

BS-011

DC-012

Package SL-015

(V) INDICATES ITEM PROVIDED BY VENDOR

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NO.	DATE	REMARKS

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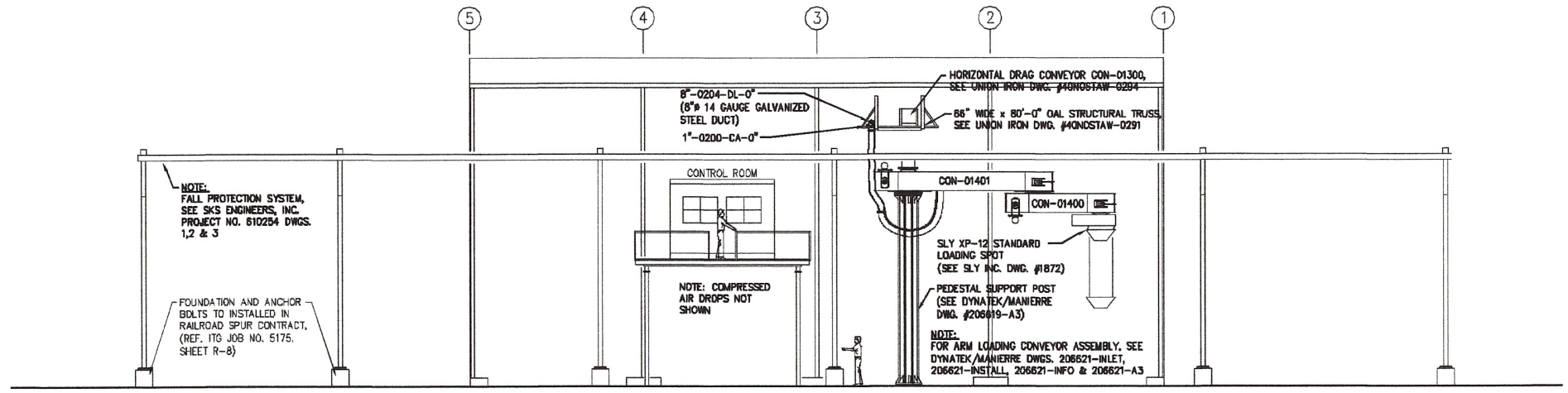


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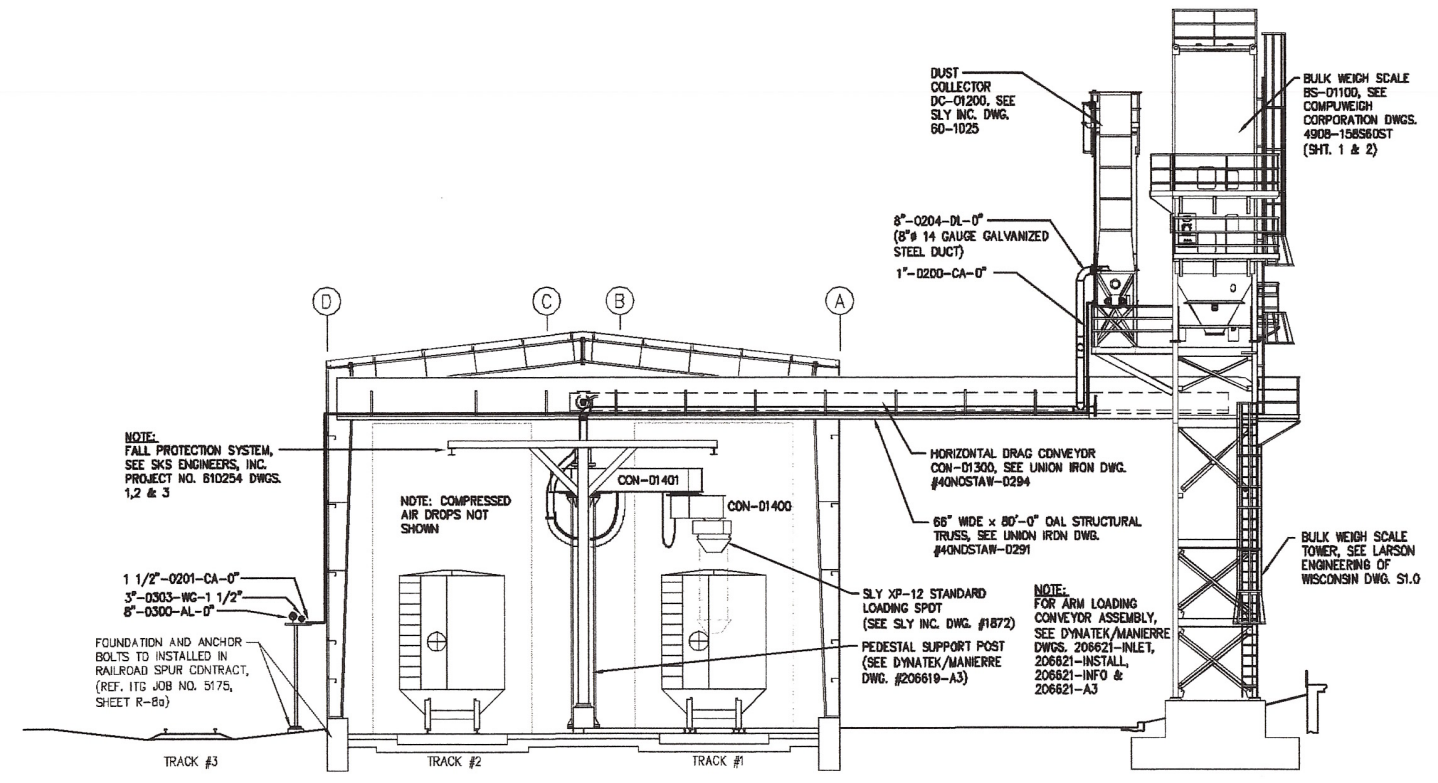
Central Illinois Energy
 Pure Energy. Homegrown.

DDG P&ID
 ETHANOL RAIL LOADOUT/DDGS LOADOUT
 CENTRAL ILLINOIS ENERGY
 CANTON, ILLINOIS

ITG NO.: 06-5183
 DATE: JANUARY 2007
 SHEET NO.: PID-2
 OF SHEETS



A
M3
SECTION - LOOKING EAST
SCALE: 1/8" = 1'-0"
12' 0" 1' 5' 10' 20'



B
M3
SECTION - LOOKING NORTH
SCALE: 1/8" = 1'-0"
12' 0" 1' 5' 10' 20'

NOTE: ALL DETAILS WILL BE AT 1/2 SCALE WHEN PRINTED ON 11x17 SHEET

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DESIGNED: KJD
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DDGS LOADOUT AREA - SECTIONS
ETHANOL RAIL LOADOUT/DDGS LOADOUT
CENTRAL ILLINOIS ENERGY
CANTON, ILLINOIS

ITC NO.: 06-5183
DATE: MARCH 16, 2007
SHEET NO. **M-3**
OF SHEETS

BILL OF MATERIALS												
NUMBER	DESCRIPTION	USE	SIZE / CAPACITY	QUANTITY / LENGTH	TYPE	MANUFACTURER	MATERIAL SPECIFICATION	MODEL - MOTOR	VENDOR	DRAWING NUMBER	PROVIDED BY	INSTALLED BY
BS-0110	BULK WEGH SCALE & TOWER	DDGS LOADOUT	15 CU.FT/HR	ONE	GRANER & SCALE	COMPUMEGH		15K 60 DEG 10 HP HYDRAYLIC PUMP	NOSTAW	PID-02 06-5183 DWG. PACKAGE COMPUMEGH SHOP DWG 4909-158S60ST SI.O TOWER REACTIONS	NOSTAW	MECHANICAL CONTRACTOR
DC-01200	DUST COLLECTOR	DDGS LOADOUT	1,000 CFM	ONE	TOP MOUNTED FAN	SLY		TUBE JET STJ-36-10 5 HP FAN	NOSTAW	PID-02 06-5183 DWG. PACKAGE SLY SHOP DRAWING 60-1025 REV A	NOSTAW	MECHANICAL CONTRACTOR
CON-01300	CONVEYOR	DDGS LOADOUT	240 TON/HR	ONE	EN-MASS CONVEYOR WITH SUPPORT BRIDGE	UNION IRON		2020 FLAT BOTTOMN ENMASSE DRAG 20 HP	NOSTAW	PID-02 06-5183 DWG. PACKAGE UNION IRON 40-NOSTAW-0294 40-NOSTAW-0291	NOSTAW	MECHANICAL CONTRACTOR
CON-01400 CON-01401	ARM CONVEYOR #1 ARM CONVEYOR #2	DDGS LOADOUT	240 TON/HR	ONE	DRAG CONVEYOR WITH SLIP CHAIN AND PLUG DETECTION	DYNATECH		30' BULK LOADER EACH ARM HAS 5 HP DRAG, 1/3 VFD ARTICULATING ARM	NOSTAW	PID-02 06-5183 DWG. PACKAGE 206621-INFO.A3,INSTALL INLET, 206619-A3	NOSTAW	MECHANICAL CONTRACTOR
SL-01500	LOADING SPOUT	DDGS LOADOUT	240 TON/HR	ONE	DUSTLESS LOADOUT SPOUT	SLY		MODEL XP-12 3/4 HP	SLY	PID-02 06-5183 DWG. PACKAGE SLY SHOP DRAWING 1872 800524	NOSTAW	MECHANICAL CONTRACTOR
NO ##	DDGS LOADING SHED	DDGS LOADOUT	80' X 40' BUILDING	ONE	PRE-ENGINEERED BUILDING	SENTINEL BUILDING SYSTEMS			NOSTAW	06-5183 DWG. PACKAGE SENTINEL DWG PACKAGE 9 TOTAL INTALLATION DWG	NOSTAW	MECHANICAL CONTRACTOR
NO ##	DDGS CONTROL ROOM & CATWALK	DDGS LOADOUT	12' X 10" CONTROL ROOM 19' 11.75" X 12' 2.5" CATWALK	ONE	PRE-FABRICATED	NOSTAW CONSTRUCTION	CONTROL ROOM IS MADE OF WOOD CATWALK IS MADE OF STEEL		NOSTAW	06-5183 DWG. PACKAGE NO SHOP DRAWINGS	NOSTAW	MECHANICAL CONTRACTOR
NO ##	FALL PROTECTION	DDGS LOADOUT	150 FOOT		PARTIAL BUILT OFF SITE & SHIPPED TO JOBSITE	NOSTAW CONSTRUCTION			NOSTAW	06-5183 DWG. PACKAGE 3 MANUFACTURING DWG	NOSTAW	MECHANICAL CONTRACTOR
FL-0300	ETHANOL FILTER	ETHANOL LOADOUT	1,200 GPM	ONE	CARTRIDGE FILTER	KRYSTIL KLEAR	CARBON STEEL 150# ASME VESSEL	STYLE #1 MODEL # C3030-20-8F-C-B	DALY FILTER TECHNOLOGIES	PID-03 06-5183 DWG. PACKAGE KRYSTIL KLEAR 1080	OWNER	MECHANICAL CONTRACTOR
MS-0310	ETHANOL METERING SKID	ETHANOL LOADOUT	1,200 GPM	ONE	2 TURBINE METERS WITH TEMPERATURE CORRECTION	SMITH			DIVICOM	PID-03 06-5183 DWG. PACKAGE PROVER PLAN.DWG, BWD001.DWG, BWD002.DWG L-FD-001,002.DWG, LTD-001,002	OWNER	MECHANICAL CONTRACTOR
LA-0320,0330	ETHANOL LOADING ARM	ETHANOL LOADOUT	600 GPM EACH ARM 4" ARM	TWO	RAIL TOP LOADING WITH VAPOR RECOVERY	OPW-ENGINEERED SYSTEMS	CARBON STEEL	4" TOP LOADING ARM WITH INFLATABLE BLADDER WITH CONTROL BOX, OVERFILL LEVEL SWITCH	ALLESKO	PID-03 06-5183 DWG. PACKAGE B32F-0788 7394HS-2193	OWNER	MECHANICAL CONTRACTOR
KP-0340	KNOCK OUT POT	ETHANOL LOADOUT	3 CU. FT	ONE	VERTICAL	JOHN ZINK	CARBON STEEL		JOHN ZINK	PID-03 06-5183 DWG. PACKAGE	OWNER	MECHANICAL CONTRACTOR
FR-0350	VAPOR COMBUSTION UNIT	ETHANOL LOADOUT	160 SCFM	ONE	ENCLOSED FLARE	JOHN ZINC		ZCT-1-4-25-X-1/6 INCLUDING PLC CONTROL CABNIET	JOHN ZINK	PID-03 06-5183 DWG. PACKAGE 10 TOTAL INSTALLATION DRW.	OWNER	MECHANICAL CONTRACTOR
NO ##	LOADING PLATFORM	ETHANOL LOADOUT		ONE	PRE-FABRICATED	JBC-STEEL	GALVANIZED	STANDARD DOUBLE DROP SAFETY LOADER	ALLESKO	06-5183 DWG. PACKAGE D-E2	OWNER	MECHANICAL CONTRACTOR

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BILL OF MATERIALS
 ETHANOL RAIL LOADOUT/DDGS LOADOUT
 CENTRAL ILLINOIS ENERGY
 CANTON, ILLINOIS

ITG NO.:
06-5183
DATE
MARCH 16, 2007
SHEET NO.
ROM-1

VALVE SCHEDULE														
NUMBER	DESCRIPTION	USE	SIZE	CONNECTION TYPE	QUANTITY / LENGTH	MAX FLOW	MIN FLOW	TEMPERATURE	MAX. PRESSURE INLET	PRESSURE OUTLET	MATERIAL OF CONSTRUCTION	MODEL NUMBER	ACTUATOR	PROVIDED BY
HV-0200-0202	MANUAL BALL VALVE	DDG P&ID-2	1"	NPT	THREE	50 SCFM	3 SCFM	AMB	150 PSIG	125 PSIG	CARBON STEEL	MARPAC B780 OR APPROVED EQUAL		CONTRACTOR
HV-0203-0208,0208	MANUAL BALL VALVE	DDG P&ID-2	1/2"	NPT	FIVE	50 SCFM	3 SCFM	AMB	150 PSIG	125 PSIG	CARBON STEEL	MARPAC B780 OR APPROVED EQUAL		CONTRACTOR
HV-0207	MANUAL FULL BLAST GATE VALVE	DDG P&ID-2	8"	FLANGE	ONE						GALVANIZED STEEL			CONTRACTOR
HV-0300-0301,0309	MANUAL BALL VALVE FOR FILTER BYPASS	DDG P&ID-3	1/2"	NPT	THREE	200 GPM	25	70 OF	60 PSIG	40 PSIG	CARBON STEEL	MARPAC B780 OR APPROVED EQUAL		CONTRACTOR
HV-0306	MANUAL KEYSTONE BUTTERFLY VALVE	DDG P&ID-3	8"	FLANGE	ONE	1200 GPM	300	70 OF	60 PSIG	40 PSIG	CARBON STEEL WITH NBR SEAT & STEAM PACKING 316 STAINLESS STEEL DISC	KEYSTONE AR2 125 LB ANSI FLANGE LUG STYLE	MANUAL QUARTER TURN 10 POSITION NOTCH PLATE OPERATOR WITH PADLOCK KIT	CONTRACTOR
PDI-0300	DIFFERENTIAL PRESSURE GAUGE	DDG P&ID-3		NPT	ONE						CARBON STEEL	0-25 PSIG DIFFERENTIAL PRESSURE MEASUREMENT		CONTRACTOR
HV-0302-0303	MANUAL BALL VALVE	DDG P&ID-3	1/4"	NPT	TWO	5 SCFM	3 SCFM	AMB	150 PSIG	125 PSIG	CARBON STEEL	MARPAC B780 OR APPROVED EQUAL	HANDLE TO BE CARBON STEEL PLASTIC COATED	CONTRACTOR
HV-0304-0305	MANUAL BALL VALVE	DDG P&ID-3	3"	FLANGE	THREE	80 SCFM	40 SCFM	AMB	18 IN H2O	12 IN H2O	CARBON STEEL	WORCESTER 51 OR APPROVED EQUAL SERIES 51 CLASS 150 TFE SEATS AND BODY SEAL ANSI 150 LB FLANGE	MANUAL ACUATOR WITH OSHA LOCK OUT	CONTRACTOR
XV-0300-0301	AUTOMATIC BALL VALVE	DDG P&ID-3	3"	FLANGE	TWO	80 SCFM	40 SCFM	AMB	18 IN H2O	12 IN H2O	CARBON STEEL	WORCESTER 818 FULL BORE OR APPROVED EQUAL SERIES 51 CLASS 150 TFE SEATS AND BODY SEAL ANSI 150 LB FLANGE	SPRING RETURN ACTUATOR WITH END MOUNTED LIMIT SWITCHES SOLENOID MOUNTED, FAIL CLOSE, WATER TIGHT SERVICE, 24 DC VOLTAGE WORCESTER 3039S OR APPROVED EQUAL	CONTRACTOR
HV-0308	MANUAL BALL VALVE	DDG P&ID-3	1"	NPT	ONE	LIQUID DRAIN		60 OF	3 FT H2O	AMB	CARBON STEEL	MARPAC B780 OR APPROVED EQUAL	MANUAL ACUATOR WITH OSHA LOCK OUT	CONTRACTOR

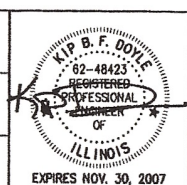
ITEM #	LINE #	SERVICE DESCRIPTION	DRAWING NUMBER	DESIGN TEMP (DEG F)	DESIGN PRESS (PSIG)	SIZE	RATING	MATERIAL	INSULATION TYPE & THICKNESS	JACKETING	HEAT TRACE
1	1.5"-0201-CA-0"	COMPRESSED AIR	PID-2 & PID-3	AMB	110	1.5"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
2	1"-0200-CA-0"	COMPRESSED AIR	PID-2	AMB	110	1"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
3	.5"-0202-CA-0"	COMPRESSED AIR	PID-2	AMB	110	.5"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
4	8"-0203-DL-0"	DUST PICK UP	PID-2	AMB	-0.723	8"	-20 IN WATER	VINYL	NONE	NONE	NONE
5	8"-0204-DL-0"	DUST PICK UP	PID-2	AMB	-0.723	8"	-20 IN WATER	14 GAUGE CLASS 2 ROUND DUCT	NONE	NONE	NONE
6	8"-0300-AL-0"	FUEL GRADE ETHANOL TO LOAD OUT	PID-3	75	60	8"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
7	4"-0301-AL-0"	FUEL GRADE ETHANOL TO LOAD OUT	PID-3	75	60	4"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
9	3"-0303-WG-1.5"	WASTE GAS	PID-3	AMB	0.6	3"	CLASS 150	CARBON STEEL	1.5" MINERAL WOOL	ALUMINUM JACKET	NONE
10	3"-0304-WG-0"	WASTE GAS	PID-3	AMB	0.6	3"	CLASS 150	CARBON STEEL	NONE	NONE	NONE
11	1.5"-0305-NG-0"	NATURAL GAS	PID-3	AMB	50	1.5"	CLASS 150	CARBON STEEL	NONE	NONE	NONE

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VALVE SCHEDULE & LINE SPECIFICATION
 ETHANOL RAIL LOADOUT/DDGS LOADOUT
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 CANTON, ILLINOIS

ITG NO.: 06-5183
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 SHEET NO. BOM-2