



SYSTEMS WITH RELIABILITY, Inc.
Broadcast Antennas & Transmission Systems

SYSTEM DATA SHEET

Customer WGFL-TV
Contact Terry Blakeney
Location Gainesville, FL
Antenna Model SWDDP 1-1-1-1 / 9-DT
Channel / Frequency 9 / 189 MHz

ELECTRICAL SPECIFICATION

Polarization Type	Horizontal		
Polarization Ratio			
	H-Pol. (PRH)	100.00	%
Elevation Directivity (ED)		2.491	
Azimuth Directivity (AD) H-Pol.		1.610	
Antenna Gain (GH)			
	H-Pol. (GH)	4.01	
dB Gain (AG)			
	H-Pol. (AGH)	6.03	dB
ERP			
	H-Pol. (ERPH)	3.20	kW
Beam Tilt		1.00	Degrees
Null Fill		0, 0, 0	%
Line Type		6.125" 75 Ohm	EIA
Attenuation per 100 ft.		0.060	dB/100ft
Line Length (LL)	**	950.00	ft.
Total Line Attenuation		0.57	dB
Line Efficiency (LE)		87.70	%
Line Loss (LPL)		0.11	kW
Antenna Input Power (AIP)		0.80	kW
Req'd. Transmitter Output Power		0.91	kW

MECHANICAL SPECIFICATION

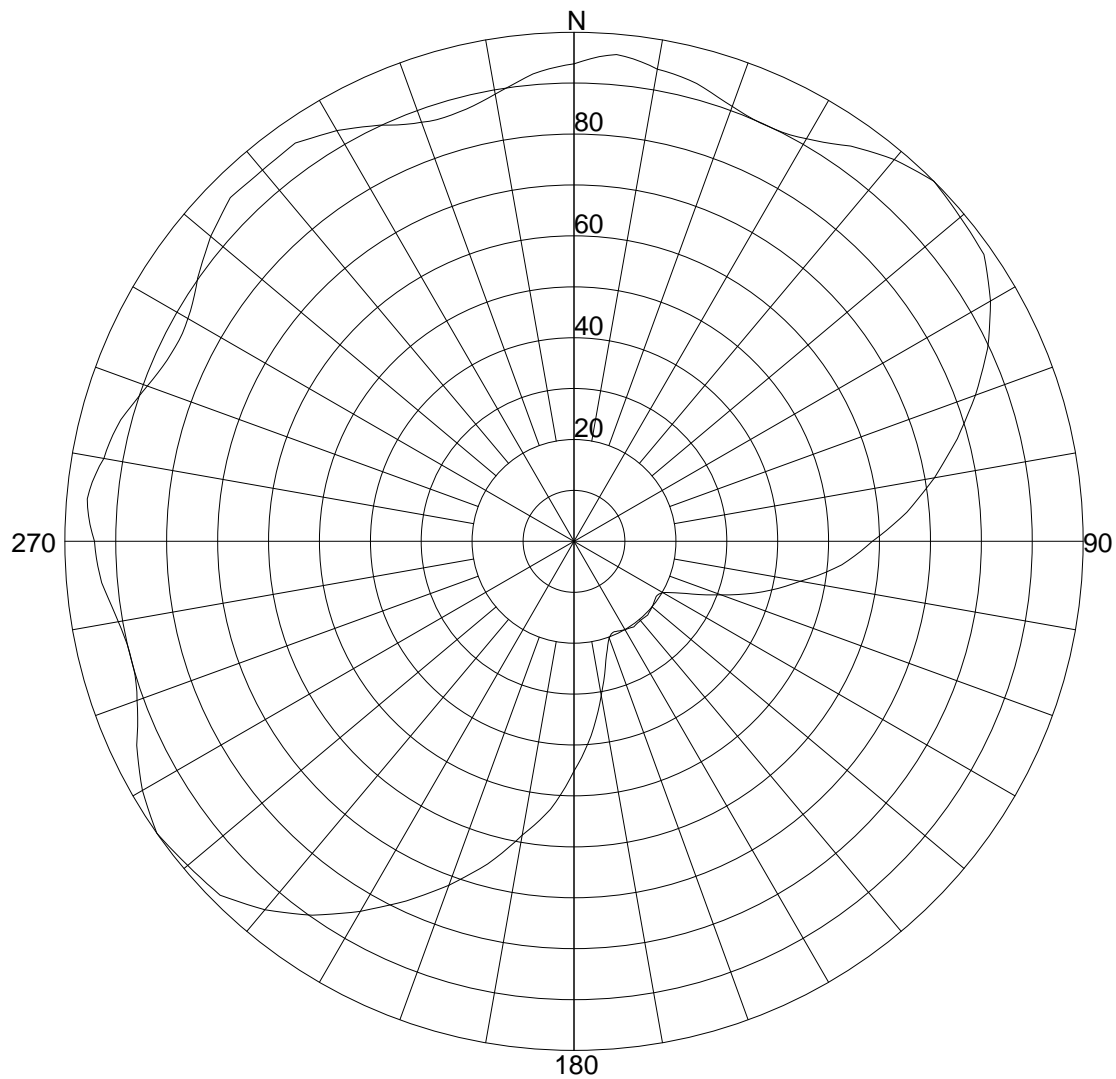
No. Of Bays	1	#		
Antenna Aperture	4.87	ft.	1.48	m
Antenna Total Length	9.33	ft.	2.84	m
Center of Radiation AGL	950.00	ft.	289.55	m
Antenna Weight	620.00	lbs.	281.82	kg
Windload (50/33) / CaAc	420.00	lbs.	11.67	ft.^2

Mechanical Specifications will be certified upon final construction and testing.

Note: Given values can be used for planning system.

Prepared by:

Mark A. Gergely
SWR, LP, Engineering



Azimuth Pattern

Systems With Reliability Inc

Scale: Linear

Unit: Relative Field

CLIENT: *WGFL-TV*

Date: 9/09/2008

ANTENNA TYPE: SWDDP 1-1-1-1

FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.61 / 2.07 dB

PATTERN RMS: 0.787

Relative Field Tabulation(Azimuth)

Azimuth Heading	Normalized Field(dB)	Azimuth Heading	Normalized Field(dB)
0	.9377 (-0.558)	180	.4512 (-6.912)
5	.9598 (-0.356)	185	.5280 (-5.547)
10	.9418 (-0.521)	190	.5860 (-4.642)
15	.9311 (-0.62)	195	.6562 (-3.66)
20	.9090 (-0.829)	200	.7187 (-2.869)
25	.9000 (-0.915)	205	.7794 (-2.165)
30	.9133 (-0.788)	210	.8392 (-1.523)
35	.9477 (-0.466)	215	.8965 (-0.949)
40	.9789 (-0.185)	220	.9445 (-0.496)
45	1.0000 (0)	225	.9828 (-0.151)
50	.9905 (-0.083)	230	.9905 (-0.083)
55	.9828 (-0.151)	235	1.0000 (0)
60	.9445 (-0.496)	240	.9789 (-0.185)
65	.8965 (-0.949)	245	.9477 (-0.466)
70	.8392 (-1.523)	250	.9133 (-0.788)
75	.7794 (-2.165)	255	.9000 (-0.915)
80	.7187 (-2.869)	260	.9090 (-0.829)
85	.6562 (-3.66)	265	.9311 (-0.62)
90	.5860 (-4.642)	270	.9418 (-0.521)
95	.5280 (-5.547)	275	.9598 (-0.356)
100	.4512 (-6.912)	280	.9377 (-0.558)
105	.3832 (-8.331)	285	.9217 (-0.708)
110	.3076 (-10.239)	290	.8919 (-0.993)
115	.2420 (-12.322)	295	.8731 (-1.179)
120	.2018 (-13.902)	300	.8758 (-1.152)
125	.1953 (-14.186)	305	.9021 (-0.895)
130	.2004 (-13.961)	310	.9316 (-0.616)
135	.2048 (-13.774)	315	.9548 (-0.401)
140	.2030 (-13.852)	320	.9518 (-0.429)
145	.2048 (-13.774)	325	.9548 (-0.401)
150	.2004 (-13.961)	330	.9316 (-0.616)
155	.1953 (-14.186)	335	.9021 (-0.895)
160	.2018 (-13.902)	340	.8758 (-1.152)
165	.2420 (-12.322)	345	.8731 (-1.179)
170	.3076 (-10.239)	350	.8919 (-0.993)
175	.3832 (-8.331)	355	.9217 (-0.708)

Systems With Reliability Inc

CLIENT: *WGFL-TV*

Date: 9/09/2008

ANTENNA TYPE: SWDDP 1-1-1-1

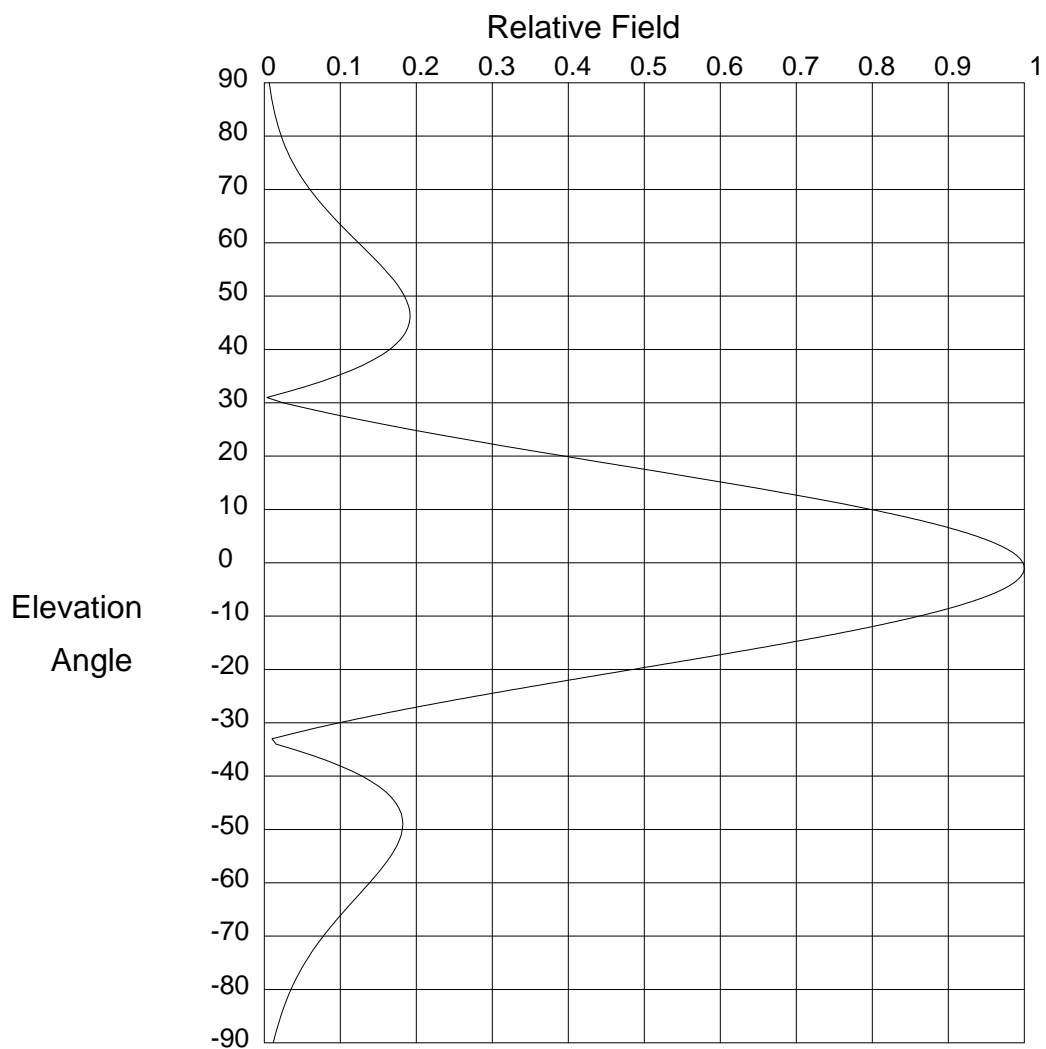
FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

CIRCULARITY(+/-dB):

AZ. DIRECTIVITY: 1.61 / 2.07 dB

PATTERN RMS: 0.787



Elevation Pattern

Scale: Linear

Units: Field, Relative

Systems With Reliability Inc

CLIENT: *WNBW*

Date: 9/22/2008

ANTENNA TYPE: SWDDP 1-1-1-1 / 9-DT

FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 2.491/3.964 dBd

Beam Tilt (Deg.) : -1

DIRECTIVITY(Horiz): 2.482/3.949 dBd

Null Fill(s)(%) : 0, 0, 0

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
90.0	.007 (-43.643)	52.0	.176 (-15.098)	14.0	.648 (-3.768)
89.0	.008 (-42.347)	51.0	.181 (-14.868)	13.0	.688 (-3.249)
88.0	.009 (-41.156)	50.0	.185 (-14.676)	12.0	.726 (-2.775)
87.0	.01 (-40.035)	49.0	.188 (-14.524)	11.0	.763 (-2.345)
86.0	.011 (-38.962)	48.0	.19 (-14.414)	10.0	.798 (-1.956)
85.0	.013 (-37.922)	47.0	.192 (-14.351)	9.8	.805 (-1.883)
84.0	.014 (-36.906)	46.0	.192 (-14.337)	9.6	.812 (-1.811)
83.0	.016 (-35.909)	45.0	.191 (-14.378)	9.4	.818 (-1.741)
82.0	.018 (-34.927)	44.0	.189 (-14.478)	9.2	.825 (-1.672)
81.0	.02 (-33.959)	43.0	.185 (-14.645)	9.0	.831 (-1.605)
80.0	.022 (-33.005)	42.0	.18 (-14.888)	8.8	.838 (-1.54)
79.0	.025 (-32.065)	41.0	.173 (-15.217)	8.6	.844 (-1.476)
78.0	.028 (-31.141)	40.0	.165 (-15.647)	8.4	.85 (-1.413)
77.0	.031 (-30.232)	39.0	.155 (-16.198)	8.2	.856 (-1.352)
76.0	.034 (-29.341)	38.0	.143 (-16.897)	8.0	.862 (-1.292)
75.0	.038 (-28.469)	37.0	.129 (-17.786)	7.8	.868 (-1.234)
74.0	.042 (-27.616)	36.0	.113 (-18.926)	7.6	.873 (-1.177)
73.0	.046 (-26.784)	35.0	.095 (-20.419)	7.4	.879 (-1.122)
72.0	.05 (-25.974)	34.0	.075 (-22.454)	7.2	.884 (-1.068)
71.0	.055 (-25.185)	33.0	.053 (-25.445)	7.0	.89 (-1.015)
70.0	.06 (-24.42)	32.0	.029 (-30.63)	6.8	.895 (-0.964)
69.0	.065 (-23.678)	31.0	.003 (-49.464)	6.6	.90 (-0.914)
68.0	.071 (-22.96)	30.0	.025 (-32.151)	6.4	.905 (-0.866)
67.0	.077 (-22.266)	29.0	.055 (-25.243)	6.2	.91 (-0.819)
66.0	.083 (-21.597)	28.0	.087 (-21.253)	6.0	.915 (-0.773)
65.0	.09 (-20.953)	27.0	.12 (-18.4)	5.8	.919 (-0.729)
64.0	.096 (-20.335)	26.0	.156 (-16.161)	5.6	.924 (-0.686)
63.0	.103 (-19.743)	25.0	.192 (-14.312)	5.4	.928 (-0.645)
62.0	.11 (-19.177)	24.0	.231 (-12.735)	5.2	.933 (-0.604)
61.0	.117 (-18.638)	23.0	.27 (-11.36)	5.0	.937 (-0.565)
60.0	.124 (-18.127)	22.0	.311 (-10.144)	4.8	.941 (-0.528)
59.0	.131 (-17.643)	21.0	.353 (-9.056)	4.6	.945 (-0.492)
58.0	.138 (-17.187)	20.0	.395 (-8.075)	4.4	.949 (-0.457)
57.0	.145 (-16.761)	19.0	.437 (-7.185)	4.2	.952 (-0.423)
56.0	.152 (-16.365)	18.0	.48 (-6.374)	4.0	.956 (-0.391)
55.0	.159 (-15.999)	17.0	.523 (-5.633)	3.8	.959 (-0.36)
54.0	.165 (-15.665)	16.0	.565 (-4.956)	3.6	.963 (-0.33)
53.0	.171 (-15.365)	15.0	.607 (-4.335)	3.4	.966 (-0.302)

Systems With Reliability Inc

Page 1 of 3

CLIENT: *WNBW*

Date: 9/22/2008

ANTENNA TYPE: SWDDP 1-1-1-1 / 9-DT

FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 2.491/3.964 dBd

Beam Tilt (Deg.) : -1

DIRECTIVITY(Horiz): 2.482/3.949 dBd

Null Fill(s)(%) : 0, 0, 0

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
3.2	.969 (-0.275)	-4.4	.979 (-0.183)	-12.0	.799 (-1.952)
3.0	.972 (-0.249)	-4.6	.977 (-0.205)	-12.2	.792 (-2.026)
2.8	.974 (-0.225)	-4.8	.974 (-0.228)	-12.4	.785 (-2.101)
2.6	.977 (-0.201)	-5.0	.971 (-0.253)	-12.6	.778 (-2.178)
2.4	.98 (-0.179)	-5.2	.968 (-0.279)	-12.8	.771 (-2.257)
2.2	.982 (-0.159)	-5.4	.965 (-0.306)	-13.0	.764 (-2.337)
2.0	.984 (-0.139)	-5.6	.962 (-0.334)	-13.2	.757 (-2.419)
1.8	.986 (-0.121)	-5.8	.959 (-0.364)	-13.4	.75 (-2.502)
1.6	.988 (-0.104)	-6.0	.956 (-0.395)	-13.6	.742 (-2.587)
1.4	.99 (-0.089)	-6.2	.952 (-0.427)	-13.8	.735 (-2.674)
1.2	.991 (-0.075)	-6.4	.948 (-0.461)	-14.0	.728 (-2.762)
1.0	.993 (-0.061)	-6.6	.945 (-0.496)	-14.2	.72 (-2.852)
.8	.994 (-0.05)	-6.8	.941 (-0.532)	-14.4	.713 (-2.943)
.6	.996 (-0.039)	-7.0	.937 (-0.57)	-14.6	.705 (-3.037)
.4	.997 (-0.03)	-7.2	.932 (-0.608)	-14.8	.697 (-3.132)
.2	.997 (-0.022)	-7.4	.928 (-0.649)	-15.0	.69 (-3.229)
.0	.998 (-0.015)	-7.6	.924 (-0.69)	-15.2	.682 (-3.327)
-.2	.999 (-0.01)	-7.8	.919 (-0.733)	-15.4	.674 (-3.427)
-.4	.999 (-0.005)	-8.0	.914 (-0.777)	-15.6	.666 (-3.529)
-.6	1.00 (-0.002)	-8.2	.91 (-0.823)	-15.8	.658 (-3.633)
-.8	1.00 (-0.001)	-8.4	.905 (-0.869)	-16.0	.65 (-3.739)
-1.0	1.00 (0)	-8.6	.90 (-0.918)	-16.2	.642 (-3.847)
-1.2	1.00 (-0.001)	-8.8	.895 (-0.967)	-16.4	.634 (-3.956)
-1.4	1.00 (-0.003)	-9.0	.889 (-1.018)	-16.6	.626 (-4.068)
-1.6	.999 (-0.006)	-9.2	.884 (-1.07)	-16.8	.618 (-4.181)
-1.8	.999 (-0.01)	-9.4	.879 (-1.124)	-17.0	.61 (-4.297)
-2.0	.998 (-0.016)	-9.6	.873 (-1.179)	-17.2	.602 (-4.414)
-2.2	.997 (-0.023)	-9.8	.867 (-1.236)	-17.4	.593 (-4.534)
-2.4	.996 (-0.031)	-10.0	.862 (-1.294)	-17.6	.585 (-4.655)
-2.6	.995 (-0.041)	-10.2	.856 (-1.353)	-17.8	.577 (-4.779)
-2.8	.994 (-0.052)	-10.4	.85 (-1.414)	-18.0	.569 (-4.904)
-3.0	.993 (-0.064)	-10.6	.844 (-1.476)	-18.2	.56 (-5.032)
-3.2	.991 (-0.077)	-10.8	.838 (-1.539)	-18.4	.552 (-5.163)
-3.4	.99 (-0.091)	-11.0	.831 (-1.604)	-18.6	.544 (-5.295)
-3.6	.988 (-0.107)	-11.2	.825 (-1.671)	-18.8	.535 (-5.43)
-3.8	.986 (-0.124)	-11.4	.819 (-1.739)	-19.0	.527 (-5.567)
-4.0	.984 (-0.142)	-11.6	.812 (-1.808)	-19.2	.518 (-5.706)
-4.2	.982 (-0.162)	-11.8	.805 (-1.879)	-19.4	.51 (-5.848)

Systems With Reliability Inc

Page 2 of 3

CLIENT: WNBW

Date: 9/22/2008

ANTENNA TYPE: SWDDP 1-1-1-1 / 9-DT

FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 2.491/3.964 dBd

Beam Tilt (Deg.) : -1

DIRECTIVITY(Horiz): 2.482/3.949 dBd

Null Fill(s)(%) : 0, 0, 0

Relative Field Tabulation

Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)	Elev. Angle	Rel. Fld(dB)
-19.6	.502 (-5.992)	-27.2	.195 (-14.188)	-54.0	.171 (-15.348)
-19.8	.493 (-6.139)	-27.4	.188 (-14.519)	-55.0	.166 (-15.575)
-20.0	.485 (-6.289)	-27.6	.181 (-14.86)	-56.0	.162 (-15.834)
-20.2	.476 (-6.441)	-27.8	.174 (-15.212)	-57.0	.156 (-16.124)
-20.4	.468 (-6.595)	-28.0	.166 (-15.576)	-58.0	.151 (-16.443)
-20.6	.46 (-6.753)	-28.2	.159 (-15.953)	-59.0	.145 (-16.791)
-20.8	.451 (-6.913)	-28.4	.152 (-16.343)	-60.0	.139 (-17.165)
-21.0	.443 (-7.076)	-28.6	.145 (-16.748)	-61.0	.132 (-17.565)
-21.2	.434 (-7.243)	-28.8	.139 (-17.169)	-62.0	.126 (-17.991)
-21.4	.426 (-7.412)	-29.0	.132 (-17.607)	-63.0	.12 (-18.44)
-21.6	.418 (-7.584)	-29.2	.125 (-18.063)	-64.0	.113 (-18.912)
-21.8	.409 (-7.759)	-29.4	.118 (-18.54)	-65.0	.107 (-19.407)
-22.0	.401 (-7.938)	-29.6	.112 (-19.04)	-66.0	.101 (-19.923)
-22.2	.393 (-8.12)	-29.8	.105 (-19.564)	-67.0	.095 (-20.46)
-22.4	.384 (-8.306)	-30.0	.099 (-20.117)	-68.0	.089 (-21.018)
-22.6	.376 (-8.495)	-31.0	.067 (-23.434)	-69.0	.083 (-21.594)
-22.8	.368 (-8.688)	-32.0	.038 (-28.442)	-70.0	.078 (-22.19)
-23.0	.36 (-8.884)	-33.0	.01 (-39.824)	-71.0	.072 (-22.804)
-23.2	.351 (-9.085)	-34.0	.015 (-36.194)	-72.0	.067 (-23.435)
-23.4	.343 (-9.289)	-35.0	.039 (-28.124)	-73.0	.062 (-24.083)
-23.6	.335 (-9.498)	-36.0	.061 (-24.289)	-74.0	.058 (-24.748)
-23.8	.327 (-9.711)	-37.0	.081 (-21.847)	-75.0	.054 (-25.429)
-24.0	.319 (-9.928)	-38.0	.099 (-20.113)	-76.0	.049 (-26.126)
-24.2	.311 (-10.15)	-39.0	.115 (-18.812)	-77.0	.046 (-26.839)
-24.4	.303 (-10.377)	-40.0	.129 (-17.807)	-78.0	.042 (-27.567)
-24.6	.295 (-10.609)	-41.0	.141 (-17.018)	-79.0	.038 (-28.311)
-24.8	.287 (-10.846)	-42.0	.151 (-16.395)	-80.0	.035 (-29.073)
-25.0	.279 (-11.088)	-43.0	.16 (-15.905)	-81.0	.032 (-29.852)
-25.2	.271 (-11.336)	-44.0	.167 (-15.524)	-82.0	.029 (-30.652)
-25.4	.263 (-11.59)	-45.0	.173 (-15.236)	-83.0	.027 (-31.475)
-25.6	.256 (-11.85)	-46.0	.177 (-15.026)	-84.0	.024 (-32.326)
-25.8	.248 (-12.116)	-47.0	.18 (-14.887)	-85.0	.022 (-33.211)
-26.0	.24 (-12.389)	-48.0	.182 (-14.809)	-86.0	.02 (-34.139)
-26.2	.233 (-12.669)	-49.0	.182 (-14.786)	-87.0	.018 (-35.121)
-26.4	.225 (-12.956)	-50.0	.182 (-14.813)	-88.0	.016 (-36.176)
-26.6	.217 (-13.251)	-51.0	.18 (-14.886)	-89.0	.014 (-37.326)
-26.8	.21 (-13.555)	-52.0	.178 (-15.002)	-90.0	.012 (-38.608)
-27.0	.203 (-13.867)	-53.0	.175 (-15.157)	90.0	.00 (-50)

Systems With Reliability Inc

Page 3 of 3

CLIENT: *WNBW*

Date: 9/22/2008

ANTENNA TYPE: SWDDP 1-1-1-1 / 9-DT

FREQUENCY: 189 MHz

PATTERN POL.: Horizontal

DIRECTIVITY(Peak): 2.491/3.964 dBd

Beam Tilt (Deg.) : -1

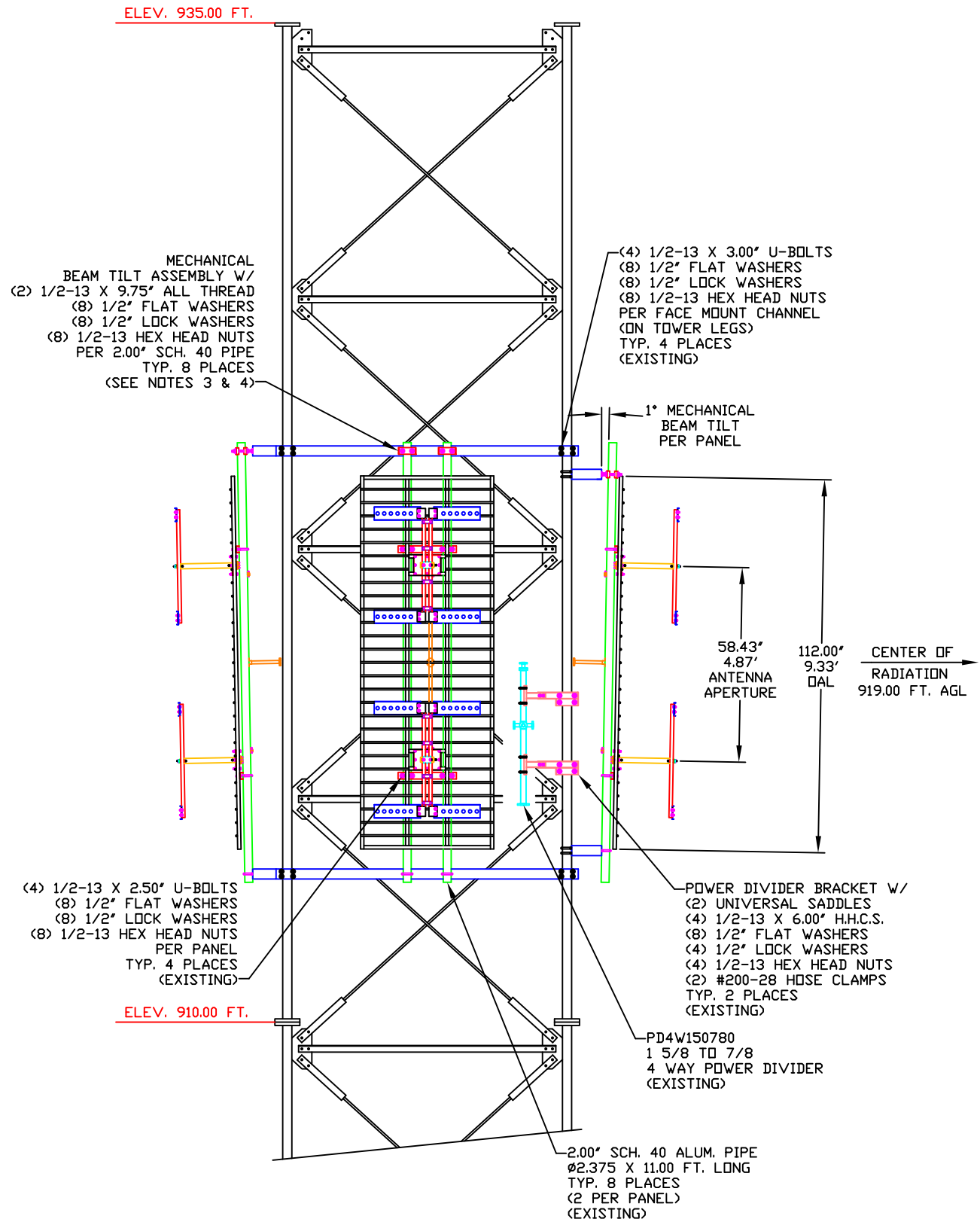
DIRECTIVITY(Horiz): 2.482/3.949 dBd

Null Fill(s)(%) : 0, 0, 0

NOTES:

1. REFERENCE DWG. 1140IDE FOR TOP VIEW.
2. REFERENCE DWG. 1140IDF FOR FEED SYSTEM.
3. THE ORIGINAL U-BOLTS TO BE REMOVED FROM THE TOP OF EACH 2.00' SCH. 40 ALUM. PIPE & REPLACED WITH THE MECHANICAL BEAM TILT ASSEMBLIES.
4. REFERENCE DWG. 1140IDG FOR MECHANICAL BEAM TILT INSTALLATION.

DRAWING NUMBER: 1140IDD



SYSTEMS WITH RELIABILITY, INC.
 619 INDUSTRIAL PARK ROAD
 EBENSBURG, PENNSYLVANIA 15931

TITLE: SWDDP1-1-1-1/9, CH. 9
 WGFL, GAINESVILLE, FL
 MATERIAL: REVISED
 ELEVATION

SIZE: C
 REV: 1
 APPR: 2
 DATE: 3

ENGINEER:

SCALE: NTS

NAME: RAC

DATE: 9/17/08

SHEET 1 OF 1

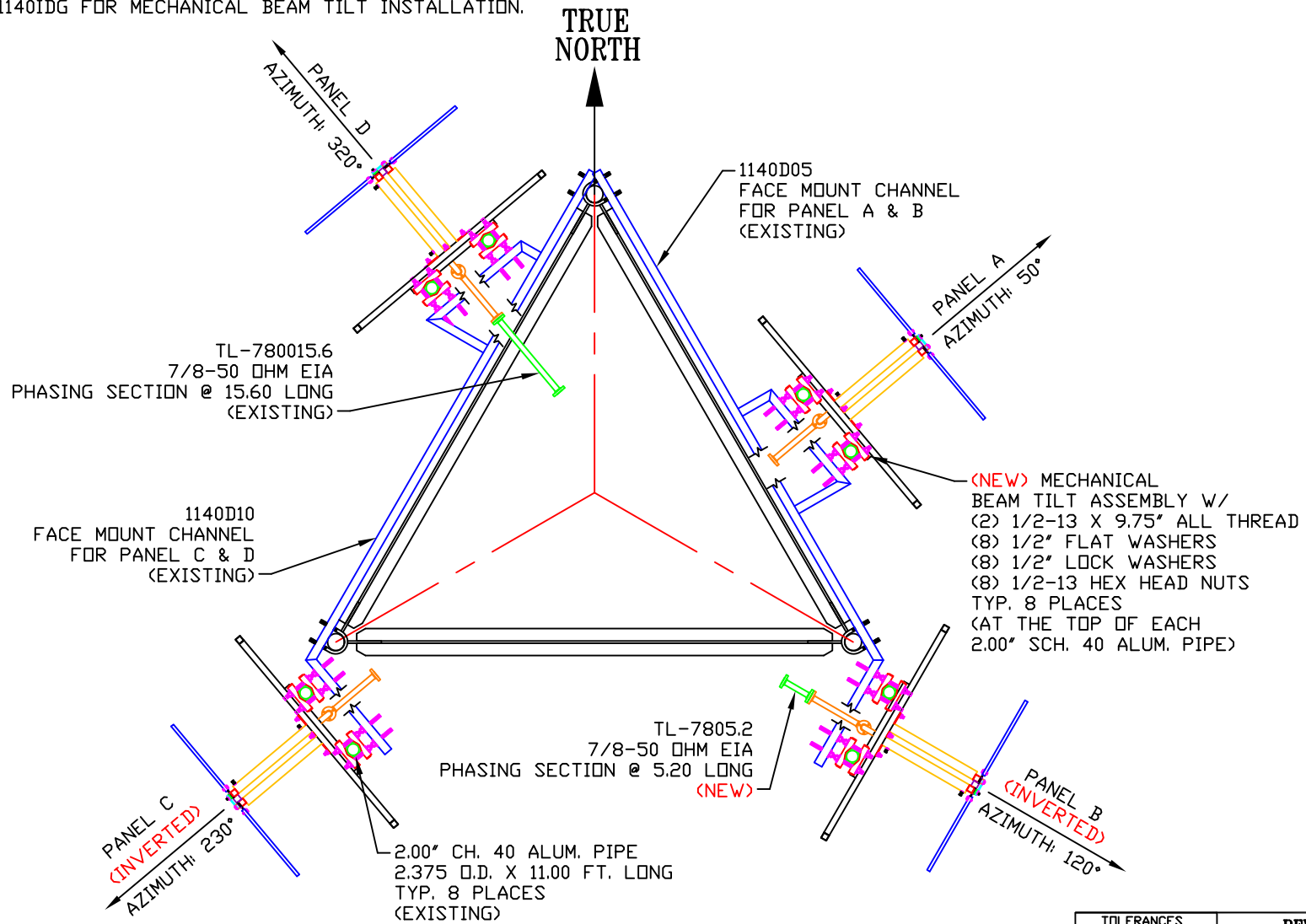
DRAWING NUMBER: 1140IDD

NOTE:

1. THE ORIGINAL U-BOLTS TO BE REMOVED FROM THE TOP OF EACH 2.00' SCH. 40 ALUM. PIPE & REPLACED WITH THE MECHANICAL BEAM TILT ASSEMBLIES.
2. REFERENCE DWG. 1140IDG FOR MECHANICAL BEAM TILT INSTALLATION.

DRAWING
NUMBER:

1140IDE



TOLERANCES	
.X	± .015
.XX	± .005
.XXX	± .002
X/X	± 1/32
DEG.	± 1/2
UNLESS OTHERWISE SPECIFIED	

REVISION RECORD		
REV	APPROVAL	DATE
DRAWING NUMBER: 1140IDE		
SCALE: NTS	NAME: RAC	DATE: 9/17/08
SHEET 1	OF 1	



SYSTEMS WITH RELIABILITY, INC
619 INDUSTRIAL PARK ROAD
EBensburg, PENNSYLVANIA 15931

TITLE:

SWDDP1-1-1-1/9, CH. 9
WGFL, GAINESVILLE, FL

MATERIAL:

TOP VIEW
REVISED

SIZE

A

PARTS MADE BY THIS DRAWING

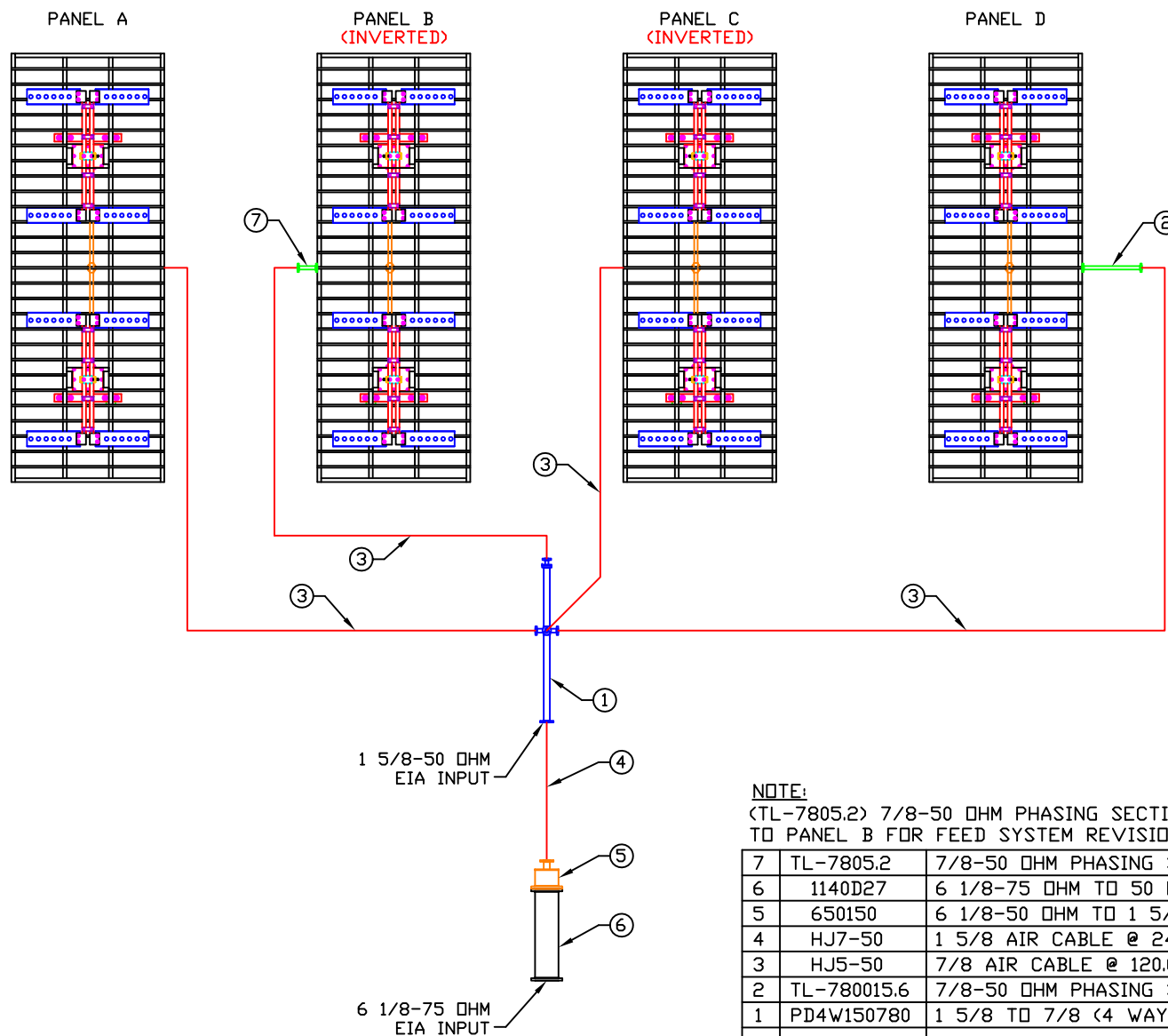
SCALE: NTS

NAME: RAC

DATE: 9/17/08

SHEET 1 OF 1

NOTE:

DRAWING
NUMBER: 1140IDF

NOTE:

(TL-7805.2) 7/8-50 OHM PHASING SECTION @ 5.20 LONG ADDED TO PANEL B FOR FEED SYSTEM REVISION.

7	TL-7805.2	7/8-50 OHM PHASING SECTION @ 5.20 LONG	1
6	1140D27	6 1/8-75 OHM TO 50 OHM TRANSFORMER	1
5	650150	6 1/8-50 OHM TO 1 5/8 QUICKSTEP REDUCER	1
4	HJ7-50	1 5/8 AIR CABLE @ 240.00 INCHES LONG	1
3	HJ5-50	7/8 AIR CABLE @ 120.00 INCHES LONG	4
2	TL-780015.6	7/8-50 OHM PHASING SECTION @ 15.60 LONG	1
1	PD4W150780	1 5/8 TO 7/8 (4 WAY) POWER DIVIDER	1
#	PART #	DESCRIPTION	QTY.



SYSTEMS WITH RELIABILITY, INC
619 INDUSTRIAL PARK ROAD
EBENSBURG, PENNSYLVANIA 15931

TITLE: SWDDP1-1-1-1/9, CH. 9
WGFL, GAINESVILLE, FL
MATERIAL: FEED SYSTEM
REVISION

SIZE

C

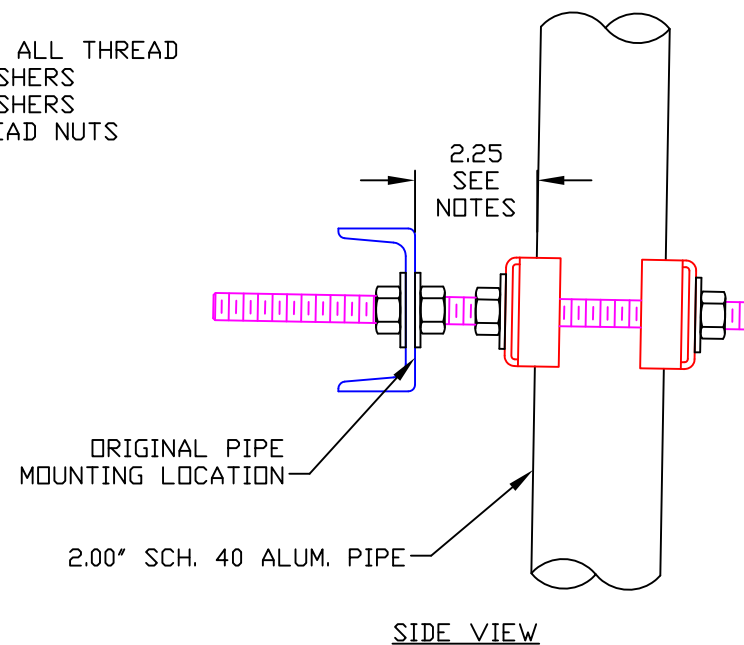
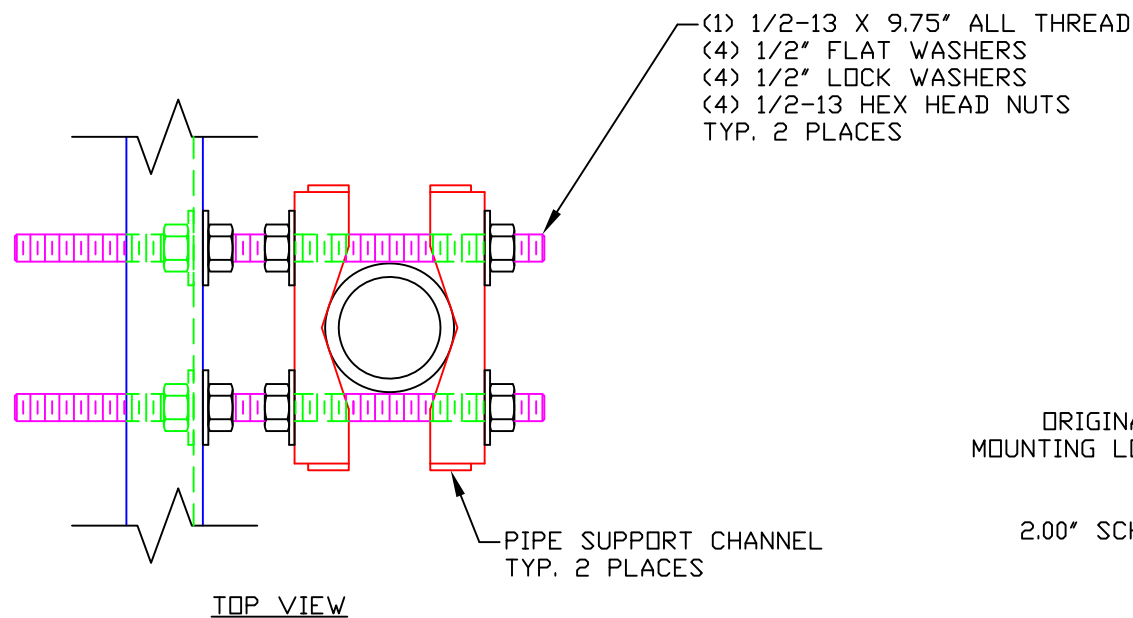
REV	APPROVAL	DATE	REV	APPROVAL	DATE	ENGINEER:	DRAWING NUMBER: 1140IDF
						SCALE: NTS	SHEET 1 OF 1
						NAME: RAC	DATE: 9/17/08

NOTE:

DRAWING
NUMBER:

1140IDG

THIS ASSEMBLY TO BE USED @ THE TOP OF EACH 2.00" SCH. 40 ALUM. PIPE. (TYP. 8 PLACES)
THE ORIGINAL U-BOLTS TO BE REMOVED FROM THESE LOCATIONS & REPLACED WITH THIS ASSEMBLY.
EACH PIPE TO BE TILTED OUT 2.25 INCHES FROM THE ORIGINAL TOP MOUNTING LOCATION AS SHOWN.



SYSTEMS WITH RELIABILITY, INC
619 INDUSTRIAL PARK ROAD
EBensburg, PENNSYLVANIA 15931

TITLE: MECHANICAL BEAM TILT ASSEMBLY
INSTALLATION

MATERIAL:

SIZE

A

PARTS MADE BY THIS DRAWING

SCALE: NTS

NAME: RAC

DATE: 9/17/08

SHEET 1 OF 1

TOLERANCES	
.X	± .015
.XX	± .005
.XXX	± .002
X/X	± 1/32
DEG.	± 1/2
UNLESS OTHERWISE SPECIFIED	

REVISION RECORD		
REV	APPROVAL	DATE
DRAWING NUMBER: 1140IDG		