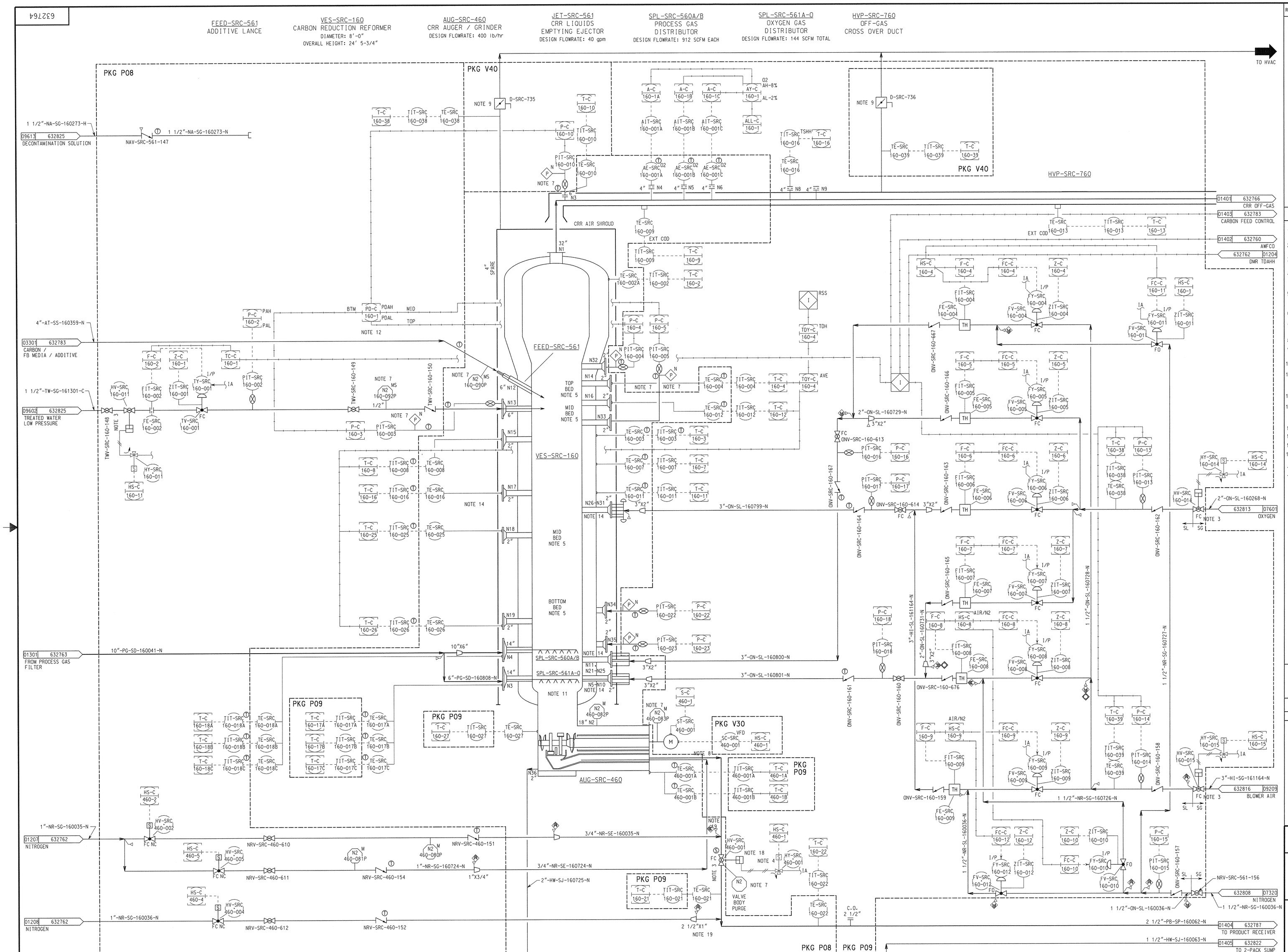
632764



REV	DATE	DESCRIPTION	By/Chk'd
0	10/12/06	ISSUED FOR DESIGN FREEZE	

NOTES

1. THE PROCESS GAS DISTRIBUTOR NOZZLES (SPL-SRC-560-A/B/C/D) ARE ALL LOCATED AT THE SAME LEVEL ON THE CRR.
2. SOLENOID VALVES AND I/P ARE LOCATED OUTSIDE SHIELDED AREA W/ PNEUMATIC TUBING INTO CELL.
3. DENOTES VALVES HAVING POSITION SWITCHES SHOWN IN "TYPICAL POSITION SWITCH" SKETCH. SEE DWG. 632758.
4. IT IS NOT THE INTENT OF THE P&ID TO SHOW ALL THE CONTROL FUNCTIONALITY OF THE DCS BUT LOOPS, TRIPS, SAFETY ALARMS, AND OTHER IMPORTANT ALARMS ARE DEPICTED.
5. THE PRESSURE PROBES IN THE CRR ARE LOCATED SUCH THAT THE PRESSURE AT THE BASE, MID-POINT, AND TOP OF THE FLUIDIZED BED CAN BE MONITORED.
6. AUXILIARY SOLIDS REMOVAL TO BE USED IF AUGER FAILS.
7. (N2) & (P N) SEE DETAILS ON 632758.
8. SEE FORWARD - REVERSE VFD DETAIL ON DWG. 632757.
9. SHROUD TEMPERATURES & DAMPERS ARE PART OF THE DCS FOR THE BUILDING HVAC.
10. SEE TYPICAL PRESSURE SAFETY VALVE ON DWG. 637758.
11. CRR INTERNALS INCLUDE 2 PROCESS GAS DISTRIBUTION NOZZLES (SPL-SRC-560) AND 15 OXYGEN GAS DISTRIBUTION NOZZLES (SPL-SRC-561 / A-O.
12. PD-C-160-1 USED TO CALCULATE BED LEVEL AND DENSITY.
13. ONLY ONE OUTLET VALVE FROM DMR, PGF, CRR OR OGF HAS INSTRUMENT AIR AT ANYTIME. SEE "SWITCHED INSTRUMENT AIR DETAIL" ON DWG. 632761.
14. REPRESENTS SIX (6) - 2"-150# NOZZLES.
15. DELETED.
16. EXTERNAL SHELL TEMPERATURE CONTACT.
17. CHANGED INSTRUMENT AND VALVE TAG NUMBERS PER MCP-3785 AND EQUIPMENT TAG NUMBERS PER DCN-IWTU-115.
18. HANDLE OR ACTUATOR PENETRATES CELL WALL.
19. PURGE CONNECTION LOCATED AT BLOCK FITTING.

SAFETY SIGNIFICANT ITEMS

1. ALL TEMPERATURE INSTRUMENTS TAGGED
   TE-SRC-160-004
   TE-SRC-160-008
   TE-SRC-160-016
   TE-SRC-160-017-A/-B/-C
   TE-SRC-160-018-A/-B/-C
   TE-SRC-160-025
   TE-SRC-160-026
   TIT-SRC-160-004
   TIT-SRC-160-008
   TIT-SRC-160-016
   TIT-SRC-017-A/-B/-C
   TIT-SRC-018-A/-B/-C
   TIT-SRC-160-025
   TIT-SRC-160-026
2. CRR OUTLET OXYGEN MONITORS:
   AE-SRC-160-001-A/-B/-C
   AIT-SRC-160-001-A/-B/-C
   A-C-160-1A/-1B/-1C.
3. HV-SRC-160-009, -010
   HY-160-009, -010.
4. CARBON FEED LINE
   4"-AT-SS-160359-N INSIDE OF CELL.
5. DELETED.
6. TOY-C-160-4.

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REFERENCE DRAWINGS

DRAWING NO.	DRAWING TITLE

IDAHO CLEANUP PROJECT
INTEGRATED WASTE TREATMENT UNIT

PIPING & INSTRUMENT DIAGRAM
CARBON REDUCTION REFORMER

Washington Group International
7800 E. Union Ave. - Denver, CO 80237 - (303) 843-2000

THOR Treatment Technologies

REVISION APPROVAL RECORD				REV	0
DISCIPLINE	BY	DATE	DISCIPLINE	BY	DATE
ARCH.	—	—	MECHANICAL		10/12/06
CIVIL	—	—	NUCLEAR		
ELECTRICAL		10/12/06	PIPING		10/12/06
ENVIRON.	—	—	PROCESS	RLH	10/12/06
GEN. ARRANG.		10/12/06	QA / QC		10-12-06
HVAC		10/12/06	STRUCTURAL		10-12-06
I & C		10-12-06	REMOTE HDL.	—	—
			SYS. ENG.		10-12-06

DRAWING STATUS				
ISSUED	REV	DATE	LDE	PEM
PRELIMINARY	G	09/22/06	RLH	NDA
APPROVED FOR CONSTRUCTION	0	10/12/06	RLH	

NOT APPROVED FOR CONSTRUCTION UNLESS SIGNED & DATED. DESTROY ALL PRINTS BEARING EARLIER DATE &/OR REV.NO.

PROFESSIONAL ENGINEER REGISTERED 7720 STATE OF IDAHO RICHARD WILLIAM NELSON 10/13/06

SCALE: NONE	AIE BY 10/12/06	PROJECT NO. 28276	
DRAWN: ORW	DATE 05/03/06		
DESIGNED:	DATE 10/12/06	WBS: P.1.04.03.02	
CHECKED:	DATE 10/12/06	SYSTEM:	QUALITY LEVEL: 2
VERIFIED:	DATE 10/12/06	DRAWING NUMBER 632764	REV 0
APPROVED:	DATE		
CAD FILE NAME: 632764.pid		INDEX CODE NUMBER: AREA 200, TYPE 1606, SL 24, SEQ 523	SHEET P-15

SIZE E — FOR DRAWING INDEX SEE DRAWING NO. 200-1696-24-923-632756

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