THIS DOCUMENT IS THE PROPERTY OF ENGINEERED CONVEYOR SYSTEMS. THE DESIGN AND IDEAS WITHIN ARE NOT TO BE USED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF ENGINEERED CONVEYOR SYSTEMS.

BASIC DATA / DESIGN CRITERIA / BELTING

FAC. NO	CONVEYOR NUMBER	CONVEYOR FROM	CONVEYOR TO	NO. OF LOAD POINTS	CONVEYOR DIAGRAM (= DRIVE PULLEY)	BELT WIDTH	HORIZONTAL CENTERS	VERTICAL CENTERS	CONVEYOR DRAWING NUMBER	REMARKS	MATERIAL TYPE	MATERIAL MAX. SIZE	MATERIAL DENSITY lbs/ft³	MATERIAL TEMP	FLOWSHEET T.P.H.	DESIGN T.P.H.	DESIGN LOADING %	DESIGN BELT SPEED F.P.M.	ACTUAL SPEED F.P.M.	CALCULATED HP @ DRIVE SHAFT	TENSIONS T.E. EFFECTIVE TENSION	TENSIONS T1 TIGHT SIDE TENSION	TENSIONS T2 SLACK SIDE TENSION	TAKE-UP TYPE	TAKE-UP TRAVEL (ft.)	TAKE-UP PULL IN lbs.	BELTING WIDTH	BELTING CALC. P.I.W. AT T max.	BELT SELECTED	SELECTED BELT RATING P.I.W.	R.M.A. GRADE	TOP COVER	BOTTOM COVER	TOTAL BELT THICKNESS (APPROX.)	BELT LENGTH	TYPE OF SPLICE
101	TRANSFER CONVEYOR CV-117	COLLECTION CONVEYOR #1	TRANSFER CONVEYOR CV-001	1	105.1'	48	105.1	0.0	CRR101-40-70-003		GOLD/SILVER ORE	0.375	100	-37 112	2000	2000	80	500	489	29	1929	5071	3751	SCREW	3.0	8075	48	106	SHARDA	330	DIN Y	0.250	0.125	0.520	(NOTE 1) 220	VULC.
103	TRANSFER CONVEYOR CV-001	TRANSFER CONVEYOR CV-117	OVERLAND CONVEYOR CV-002	1	20.7' / 938.7'	48	938.7	-20.7	CRR103-40-70-001		GOLD/SILVER ORE	0.375	100	-37 112	2000	2000	80	500	520	60	3921	8740	5449	HGTU	26.0	12692	48	182	SHARDA	330	DIN Y	0.250	0.125	0.520	(NOTE 1) 1880	VULC.
106	OVERLAND CONVEYOR CV-002	TRANSFER CONVEYOR CV-001	STOCKPILE	1	257.6' / 4791.1'	48	4791.1	-257.6	CRR106-40-70-001		GOLD/SILVER ORE	0.375	100	-37 112	2000	2000	64	623	618	-152	-8922	23646	33343	HGTU	75.0	45000	48	705	SHARDA	1000	DIN Y	0.375	0.125	0.803	(NOTE 1) 9775	VULC.
108	BELT FEEDER FE-001	STOCKPILE	LOADOUT CONVEYOR CV-003	1	25.0'	96	25.0	0.0	CRR108-40-70-001		GOLD/SILVER ORE	0.375	100	-37 112	6622	6622	N/A	20-100	20-100	65	21451	41511	20060	MAUNAL	1.5	43000	96	432	SHARDA	800	DIN Y	0.500	0.250	1.004	(NOTE 1) 68	VULC.
109	LOADOUT CONVEYOR CV-003	BELT FEEDER FE-001	TRUCKS	1	312.5' / 46.0'	72	312.5	46.0	CRR109-40-70-001		GOLD/SILVER ORE	0.375	100	-37 112	6000	6000	86	600	618	423	23237	32238	9989	GTU	10.0	20813	72	448	SHARDA	600	DIN Y	0.250	0.125	0.579	(NOTE 1) 680	VULC.

CONVEYOR COMPONENTS

FAC. NO.	DRIVE PULLEY: DEGREES WRAP	PULLEY RPM	PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	HEAD PULLEY: PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	DRIVE #2 PULLEY: PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	TAIL PULLEY (HT BEND ON CV-002): PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	BEND PULLEY (TAIL SNUB ON CV-002): PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	TAKE-UP PULLEY (LT BEND ON CV-002): PULLEY DIA X FACE	CF-SF SLATTED	LAGGING	SHAFT DIA.	HUBS	BEARING CENTERS	BEARING MODEL & SIZE	QUANTITY OF PULLEYS	SCREW T.U. MODEL & SIZE
101	180	74.8	24 X 54	SF	0.5 C	4.9375	PXT50	74	SAF 22526 4.4375	1																	20 X 54	SF	0.5 PL	4.4375	PXT45	66	SAF 22520 3.4375	1																				PRECISION PHD308 X 36
103	180	79.5	24 X 54	SF	0.5 C	5.4375	PXT60	74	SAF 22532 5.4375	1																																	20 X 54	SF	0.5 PL	4.9375	PXT50	66	SAF 22522 3.9375	1	
106	180	63.8	36 X 54	SF	0.5 C	8.0000	PXT80	70	SAF 22538 6.9375	1	24 X 54	SF	0.5 PL	7.0000	PXT70	74	SAF 22532 5.4375	1	36 X 54	SF	0.5 C	8.0000	PXT80	70	SAF 22538 6.9375	1	30 X 54	SF	0.5 PL	8.0000	PXT80	70	SAF 22534 5.9375	1	30 X 54	SF	0.5 PL	4.9375	PXT50	70	SAF 22522 3.9375	2	24 X 54	SF	0.5 PL	7.0000	PXT70	70	SAF 22532 5.4375	4	
108	180	11.1	36 X 102	SF	0.5 C	10.9375	PXT120	130	SDAF 23160 10.9375	1																	36 X 102	SF	0.5 PL	9.5000	PXT100	130	SAF 22544 7.9375	1																				
109	180	63.8	36 X 78	SF	0.5 C	8.5000	PXT100	104	SAF 22544 7.9375	1																	30 X 78	SF	0.5 PL	6.9375	PXT70	96	SAF 22532 5.4375	1	30 X 78	SF	0.5 PL	6.9375	PXT70	96	SAF 22532 5.4375	2	30 X 78	SF	0.5 PL	6.9375	PXT70	96	SAF 22532 5.4375	1	
					(NOTE 4)																																															

IDLERS / DRIVES

FAC. NO.	IDLERS CARRYING: DIAMETER	35° TROUGHING	35° TRAINING	35° IMPACT VARIABLE TRANSITION	35° REB TROUGHING 20° PICKING IMPACT	20° PICKING	QUANTITY CARRYING	IDLERS RETURN: DIAMETER	FLAT	FLAT CARRY	TRAINING	LIVE SHAFT	QUANTITY RETURN	TOTAL QUANTITY	LUBRICATION	MOTOR (NOTE 7 & 11): H.P.	PH/HZ/VOLTS	NOM. SPEED rpm	FRAME NUMBER	TYPE AND DESIGN	COUPLINGS: HIGH SPEED TYPE & SIZE	LOW SPEED TYPE & SIZE	SPECIAL	HOLDBACK/BRAKES (NOTE 12): TYPE AND SIZE	TORQUE CAPACITY (FT-LB)	BORE (INCH)	V-BELT DRIVES: RATIO	NUMBER OF BELTS	TYPE OF BELTS	DRIVE CENTERS	BELT LENGTH	SHEAVES DIA. DRIVER	SHEAVES DIA. DRIVEN	GUARD	REDUCER (NOTE 11): TYPE AND SIZE	SIZE NO.	NOM/ACT RATIO	INPUT rpm	OUTPUT rpm	MIN. H.P. RATING	BASE PLATE or/MTR. MT.	COOLING	CHAIN DRIVE: RATIO	CHAIN TYPE & WIDTH	CHAIN CENTERS	CHAIN LENGTH IN PITCHES	DRIVER SPROCKET PITCH DIA.	DRIVER SPROCKET NO. OF TEETH	DRIVER SPROCKET HUB TYPE	DRIVER SPROCKET BORE	DRIVEN SPROCKET PITCH DIA.	DRIVEN SPROCKET NO. OF TEETH	DRIVEN SPROCKET HUB TYPE	DRIVEN SPROCKET BORE	CHAIN CASING
101	D6	18	1	5	1	8	~	~	33	D6	10	~	1	~	11	44	SFL	40	3/60/480	1800	324TD	SIEMENS VFD DUTY TEFC	DODGE 1060T10	SHRINK DISC	~	~	~	~	~	~	~	~	~	~	~	~	ROSSI R C2I 160 U02A	~	23.8 23.8	1780	74.8	71	BELL HOUSING	SF	~	~	~	~	~	~	~	~	~	~	~	~	~
103	D6	143	9	5	1	8	~	~	166	D6	70	2	9	~	81	247	SFL	75	3/60/480	1800	365TD	SIEMENS VFD DUTY TEFC	DODGE 1070T10	SHRINK DISC	DODGE DGF 5.0	~	JOHNSON 1824FH	2900	7.5000	~	~	~	~	~	~	~	~	ROSSI R C2I 200 U02A	~	22.4 22.4	1780	79.5	148	BELL HOUSING	SF	~	~	~	~	~	~	~	~	~	~	~	~	~
106	D6	747	48	6	2	8	~	~	811	D6	351	12	48	~	411	1222	SFL	250	3/60/480	1800	B449T	SIEMENS VFD DUTY TEFC	DODGE 1090T10	DODGE DGF 5.0	~	~	JOHNSON 38HHHX	50000	14.0000	~	~	~	~	~	~	~	~	ROSSI R C2I 320 U02A	~	28 28	1785	63.8	304	BED PLATE	SF	~	~	~	~	~	~	~	~	~	~	~	~	~
108	E7	~	~	~	~	9	3	12	E7	~	~	~	*	4	16	SFL	100	3/60/480	1800	405T	SIEMENS VFD DUTY TEFC	DODGE 1080T10	SHRINK DISC	~	~	~	~	~	~	~	~	~	~	~	~	~	(NOTE 9)	~	160 160	1780	11.1	209	SWING BASE	SF	~	~	~	~	~	~	~	~	~	~	~	~	~
109	E7	67	2	6	3	8	~	~	86	E7	*	~	3	~	30	116	SFL	250	3/60/480	1800	B449TZ	SIEMENS VFD DUTY TEFC	DODGE 1090T10	(NOTE 8)	~	~	MARLAND BC-45 MA	45000	7.0000	~	~	~	~	~	~	~	~	ROSSI R C2I 320 U02A	~	28 28	1785	63.8	304	BED PLATE	SF	~	~	~	~	~	~	~	~	~	~	~	~	~
					(NOTE 3)						(NOTE 5)		(NOTE 6)				(NOTE 2)				(NOTE 7)																						(NOTE 10)																

NOTES:

1. Belt lengths given are neat plus splice. Field to verify length before cutting.
2. SFL = Sealed For Life
3. REB = Removable End Bracket
4. C = Ceramic Lagging
5. QTY 6: Flat return idlers
   QTY 21: 10° V-Return Idlers
6. QTY 3: 8" Live Shaft Return Idlers
   QTY 2: 8" Live Shaft Idlers on Custom Adjustable Inverted V-Traininig Frame
7. FE-001 405T motor is blower cooled
   CV-003 B449TZ motor is blower cooled
8. CV-003 low speed couplings are Dodge DGF 5.0 and Dodge DGF 5.0 Spacer.
9. FE-001 reducer is Rossi R 2EL 180A + R CI 200 160Y H200M1 A10i B5
10. SF = Shaft fan
11. CV-002 and CV-003 have dual drives. Motors and reducers listed in the chart are for one drive assembly.
12. CV-001 brake is on the head pulley. CV-002 brake is on the tail pulley.

ENGINEERED CONVEYOR SYSTEMS
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Original sealed by: ENGINEER ... STATE OF NEVADA ... No. 15569 ... CIVIL ... PROFESSIONAL ENGINEER ... 6-24-16

Date original sealed: 6-24-16

An original document is on file in the office of Engineered Conveyor Systems.

MECHANICAL CHART

Project/Job No.: 16-6-0007
Designed By: ECS
Drawn By: ECS
Checked By: ECS

STAGE IV CONVEYOR & LOADOUT FACILITY
LOVELOCK, NV

OWNER/DEVELOPER:
COEUR ROCHESTER MINE
EXIT 119 OFF OF I-80
26 MILES SE OF LOVELOCK
LOVELOCK, NV 89419

REVISIONS

No.	DATE	BY	DESCRIPTION
0	12/12/2016	CRS	ISSUED FOR CONSTRUCTION

ISSUED FOR CONSTRUCTION

SCALE: N/A

Drawing Number: CRR100-80-70-001

REV. 0