

**FIWP ELECTRICAL**

Project Number:	1000		
FIWP number & revision number:	FIWP 8120. 051		
All related CWP and revision number:	CWP-8120-14		
Area/System/SubSystem/Discipline:	Area 8120 - Electrical		
Work will be performed : Greenfield			
Prepared by:	Jim Bob Planner	Date:	1 Feb 06
Revised by:	Jim Bob Planner	Date:	1 March 06
Issued by:	Jim Bob Electrical Superintendent	Date:	7 March 06
Released by:	Bob Bob Area Superintendent	Date:	14 March 06
Assigned to:	Billy Bob Foreman	Date:	1 April 06
Reason to Recall:		Date:	
Completed by:	Jeph Bob Electrical Field Engineer	Date:	1 May 06

**Scope:** Install 300 meters of 60cm, 200 meters of 30cm and 300 meters of 10 cm cable tray with down comers, all complete with structural steel supports within Compressor Building 8120-BG-001.

See Drawing #8120-65N-042 for lay out, elevation and details.

**Deliverable:** 800 meters of cable tray ready for wire pull commencing 15 May 2006.

**Activities:** The welding crew shall install, 25 type CTS 60T, 20 type CTS 60A, 30 type CTS 30T, 12 type CTS 60, 6 type CTS 30, 100 type CTS 10 cable tray supports welded to the building structural steel. 80 hours each for structural steel welder and helper/fitter.

The Electrical crew shall bolt the cable tray to the supports 60 cm, 30 cm, 10 cm cable tray with bends and tees as indicated on drawing #8120-65N-042 and standards drawing #8000-65-002. 80 hours for a four-man crew (an Electrician with 2 – apprentice and one helper).

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**Resources:**

**Equipment:** Portable mobile welding machine and man lift for welding crew.  
2 - man lifts and steel cutting mitre saw

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**Tools:** General hand tools for Welder and Electrician.

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**Materials:** 25 – type CTS 60T cable tray support  
20 – type CTS 60A cable tray support  
30 – type CTS 30T cable tray support  
12 – type CTS 60 cable tray support  
6 – type CTS 30 cable tray support  
100 – type CTS 10 cable tray support  
300 meters Standard 60cm cable tray  
200 meters Standard 30cm cable tray.  
300 meters Light Weight 10cm cable tray  
2 – cable tray 90 elbow type 2 60 cm  
2 – cable tray 90 elbow type 3 60 cm  
3 - cable tray tee type 4 60 cm  
5 - cable tray end caps type 2 60 cm  
4 – cable tray 90 elbow type 2 30 cm  
4 – cable tray 90 elbow type 3 30 cm  
2 – cable tray tee type 4 30 cm  
45 - cable tray coupling 60 cm type L2 with nuts and bolts  
30 – cable tray coupling 30 cm type L2 with nuts and bolts  
50 – cable tray coupling 10 cm type 1 with nuts and bolts  
100 - cable tray bonding clamps complete type 5

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**Labour:** 1- Structural Steel Welder.

- 1- Fitter/Helper
- 1- Electrician
- 2 - Apprentice
- 1 – Helper

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**Work Instructions:** Other trades shall be working in the Compressor building during the installation of the Cable Tray and supports. As the welder and electrical crews will be working most of the time from a man lift care must be taken of falling materials and tools on fellow workers below. Areas should be ribbon off to restrict access.

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**Safety Equipment:** Training required for use of man-lift for complete crew.  
Safety Harness training for all members of the crew.

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**Drawings:** Building general arrangement #8120-BG-001  
Cable Tray routing #8120-65N-042  
Cable tray installation standards #8000-65-002

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**Vendor Info.** XYZ Speciality company supplier of CTFS wonder fastener.  
Vendor drawing number: 100-elec-8120-4

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**Special Conditions:**  
Special cable tray fastening system (CTFS) required due to operations request.

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**Quality Control:**

Insure that team installing the CTFS has vendor supplied installation details

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**Interdependencies:** The building structural steel and large bore pipe shall be installed before welder's mobilized. Welder to start east wall, north end working south around the building, Electrical trades to start approx three days after welder crew has started and completed the supports for the east wall as a minimum.

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**Risk Planning:**

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**Reverse Punch List (Error Proofing):**

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**Lessons Learned:**

The CTFS system requested by operations was easy to install and saved approximately 20 minutes per connection.

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