems shall be performed during a plant outage. Plant outage schedule shall be coordinated with purchaser.

13. PROTECTION

a. During the performance of the Work, Contractor shall take all necessary precautions to adequately protect existing structures, overhead and buried utilities, paving, sidewalks, curbs, trees, shrubs, vegetation and landscaped areas, and security fences. Where existing Work is damaged by Contractor, that Work shall be repaired, or otherwise restored to its original condition, as approved by, and at no additional cost to, Purchaser.

14. SURVEY

Provide all necessary survey work required for the location of pads, anchor bolts and equipment.

15. HAZARDOUS MATERIAL

Prior to the start of construction, Contractor shall survey the Work areas to determine the presence of hazardous materials. Any suspect materials shall be reported to Purchaser. Contractor shall not disturb any suspect material until it is determined to be safe.

If, during the performance of the Work, hazardous material is encountered, the Contractor shall cease all operations in the affected area and shall promptly notify Purchaser. The Work shall not proceed in the affected area without Purchaser's written approval.

During performance of the Work, the Contractor shall, at all times, take all necessary precautions to prevent the discharge of any hazardous materials or liquids onto the site or into the environment.

16. SAFETY

Contractor shall be solely responsible for safety at the site as related to its performance of the Work.

17. REPAIR OF DISTURBED AREA

All areas disturbed by Contractor shall be restored to the original conditions existing prior to the start of Work as approved by Purchaser.

18. SITE MAINTENANCE AND CLEANUP

Contractor shall maintain the Work areas free of debris at all times. At completion of Work, Contractor shall remove all debris and excess material from the site. Site shall be left in a neat condition.

Contractor shall be responsible for control of dust resulting from its construction operations. Contractor shall use water spray or other methods, as approved by Purchaser, to prevent the spread of dust.

19. RECORD DRAWINGS

Contractor shall maintain a set of as-built red-lined Drawings. At the completion of the Project Contractor shall provide as-built Record Drawings to Purchaser.