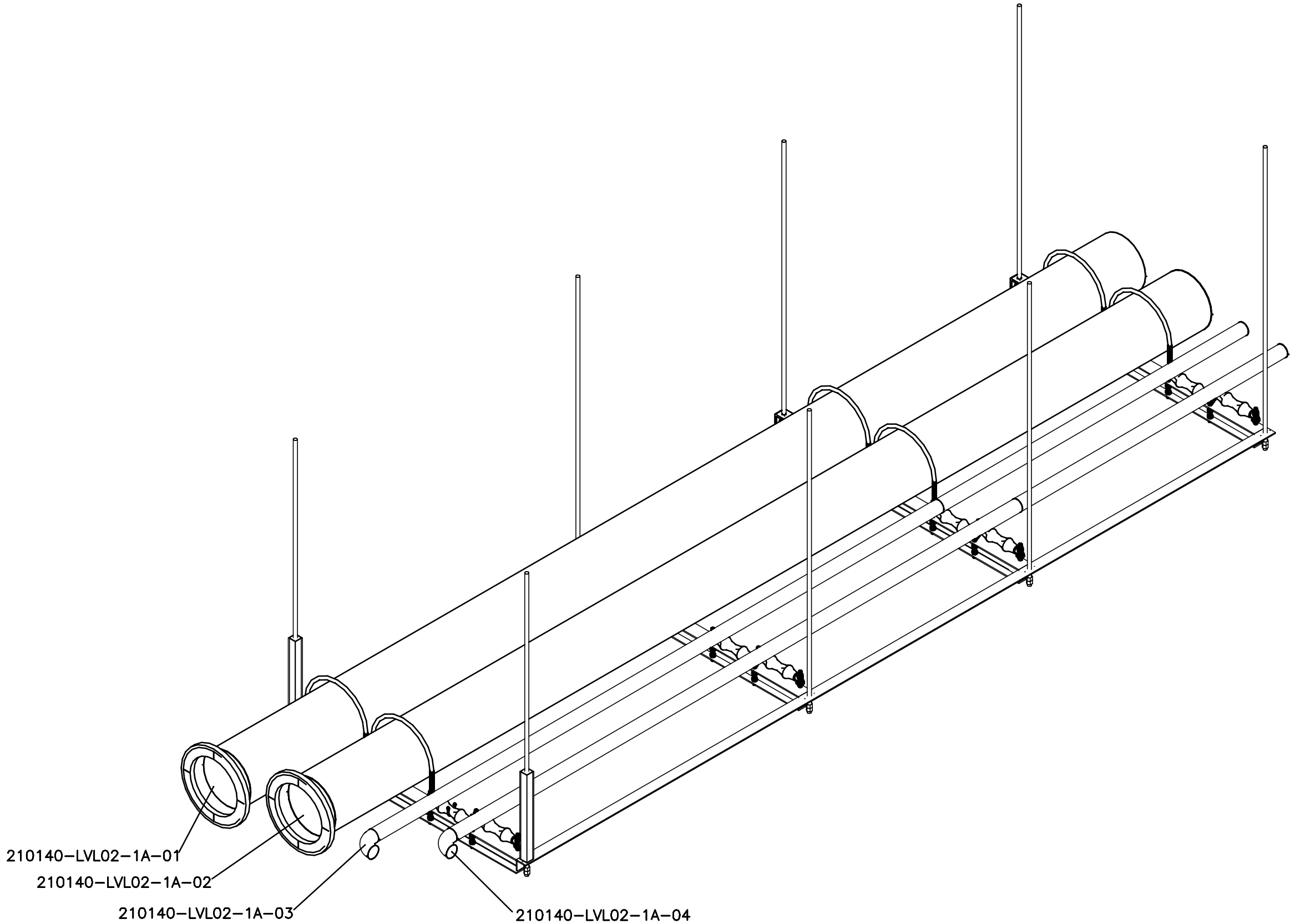


DRN	JMM	5/24/2021	WUSM RESEARCH BUILDING				QA/QC ACCEPT				FLANGE WEIGHT/ORIENTATION			
CHK			NRB								FITTING ORIENTATION			
APP			LEVEL 02 NRB RACK								BOLTS/CPLGS/TH'D TIGHT			
JOB NO.	210140		SERVICE NAME								SPOOL IDENTIFICATION			
REF.DWG.							SPEC.	ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS		
DRAWING NO./TRACKING NO. 201140-LVL02-1A			QTY.	1	SHT/NO	1 OF 3	NA	NA	NA	NA	NA	MURPHY WPS#		
			REV	0			0					DRN	CHK	APP

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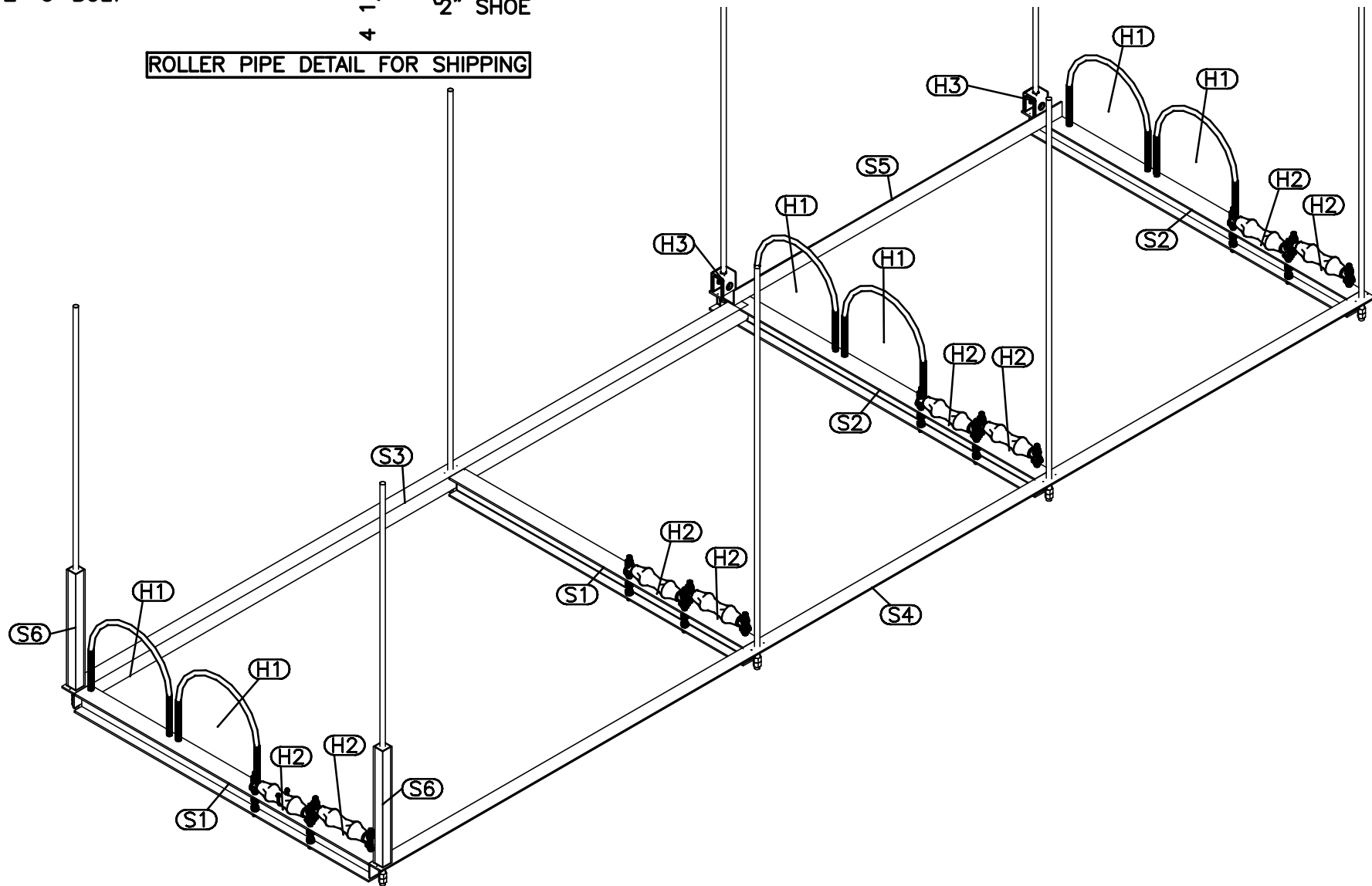
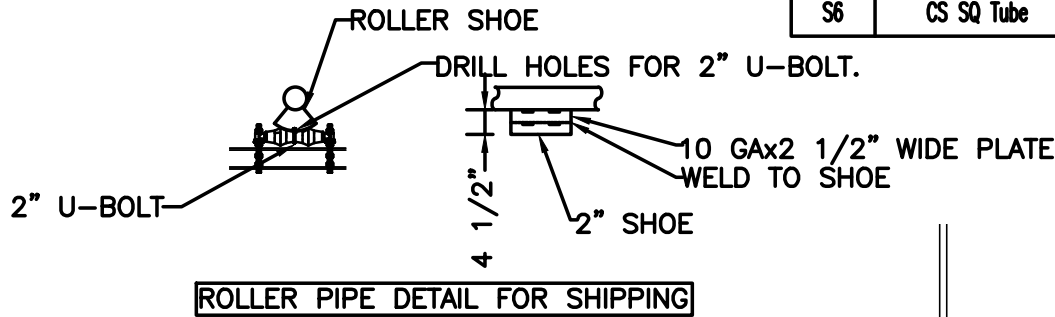
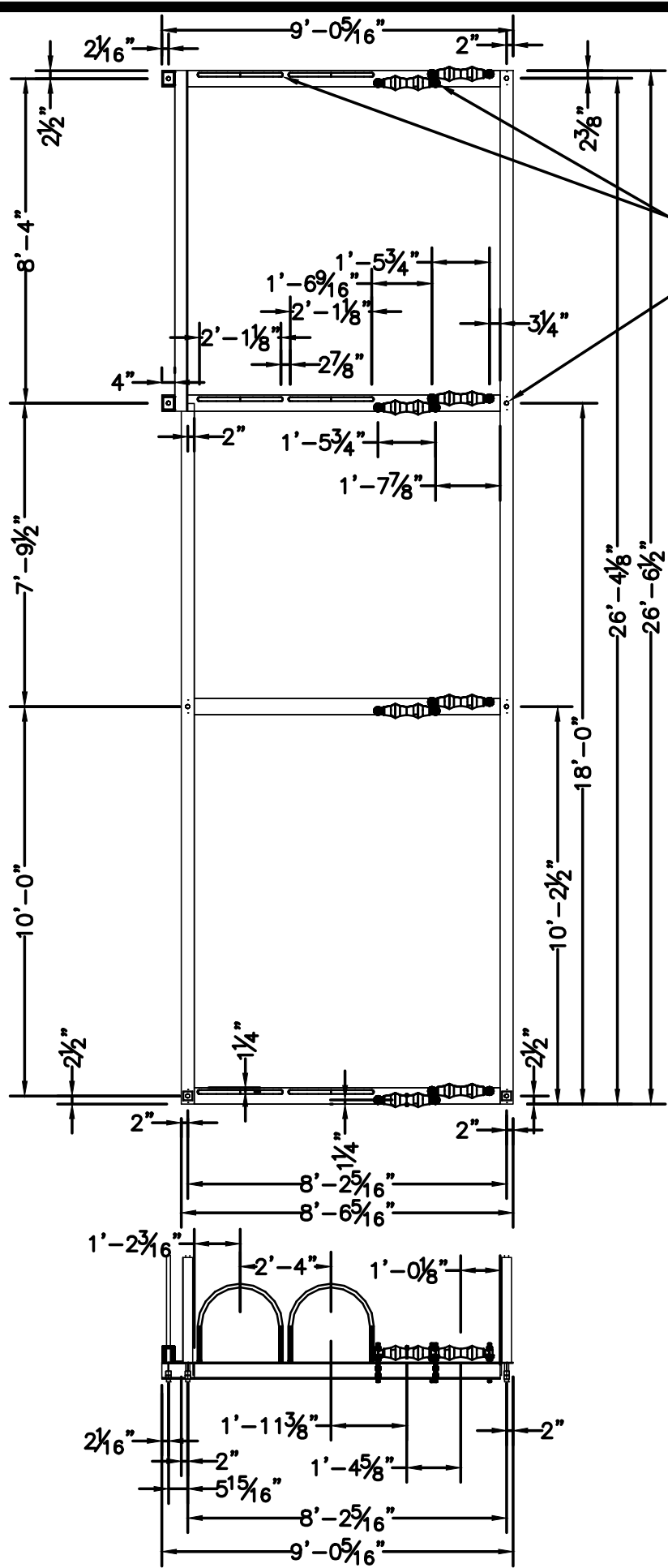


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DRN JMM		5/24/2021	WUSM RESEARCH BUILDING					QA/QC ACCEPT					FLANGE WEIGHT/ORIENTATION				<input type="checkbox"/>	
CHK			NRB										FITTING ORIENTATION				<input type="checkbox"/>	
APP			LEVEL 02 NRB RACK										BOLTS/CPLG'S/TH'D TIGHT				<input type="checkbox"/>	
JOB NO.		210140	SERVICE NAME										SPOOL IDENTIFICATION				<input type="checkbox"/>	
REF.DWG.								SPEC.		ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS				
								NA		NA	NA	NA	NA	MURPHY WPS#				
DRAWING NO./TRACKING NO.			QTY.		SHT/NO		REV		0									
201140-LVL02-1A			1		2 of 3		0		REV		DATE	DESCRIPTION			DRN	CHK	APP	



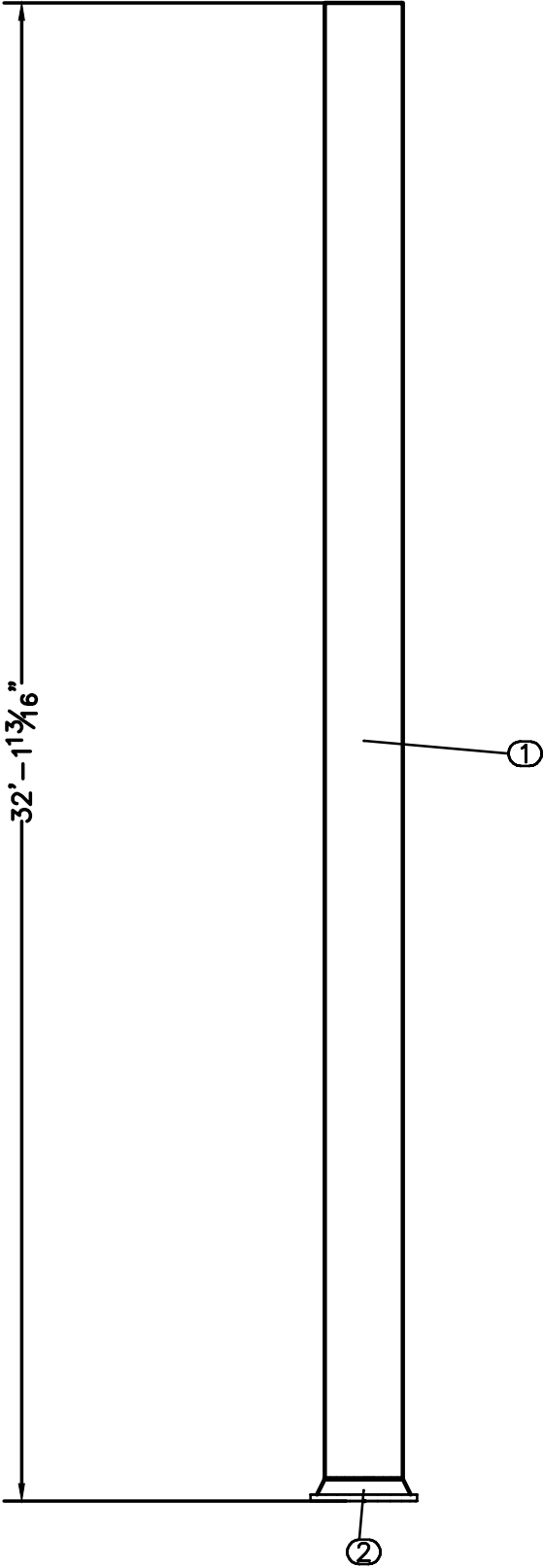
BOM-STEEL

Item No	Order	Description	Qty	Size	Steel L
H1	Fig137	Fig.137 U-Bolt (4)-Nut Black	6	24	
H2	B3122-14 PLN	B3122 Adjustable Roller Support - PLN	8	14	
H3	Fig66 No-Bolt - PLN	Fig.66 Weld Beam Attach without Bolt & Nut - BLK	2	1-1/4	
H4	Fig137	Fig.137 U-Bolt (4)-Nut Black	1	2	
S1	W5x19	ASTM A36 CS Wide Flange	2	W5x19	94 1/4"
S2	W5x19	ASTM A36 CS Wide Flange	2	W5x19	104 1/4"
S3	L4x4x3/8	ASTM A36 CS Equal Angle	1	L4x4x3/8	215 3/4"
S4	L4x4x3/8	ASTM A36 CS Equal Angle	1	L4x4x3/8	318 1/2"
S5	L4x4x3/8	ASTM A36 CS Equal Angle	1	L4x4x3/8	105"
S6	CS SQ Tube	ASTM A36 CS Square Tube	2	SQ3x3x1/4	32 1/4"

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FLANGE WEIGHT/ORIENTATION	□	□	□	□
FITTING ORIENTATION				
BOLTS/CPLG'S/TH'D TIGHT				
SPOOL IDENTIFICATION				
QA/QC ACCEPT				
SPEC.	ASME	X-RAY	HYDRO TEST	COMMENTS
NA	NA	NA	NA	MURPHY WPS#
REV	DATE	DESCRIPTION	DRN	CHK
0				APP

WUSM RESEARCH BUILDING	5/24/2021	DRN JMM	REF.DWG.	DRAWING NO./TRACKING NO.	QTY.	SHT/NO	REV
NRB		CHK		201140-LVL02-1A	1	3 OF 3	0
LEVEL 02 NRB RACK		APP					
SERVICE NAME	JOB NO. 210140						



CWR

Murphy-PFFS-SPOOL-BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
2	1	150lb RF Sch 40 Bore SA105 CS WN Flg					20
1	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	31'-8"	380.000	20

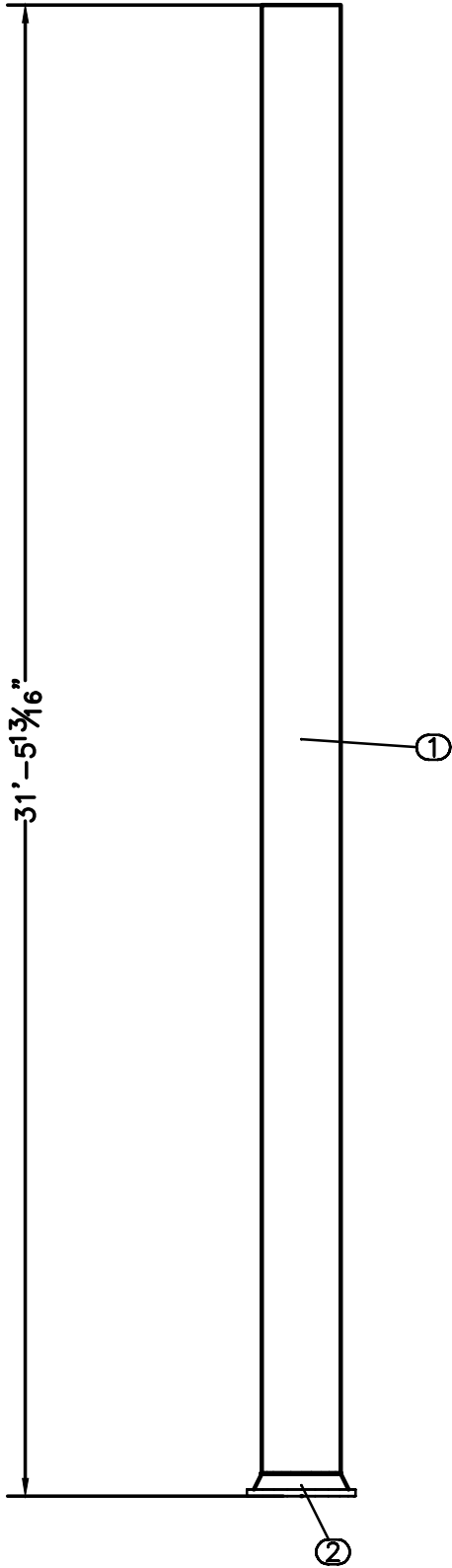
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QA/QC ACCEPT _____					FLANGE WEIGHT/ORIENTATION <input type="checkbox"/> FITTING ORIENTATION <input type="checkbox"/> BOLTS/CPLG'S/TH'D TIGHT <input type="checkbox"/> SPOOL IDENTIFICATION <input type="checkbox"/>				
SPEC.	ASME	X-RAY	HYDRO	TEST	PWHT	COMMENTS			
NA	NA	NA	NA	NA	NA	MURPHY WPS#			
0									
REV	DATE	DESCRIPTION				DRN	CHK	APP	

DRN JMM	5/25/2021	WUSM RESEARCH BUILDING	
CHK		NRB	
APP		LVL02 RACKS	
JOB NO.	210140	SERVICE NAME	
REF.DWG.		LVL02-1A	
DRAWING NO./TRACKING NO.		QTY.	REV
210140-LVL02-1A-01		1	1 of 1 0



CWS

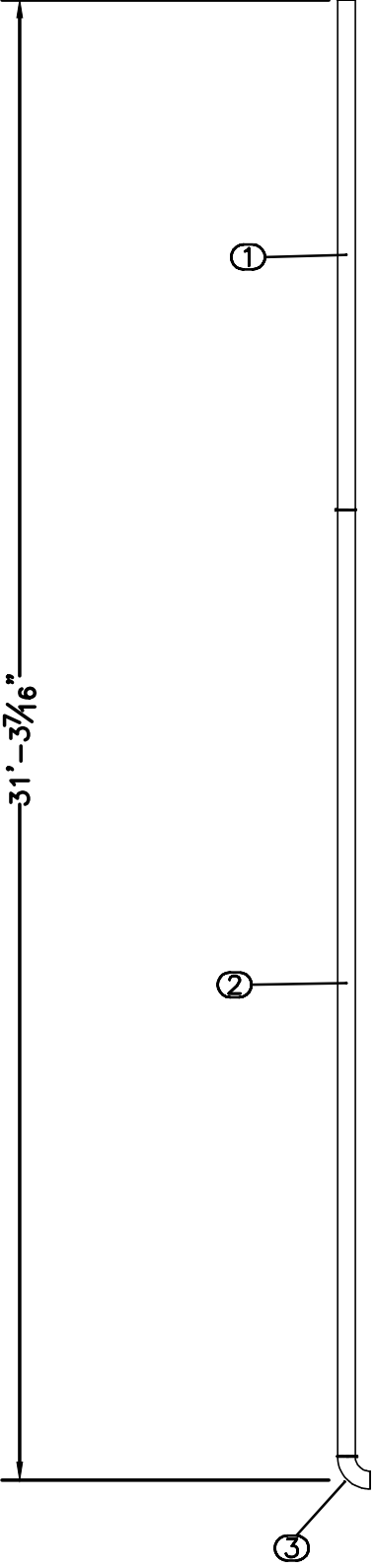
Murphy—PFFS—SPOOL—BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
2	1	150lb RF Sch 40 Bore SA105 CS WN Flg					20
1	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	20

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DRN JMM	5/25/2021	WUSM RESEARCH BUILDING				QA/QC ACCEPT				<input type="checkbox"/> FLANGE WEIGHT/ORIENTATION						
CHK		NRB				<input type="checkbox"/> FITTING ORIENTATION				<input type="checkbox"/> BOLT'S/CPLG'S/TH'D TIGHT						
APP		LVLO2 RACKS								<input type="checkbox"/> SPOOL IDENTIFICATION						
JOB NO.	210140	SERVICE NAME				SPEC.	ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS					
REF.DWG.		LVLO2-1A				NA	NA	NA	NA	NA	MURPHY WPS#					
DRAWING NO./TRACKING NO.		QTY.		SHT/NO		REV		REV		DATE		DESCRIPTION		DRN	CHK	APP
210140-LVLO2-1A-02		1		1 of 1		0		0								



MPC

Murphy-PFFS-SPOOL-BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
3	1	XH SA234 WPB CS BW LR 90 Deg El					4
1	1	XH SA-53B CS SMLS Pipe	BEV	BEV	10'-9 1/4"	129.246	4
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	20'-0"	240.000	4

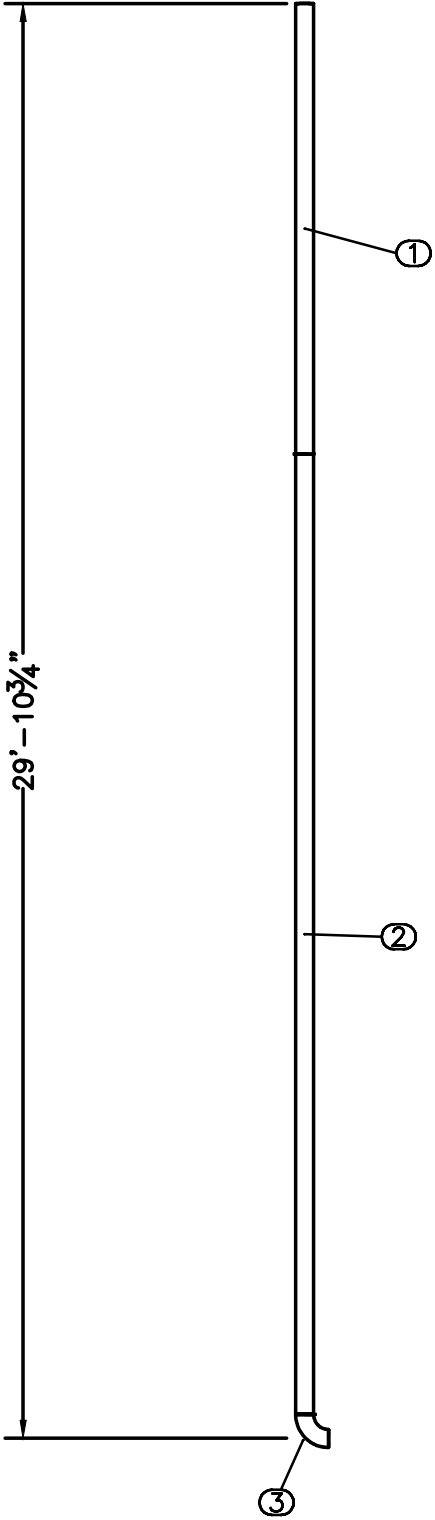
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QA/QC ACCEPT				FLANGE WEIGHT/ORIENTATION				<input type="checkbox"/>
				FITTING ORIENTATION				<input type="checkbox"/>
				BOLTS/CPLG'S/TH'D TIGHT				<input type="checkbox"/>
				SPOOL IDENTIFICATION				<input type="checkbox"/>
SPEC.	ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS			
NA	NA	NA	NA	NA	MURPHY WPS#			
0								
REV	DATE	DESCRIPTION			DRN	CHK	APP	

DRN JMM	5/25/2021	WUSM RESEARCH BUILDING		
CHK		NRB		
APP		LVL02 RACKS		
JOB NO.	210140	SERVICE NAME		
REF.DWG.		LVL02-1A		
DRAWING NO./TRACKING NO.		QTY.	SHT/NO	REV
210140-LVL02-1A-03		1	1 of 1	0



LPC

Murphy—PFFS—SPOOL—BOM						
Mark	Qty	Description	End 1	End 2	Lft	LDec
3	1	XH SA234 WPB CS BW LR 90 Deg El				
1	1	XH SA-53B CS SMLS Pipe	BEV	BEV	9'-4 9/16"	112.538
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	20'-0"	240.000

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DRN JMM CHK APP JOB NO. 210140 REF.DWG. DRAWING NO./TRACKING NO. 210140-LVL02-1A-04	5/25/2021		WUSM RESEARCH BUILDING				QA/QC ACCEPT				<input type="checkbox"/> FLANGE WEIGHT/ORIENTATION <input type="checkbox"/> FITTING ORIENTATION <input type="checkbox"/> BOLTS/CPLG'S/TH'D TIGHT <input type="checkbox"/> SPOOL IDENTIFICATION																		
			NRB																										
			LVL02 RACKS																										
			SERVICE NAME																										
			LVL02-1A																										
QTY. 1			SHT/NO 1 of 1			REV 0			SPEC. NA			ASME NA			X-RAY NA			HYDRO TEST NA			PWHT NA			COMMENTS					
REV 0			DATE			DESCRIPTION			REV 0			NA			NA			MURPHY WPS#			DRN			CHK			APP		