

FABRICATED SECTIONS
SEE PAGE 2

12" BREAKDOWN
LEG SECTIONS
SEE PAGE 2



JUN - 2 2014

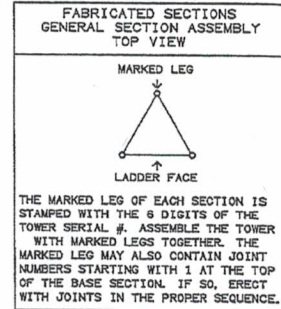
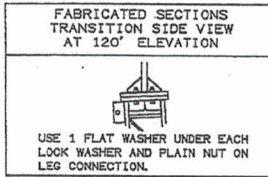
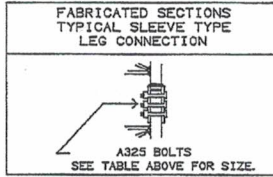
William R. Heiden III, NY Professional Engineer # 080406-1

FAMILY LIFE NETWORK
WCIK COHOCTON STEUBEN CO, NY
U-16 X 199'

B	ADDED FOUNDATION	JAK	06/02/2014			
A	UPDATE TITLE BLOCK	SKK	06/02/2014	APPROVED/ENG.	M_S 6/2/2014	
REV	DESCRIPTION OF REVISIONS	INI	DATE	APPROVED/FOUND.	N/A	1-877-467-4753 Plymouth, IN 1-800-547-2151 Salem, OR
				COPYRIGHT 2014		STRUCTURES
				DRAWN BY	JAK	DRAWING NO.
				ENG. FILE NO.	A-222661-	254556
From: F1016262.DFT - 06/02/2014 14:01 Printed from 254556_01@B.DWG * 06/02/2014 14:41 @ 06/02/2014 15:56				ARCHIVE	F-1016262	PAGE 1 OF 8

FABRICATED SECTION DATA 120' - 199' ELEVATION							
SECT LEN	SEC #	SECTION PART#	LEG SIZE	BRACE SIZE	SECT WT.	BOLTS AT BOTTOM DIAM	LENGTH #
20'	V- 2.0	TBD	1- 1/2"	5/8"	752#	5/8"	4" 12
20'	V- 2.0	TBD	1- 3/4"	3/4"	980#	5/8"	4-1/2" 15
19'	V- 4.0	TBD	2"	3/4"	1138#	5/8"	4-1/2" 15
20'	V- 4.0	106777	2"	3/4"	1234#	1"	3-1/2" 18

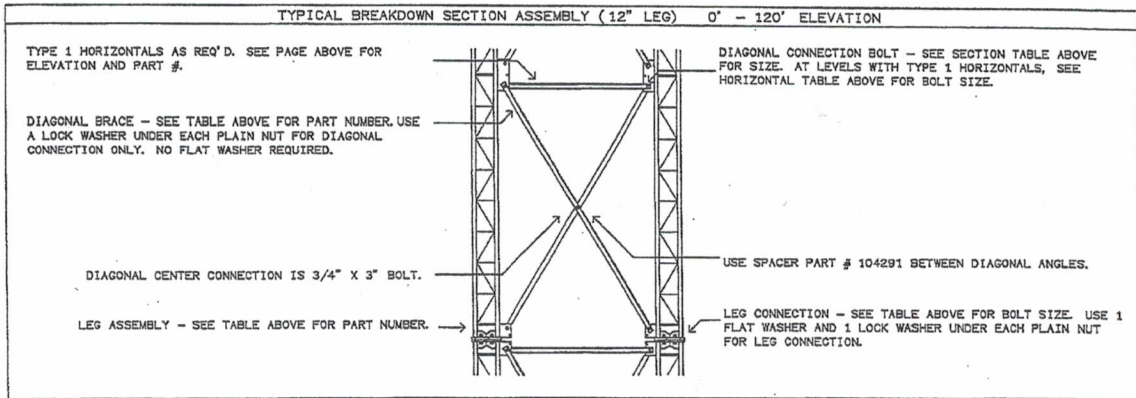
* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.



BREAKDOWN SECTION DATA (12" LEG) 0' - 120' ELEVATION													
SEC #	SECTION LENGTH	LEG SIZE	LEG PART#	TOP PART#	DIAG PART#	DIAG FACE	DIAG ANGLE	DIAG THICK	DIAG HOR	DIAG VERT	DIAG WEIGHT	DIAG CONNECT+ DIAM	DIAG CONNECT+ LENGTH
U- 6.0	20'	1- 1/4"	207628	105898	105556	2-1/2"	3/16"	1	1924#	1"	3-1/2"	1"	2-1/4"
U- 8.0	20'	1- 1/4"	207628	105558	105561	2-1/2"	3/16"	1	1925#	1"	3-1/2"	1"	2-1/4"
U-10.0	20'	1- 1/4"	207628	105564	105567	2-1/2"	3/16"	1	1969#	1"	3-1/2"	1"	2-1/4"
U-12.0	20'	1- 1/2"	207629	105570	105573	2-1/2"	3/16"	1	2383#	1"	3-1/2"	1"	2-1/4"
U-14.0	20'	1- 1/2"	207629	199054	199055	2-1/2"	3/16"	1	2442#	1"	3-1/2"	1"	2-1/4"
U-16.0	20'	1- 1/2"	207629	105582	105587	3"	3/16"	1	2608#	1"	3-1/2"	1"	2-1/4"

* THE WEIGHTS LISTED ARE THEORETICAL. THE ACTUAL WEIGHTS WILL VARY. ALL WEIGHTS SHOULD BE CONFIRMED IN THE FIELD PRIOR TO ERECTION.
** SEE ANGLE HORIZONTAL DATA TABLE FOR BOLT SIZE AT LEVELS WITH TYPE 1 HORIZONTALS.
+ USE 1 FLAT WASHER UNDER EACH LOCK WASHER FOR LEG CONNECTION ONLY.

ANGLE HORIZONTAL DATA (12" LEG)					
HORIZ HT	IN SEC#	HORIZ PART#	HORIZ TYPE	BOLTS DIAM	LENGTH
120	U- 6.0	105938	1	1"	3-1/2"



JUN - 2 2014

William R. Heiden III, NY Professional Engineer # 080406-1

A		UPDATE TITLE BLOCK		SKK	06/02/2014	APPROVED/ENG.	M.S	6/2/2014
REV	DESCRIPTION OF REVISIONS			INI	DATE	APPROVED/FOUND.	N/A	
From: F1016262.DFT - 06/02/2014 14:01						DRAWING NO.		
Printed from 254556_029A.DWG * 06/02/2014 14:29 @ 06/02/2014 15:56						254556		
ARCHIVE						PAGE 2 OF 8		

FAMILY LIFE NETWORK
WCIK COHOCTON STEUBEN CO, NY
U-16 X 199'



Copyright 2014
DRAWN BY SKK
ENG. FILE NO. A-222661-
F-1016262

GENERAL NOTES

1. TOWER DESIGN CONFORMS TO STANDARD TIA-222-G UTILIZING AN 90 MPH 3-SEC GUST BASIC WIND SPEED WITH A STRUCTURE CLASS OF II, TOPOGRAPHIC CATEGORY OF 3 AND EXPOSURE C CRITERIA WITH NO ICE.
TOWER DESIGN CONFORMS TO STANDARD TIA-222-G UTILIZING AN 40 MPH 3-SEC GUST BASIC WIND SPEED WITH A STRUCTURE CLASS OF II, TOPOGRAPHIC CATEGORY OF 3 AND EXPOSURE C CRITERIA WITH .75" RADIAL ICE.
2. TWIST AND SWAY LESS THAN OR EQUAL TO 2.25 DEGREES AT AN OPERATIONAL BASIC WIND SPEED OF 60 MPH WITH NO ICE AT 120 FT. ABOVE THE BASE OF THE TOWER. ALL OPERATIONAL WINDLOADS ARE ASSUMED TO OCCUR AT 33 FT. ABOVE GROUND LEVEL.
3. MATERIAL: (A) SOLID RODS TO ASTM A572 GRADE 50. (B) ANGLES TO ASTM A36. (C) PIPE TO ASTM A500 GRADE B. (D) STEEL PLATES TO ASTM A36. (E) CONNECTION BOLTS TO ASTM A325 OR ASTM A449 (Fu=120 KSI AND Fy=92 KSI) AND ANCHOR BOLTS TO ASTM F1554 (Fu=150 KSI AND Fy=105 KSI).
4. BASE REACTIONS PER TIA-222-G FOR 90 MPH BASIC WIND SPEED WITH NO ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT = 21.0 KIPS. MAXIMUM COMPRESSION = 205.0 KIPS PER LEG. MOMENT = 2736.0 KIP-FT. MAXIMUM UPLIFT = 186.0 KIPS PER LEG. MAXIMUM SHEAR = 30.0 KIPS TOTAL.
5. BASE REACTIONS PER TIA-222-G FOR 40 MPH BASIC WIND SPEED WITH 0.75" RADIAL ICE (REACTIONS INCLUDE TIA-222-G LOAD FACTORS): TOTAL WEIGHT = 97.0 KIPS. MOMENT = 1232.0 KIP-FT. MAXIMUM SHEAR = 11.0 KIPS TOTAL.
6. FINISH: ALL BOLTS ARE GALVANIZED IN ACCORDANCE WITH ASTM A153 (HOT DIPPED) OR ASTM B895 CLASS 50 (MECHANICAL). ALL OTHER STRUCTURAL MATERIALS ARE GALVANIZED IN ACCORDANCE WITH ASTM 123.
7. ANTENNAS: 175' TO 195' (1) SHIEVELY 6810 3 BAY WITH RADOMES, FULL WAVE SPACE FM WITH (1) 1-5/8" LINE
150' -(3) PD220 ON (3) 3' PIVOT SIDE ARMS WITH (3) 7/8" LINES
120' -(1) UBIQUITY ROCKET DISH: RD-56-34 (240 DEG. AZ. ASSUMED) WITH (1) GATE LINE
NOTE: (A) ELEVATIONS ARE TO THE BOTTOM OF THE ANTENNAS EXCEPT FOR MICROWAVE DISHES, WHICH ARE TO THE CENTERLINE. (B) ALL TRANSMISSION LINES MUST BE PLACED ON PIRRO SUPPLIED LINE BRACKETS.
8. REMOVE FOUNDATION TEMPLATE PRIOR TO ERECTING TOWER. INSTALL BASE SECTION WITH MINIMUM OF 2" CLEARANCE ABOVE CONCRETE. SEE BASE SECTION PLACEMENT PAGE FOR MORE INFORMATION. PACK NON-SHRINK STRUCTURAL GROUT UNDER BASE SECTION AFTER LEVELING TOWER.
9. MIN. WELDS 5/16" UNLESS OTHERWISE SPECIFIED. ALL WELDING TO CONFORM TO AWS D1.1 SPECIFICATIONS.
10. THIS DRAWING DOES NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, SEQUENCES AND PROCEDURES.
11. ALL BOLTS AND NUTS MUST BE IN PLACE BEFORE THE ADJOINING SECTIONS ARE INSTALLED.
12. ALL STRUCTURAL BOLTS ARE TO BE TIGHTENED TO A SNUG TIGHT CONDITION AS DEFINED BY AISC SPECIFICATION UNLESS OTHERWISE NOTED.
13. ATTENTION TOWER ERECTOR: COAT ALL BOLT ASSEMBLIES THAT USE PIN LOCK NUTS WITH ZINC RICH COLD GALVANIZING COMPOUND AFTER FINAL TIGHTENING.
14. TIA-222-G GROUNDING FOR TOWER.



JUN - 2 2014

William R. Heiden III, NY Professional Engineer # 080406-1

		FAMILY LIFE NETWORK WCIK COHOCTON STEUBEN CO, NY U-16 X 199'	
A	UPDATE TITLE BLOCK	SKK	06/02/2014
REV	DESCRIPTION OF REVISIONS	INI	DATE
		APPROVED/ENG.	M.S 6/2/2014
		APPROVED/FOUND.	N/A
		COPYRIGHT	2014
		DRAWN BY	SKK
		ENG. FILE NO.	A-222661-254556
		ARCHIVE	F-1016262
From: F1016262.DFT -- 06/02/2014 14:12		DRAWING NO.	254556
Printed from 254556_030A.DWG -- 06/02/2014 14:26 @ 06/02/2014 15:56		PAGE	3 OF 8



FOUNDATION NOTES

1. SOIL AS PER REPORT BY EMPIRE GEO, DATED: 04/11/14 (PROJECT#BE-14-036)
2. CONCRETE TO BE 4000 PSI @ 28 DAYS. REINFORCING BAR TO CONFORM TO ASTM A615 GRADE 60 SPECIFICATIONS. CONCRETE INSTALLATION TO CONFORM TO ACI-318 (2008) BUILDING REQUIREMENTS FOR REINFORCED CONCRETE. ALL CONCRETE TO BE PLACED AGAINST UNDISTURBED EARTH FREE OF WATER AND ALL FOREIGN OBJECTS AND MATERIALS. A MINIMUM OF THREE INCHES OF CONCRETE SHALL COVER ALL REINFORCEMENT. WELDING OF REBAR NOT PERMITTED.
3. A COLD JOINT IS PERMISSIBLE UPON CONSULTATION WITH PIROD. ALL COLD JOINTS SHALL BE COATED WITH BONDING AGENTS PRIOR TO SECOND POUR.
4. ALL FILL SHOULD BE PLACED IN LOOSE LEVEL LIFTS OF NO MORE THAN 6" THICK. FILL MATERIALS SHOULD BE CLEAN AND FREE OF ORGANIC AND FROZEN MATERIALS OR ANY OTHER DELETERIOUS MATERIALS. COMPACT FILL TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557.
5. BENDING, STRAIGHTENING OR REALIGNING (HOT OR COLD) OF THE ANCHOR BOLTS BY ANY METHOD IS PROHIBITED.
6. CROWN TOP OF FOUNDATION FOR PROPER DRAINAGE.
7. FOUNDATION IS TO BEAR ON INSITU VERY STIFF TO HARD CLAYEY SILT AT APPROXIMATELY 5.5' BELOW GRADE. THE BEARING SURFACE IS TO BE FREE OF ANY LOOSE MATERIAL & SUBSEQUENTLY INSPECTED BY A QUALIFIED ON-SITE GEOTECHNICAL ENGINEER.
8. A SUMP PUMP OR OTHER DEWATERING SYSTEM MAY BE REQUIRED TO LOWER THE WATER TABLE TO FACILITATE THE INSTALLATION OF THE FOUNDATION.
9. ANY SOFT OR UNSTABLE SUBGRADE SOILS DETECTED DURING THE EXCAVATION SHOULD BE REMOVED AND REPLACED WITH COMPACTED FILL.
10. SUBGRADE PREPARATIONS AND BACKFILLING MUST BE COMPLETED PER THE SPECIFICATIONS IN THE REFERENCED GEOTECHNICAL REPORT ABOVE.

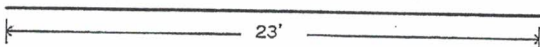


JUN - 2 2014

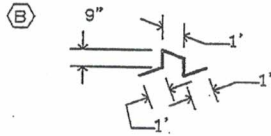
William R. Heiden III, NY Professional Engineer # 080406-1

FAMILY LIFE NETWORK
WCIK COHOCTON STEUBEN CO, NY
U-16 X 199'

B ADDED FOUNDATION		JAK	06/02/2014			
A UPDATE TITLE BLOCK		SKK	06/02/2014	APPROVED/ENG.	M.S 6/2/2014	
REV	DESCRIPTION OF REVISIONS	INI	DATE	APPROVED/FOUND.	M.S 6/2/2014	1-877-467-4763 Plymouth, IN 1-800-247-2151 Salem, OR
				COPYRIGHT	2014	
				DRAWN BY	JAK	DRAWING NO.
From: F1016262.DFT - 06/02/2014 15:34				ENG. FILE NO.	A-222661-	254556
Printed from 254556_040B.DWG - 06/02/2014 15:36 @ 06/02/2014 15:56				ARCHIVE	F-1016262	PAGE 4 OF 8

Ⓐ  # 6 REBAR - 160 PIECES REQ. TOTAL
APPROX WT = 34.5# EACH, 5520# TOTAL

REBAR SUPPORTS MAY CONSIST OF ANY ACCEPTABLE MEANS OF SECURELY SUPPORTING THE TOP REINFORCEMENT GRID ABOVE THE BOTTOM REINFORCEMENT GRID WHILE MAINTAINING A SEPARATION OF 1' (OUTSIDE REBAR TO OUTSIDE REBAR).



6 REBAR - 49 PIECES REQUIRED TOTAL
TYPE 26 STANDEE PLACED BETWEEN REBAR GRIDS ON NOMINAL 4' SPACING THROUGHOUT
APPROX UNBENT LENGTH = 4' - 6 - 1/4"
APPROX WT = 6.8# EACH, 333# TOTAL

Ⓒ

7 REBAR - 36 PIECES REQUIRED TOTAL
APPROX UNBENT LENGTH = 6' - 10 - 7/8"
APPROX WT = 14.1# EACH, 508# TOTAL

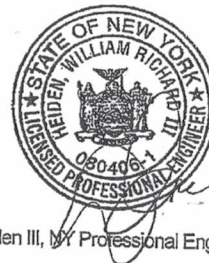


4 REBAR - 18 PIECES REQUIRED TOTAL
APPROX UNBENT LENGTH = 7' - 10"
APPROX WT = 5.2# EACH, 94# TOTAL

LAP DIMENSION: 1' - 6 - 1/2"
PLACE CIRCULAR TIES SO THAT LAPS ON ADJACENT TIES ARE 180 DEGREES APART. PLACE ONE TIE AT TOP OF PAD AND TWO TIES AT TOP OF PIER REBAR. EQUALLY SPACE REMAINING TIES ALONG PIER.


REBAR DETAIL

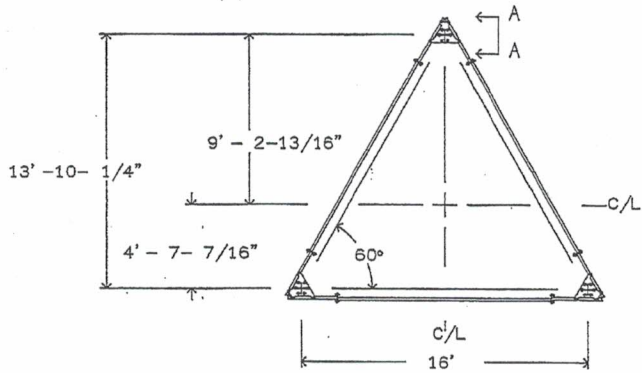
TOTAL APPROX REBAR WEIGHT = 6455#
REINFORCING BAR TO CONFORM TO
ASTM A615 GRADE 60 SPECIFICATIONS.



JUN - 2 2014

William R. Heiden III, NY Professional Engineer # 080406-1

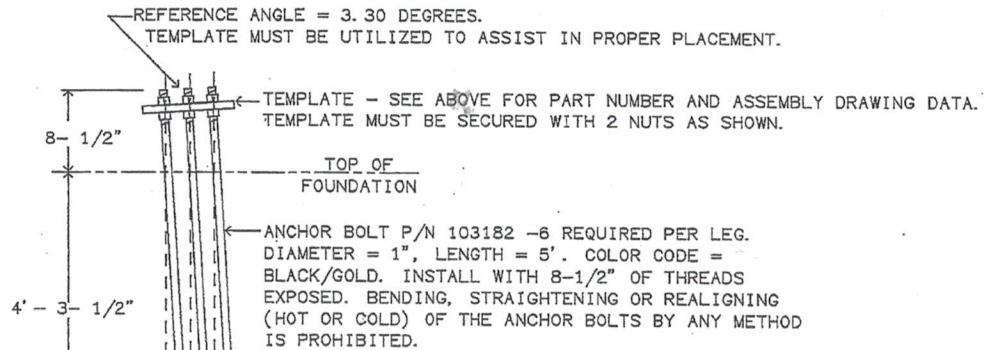
				FAMILY LIFE NETWORK WCIK COHOCTON STEUBEN CO, NY U-16 X 199'	
B	ADDED FOUNDATION	JAK	06/02/2014	APPROVED/ENG.	M.S 6/2/2014
A	UPDATE TITLE BLOCK	SKK	06/02/2014	APPROVED/FOUND.	M.S 6/2/2014
REV	DESCRIPTION OF REVISIONS	INI	DATE		
				COPYRIGHT 2014	
				DRAWN BY	JAK
From: F1016262.DFT - 06/02/2014 15:34				ENG. FILE NO.	A-222661-
Printed from 254556_06@B.DWG - 06/02/2014 15:36 @ 06/02/2014 15:57				ARCHIVE	F-1016262
					
				DRAWING NO. 254556	
				PAGE 6 OF 8	



TOWER ANCHOR STEEL PLACEMENT - TOP VIEW

TEMPLATE ASSEMBLY P/N 159422 INCLUDES CORNER PLATE P/N 158388, IS REQUIRED FOR INSTALLATION AND MUST BE PLACED AS SHOWN. SEE DRAWING # 159394 FOR TEMPLATE ASSEMBLY DETAILS. SEE PAGE 5 FOR TOWER C/L LOCATION RELATIVE TO THE FOUNDATION LAYOUT. TEMPLATE PLACEMENT +/- 3". EACH LEG MUST BE CENTERED IN PIER WITHIN +/- 10% OF PIER DIAMETER. TEMPLATE MUST BE LEVEL +/- 1 DEGREE. INSTALL TEMPLATE WITH SUFFICIENT SPACE BENEATH (2" MINIMUM) TO PERMIT FINISHING OF CONCRETE AND TO FACILITATE TEMPLATE REMOVAL PRIOR TO TOWER ERECTION.

SEE PAGE 8 FOR BASE SECTION INSTALLATION DETAIL.



VIEW A - A - ANCHOR BOLT INSTALLATION DETAIL (NOT TO SCALE)

ATTENTION CONTRACTOR INSTALLING THE ANCHOR BOLTS!

1" DIAMETER ANCHOR BOLTS FOR TAPERED TOWER.

VERIFY THE PART NUMBERS AND SIZES FOR ALL COMPONENTS ON THIS PAGE AND PAGE 8.

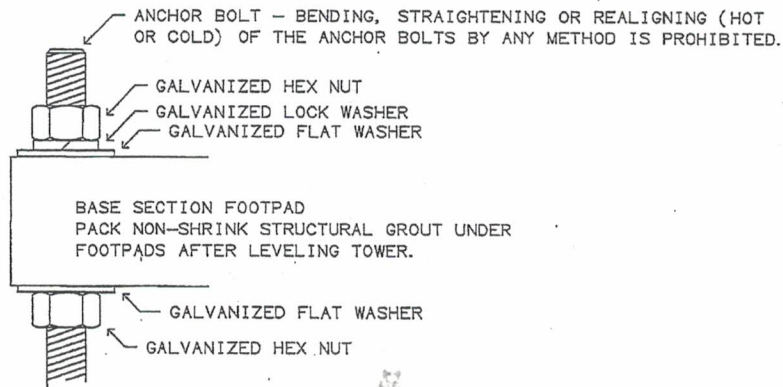
IF THERE ARE ANY DISCREPANCIES, PLEASE NOTIFY PIROD, INC. PRIOR TO INSTALLATION!!



JUN - 2 2014

William R. Heiden III, NY Professional Engineer # 080406-1

				FAMILY LIFE NETWORK WCIK COHOCTON STEUBEN CO, NY U-16 X 199'	
B	ADDED FOUNDATION	JAK	06/02/2014	APPROVED/ENG.	M.S 6/2/2014
REV	DESCRIPTION OF REVISIONS	INI	DATE	APPROVED/FOUND.	M.S 6/2/2014
				COPYRIGHT 2014	
				DRAWN BY	JAK
From: F1016262.DFT - 06/02/2014 15:34				ENG. FILE NO.	A-222661-
Printed from 254556_07@B.DWG - 06/02/2014 15:36 @ 06/02/2014 15:57				ARCHIVE	F-1016262
				DRAWING NO.	254556
				PAGE	7 OF 8



BASE SECTION INSTALLATION DETAIL



JUN - 2 2014

William R. Heiden III, NY Professional Engineer # 080406-1

				FAMILY LIFE NETWORK WCIK COHOCTON STEUBEN CO, NY U-16 X 199'	
B	ADDED FOUNDATION	JAK	06/02/2014	APPROVED/ENG.	M.S 6/2/2014
REV	DESCRIPTION OF REVISIONS	INI	DATE	APPROVED/FOUND.	M.S 6/2/2014
				COPYRIGHT 2014	
				DRAWN BY	JAK
From: F1016262.DFT - 06/02/2014 15:34				ENG. FILE NO.	A-222661-
Printed from 254556_080B.DWG - 06/02/2014 15:36 @ 06/02/2014 15:57				ARCHIVE	F-1016262
				DRAWING NO.	254556
				PAGE	8 OF 8

