

NOTES:

1. MATERIAL: ASTM A53 GRADE B GALVANIZED STEEL PIPE
2. UPON REQUEST, GRATES SUBJECT TO SALT WATER OR HIGHLY CORROSIVE ENVIRONMENTS WILL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123
3. ALL GALVANIZED STEEL PIPE CUT TO 45 DEGREE ANGLE BOTH ENDS
4. 11/16" X 2" SLOTS PUNCHED AT BOTH ENDS OF PIPE. INTERMEDIATE SLOTS INSERTED FOR MULTIPLE PIPE
5. ADDITIONAL SIZES ARE AVAILABLE
6. PIPE FASTENER UNITS AVAILABE - PLEASE SEE SEPARATE DRAWING FOR DETAILS
7. PIPE GRATES FABRICATED PER FL DOT INDEX 273

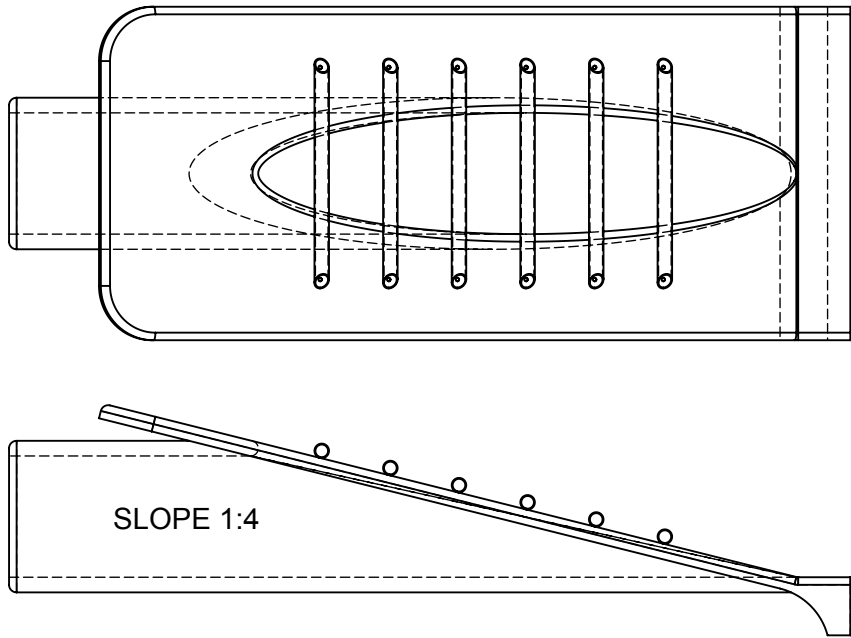
PIPE DIAMETER	SCH40 PIPE SIZE	# OF SCH40 PIPE	SCH80 PIPE SIZE	LENGTH OF PIPE SINGLE	LENGTH OF PIPE DOUBLE	LENGTH OF PIPE TRIPLE
12" X 18"	2-1/2"	2	3"	38-5/8"	72-5/8"	106-1/2"
14" X 23"	2-1/2"	3	3"	44"	84"	124"
19" X 30"	2-1/2"	4	3"	52"	100"	148"
24" X 38"	2-1/2"	5	3"	61"	121"	181"
29" X 45"	2-1/2"	7	3-1/2"	69-5/8"	140-5/8"	211-1/2"
34" X 53"	3"	8	3-1/2"	78-5/8"	162-5/8"	246-5/8"
38" X 60"	3"	10	4"	86-5/8"	180-5/8"	274-1/2"
43" X 68"	3"	11	4"	95-5/8"	202-1/2"	309-5/8"
48" X 76"	4"	13	4"	104-5/8"	223-1/2"	342-5/8"
53" X 83"	4"	14	4"	112-1/2"	240 5/8"	368-5/8"
58" X 91"	4"	15	4"	121-1/2"	261-5/8"	401-5/8"

SINGLE AND MULTIPLE ELLIPTICAL CONCRETE PIPE



Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
 www.environmentalcomposites.com

MITERED END SECTION PIPE GRATES



NOTES:

1. MATERIAL: ASTM A53 GRADE B GALVANIZED STEEL PIPE
2. UPON REQUEST, GRATES SUBJECT TO SALT WATER OR HIGHLY CORROSIVE ENVIRONMENTS WILL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123
3. ALL GALVANIZED STEEL PIPE CUT TO 45 DEGREE ANGLE BOTH ENDS
4. 11/16" X 2" SLOTS PUNCHED AT BOTH ENDS OF PIPE. INTERMEDIATE SLOTS INSERTED FOR MULTIPLE PIPE
5. ADDITIONAL SIZES ARE AVAILABLE
6. PIPE FASTENER UNITS AVAILABE - PLEASE SEE SEPARATE DRAWING FOR DETAILS
7. PIPE GRATES FABRICATED PER FL DOT INDEX 273

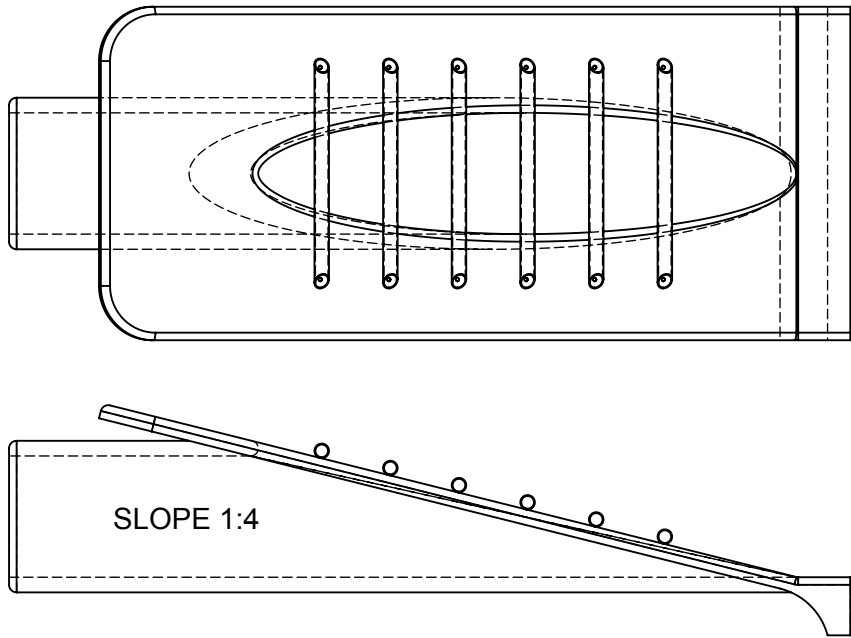
PIPE DIAMETER	SCH40 PIPE SIZE	# OF SCH40 PIPE	SCH80 PIPE SIZE	LENGTH OF PIPE SINGLE	LENGTH OF PIPE DOUBLE	LENGTH OF PIPE TRIPLE
17" X 13"	2-1/2"	1	3"	31"	63-5/8"	93-5/8"
21" X 15"	2-1/2"	2	3"	45"	71-5/8"	105-5/8"
28" X 20"	2-1/2"	4	3"	44-5/8"	85-1/2"	126-5/8"
35" X 24"	2-1/2"	5	3"	51-5/8"	99-5/8"	147-5/8"
42" X 29"	2-1/2"	6	3-1/2"	58-1/2"	115-1/2"	172-1/2"
49" X 33"	2-1/2"	7	3-1/2"	65-5/8"	131-5/8"	197-5/8"
57" X 38"	3"	9	4"	73-1/2"	149-5/8"	222-5/8"
64" X 43"	3"	10	4"	80-5/8"	165-5/8"	249-5/8"
71" X 47"	3"	12	4"	87-5/8"	181-1/2"	275-5/8"

SINGLE AND MULTIPLE ELLIPTICAL CORRUGATED METAL PIPE



Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
 www.environmentalcomposites.com

MITERED END SECTION PIPE GRATES



NOTES:

1. MATERIAL: ASTM A53 GRADE B GALVANIZED STEEL PIPE
2. UPON REQUEST, GRATES SUBJECT TO SALT WATER OR HIGHLY CORROSIVE ENVIRONMENTS WILL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123
3. ALL GALVANIZED STEEL PIPE CUT TO 45 DEGREE ANGLE BOTH ENDS
4. 11/16" X 2" SLOTS PUNCHED AT BOTH ENDS OF PIPE. INTERMEDIATE SLOTS INSERTED FOR MULTIPLE PIPE
5. ADDITIONAL SIZES ARE AVAILABLE
6. PIPE FASTENER UNITS AVAILABE - PLEASE SEE SEPARATE DRAWING FOR DETAILS
7. PIPE GRATES FABRICATED PER FL DOT INDEX 273

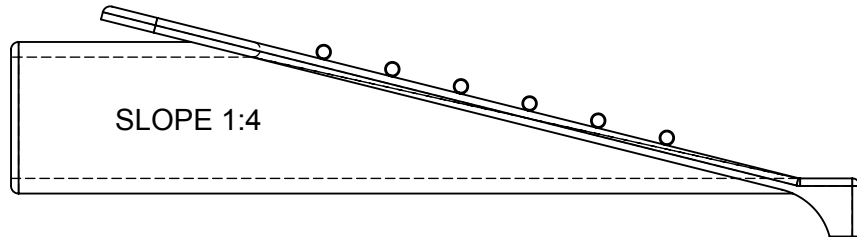
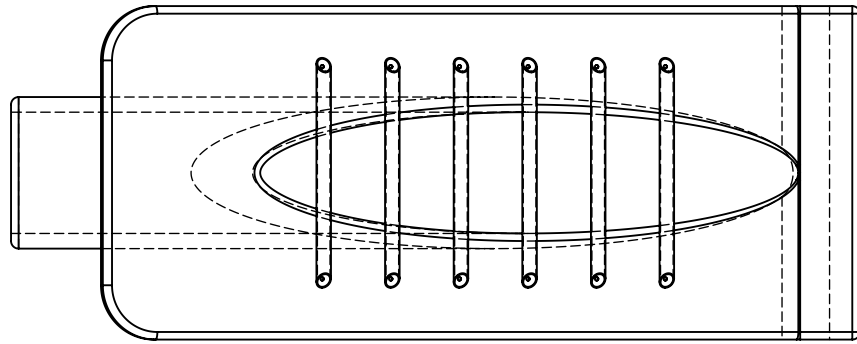
PIPE DIAMETER	SCH40 PIPE SIZE	# OF SCH40 PIPE	SCH80 PIPE SIZE	LENGTH OF PIPE SINGLE	LENGTH OF PIPE DOUBLE	LENGTH OF PIPE TRIPLE
15"	2-1/2"	3	3"	35"	66"	97"
18"	2-1/2"	4	3"	38-5/8"	72-5/8"	106-1/2"
24"	2-1/2"	6	3"	45-5/8"	86-5/8"	127-1/2"
30"	2-1/2"	7	3"	52-1/2"	103-1/2"	154-1/2"
36"	2-1/2"	9	3"	59-5/8"	120-5/8"	181-1/2"
42"	2-1/2"	11	3-1/2"	66-5/8"	138-5/8"	210-5/8"
48"	2-1/2"	13	3-1/2"	73-1/2"	154-1/2"	235-1/2"
54"	3"	14	4"	80-5/8"	172-1/2"	264-5/8"
60"	3"	16	4"	87-5/8"	189-5/8"	291-5/8"

SINGLE AND MULTIPLE ROUND CONCRETE PIPE



Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
 www.environmentalcomposites.com

MITERED END SECTION PIPE GRATES



NOTES:

1. MATERIAL: ASTM A53 GRADE B GALVANIZED STEEL PIPE
2. UPON REQUEST, GRATES SUBJECT TO SALT WATER OR HIGHLY CORROSIVE ENVIRONMENTS WILL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123
3. ALL GALVANIZED STEEL PIPE CUT TO 45 DEGREE ANGLE BOTH ENDS
4. 11/16" X 2" SLOTS PUNCHED AT BOTH ENDS OF PIPE. INTERMEDIATE SLOTS INSERTED FOR MULTIPLE PIPE
5. ADDITIONAL SIZES ARE AVAILABLE
6. PIPE FASTENER UNITS AVAILABE - PLEASE SEE SEPARATE DRAWING FOR DETAILS
7. PIPE GRATES FABRICATED PER FL DOT INDEX 273

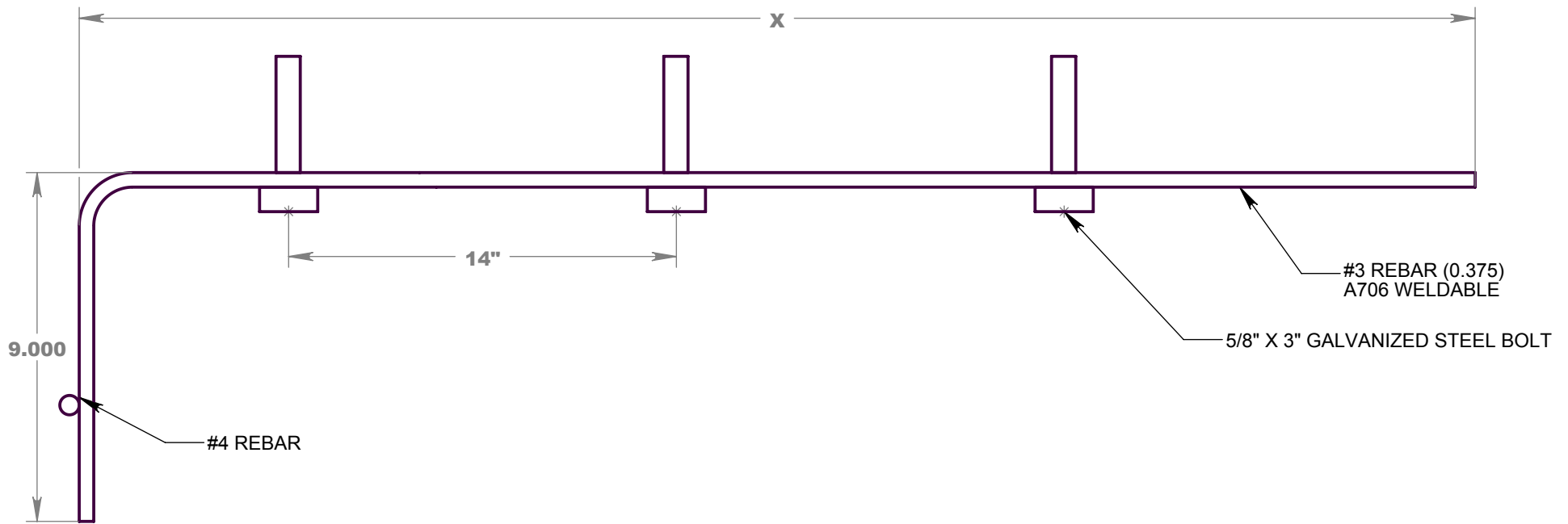
PIPE DIAMETER	SCH40 PIPE SIZE	# OF SCH40 PIPE	SCH80 PIPE SIZE	LENGTH OF PIPE SINGLE	LENGTH OF PIPE DOUBLE	LENGTH OF PIPE TRIPLE
15"	2-1/2"	2	3"	31-1/2"	62-5/8"	93-5/8"
18"	2-1/2"	3	3"	34-1/2"	68-5/8"	102-5/8"
24"	2-1/2"	5	3"	40-1/2"	81-5/8"	122-5/8"
30"	2-1/2"	7	3"	46-1/2"	97-1/2"	148-1/2"
36"	2-1/2"	8	3"	52-1/2"	113-5/8"	174-5/8"
42"	2-1/2"	10	3-1/2"	58-1/2"	130-1/2"	202-1/2"
48"	2-1/2"	12	3-1/2"	64-1/2"	145-1/2"	226-1/2"
54"	3"	14	4"	70-1/2"	162-5/8"	254-5/8"
60"	3"	15	4"	76-1/2"	178-1/2"	280-1/2"

SINGLE AND MULTIPLE ROUND CORRUGATED METAL PIPE



Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
 www.environmentalcomposites.com

MITERED END SECTION PIPE GRATES



CONCRETE PIPE ROUND

PIPE DIA.	"X"	# BOLTS
15"	50"	4
18"	64"	5
24"	92"	7
30"	106"	8
36"	134"	10
42"	162"	12
48"	190"	14
54"	204"	15
60"	232"	17

CONCRETE PIPE ELLIPTICAL

PIPE DIA.	"X"	# BOLTS
12" X 18"	36"	3
14" X 23"	50"	4
19" X 30"	64"	5
24" X 38"	78"	6
29" X 45"	106"	8
34" X 53"	120"	9
38" X 60"	148"	11
43" X 68"	162"	12
48" X 76"	190"	14
53" X 83"	204"	15
58" X 91"	218"	16

CORRUGATED METAL ROUND

PIPE DIA.	"X"	# BOLTS
15"	36"	3
18"	50"	4
24"	78"	6
30"	106"	8
36"	120"	9
42"	148"	11
48"	176"	13
54"	204"	15
60"	218"	16

CORRUGATED METAL ELLIPTICAL

PIPE DIA.	"X"	# BOLTS
17" X 13"	22"	2
21" X 15"	36"	3
28" X 20"	64"	5
35" X 24"	78"	6
42" X 29"	92"	7
49" X 33"	106"	8
57" X 38"	134"	10
64" X 43"	148"	11
71" X 47"	176"	13

MITERED END SECTION FRAME FASTENER



Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
 www.environmentalcomposites.com

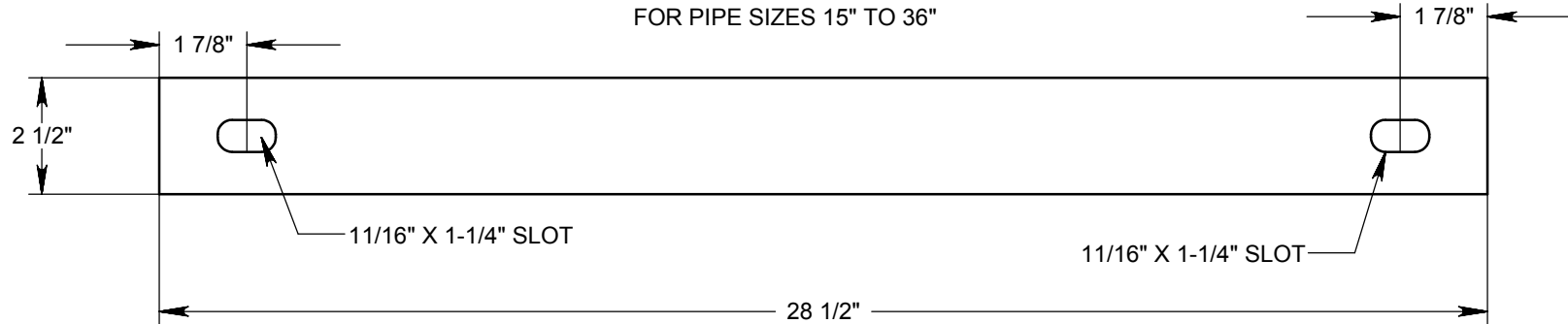
MITERED END SECTION PIPE GRATES

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
ENVIRONMENTAL COMPOSITES, INC. ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
ENVIRONMENTAL COMPOSITES, INC. IS
PROHIBITED.

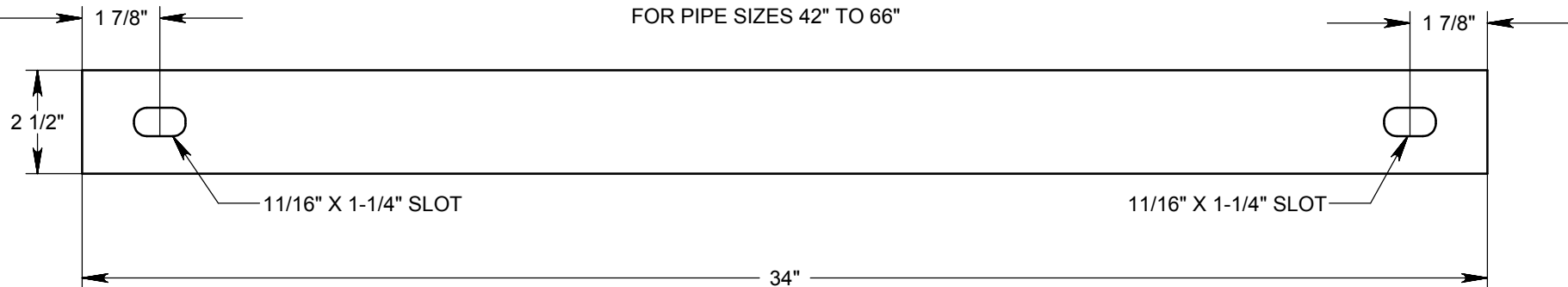
ENVIRONMENTAL COMPOSITES, INC.
Tavares, FL - 352-343-3449
www.eci1usa.com

STEEL PIPE CONNECTOR (FL DOT INDEX 273)

FOR PIPE SIZES 15" TO 36"



FOR PIPE SIZES 42" TO 66"



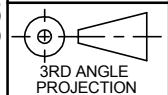
NOTES:

2-1/2" X 1/4" STEEL FLAT BAR; GALVANIZED
ALL MATERIAL IS DOMESTIC

STANDARD HARDWARE FOR ALL PIPE CONNECTORS:

- (2) 5/8" X 6" GALVANIZED STEEL BOLTS
- (2) 5/8" GALVANIZED STEEL NUTS
- (2) 5/8" GALVANIZED STEEL WASHERS

DIMENSIONS
ARE IN INCHES.
TOLERANCE
±N/A
UNLESS
OTHERWISE
SPECIFIED



SCALE: NTS