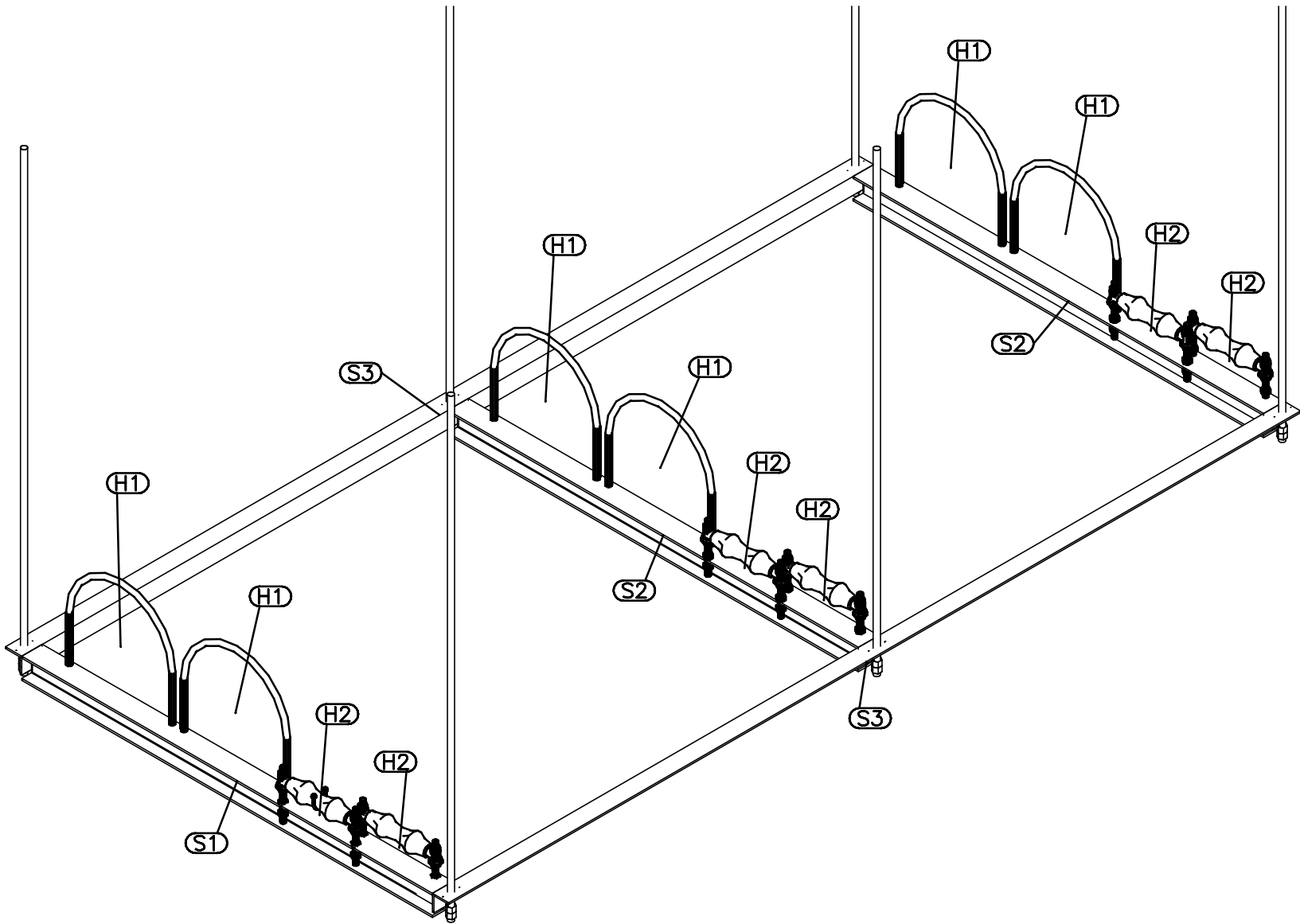
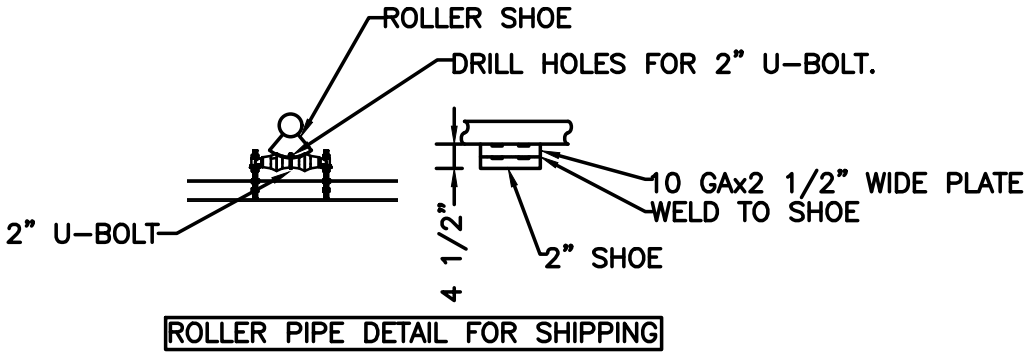
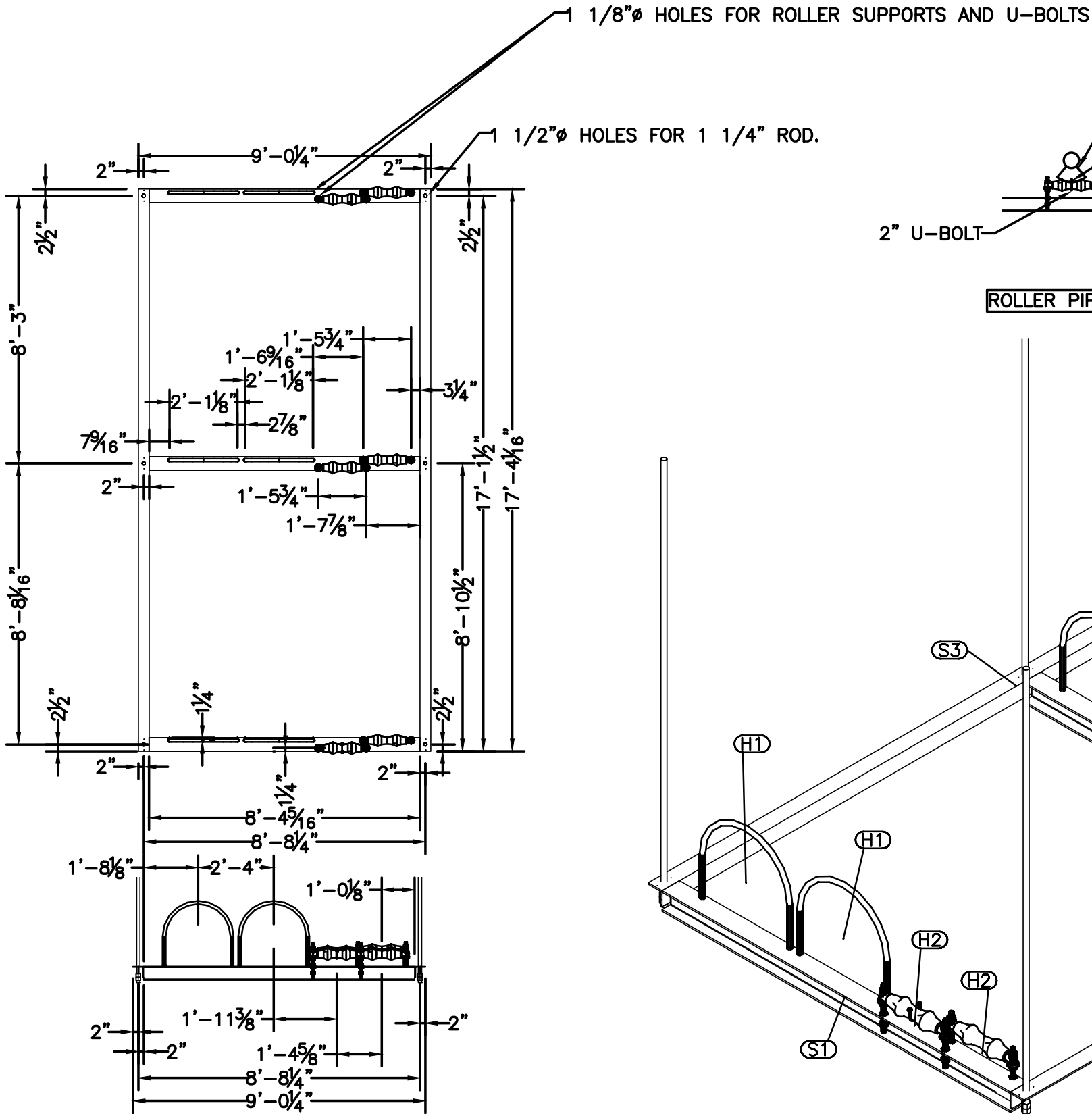


DRN	JMM	5/24/2021	WUSM RESEARCH BUILDING				QA/QC ACCEPT		FLANGE WEIGHT/ORIENTATION			
CHK			NRB						FITTING ORIENTATION			
APP			LEVEL 02 NRB RACK						BOLTS/CPLG'S/TH'D TIGHT			
JOB NO.	210140		SERVICE NAME						SPOOL IDENTIFICATION			
REF.DWG.							SPEC.	ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS
DRAWING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

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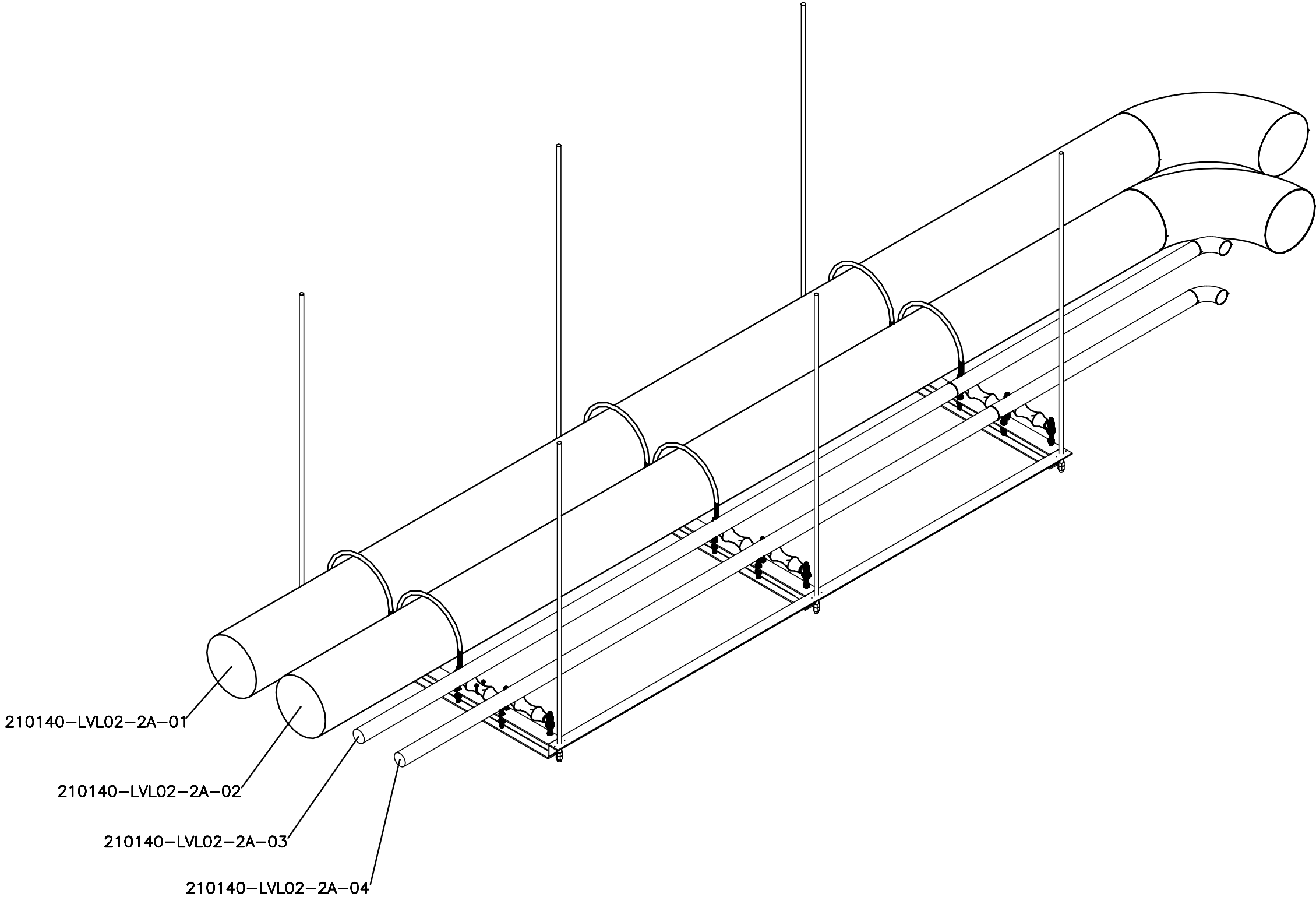
BOM-STEEL

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	6	14	
S1	W5x19	ASTM A36 CS Wide Flange	1	W5x19	100 1/4"
S2	W5x19	ASTM A36 CS Wide Flange	2	W5x19	100 1/4"
S3	L4x4x3/8	ASTM A36 CS Equal Angle	2	L4x4x3/8	208"

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FLANGE WEIGHT/ORIENTATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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#
0				
REV	DATE	DESCRIPTION	DRN	CHK
				APP

DRN	JMM	5/24/2021	WUSM RESEARCH BUILDING	REV	0
CHK			NRB	SHT/NO	3 OF 3
APP			LEVEL 02 NRB RACK	QTY.	1
JOB NO.	210140	SERVICE NAME		DRAWING NO./TRACKING NO.	201140-LVLO2-2A
REF.DWG.					



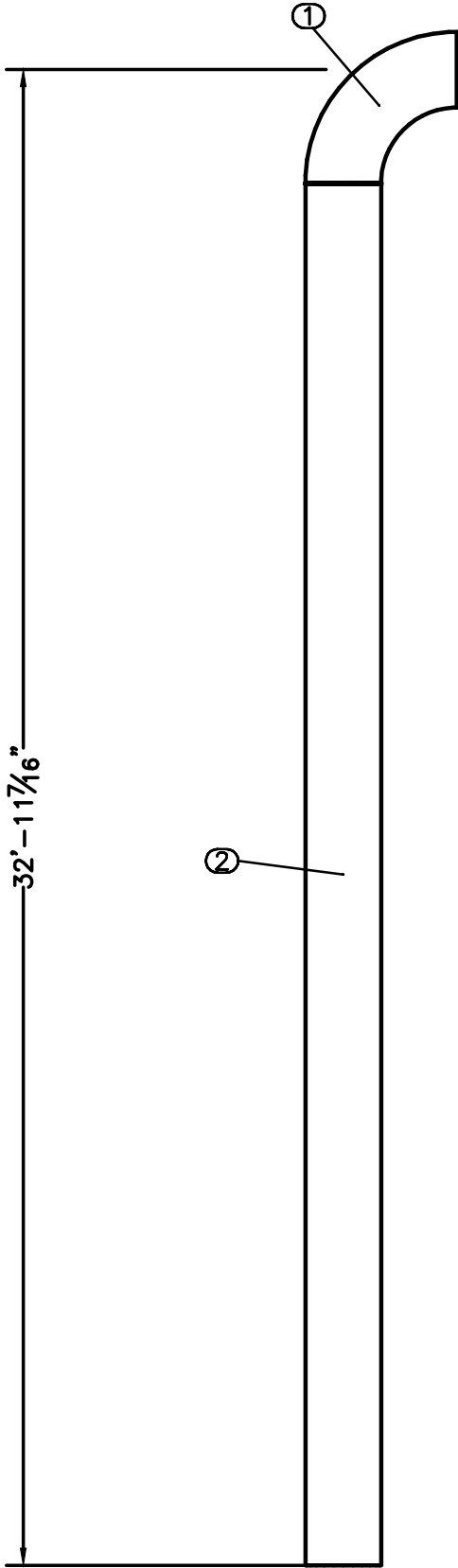
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DRN	JMM	5/24/2021	WUSM RESEARCH BUILDING				QA/QC ACCEPT				<input type="checkbox"/> FLANGE WEIGHT/ORIENTATION									
CHK			NRB								<input type="checkbox"/> FITTING ORIENTATION									
APP			LEVEL 02 NRB RACK								<input type="checkbox"/> BOLTS/CPLG'S/TH'D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



CWR

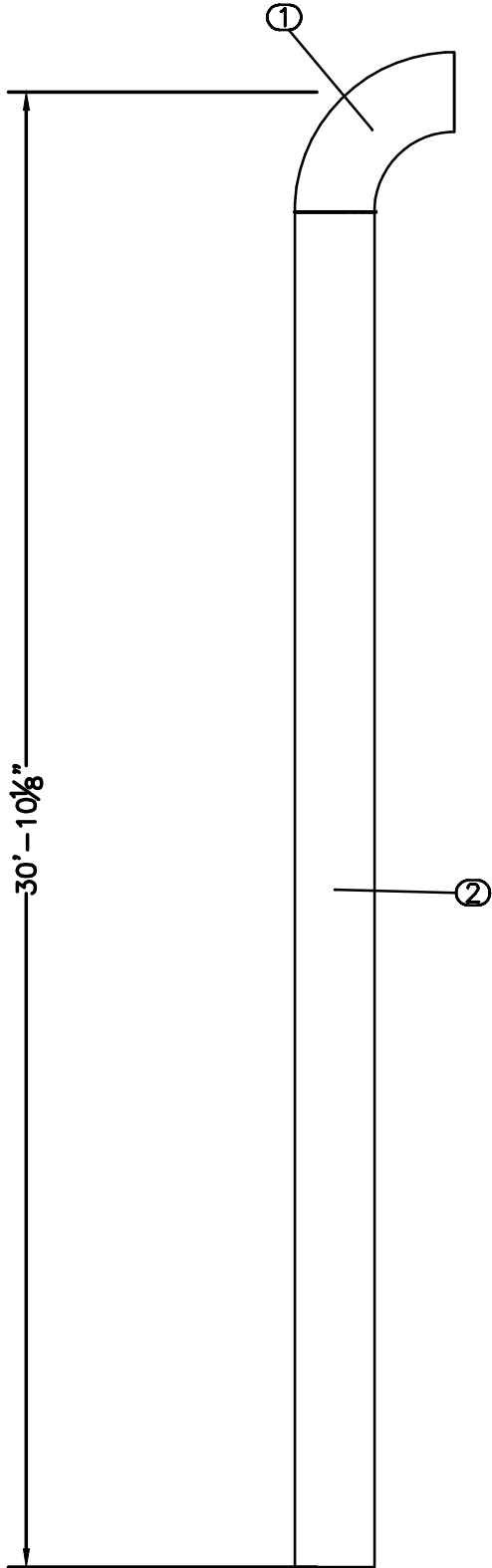
Murphy—PFFS—SPOOL—BOM						
Mark	Qty	Description	End 1	End 2	Lft	Size
1	1	Std Wt SA234 WPB CS BW LR 90 Deg El				20
2	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	30'-5 5/16"	20

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DRN JMM CHK APP JOB NO. 210140 REF.DWG. DRAWING NO./TRACKING NO. 210140-LVL02-2A-01	WUSM RESEARCH BUILDING NRB LVL02				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			
	SPEC.		ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS					
	NA		NA	NA	NA	NA	MURPHY WPS#					
	0											
	REV	DATE	DESCRIPTION		DRN	CHK	APP					



CWS

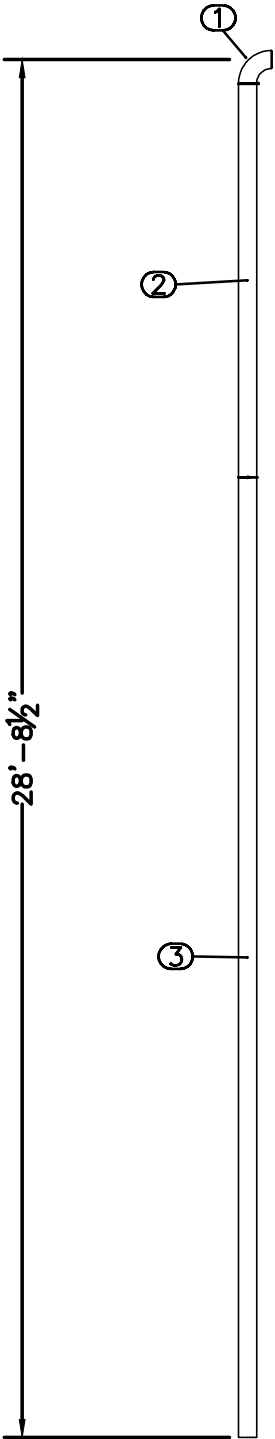
Murphy—PFFS—SPOOL—BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	Std Wt SA234 WPB CS BW LR 90 Deg El					20
2	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	28'-4"	340.000	20

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DRN JMM CHK APP JOB NO. 210140 REF.DWG. DRAWING NO./TRACKING NO. 210140-LVL02-2A-02	WUSM RESEARCH BUILDING NRB LVL02				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			
	SPEC.		ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS					
	NA		NA	NA	NA	NA	MURPHY WPS#					
	0											
	REV	DATE	DESCRIPTION		DRN	CHK	APP					



MPC

Murphy—PFFS—SPOOL—BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	XH SA234 WPB CS BW LR 90 Deg El					4
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	8'-2 5/16"	98.304	4
3	1	XH SA-53B CS SMLS Pipe	BEV	BEV	20'-0"	240.000	4

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FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

QA/QC ACCEPT

FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

0

REV

DATE

ASME

NA

X-RAY

NA

HYDRO TEST

NA

PWHT

NA

COMMENTS

MURPHY WPS#

WUSM RESEARCH BUILDING

NRB

LVL02

SERVICE NAME

LVL02-2A RACK

REF.DWG.

210140-LVL02-2A-03

DRAWING NO./TRACKING NO.

210140-LVL02-2A-03

QTY.

1

SHT/NO

1 of 1

REV

0

FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

QA/QC ACCEPT

FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

0

REV

DATE

ASME

NA

X-RAY

NA

HYDRO TEST

NA

PWHT

NA

COMMENTS

MURPHY WPS#

WUSM RESEARCH BUILDING

NRB

LVL02

SERVICE NAME

LVL02-2A RACK

REF.DWG.

210140-LVL02-2A-03

DRAWING NO./TRACKING NO.

210140-LVL02-2A-03

QTY.

1

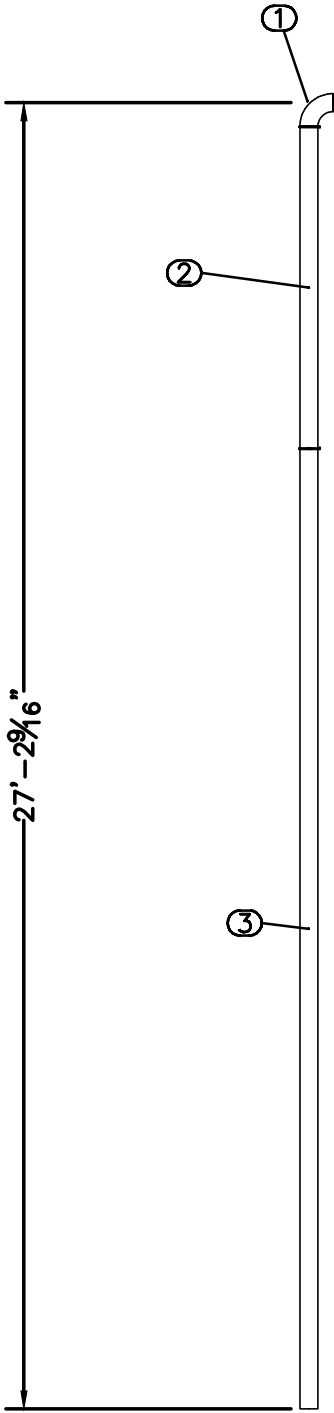
SHT/NO

1 of 1

REV

0

DRN	JMM	5/26/2021	WUSM RESEARCH BUILDING	QA/QC ACCEPT	FLANGE WEIGHT/ORIENTATION	<input type="checkbox"/>
CHK			NRB		FITTING ORIENTATION	<input type="checkbox"/>
APP			LVL02		BOLTS/CPLG'S/TH'D TIGHT	<input type="checkbox"/>
JOB NO.	210140		SERVICE NAME		SPOOL IDENTIFICATION	<input type="checkbox"/>
REF.DWG.			LVL02-2A RACK		COMMENTS	
DRAWING NO./TRACKING NO.	210140-LVL02-2A-03	QTY. 1	SHT/NO 1 of 1	REV 0	MURPHY WPS#	
					DRN	CHK
					APP	



LPC

Murphy—PFFS—SPOOL—BOM						
Mark	Qty	Description	End 1	End 2	Lft	LDec
1	1	XH SA234 WPB CS BW LR 90 Deg El				4
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	6'-8 5/16"	80.316
3	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-LVLO2-2A-04	5/26/2021		WUSM RESEARCH BUILDING				QA/QC ACCEPT				FLANGE WEIGHT/ORIENTATION				<input type="checkbox"/>								
			NRB								FITTING ORIENTATION				<input type="checkbox"/>								
			LVLO2								BOLTS/CPLG'S/TH'D TIGHT				<input type="checkbox"/>								
											SPOOL IDENTIFICATION				<input type="checkbox"/>								
SERVICE NAME			LVLO2-2A RACK			SPEC.			ASME			X-RAY			HYDRO TEST			PWHT			COMMENTS		
						NA			NA			NA			NA			NA			MURPHY WPS#		
			QTY. 1			SHT/NO 1 of 1			REV 0			REV 0			DATE			DESCRIPTION			DRN CHK APP		