

DRAWING SYMBOL KEY

DRAWING INDEX

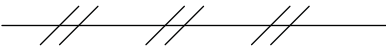
DWG. NO.	DESCRIPTION
0001	INDEX AND KEY
0002	PROCESS FLOW DIAGRAM
1001	WET UNLOAD CELL P&ID
1002	WET INGREDIENT STORAGE P&ID
1003	DRY ADDITIVE UNIT P&ID
1004	WET ADDITIVE UNIT P&ID
2001	RAIL DRY UNLOAD UNIT P&ID
2002	DRY STORAGE LOADIN AND LOADOUT UNITS P&ID
2003	TRUCK DRY UNLOAD UNIT P&ID
2004	TRUCK POWDER UNLOAD UNIT P&ID
2005	RAIL POWDER UNLOAD UNIT P&ID
3000	BLEND UNIT P&ID
3001	REACTOR 1 UNIT P&ID
3002	REACTOR 2 UNIT P&ID
3003	REACTOR 3 UNIT P&ID
3008	QA SAMPLING UNTI P&ID
4001	ION EXCHANGE 1 & 2 UNIT P&ID
4002	ION EXCHANGE 3 & 4 UNIT P&ID
5001	PRODUCT STORAGE 1 UNIT P&ID
5002	TRUCK/RAIL LOADOUT UNIT P&ID
5003	PRODUCT STORAGE 2 UNIT P&ID
6001	CLEAN-IN-PLACE UNIT P&ID



PROCESS PIPING/
CONNECTION TO PROCESS



ELECTRIC SIGNAL



PNEUMATIC SIGNAL



CONNECTION TO/FROM
OTHER SHEET



STATUS
(DISCRETE VALUE)



DEVICE
(DISCRETE CONTROL)



INDICATOR
(ANALOG VALUE)



LOOP
(REGULATORY CONTROL)



SENSOR OR ACTUATOR
EQUIPMENT TAG



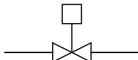
ACTUATOR WITH
CURRENT-TO-PNEUMATIC
CONVERTER



MANUAL SHUT-OFF
VALVE



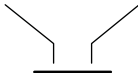
REGULATORY
VALVE



DISCRETE
VALVE



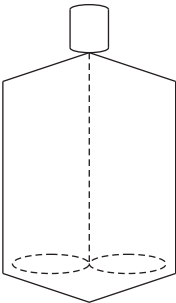
FLOW SENSOR



SLIDE GATE



FLOP GATE



TANK WITH
AGTITATOR



BLOWER



PUMP



ROTARY
VALVE

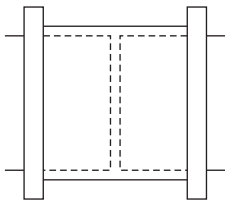
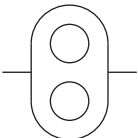
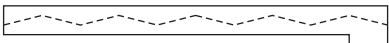


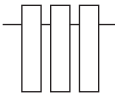
PLATE HEAT
EXCHANGER



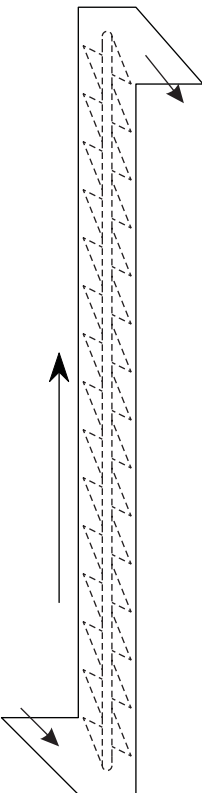
SAMPLING
PUMP



CONVEYOR



FILTERS



BUCKET
ELEVATOR

0001

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	9-08-04	△	ADD DWGS 1003 AND 2003 TO INDEX	9-06-13	KTE	CRC	JKS	△	-	-	-	-	-
CHECKED: CRC	9-24-04	△	ADD DWGS TO INDEX	9-03-14	KTE	CRC	JKS	△	-	-	-	-	-
APPROVED: JKS	9-28-04	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-

K Process
ABC Products

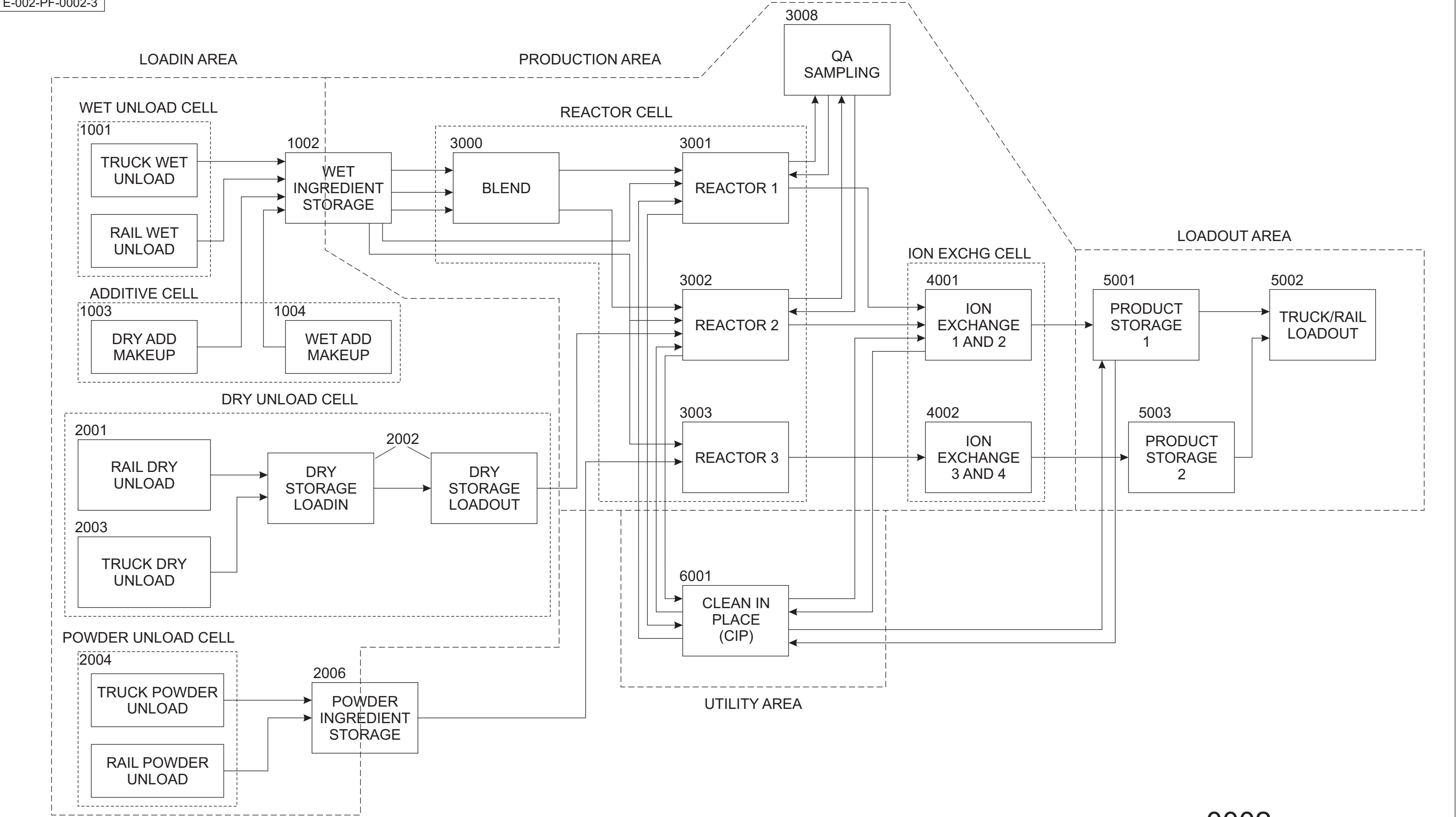
DVP Engineering

Anytown, MO

-	AS BUILT
-	FOR CONSTRUCTION
-	FOR BIDDING ONLY
-	REFERENCE ONLY
XXX	PRELIMINARY

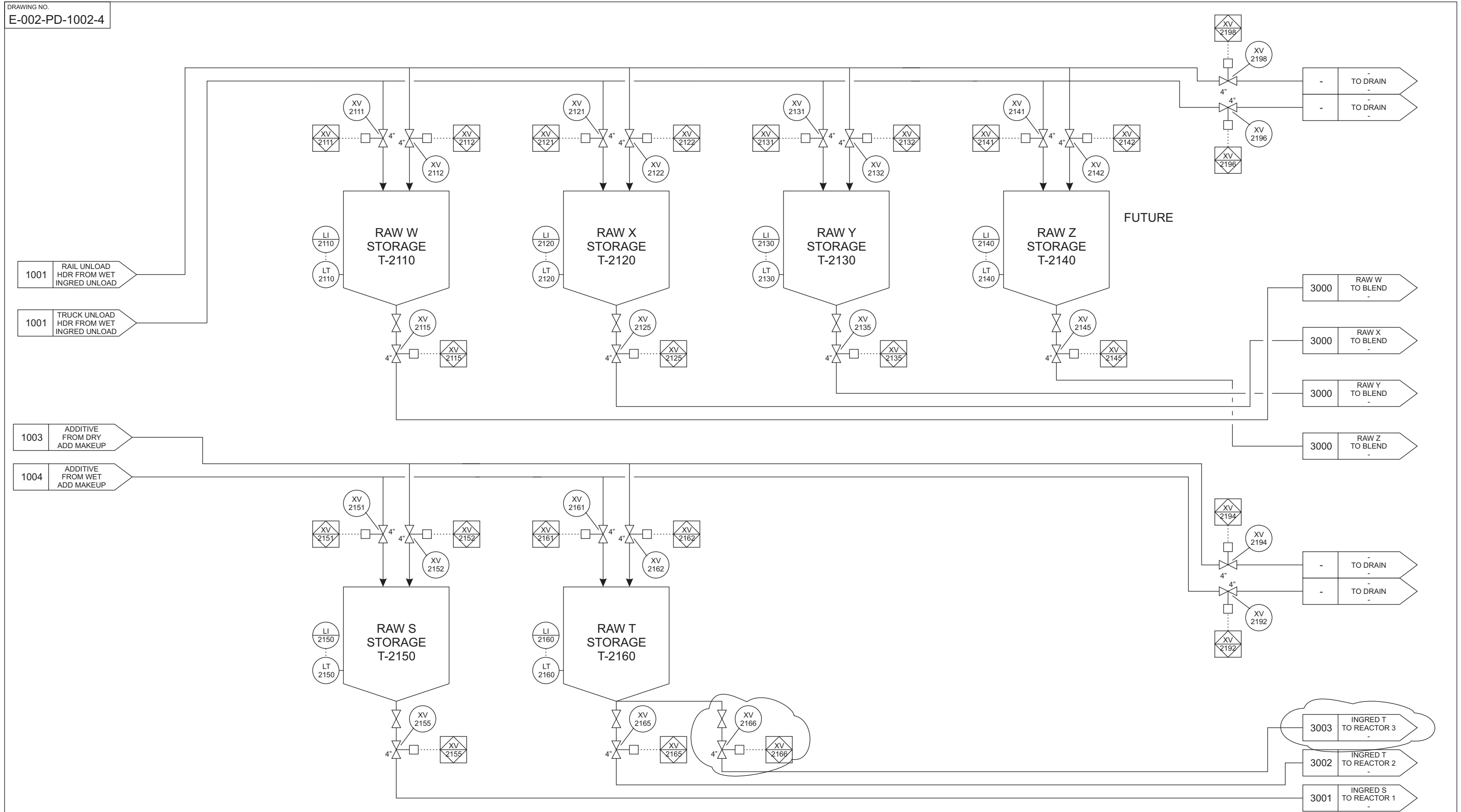
DRAWING INDEX & KEY
0001
INDEX

CAD REF. NO.	002PF0002
PROJ. NO.	-
A. F. E. NO.	-
DRAWING NO.	E-002-IN-0001-2



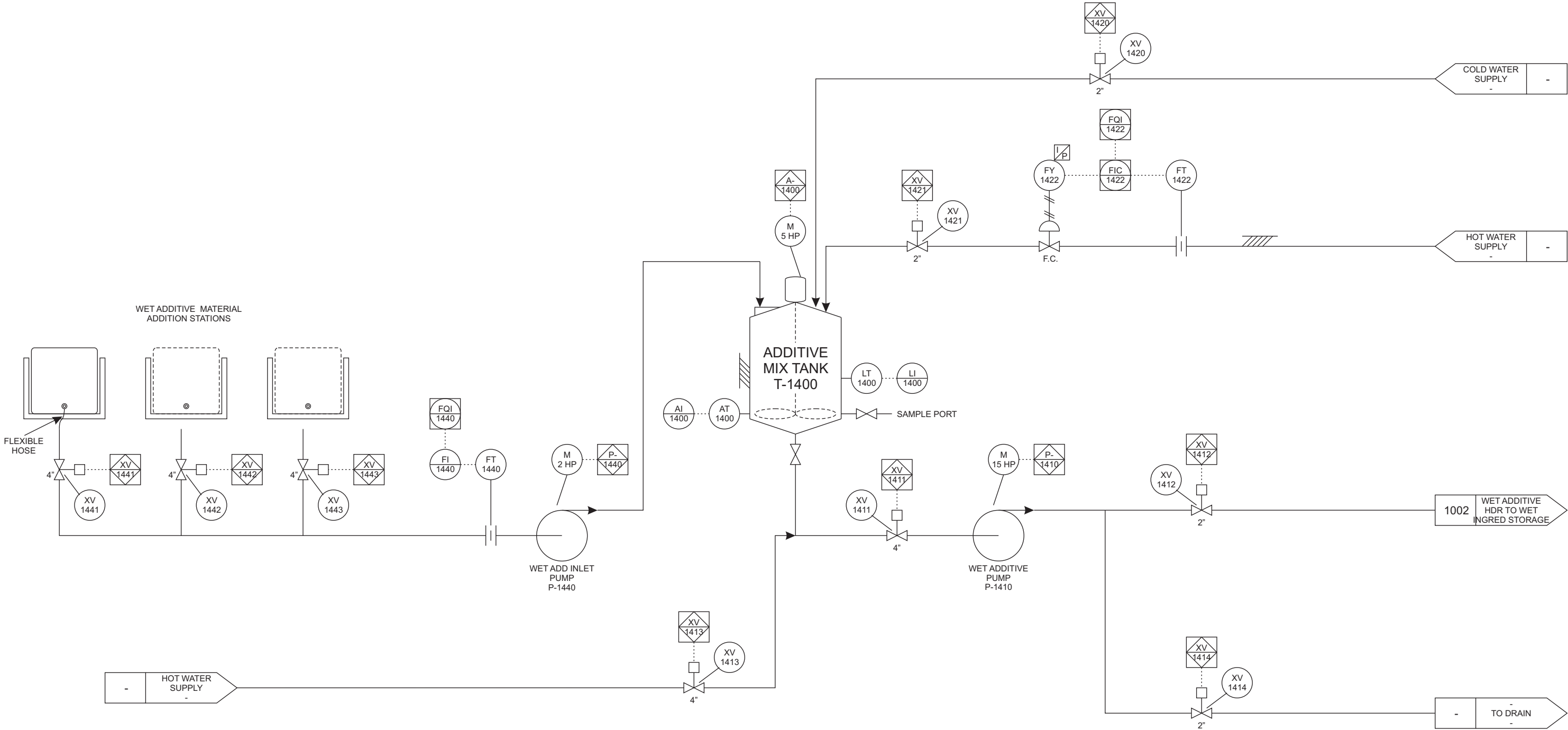
0002

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products	DVP Engineering	Anytown, MO	XXX	-	AS BUILT	OVERALL PROCESS 0002 PFD	CAD REF. NO. 002PF0002		
DRAWN BY: KTE	9-08-04	△	CORRECT BOUNDS AROUND LOADOUT AREA	9-03-07	KTE	-	-	△	-	-	-	-	-					-	-		-	FOR CONSTRUCTION	PROJ. NO. -
CHECKED: CRC	9-24-04	△	ADD TRUCK DRY UNLOAD & DRY ADD UNITS	9-02-13	KTE	-	-	△	-	-	-	-	-					-	-		-	FOR BIDDING ONLY	A. F. E. NO. -
APPROVED: JKS	9-28-04	△	ADD REACTOR 3 & ASSOCIATED UNITS	9-02-14	KTE	-	-	△	-	-	-	-	-					-	-		-	REFERENCE ONLY	DRAWING NO.
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-					-	-		-	PRELIMINARY	E-002-PF-0002-3



1002

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	<div><div>K Process ABC Products</div><div>DVP EngineeringAnytown, MO</div></div>	-	AS BUILT	<div><div>WET STORAGE 1002 P & ID</div><div>CAD REF. NO. 002PD1002 PROJ. NO. - A. F. E. NO. - DRAWING NO. E-002-PD-1002-4</div></div>
DRAWN BY: KTE	9-22-04	△	DRAIN VALVES ADDED	10-05-03	KTE	CRC	JKS	△	-	-	-	-	-		-	FOR CONSTRUCTION	
CHECKED: CRC	9-24-04	△	RAW Z FUTURE. B TANKS NOW S AND T	10-08-04	KTE	CRC	JKS	△	-	-	-	-	-		-	FOR BIDDING ONLY	
APPROVED: JKS	9-28-04	△	S AND T STORAGE FROM ADDITIVE CELL-	9-02-13	KTE	CRC	JKS	△	-	-	-	-	-		-	REFERENCE ONLY	
APPROVED: JPS	10-01-04	△	T PATH TO REACTOR 3 ADDED	9-02-14	KTE	CRC	JKS	△	-	-	-	-	-		XXX	PRELIMINARY	



SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-
CHECKED: CRC	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JKS	9-03-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JPS	9-03-14	△	-	-	-	-	-	△	-	-	-	-	-

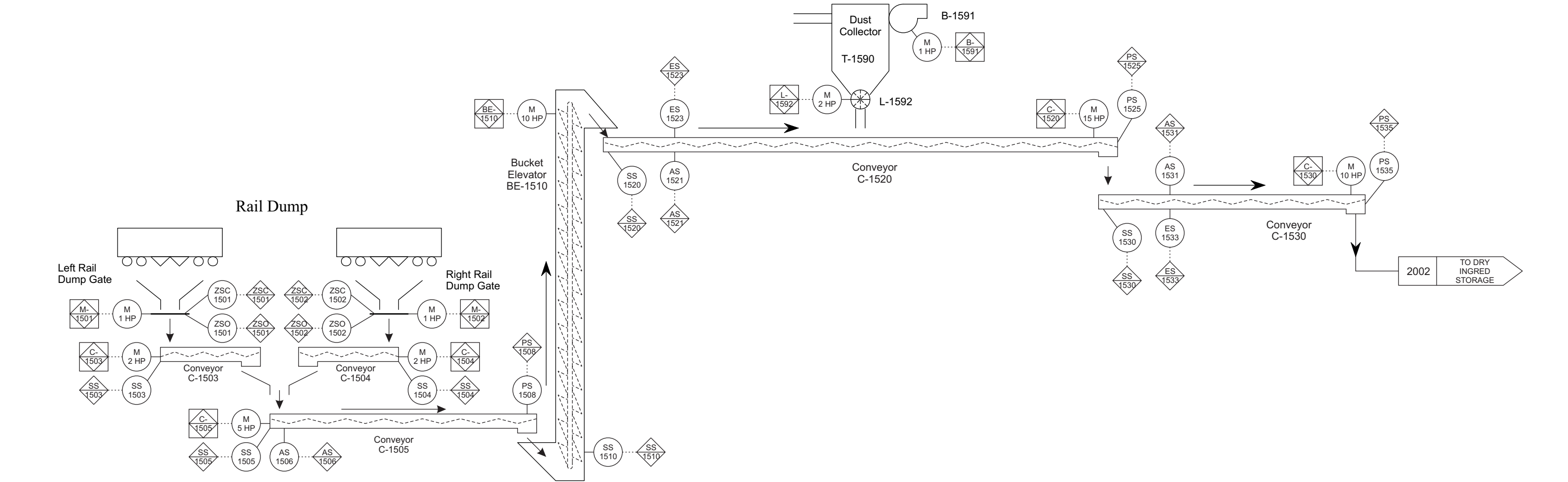
K Process
ABC Products

DVP EngineeringAnytown, MO

-	AS BUILT
-	FOR CONSTRUCTION
-	FOR BIDDING ONLY
-	REFERENCE ONLY
XXX	PRELIMINARY

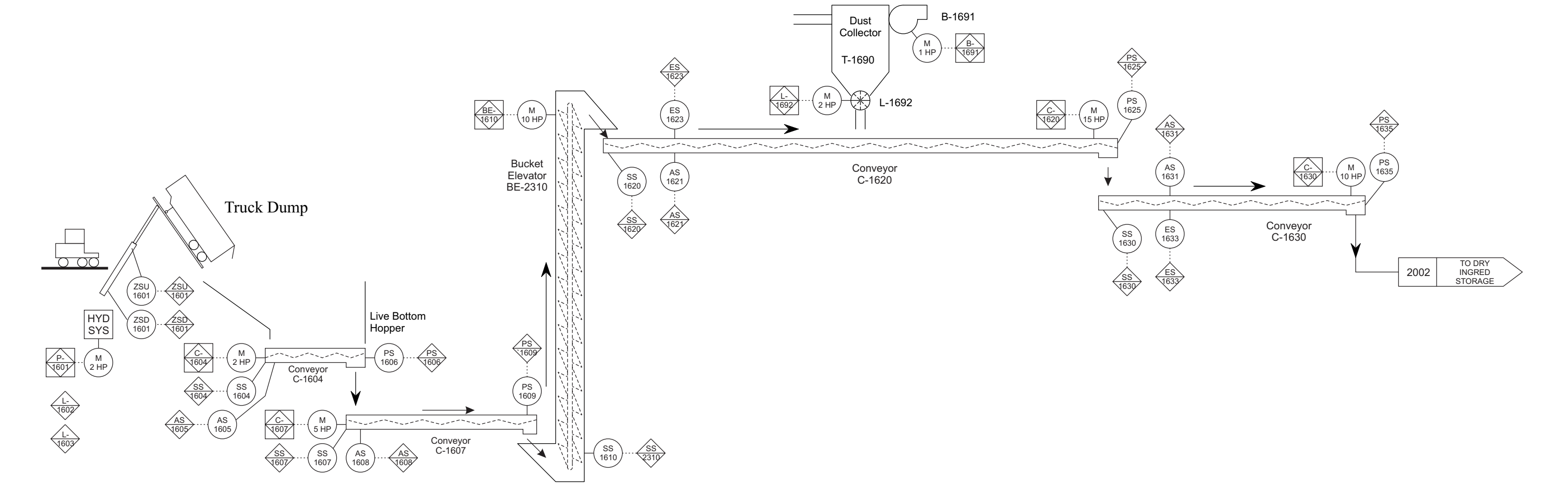
DRY ADDITIVE
1004
P & ID

CAD REF. NO.	002PD1004
PROJ. NO.	-
A. F. E. NO.	-
DRAWING NO.	E-002-PD-1004-0



2001

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products	DVP Engineering	Anytown, MO	-	AS BUILT	RAIL DRY UNLOAD 2001 P & ID	CAD REF. NO. 002PD2001
DRAWN BY: KTE	9-22-04	△	ADD C-1530 CONVEYOR	10-14-04	KTE	CRC	JKS	△	-	-	-	-	-				-	FOR CONSTRUCTION		PROJ. NO. -
CHECKED: CRC	9-24-04	△	ADD PLUG SENSORS	10-21-04	KTE	CRC	JKS	△	-	-	-	-	-				-	FOR BIDDING ONLY		A. F. E. NO. -
APPROVED: JKS	9-28-04	△	-	-	-	-	-	△	-	-	-	-	-				-	REFERENCE ONLY		DRAWING NO.
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-				XXX	PRELIMINARY		E-002-PD-2001-1

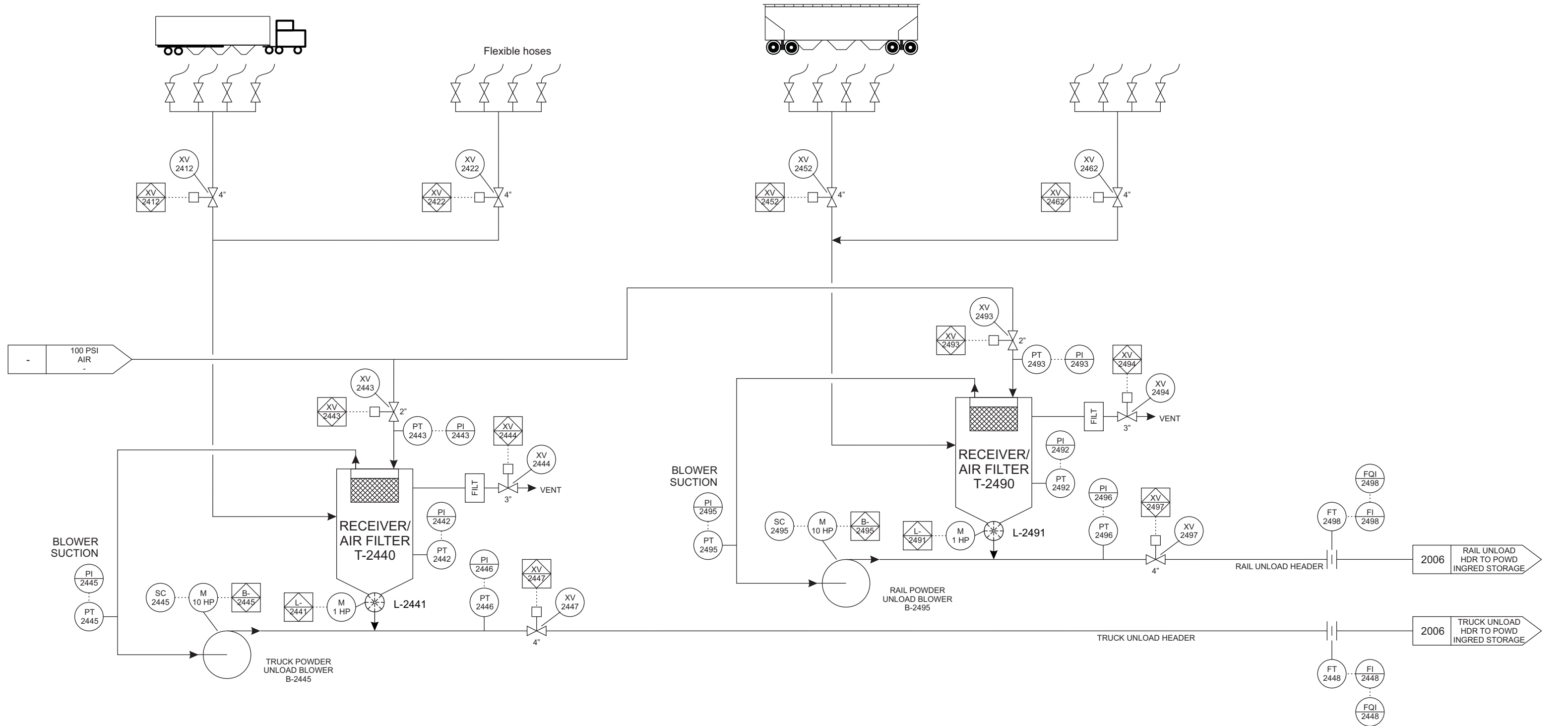


2003

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products DVP EngineeringAnytown, MO	- AS BUILT - FOR CONSTRUCTION - FOR BIDDING ONLY - REFERENCE ONLY XXX PRELIMINARY	TRUCK DRY UNLOAD 2003 P & ID	CAD REF. NO. 002PD2003 PROJ. NO. - A. F. E. NO. - DRAWING NO. E-002-PD-2003-0
DRAWN BY: KTE	9-02-13	△	-	-	-	-	-	△	-	-	-	-	-				
CHECKED: CRC	9-02-13	△	-	-	-	-	-	△	-	-	-	-	-				
APPROVED: JKS	9-03-13	△	-	-	-	-	-	△	-	-	-	-	-				
APPROVED: JPS	9-03-13	△	-	-	-	-	-	△	-	-	-	-	-				

TRUCK POWDER UNLOADING STATIONS

RAILCAR POWDER UNLOADING STATIONS



SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	8-25-14	△	-	-	-	-	-	△	-	-	-	-	-
CHECKED: CRC	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JKS	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JPS	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-

K Process
ABC Products

DVP Engineering

Anytown, MO

XXX

AS BUILT

FOR CONSTRUCTION

FOR BIDDING ONLY

REFERENCE ONLY

PRELIMINARY

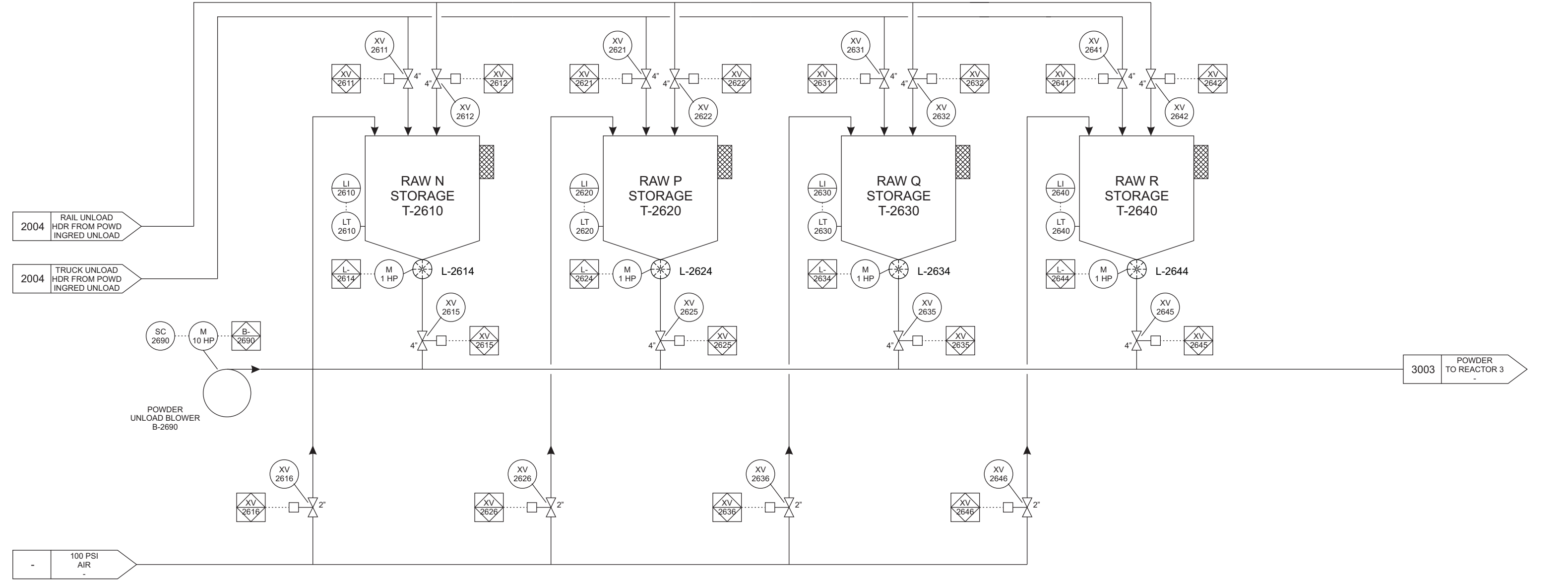
POWDER UNLOAD
2004
P & ID

CAD REF. NO. 002PD2004

PROJ. NO. 002

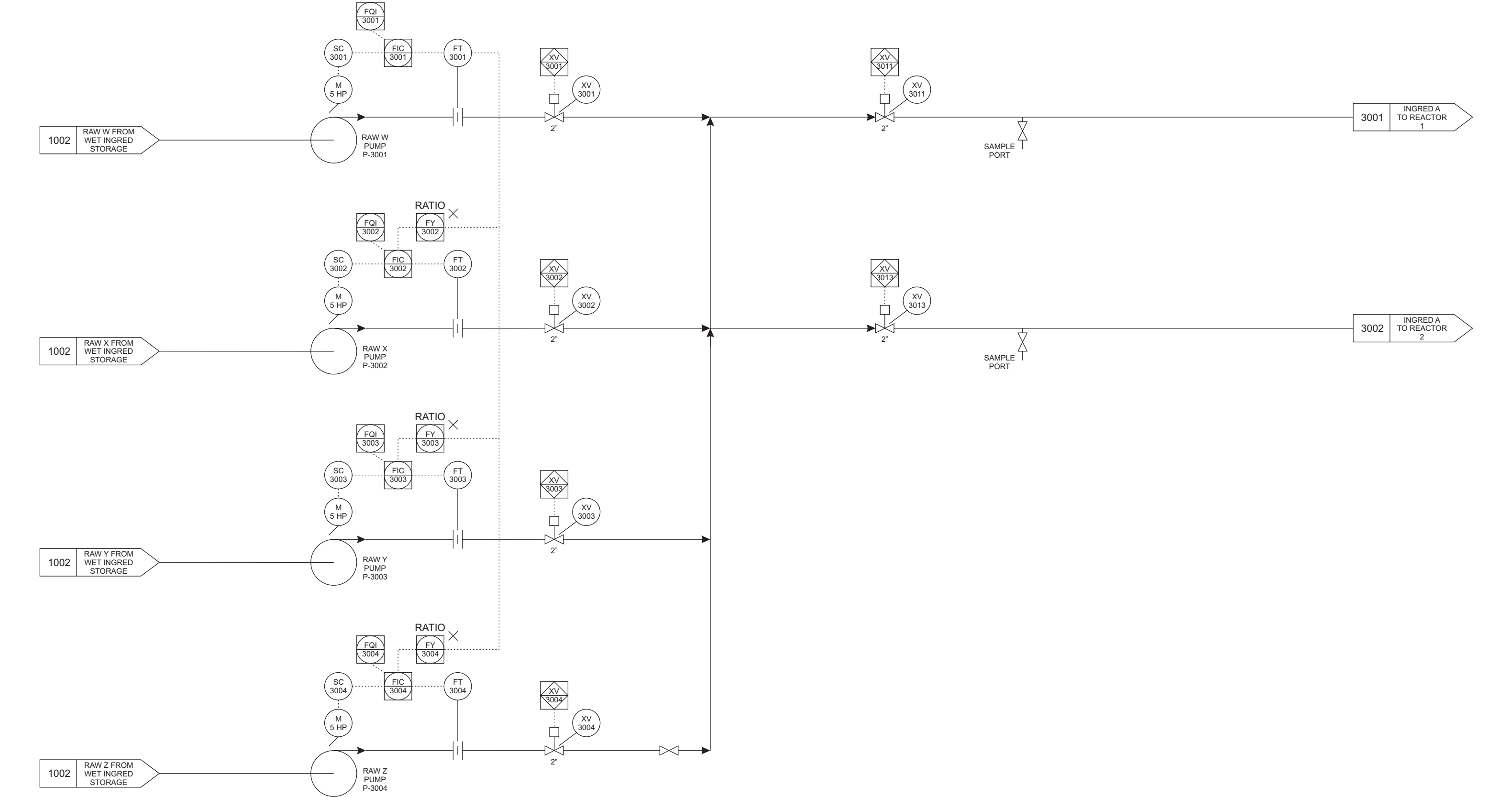
A. F. E. NO. -

DRAWING NO. E-002-PD-2004-0



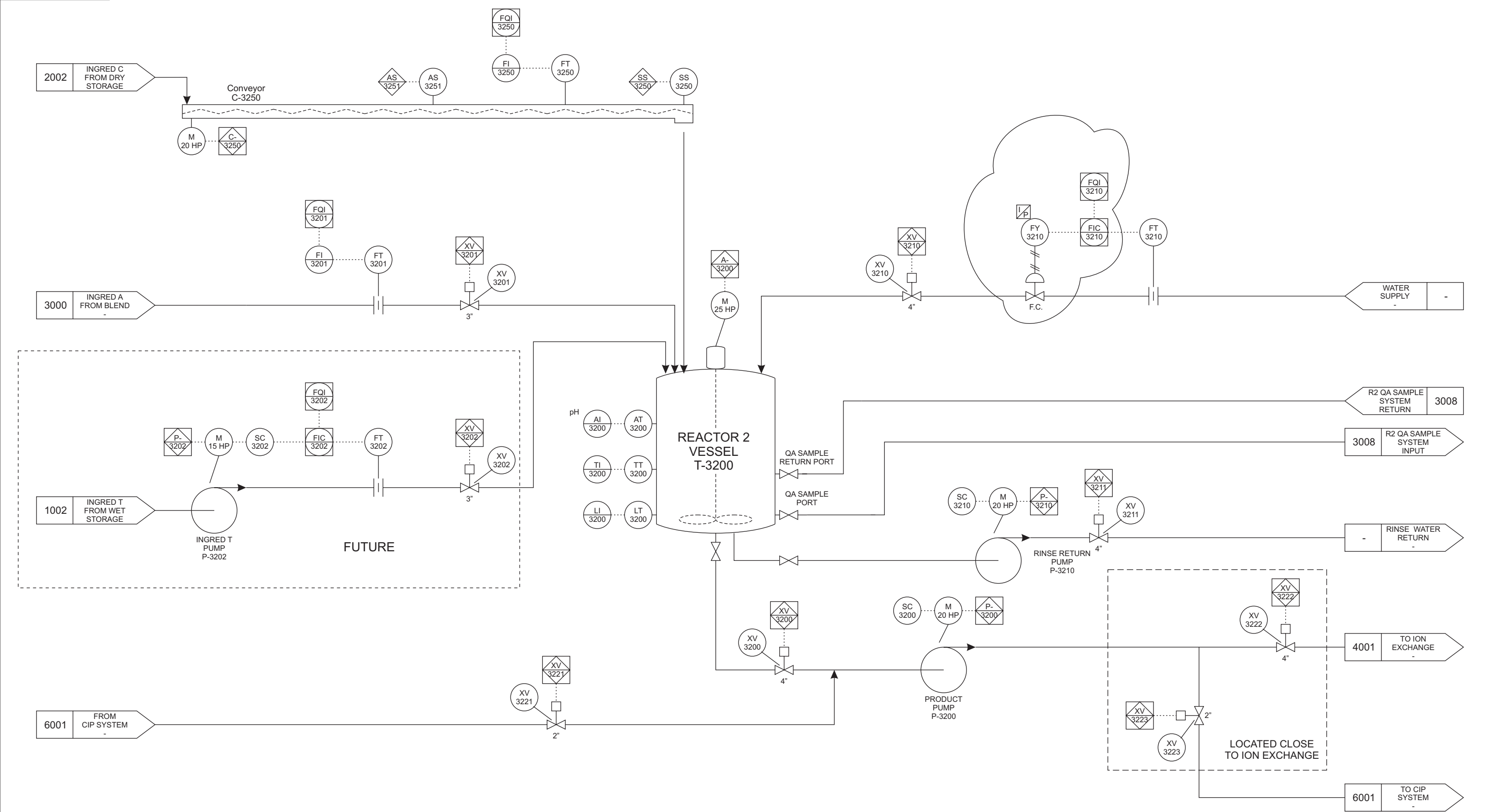
2006

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products DVP EngineeringAnytown, MO	- AS BUILT - FOR CONSTRUCTION - FOR BIDDING ONLY - REFERENCE ONLY XXX PRELIMINARY	POWDER STORAGE 2006 P & ID	CAD REF. NO. 002PD2006 PROJ. NO. - A. F. E. NO. - DRAWING NO. E-002-PD-2006-0
DRAWN BY: KTE	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-				
CHECKED: CRC	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-				
APPROVED: JKS	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-				
APPROVED: JPS	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-				



3000

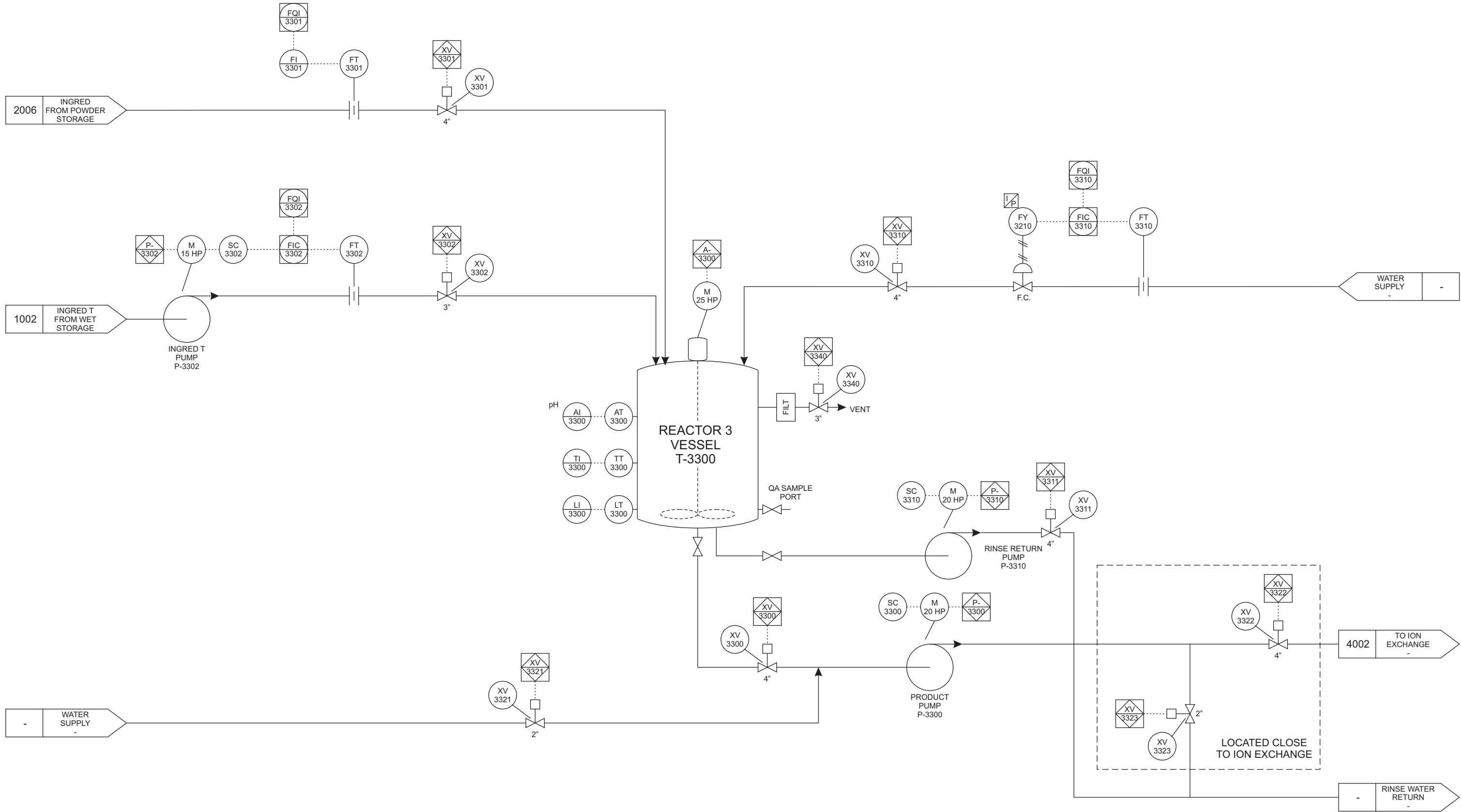
SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products		-	AS BUILT	BLEND 3000 P & ID		CAD REF. NO. 002PD3000
DRAWN BY: KTE	9-22-04	△	SURGE TANKS REMOVED	10-14-04	KTE	CRC	JKS	△	-	-	-	-	-			-	FOR CONSTRUCTION			PROJ. NO. -
CHECKED: CRC	9-24-04	△	CORRECT IN STREAM SHEET NUMBERS	9-05-07	KTE	CRC	JKS	△	-	-	-	-	-			-	FOR BIDDING ONLY			A. F. E. NO. -
APPROVED: JKS	9-28-04	△	-	-	-	-	-	△	-	-	-	-	-			-	REFERENCE ONLY			DRAWING NO.
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-			XXX	PRELIMINARY			E-002-PD-3000-2



3002

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	9-21-04	Δ	ADD QA SAMPLE VALVES	10-05-04	KTE	CRC	JKS	Δ	ADD FIC3210	9-07-13	KTE	CRC	JKS
CHECKED: CRC	9-24-04	Δ	REMOVE P-3201 AND FLOW LOOPS	10-18-04	KTE	CRC	JKS	Δ	-	-	-	-	-
APPROVED: JKS	9-28-04	Δ	ADD INGRED T	3-29-05	KTE	CRC	JKS	Δ	-	-	-	-	-
APPROVED: JPS	10-01-04	Δ	CORRECT IN STREAM SHEET NUMBERS	9-05-07	KTE	CRC	JKS	Δ	-	-	-	-	-

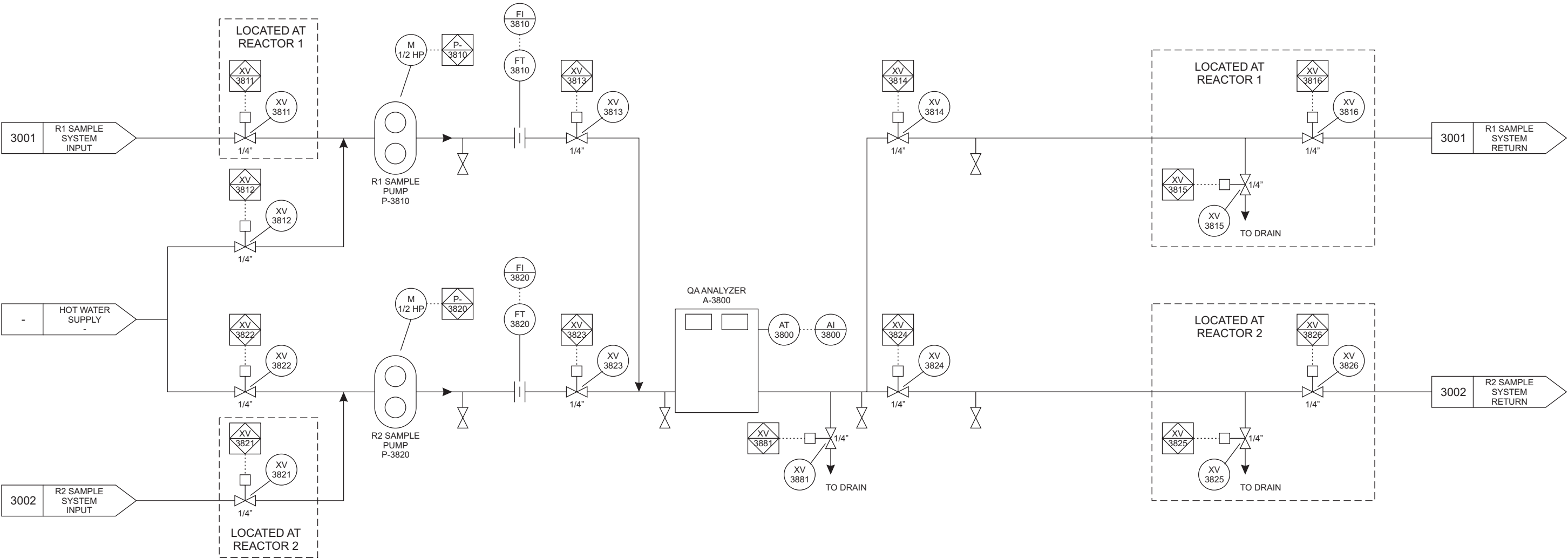
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	-	FOR CONSTRUCTION		PROJ. NO. -
	-	FOR BIDDING ONLY		A. F. E. NO. -
	-	REFERENCE ONLY		DRAWING NO.
DVP Engineering	Anytown, MO	XXX	PRELIMINARY	E-002-PD-3002-5



3003

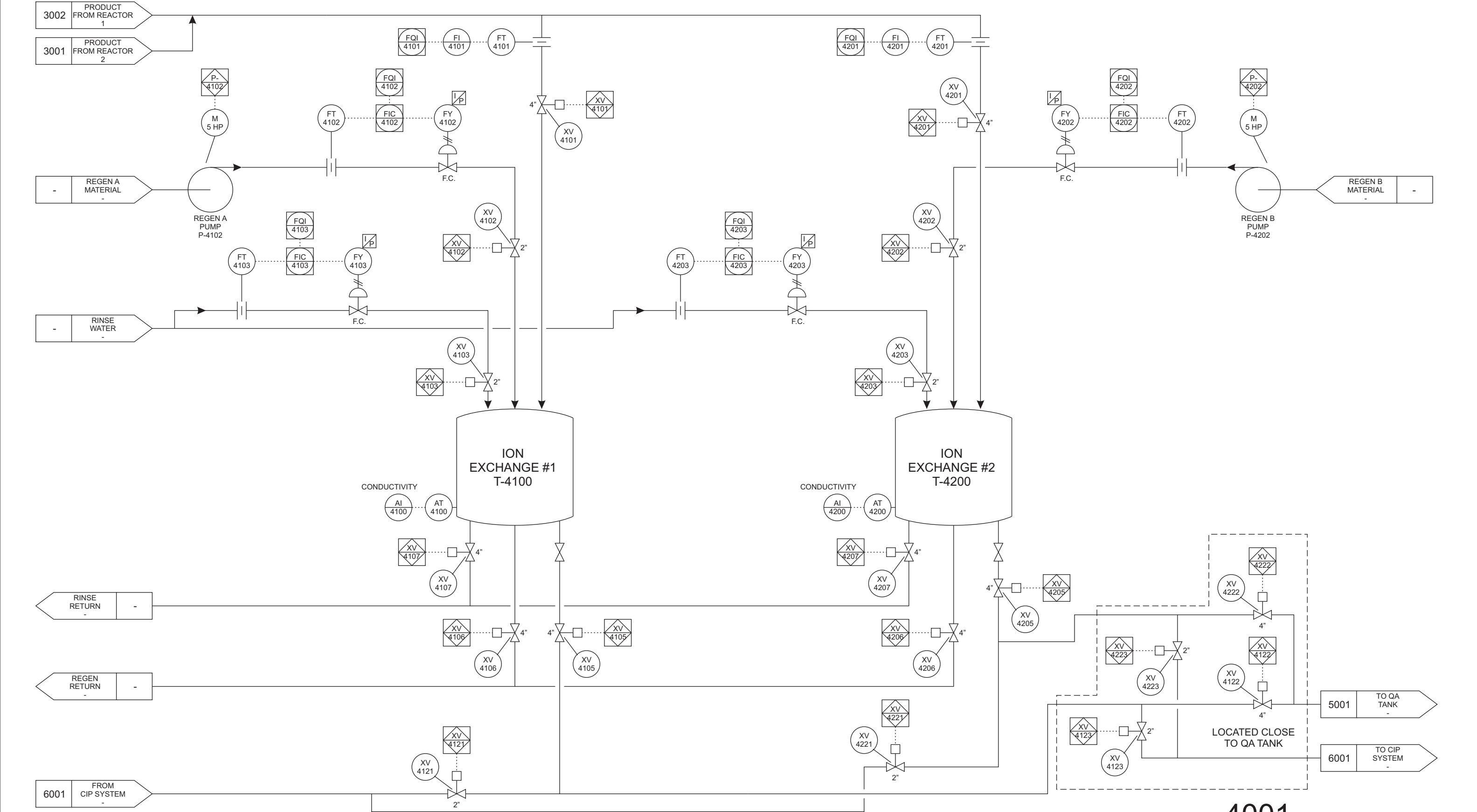
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CHECKED: CRC	8-24-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JKS	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JPS	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-

K Process ABC Products	-	AS BUILT	REACTOR 3 3003 P & ID	CAD REF. NO. 002PD3003
	-	FOR CONSTRUCTION		PROJ. NO. -
	-	FOR BIDDING ONLY		A. F. E. NO. -
	-	REFERENCE ONLY		DRAWING NO.
	XXX	PRELIMINARY		E-002-PD-3003-0
DVP Engineering	Anytown, MO			



3008

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products	DVP Engineering	Anytown, MO	-	AS BUILT	QA SAMPLE 3008 P & ID	CAD REF. NO. 002PD3008
DRAWN BY: KTE	10-05-04	△	CORRECT R2 STREAM SHEET NUMBERS	9-05-07	KTE	CRC	JKS	△	-	-	-	-	-				-	FOR CONSTRUCTION		PROJ. NO. -
CHECKED: CRC	10-06-04	△	-	-	-	-	-	△	-	-	-	-	-				-	FOR BIDDING ONLY		A. F. E. NO. -
APPROVED: JKS	10-07-04	△	-	-	-	-	-	△	-	-	-	-	-				-	REFERENCE ONLY		DRAWING NO.
APPROVED: JPS	10-07-04	△	-	-	-	-	-	△	-	-	-	-	-				XXX	PRELIMINARY		E-002-PD-3008-1



SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	9-22-04	△	Add Ion Exchange #2	9-03-07	KTE	-	-	△	-	-	-	-	-
CHECKED: CRC	9-24-04	△	Correct Regen B material input	9-05-07	KTE	-	-	△	-	-	-	-	-
APPROVED: JKS	9-28-04	△	Correct tags for product flow indicators	12-23-08	KTE	-	-	△	-	-	-	-	-
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-

K Process
ABC Products

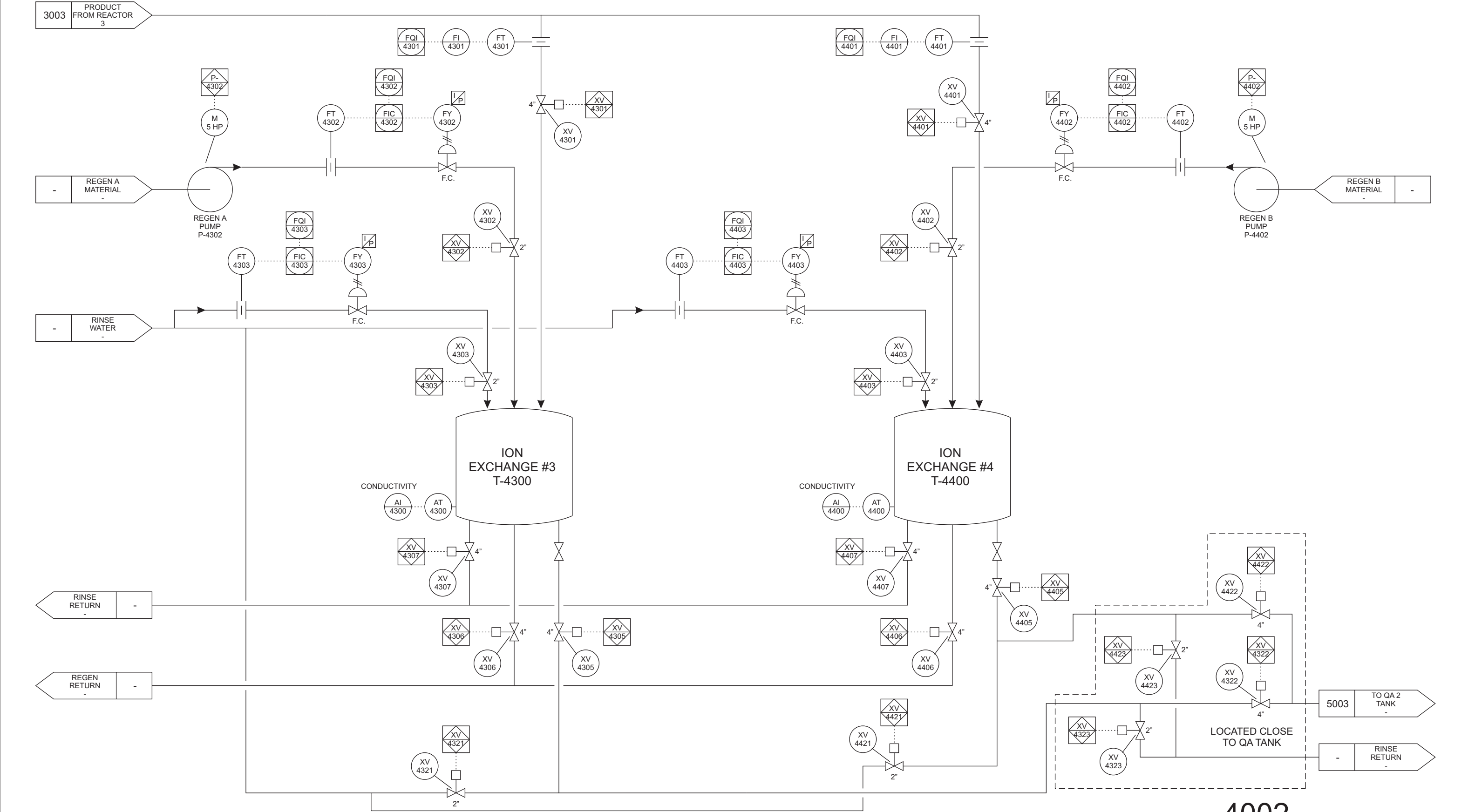
DVP Engineering

Anytown, MO

-	AS BUILT
-	FOR CONSTRUCTION
-	FOR BIDDING ONLY
-	REFERENCE ONLY
XXX	PRELIMINARY

ION EXCHANGE 1 & 2
4001
P & ID

CAD REF. NO.	002PD4001
PROJ. NO.	-
A. F. E. NO.	-
DRAWING NO.	E-002-PD-4001-3



SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	8-25-14	△	-	-	-	-	-	△	-	-	-	-	-
CHECKED: CRC	8-25-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JKS	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-
APPROVED: JPS	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-

K Process
ABC Products

DVP Engineering

Anytown, MO

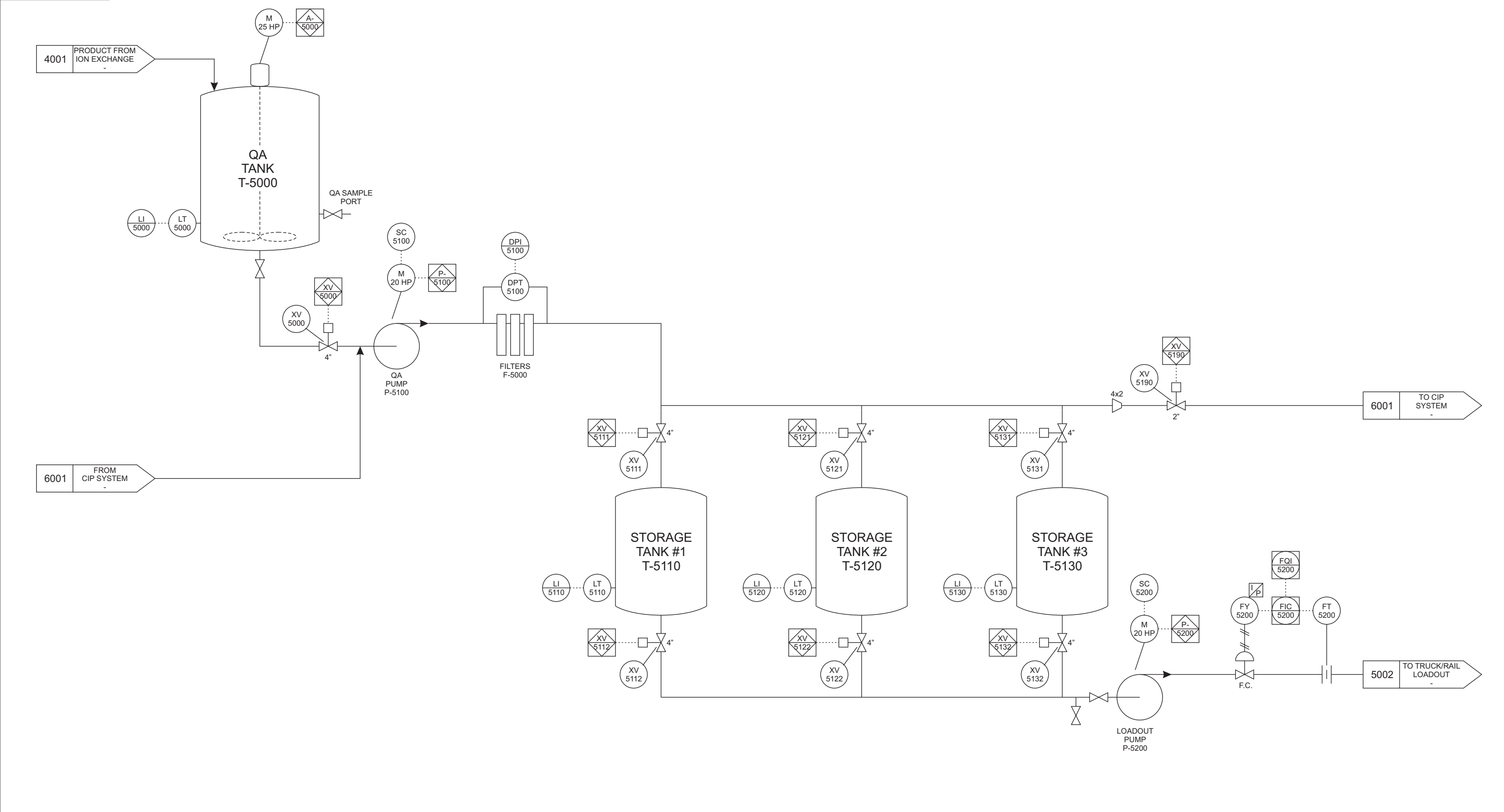
-	AS BUILT
-	FOR CONSTRUCTION
-	FOR BIDDING ONLY
-	REFERENCE ONLY
XXX	PRELIMINARY

ION EXCHANGE 3 & 4

4002

P & ID

CAD REF. NO.	002PD4002
PROJ. NO.	-
A. F. E. NO.	-
DRAWING NO.	E-002-PD-4002-0

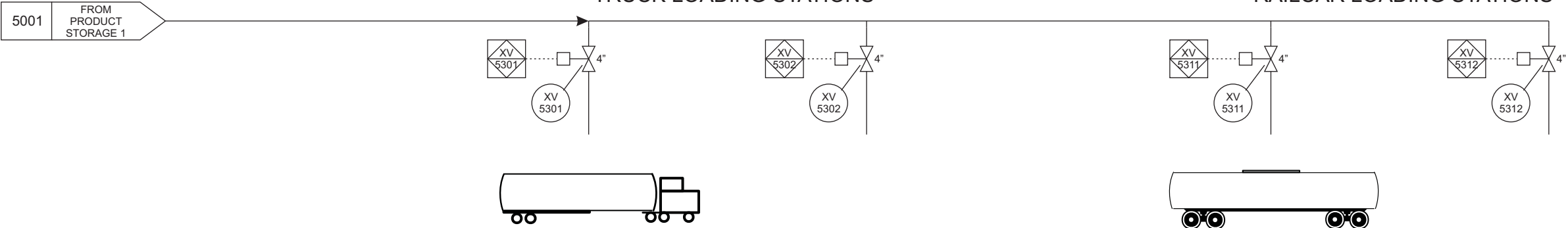


5001

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products DVP EngineeringAnytown, MO	- AS BUILT - FOR CONSTRUCTION - FOR BIDDING ONLY - REFERENCE ONLY XXX PRELIMINARY	PRODUCT STORAGE 1 5001 P & ID	CAD REF. NO. 002PD5001 PROJ. NO. - A. F. E. NO. - DRAWING NO. E-002-PD-5001-2
DRAWN BY: KTE	9-22-04	△	3" PIPES CHANGED TO 4"	10-04-04	KTE	CRC	JKS	△	-	-	-	-	-				
CHECKED: CRC	9-24-04	△	CHANGED TITLE	9-03-14	KTE	CRC	JKS	△	-	-	-	-	-				
APPROVED: JKS	9-28-04	△	-	-	-	-	-	△	-	-	-	-	-				
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	-				

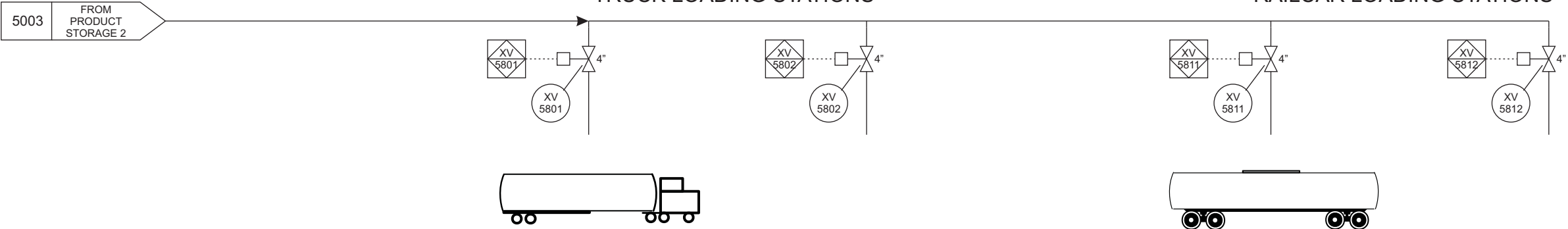
TRUCK LOADING STATIONS

RAILCAR LOADING STATIONS



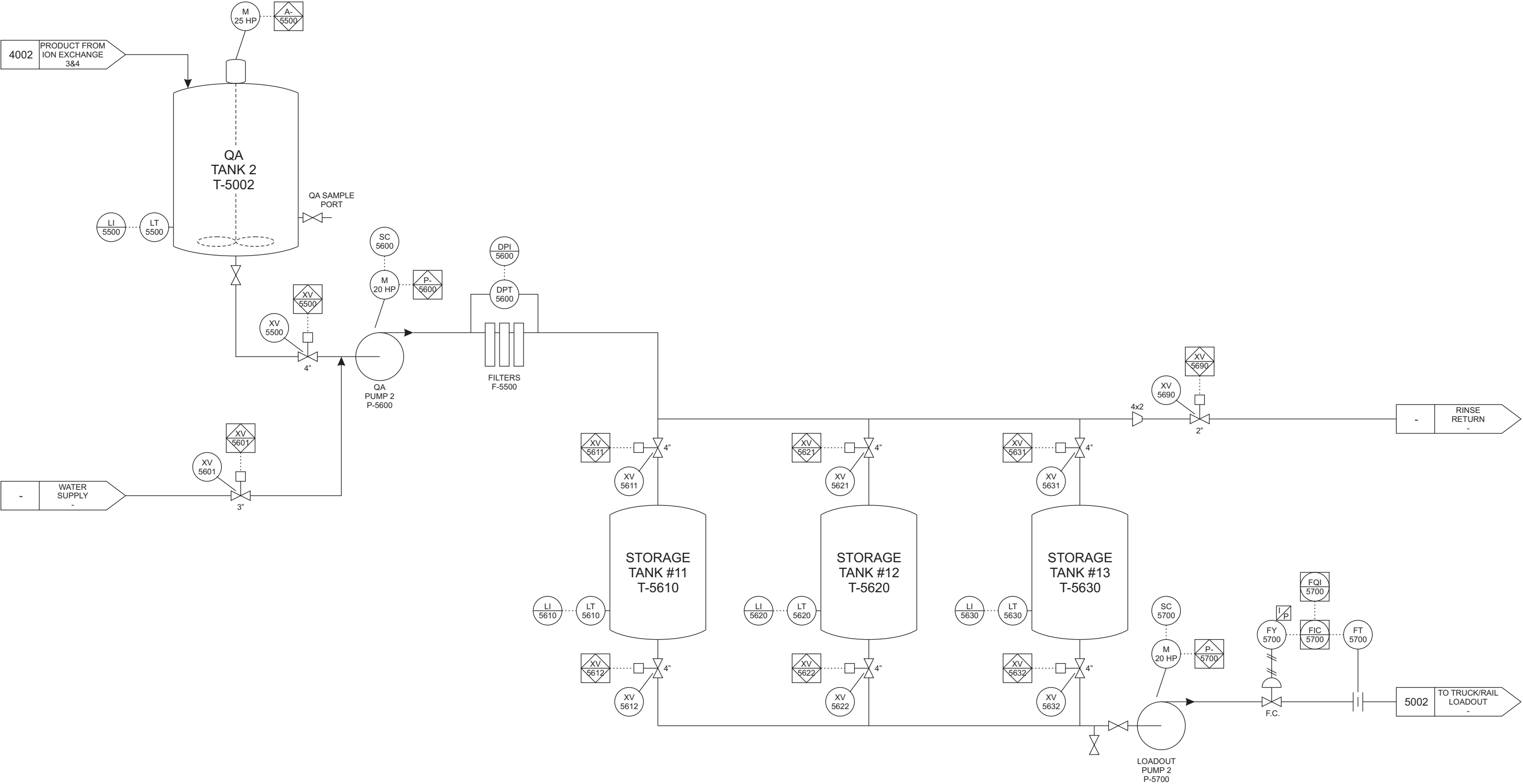
TRUCK LOADING STATIONS

RAILCAR LOADING STATIONS



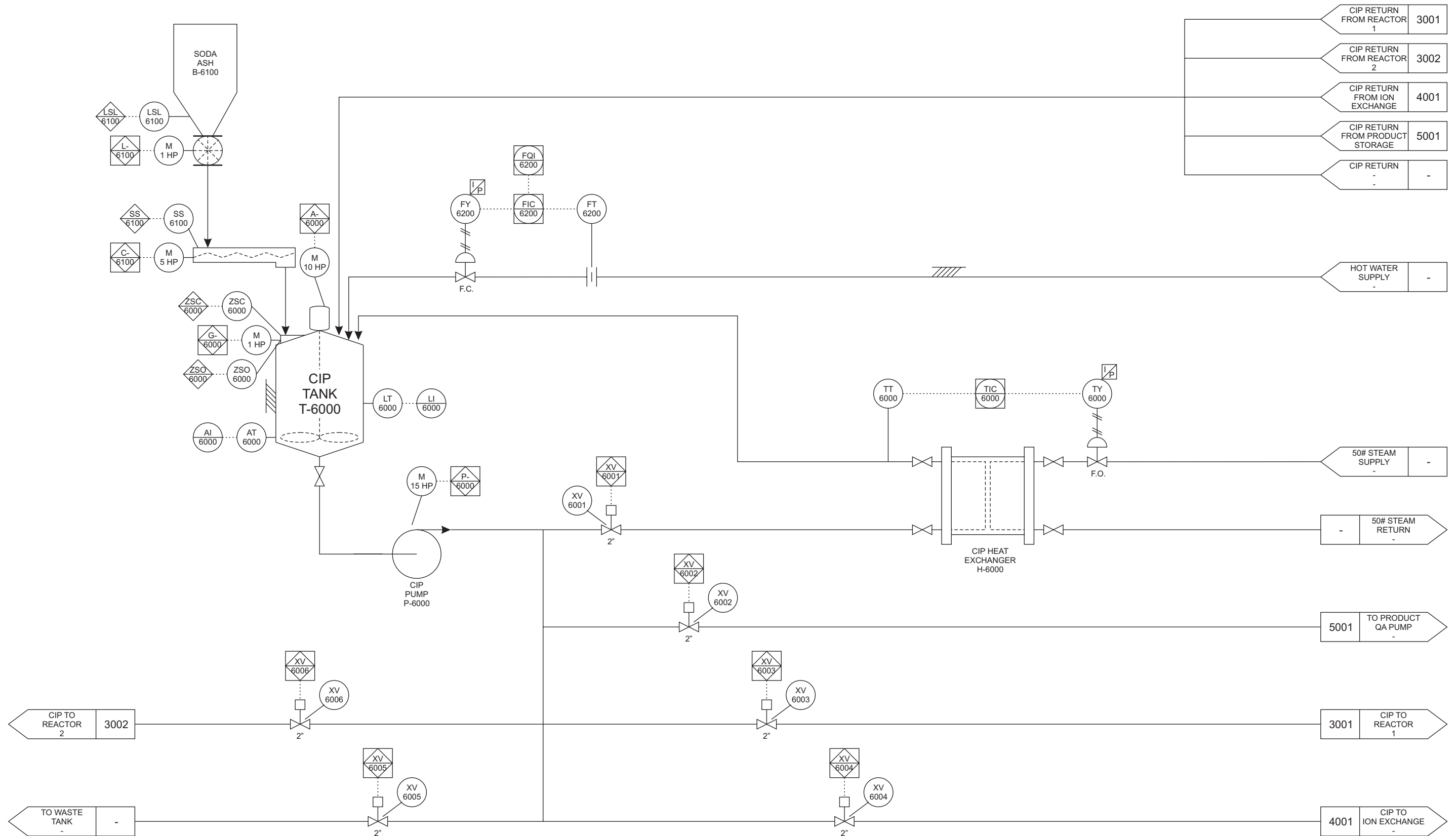
5002

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	<div>K Process ABC Products</div> <div>DVP EngineeringAnytown, MO</div>	-	AS BUILT	<div>TRUCK/RAIL LOADOUT 5002 P & ID</div>	CAD REF. NO. 002PD5002
DRAWN BY: KTE	9-22-04	△	3" PIPES CHANGED TO 4"	10-04-04	KTE	CRC	JKS	△	-	-	-	-	-		FOR CONSTRUCTION	PROJ. NO. -		
CHECKED: CRC	9-24-04	△	ADDED LOADOUT FROM PROD STOR 2	9-03-14	KTE	CRC	JKS	△	-	-	-	-	-		FOR BIDDING ONLY	A. F. E. NO. -		
APPROVED: JKS	9-28-04	△	-	-	-	-	-	△	-	-	-	-	-		REFERENCE ONLY	DRAWING NO.		
APPROVED: JPS	10-01-04	△	-	-	-	-	-	△	-	-	-	-	XXX		PRELIMINARY	E-002-PD-5002-2		











5003

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	K Process ABC Products	-	AS BUILT	PRODUCT STORAGE 2 5003 P & ID	CAD REF. NO. 002PD5003
DRAWN BY: KTE	8-25-14	△	-	-	-	-	-	△	-	-	-	-	-		-	FOR CONSTRUCTION		PROJ. NO. -
CHECKED: CRC	8-25-14	△	-	-	-	-	-	△	-	-	-	-	-		-	FOR BIDDING ONLY		A. F. E. NO. -
APPROVED: JKS	8-26-14	△	-	-	-	-	-	△	-	-	-	-	-		-	REFERENCE ONLY		DRAWING NO.
APPROVED: JPS	9-02-14	△	-	-	-	-	-	△	-	-	-	-	-		-	PRELIMINARY		E-002-PD-5003-0
														DVP Engineering	Anytown, MO	XXX		



6001

SCALE - NONE	DATE	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.	REV. NO.	DESCRIPTION	DATE	BY	CHKD.	APRD.
DRAWN BY: KTE	9-21-04		CHANGE HOT WATER FLOW TAGS	10-04-04	KTE	CRC	JKS		-	-	-	-	-
CHECKED: CRC	9-24-04		-	-	-	-	-		-	-	-	-	-
APPROVED: JKS	9-28-04		-	-	-	-	-		-	-	-	-	-
APPROVED: JPS	10-01-04		-	-	-	-	-		-	-	-	-	-

<div style="text-align: center;"> <h1>K Process ABC Products</h1> </div> <div style="display: flex; justify-content: space-between; padding: 5px;"> DVP Engineering Anytown, MO </div>	-	AS BUILT	<div style="text-align: center;"> <h1>CIP SYSTEMS 6001 P & ID</h1> </div>	CAD REF. NO. 002PD6001
	-	FOR CONSTRUCTION		PROJ. NO. -
	-	FOR BIDDING ONLY		A. F. E. NO. -
	-	REFERENCE ONLY		DRAWING NO.
	XXX	PRELIMINARY		E-002-PD-6001-1