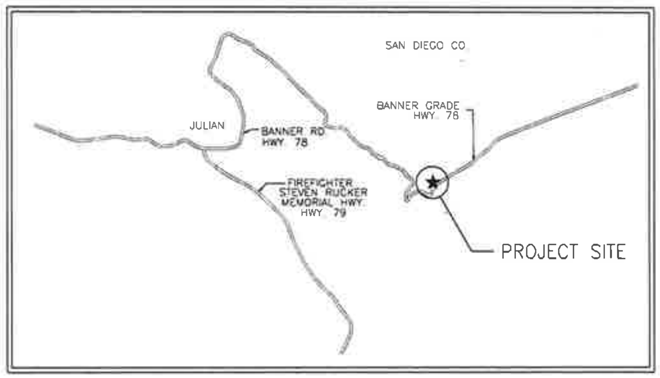
Vista Towers
Wireless Site Solutions
10161 BROADVIEW PLACE, N TUSTIN, CA 92705

BANNER GRADE

36342 HIGHWAY 78
JULIAN, CA 92036



SAN DIEGO, CA

LOCATION PLAN

GENERAL NOTES

1. DRAWINGS ARE NOT TO BE SCALED. WRITTEN DIMENSIONS TAKE PRECEDENCE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY. UNLESS NOTED OTHERWISE THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN

2. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT, WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION ANY ERRORS, OMISSIONS, OR DISCREPENCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER

3. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS

4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE

6. ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK

7. GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT

8. THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE

9. DETAILS HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK

10. SEAL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE

11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURED DUE TO THE CONSTRUCTION ON OR ABOUT THE PROPERTY

12. CONTRACTOR SHALL SEE TO IT THAT GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE

13. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPENCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE

DIRECTIONS

FROM INTERSTATE 5 NORTH IN SAN DIEGO
1. TAKE THE CALIFORNIA 94 E/ML KING JR FREEWAY RAMP
2. MERGE ONTO CA-94 E
3. TAKE THE EXIT ON THE LEFT ONTO CA-125 N
4. TAKE THE EXIT ONTO I-8 E
5. TAKE THE CA-79 N/JAPATUL VALLEY RD EXIT TOWARD JULIAN
6. TURN LEFT ONTO CA-79 N/JAPATUL VALLEY RD
CONTINUE TO FOLLOW CA-79 N
7. TURN LEFT TO STAY ON CA-79 N
8. TURN RIGHT ONTO CA-78 E/BANNER RD (SIGNS FOR WESTMORLAND/BRAWELY)
CONTINUE TO FOLLOW CA-78 E
DESTINATION WILL BE ON THE RIGHT

PROJECT MILESTONES

05/07/2013	90% ZONING DOCUMENTS
05/14/2013	100% ZONING DOCUMENTS
06/07/2013	100% ZONING DOCUMENTS REVISION 1
09/10/2013	100% ZONING DOCUMENTS REVISION 2
09/27/2013	100% ZONING DOCUMENTS REVISION 3
10/15/2013	100% ZONING DOCUMENTS REVISION 4
11/06/2013	100% ZONING DOCUMENTS REVISION 5
xx/xx/xxxx	90% CONSTRUCTION DOCUMENTS
xx/xx/xxxx	100% CONSTRUCTION DOCUMENTS

INDEX OF DRAWINGS

1	T1.1	TITLE SHEET, LOCATION PLAN, PROJECT DATA
2	LS1	CIVIL SURVEY SHEET 1
3	LS2	CIVIL SURVEY SHEET 2
4	A1.0	OVERALL PARCEL PLAN
5	A1.1	OVERALL SITE PLAN
6	A2.1	ENLARGED EQUIPMENT LAYOUT PLAN
7	A2.2	STORMWATER & EROSION CONTROL BMP PLAN
8	A3.1	PROJECT ELEVATIONS SHEET 1
9	A3.2	PROJECT ELEVATIONS SHEET 2
10	A3.3	PROJECT ELEVATIONS SHEET 3
11	A4.1	AT&T EQUIPMENT DETAILS
12	A4.2	VERIZON WIRELESS EQUIPMENT DETAILS SHEET 1
13	A4.3	VERIZON WIRELESS EQUIPMENT DETAILS SHEET 2
14	A4.4	STANDBY GENERATOR DATASHEETS

PROJECT DIRECTORY

ARCHITECT:
MANUEL S. TSIHLAS
MST ARCHITECTS, INC
801 ALHAMBRA BLVD., SUITE 2
SACRAMENTO, CA 95816
916-505-3811
manuel@mstarchitects.com

OWNER:
VISTA TOWERS, LLC
10161 BROADVIEW PLACE
N. TUSTIN, CA 92705
CONTACT:
ROBERT MACLACHLAN
714-856-1000 PH
714-417-9577 FX

CONSTRUCTION MANAGER:
ROBERT MACLACHLAN
10161 BROADVIEW PLACE
N. TUSTIN, CA 92705
CONTACT:
ROBERT MACLACHLAN
714-856-1000 PH

LANDLORD:
EVELYN J. RUDISILL (TRUSTEE)
ADDRESS NOT PROVIDED

PROJECT SUMMARY

PROPERTY INFORMATION
LATITUDE: N33° 04' 08.43" NAD 83
LONGITUDE: W116° 32' 49.65" NAD 83

ASSESSOR'S PARCEL NUMBER: 291-330-17

JURISDICTION: SAN DIEGO COUNTY

OCCUPANCY: S-2 (UNMANNED TELECOMMUNICATIONS FACILITY) U (TOWER)

TYPE OF CONSTRUCTION: V-B

ZONING: S92 (GENERAL RURAL)

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:
1. 2010 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (INCL. TITLE 24 & 25)
2. 2010 CALIFORNIA BUILDING CODE (CBC)
3. 2010 CALIFORNIA RESIDENTIAL BUILDING CODE
4. 2010 CALIFORNIA ELECTRICAL CODE (CEC)
5. 2010 CALIFORNIA MECHANICAL CODE (CMC)
6. 2010 CALIFORNIA PLUMBING CODE (CPC)
7. 2010 CALIFORNIA ENERGY CODE (CENC)
8. 2010 CALIFORNIA HISTORICAL BUILDING CODE
9. 2010 CALIFORNIA FIRE CODE (CFC)
10. 2010 CALIFORNIA EXISTING BUILDING CODE
11. 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen CODE)
12. 2010 CALIFORNIA REFERENCE STANDARDS CODE
13. LOCAL COUNTY OR CITY ORDINANCES

ACCESSIBILITY REQUIREMENTS: THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY NOT REQUIRED IN ACCORDANCE WITH THE 2010 CBC 1103B.1, EXCEPTION 1

PROJECT DESCRIPTION

PROPOSED VISTA TOWERS UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING:

- 30'-0"x60'-0" LEASE AREA
- A VARIABLE HEIGHT (6'-0" A.G.L. TO 8'-8" A.G.L. TALL) TAN BLOCK CMU WALL W/12'-0" WIDE METAL ACCESS GATE (PAINTED BROWN) @ LEASE AREA PERIMETER (NOISE CONTROL FEATURE)
- UNDERGROUND POWER TO NEW POWER UTILITY H-FRAME W/600A SERVICE & (3) 200A METERS
- UNDERGROUND TELCO TO NEW TELCO UTILITY H-FRAME
- (1) AT&T 11'-6"X20'-0" PRE-FABRICATED EQUIPMENT SHELTER
- (1) VERIZON WIRELESS 11'-6"X16'-10 1/2" PRE-FABRICATED EQUIPMENT SHELTER
- (1) AT&T UL2200 CERTIFIED 30KW STANDBY DIESEL GENERATOR W/UL 142 CERTIFIED 210 GALLON FUEL TANK ON A NEW 5'-0"X10'-0" CONCRETE SLAB
- (1) VERIZON WIRELESS UL2200 CERTIFIED 30KW STANDBY DIESEL GENERATOR W/UL 142 CERTIFIED 210 GALLON FUEL TANK ON A NEW 5'-0"X10'-0" CONCRETE SLAB
- (1) CARRIER 10'-0"X15'-0" OUTDOOR EQUIPMENT SLAB W/(6) PROPOSED OUTDOOR EQUIPMENT CABINETS
- A 60'-0" TALL VISTA TOWERS MONOPINE
- (2) AT&T ANTENNA SECTORS W/(4) ANTENNAS PER SECTOR & (4) RRH UNITS PER SECTOR MOUNTED ON NEW MONOPINE
- (2) AT&T SURGE PROTECTORS MOUNTED WITH ANTENNAS
- (3) VERIZON WIRELESS ANTENNA SECTORS W/(4) ANTENNAS PER SECTOR & (1) RRH UNIT PER SECTOR MOUNTED ON NEW MONOPINE
- (1) VERIZON WIRELESS SURGE PROTECTOR MOUNTED WITH ANTENNAS
- (1) VERIZON WIRELESS 2'-0" DIAMETER MICROWAVE DISH MOUNTED ON NEW MONOPINE

(NO WATER REQUIRED AS PART OF THIS PROJECT)

MST ARCHITECTS
801 Alhambra Blvd., Suite 2, Sacramento, CA 95816

Vista Towers
Wireless Site Solutions

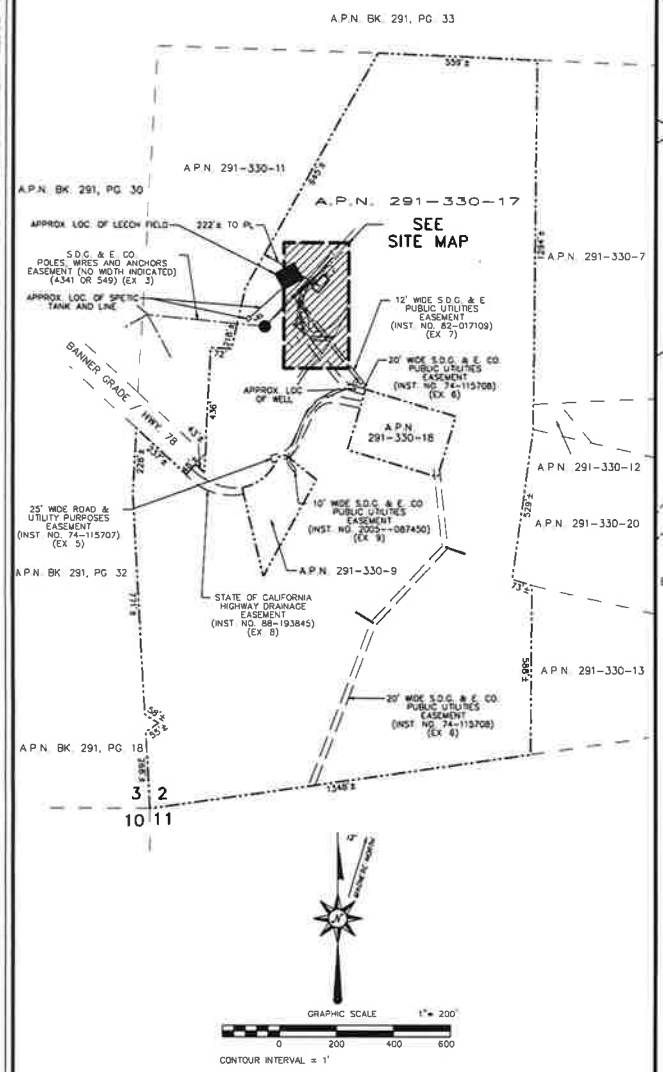
BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE:
TITLE SHEET, LOCATION PLAN, PROJECT DATA

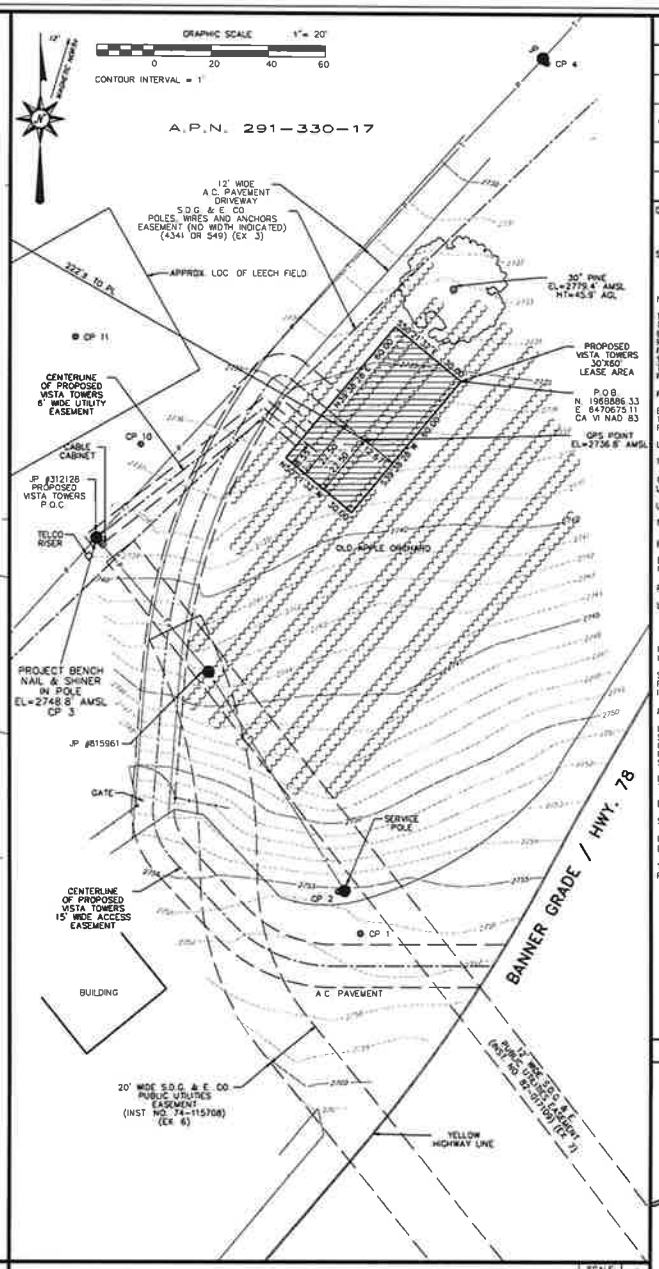
Revisions:

Date: 12/06/13

T1.1



OVERALL SITE MAP — SCALE: 1"=200' — 1



SITE MAP — SCALE: 1"=20' — 2

LEGEND

MANHOLE	FIRE HYDRANT	EDGE OF PAVEMENT	
LIGHT POLE	MONUMENT	OVERHEAD POWER & TELCO LINES	
TREE	HANDICAPPED PARKING	FENCE LINE	
JP JOINT POLE	TP TELEPHONE POLE	PROPERTY LINE	
PP POWER POLE	+ EL=124.5' SPOT ELEVATION	AMSL ABOVE MEAN SEA LEVEL	
		AGL ABOVE GROUND LEVEL	
		CP # FIELD CONTROL POINT	

DATE OF SURVEY: 04/22/13

SURVEYED BY/ OR UNDER THE DIRECTION OF: Oliver Philip Auer L.S. 5075

NOTES:

THIS IS NOT A BOUNDARY SURVEY. THIS IS A CELLULAR TELECOMMUNICATIONS TOPOGRAPHIC SURVEY MAP WITH EXISTING PARENT PARCEL LINES AND EASEMENTS BEING A GRAPHIC DEPICTION OF VARIOUS INFORMATION GATHERED FROM PRELIMINARY REPORTS, RECORD INFORMATION AND AVAILABLE MONUMENTS FOUND DURING THE FIELD SURVEY. UNLESS OTHERWISE NOTED, NO UNDERGROUND UTILITY LOCATING SERVICE COMPANY WAS CONTACTED PRIOR TO THIS MAP BEING PREPARED. THEREFORE, THERE MAY BE NON-VISIBLE OR OBSCURE UTILITIES EXISTING ON THE PROPERTY NOT SHOWN ON THIS MAP.

PARENT PARCEL DESCRIPTION:

BEING THE LANDS DESCRIBED IN THE PRELIMINARY REPORT PROVIDED BY LAWYERS TITLE, FILE NO. 09307801, DATED AS OF APRIL 10, 2013. SEE LS2 SHEET FOR PRELIMINARY REPORT EXTRACT.

LEASE AREA DESCRIPTION

TO BE PROVIDED AT TIME OF FINAL SURVEY.

TOGETHER WITH AN ACCESS ROUTE FROM THE LEASE AREA TO THE PUBLIC ROAD LOCATION TO BE DETERMINED AT A LATER DATE

UTILITY EASEMENT DESCRIPTION:

TO BE PROVIDED AT TIME OF FINAL SURVEY

BASIS OF ELEVATIONS: NAVD 88

BASIS OF BEARINGS: CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 6, NAD 83

PROJECT BENCH: AS INDICATED HEREON

LANDLORD'S INFORMATION: EVELYN J. RUDISILL (TRUSTEE)
LANDLORD'S ADDRESS NOT PROVIDED
LANDLORD'S CITY, STATE & ZIP NOT PROVIDED
A.P.N. 291-330-17

NET AREA OF:
UNDERLYING PARCEL(S): 61.02± AC LEASE AREA: 1800± SQ. FT.

SITE LOCATED IN FEMA FIRM NON-PRINTED COMMUNITY PANEL NUMBER 0607C1200G PLEASE INQUIRE WITH LOCAL JURISDICTION REGARDING LOCAL FLOOD PLAIN INFORMATION.

FAA 1A CERTIFICATION:

LATITUDE AND LONGITUDE WAS OBTAINED FROM INFORMATION PROVIDED BY A GPS SURVEY. THE GEODETIC POSITION SHOWN WAS DETERMINED UTILIZING FAST-STATIC GPS OBSERVATIONS FROM USGS MONUMENTS USING TRIMBLE 4600LS RECEIVERS. THE DATA WAS DIFFERENTIALLY CORRECTED WITH TRIMBLE GPS SURVEY SOFTWARE.

LATITUDE, LONGITUDE AND ELEVATIONS DENOTED ON THIS SURVEY MEET OR EXCEED THE FEDERAL AVIATION ADMINISTRATION 1-A STANDARD.

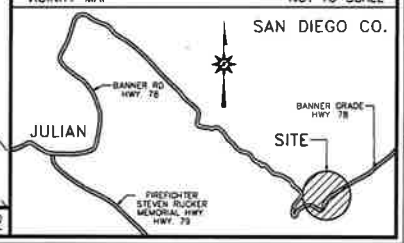
ELEVATION OF GROUND AT GPS POINT: 2736.8' AMSL

STRUCTURE HEIGHT: N/A

LATITUDE 33°04'08.43"
LONGITUDE 116°32'49.65" (NAD 83)

THE MAP WAS PREPARED FOR VISTA TOWERS FOR THE PURPOSE OF FILING A PERMIT WITH THE COUNTY OF SAN DIEGO.

VICINITY MAP — NOT TO SCALE



Vista Towers
Wireless Site Solutions

PROJECT INFORMATION:

BANNER GRADE
36342 HWY 78
JULIAN AREA, CALIFORNIA

CURRENT ISSUE DATE:
09/05/13

ISSUED FOR:
ZONING

REV.	DATE	DESCRIPTION	BY
3	09/05/13	ADDITIONAL REDLINES	TCN
2	06/07/13	REDLINE FROM CO.	TCN
1	05/08/13	REC. PR+ LEASE+	TCN
0	04/24/13	90% ISSUE	TCN

PLANS PREPARED BY:

Phil Auer Surveying
14407 Corte Lejos Bakersfield, CA 93314
Phone (661) 587-8122
Mobile (510) 714-7224
E-mail: la50754@earthlink.net

CONSULTANT:

DRAWN BY:	CHK:	APV.:
TCN	OPA	OPA

LICENSER:

SHEET TITLE:
SURVEY

SHEET NUMBER:
LS1

PRELIMINARY REPORT EXTRACT

File No. [illegible]

EXHIBIT "A"

All that certain real property situated in the County of San Diego, State of California, described as follows:

The West half of the Southwest quarter of Section 2, Township 13 South, Range 4 East, San Bernardino Meridian, in the County of San Diego, State of California, according to United States Government Survey.

Excepting therefrom the following described property:

Beginning at a point on the Southerly right of way line of the County Road running from Banner to Borrego, said point being North 86°44'00" East, 382.78 feet from a post in a rock mound, said post being on the Section line between Sections 2 and 3 in Township 13 South, Range 4 East, and also being a witness corner to the Northwest corner of said Section 2, as set by Government Surveyor, M. G. Wheeler, and described in United States Government field notes covered by said survey; Thence from said point of beginning, South 13°38'30" East, 317.54 feet;
Thence North 28°43'30" East, 386.33 feet;
Thence North 52°33'30" West, 130.84 feet to the beginning of a curve to the left having a radius of 21.29 feet;
Thence along said curve through an angle of 104°43'00" a distance of 38.91 feet to a point on the Southerly right of way line of said County Road, said point being on a curve to the Northwest, the center of which bears North 67°16'30" West, 170.00 feet;
Thence Southwesterly along said curve through an angle of 56°38'20" for a distance of 167.01 feet to the point of beginning.

Also excepting that portion described as follows:

Beginning at a point on the West line of said Section 2, distant thereon South 02°42'48" West, 1228.12 feet from the general land office corner set for the East quarter corner of said Section 3;
Thence along said West line South 02°42'48" West, 129.78 feet to a point distant thereon North 02°42'48" East, 224.59 feet from said general land office corner set for an angle point in the East line of said Section 3;
Thence leaving said West line South 47°41'20" East, 235.08 feet;
Thence North 42°18'40" East, 100.00 feet;
Thence North 47°41'20" West, 317.80 feet to the point of beginning.

CLTA Preliminary Report Form - Modified (11-17-06)
Page 3

File No. [illegible]

Also excepting that portion described as follows:

Beginning at the point of intersection of the center line of the California State Highway as described in Deed to the State of California, recorded December 31, 1951 in Book 4331, Page 192 of Official Records of San Diego County, with the West line of said Section;
Thence along said West line North 02°38'00" East to the West quarter corner of said Section;
Thence Easterly along the East and West center line of said Section, a distance of 800.00 feet;
Thence Southwesterly in a straight line to a point in a line which bears South 87°22'00" East, 362.00 feet from a point in said West line of said Section, distant thereon North 02°38'00" East, 450.00 feet from said center line of said Highway; Thence Southwesterly in a straight line to a point in a line which bears South 87°22'00" East, 320.00 feet from a point in said West line of said Section, distant thereon North 02°38'00" East, 230.00 feet from said center line of said highway; Thence North 87°22'00" West, 66.00 feet;
Thence South 02°38'00" West parallel with said West line, 110.00 feet;
Thence Southerly in a straight line to a point in the Southeasterly prolongation of said center line of said Highway, distant thereon 340.00 feet Easterly from the point of beginning;
Thence Westerly along said prolongation and center line to the point of beginning.

Also excepting therefrom that portion of said West half of the Southwest quarter as described in Deed to Mary D. Yakes, a married woman, as her sole and separate property, recorded June 3, 1969 as File No. 97383 of Official Records.

Also except therefrom that portion of said land conveyed to San Diego Gas & Electric Company, a corporation, as set forth and described as Parcel 1 in that certain Document recorded May 6, 1974 as Instrument No. 74-115707 of Official Records.

Assessor's Parcel Number: 291-330-17

CLTA Preliminary Report Form - Modified (11-17-06)
Page 4

Vista Towers
Wireless Site Solutions

PROJECT INFORMATION:

BANNER GRADE
36342 HWY 78
JULIAN AREA, CALIFORNIA

CURRENT ISSUE DATE:
09/05/13

ISSUED FOR:
ZONING

REV.	DATE	DESCRIPTION	BY
3	09/05/13	ADDITIONAL REDLINES	TCN
2	06/07/13	REDLINE FROM CO.	TCN
1	05/08/13	REC PR+ LEASE+	TCN
0	04/24/13	90% ISSUE	TCN

PLANS PREPARED BY:

Phil Auer Surveying
14407 Corte Lejos, Bakersfield, CA 93314
Phone: (661) 567-6129
Mobile: (510) 714-7284
E-mail: ls5075@earthlink.net

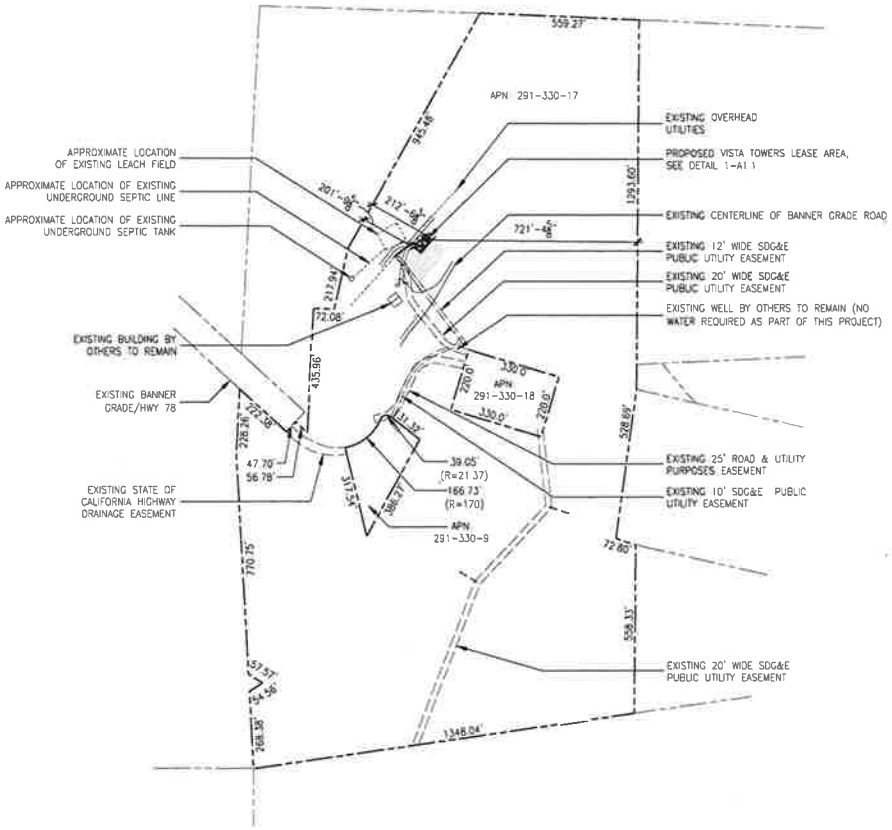
CONSULTANT:

DRAWN BY:	CHK.:	APV.:
TCN	OPA	OPA

LICENSER:

SHEET TITLE:
SURVEY

SHEET NUMBER:
LS2



1 OVERALL PARCEL PLAN
A1.0 SCALE 1" = 200.0'

MST ARCHITECTS

Vista Towers Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

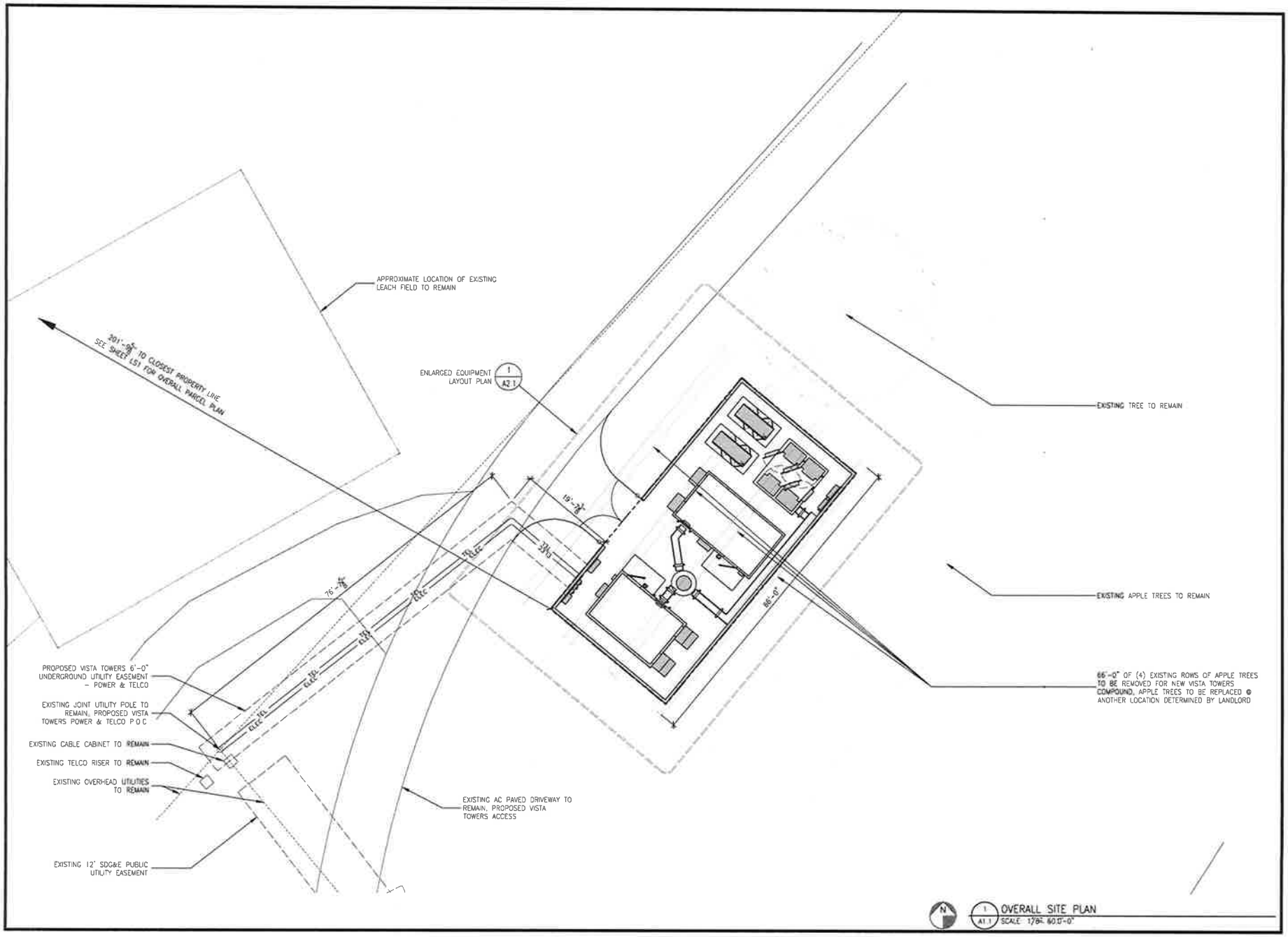
SHEET TITLE
OVERALL PARCEL PLAN

Revisions:
1 --
2 --
3 --
4 --
5 --

Drawn By: TST
Checked By: MSI
Scale: AS NOTED
Date: 12/06/13

Job No: 186.46

A1.0



MST ARCHITECTS

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE:
OVERALL SITE PLAN

Revisions:
△ --
△ --
△ --
△ --
△ --

File: 188.46_A11.dwg
Drawn By: TST
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A1.1

VERIZON WIRELESS EQUIPMENT LIST

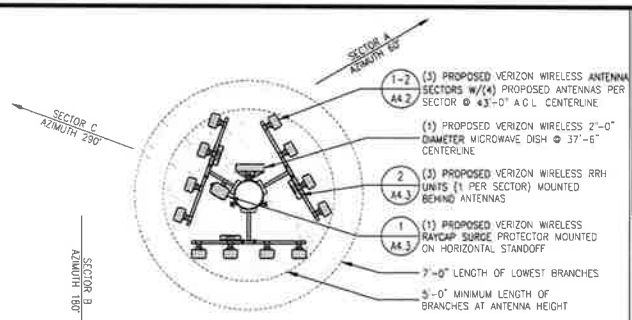
SECTOR A:
(4) ANDREW SBNH-1D6565B ANTENNAS
(1) RRU-11 UNIT

SECTOR B:
(4) ANDREW SBNH-1D6565B ANTENNAS
(1) RRU-11 UNIT

SECTOR C:
(4) ANDREW SBNH-1D6565B ANTENNAS
(1) RRU-11 UNIT
(1) RAYCAP SURGE PROTECTOR

MISC.
(1) 2'-0" DIAMETER MICROWAVE DISH (MODEL TBD)

SUMMARY: VERIZON WIRELESS TO INSTALL (12) ANTENNAS (4 PER SECTOR), (3) RRU UNITS (1 PER SECTOR) & (1) SURGE PROTECTOR



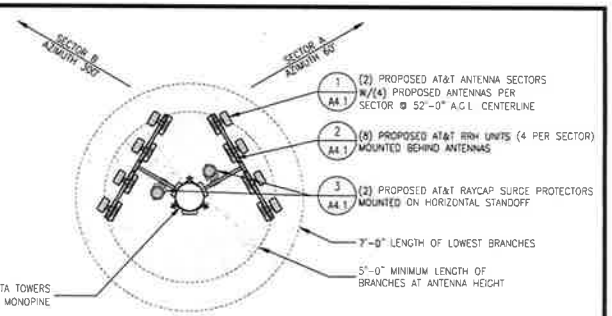
3 A2.1 VERIZON WIRELESS ANTENNA PLAN
SCALE 1/4" = 1'-0"

AT&T EQUIPMENT LIST:

SECTOR A:
(4) ERICSSON KRC 118 054/1 ANTENNAS
(4) RRU-11 UNITS
(1) DC6-48-60-18-8F SURGE PROTECTOR

SECTOR B:
(4) ERICSSON KRC 118 054/1
(4) RRU-11 UNITS
(1) DC6-48-60-18-8F SURGE PROTECTOR

SUMMARY: AT&T TO INSTALL (8) PROPOSED ANTENNAS (4 PER SECTOR), (8) RRU UNITS (4 PER SECTOR) & (2) SURGE PROTECTORS (1 PER SECTOR)

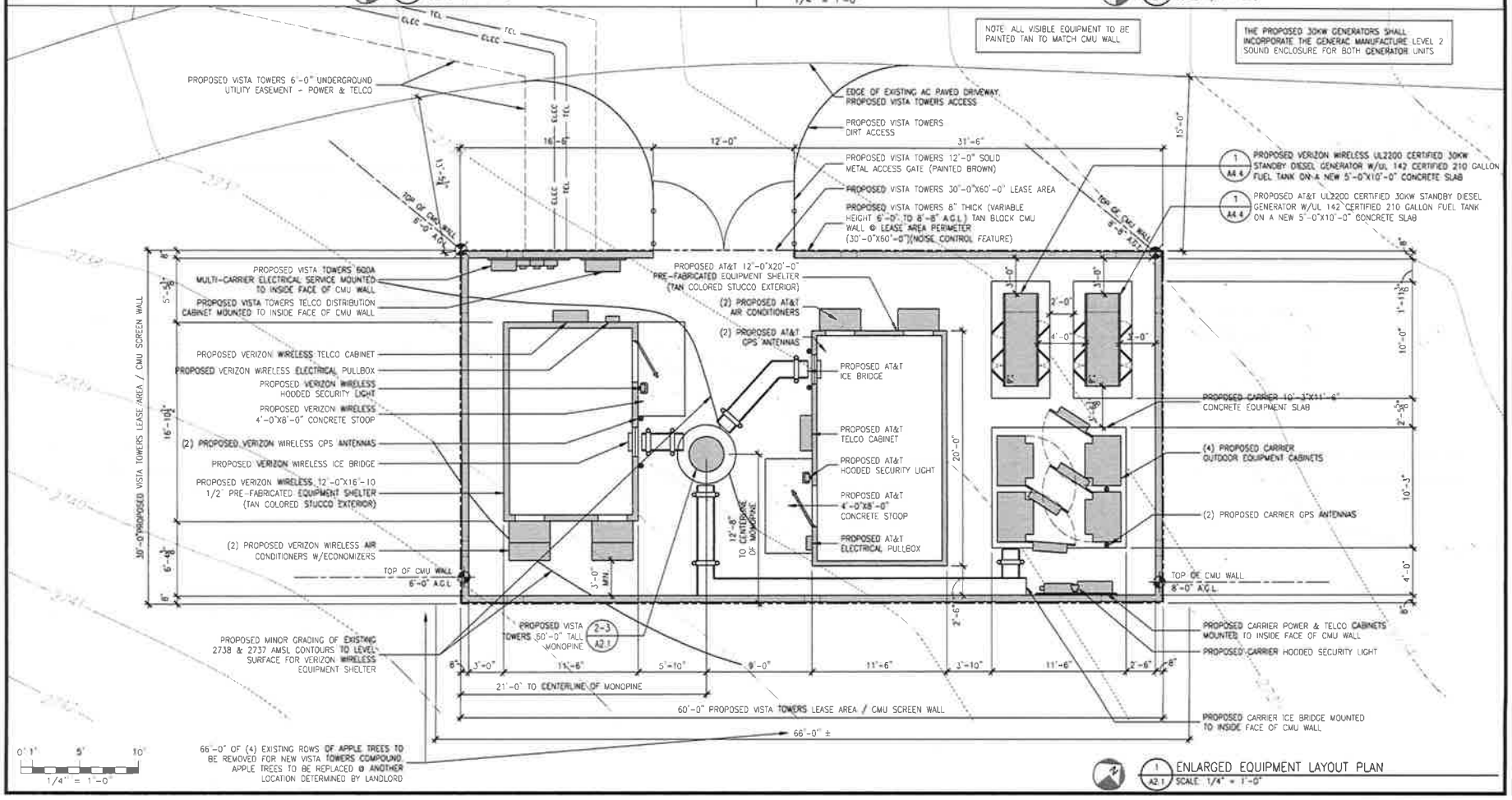


2 A2.1 AT&T ANTENNA PLAN
SCALE 1/4" = 1'-0"

0' 1' 5' 10'
1/4" = 1'-0"

NOTE: ALL VISIBLE EQUIPMENT TO BE PAINTED TAN TO MATCH CMU WALL

THE PROPOSED 30KW GENERATORS SHALL INCORPORATE THE GENERAC MANUFACTURE LEVEL 2 SOUND ENCLOSURE FOR BOTH GENERATOR UNITS



0' 1' 5' 10'
1/4" = 1'-0"

1 A2.1 ENLARGED EQUIPMENT LAYOUT PLAN
SCALE 1/4" = 1'-0"

MST ARCHITECTS

Vista Towers Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE
ENLARGED EQUIPMENT LAYOUT PLANS

Revisions:
1 --
2 --
3 --
4 --
5 --

File: 188.46_A11.dwg
Drawn By: rp
Checked By: wsf
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A2.1

BMP LEGEND

MATERIALS & WASTE MANAGEMENT CONTROL BMP'S

WM-1	MATERIAL DELIVERY & STORAGE
WM-8	CONCRETE WASTE MANAGEMENT
WM-5	SOLID WASTE MANAGEMENT
WM-9	SANITARY WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT

TEMPORARY RUNOFF CONTROL BMP'S

SS-1	SILT FENCE
SS-4	HYDRAULIC STABILIZATION (HYDROSEEDING) —TSP— —TSP—
SC-5	FIBER ROLLS
TC-1	STABILIZED CONSTRUCTION ENTRANCE

PERMANENT BMP'S

SD-34	PROPER DESIGN OF OUTDOOR MATERIAL STORAGE AREA

LOW IMPACT DEVELOPEMENT BMP'S

LID 2.2.2	MINIMIZE DISTURBANCE TO NATURAL DRAINAGES
LID 2.2.3	MINIMIZE & DISCONNECT IMPERVIOUS SURFACES
LID 2.2.4	MINIMIZE SOIL COMPACTION
LID 2.2.5	DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
LID 3.1	HYDRAULIC DESIGN

STORM WATER QUALITY NOTES - CONSTRUCTION BMP'S

THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE PERMIT, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION, ORDER NO. 2001.01 NPDES NO. CAS010875 AND THE CITY OF SAN DIEGO LAND DEVELOPMENT CODE

MINIMUM REQUIREMENTS

1. SUFFICIENT BMP'S MUST BE INSTALLED TO PREVENT SILT, MUD OR OTHER CONSTRUCTION DEBRIS FROM BEING TRACKED INTO THE ADJACENT STREETS OR STORM WATER CONVEYANCE SYSTEMS DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONTSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SUCH DEBRIS THAT MAY BE IN THE STREET AT THE END OF EACH WORK DAY OR AFTER A STORM EVENT THAT CAUSES A BREECH IN THE INSTALLED CONSTRUCTION BMP'S.

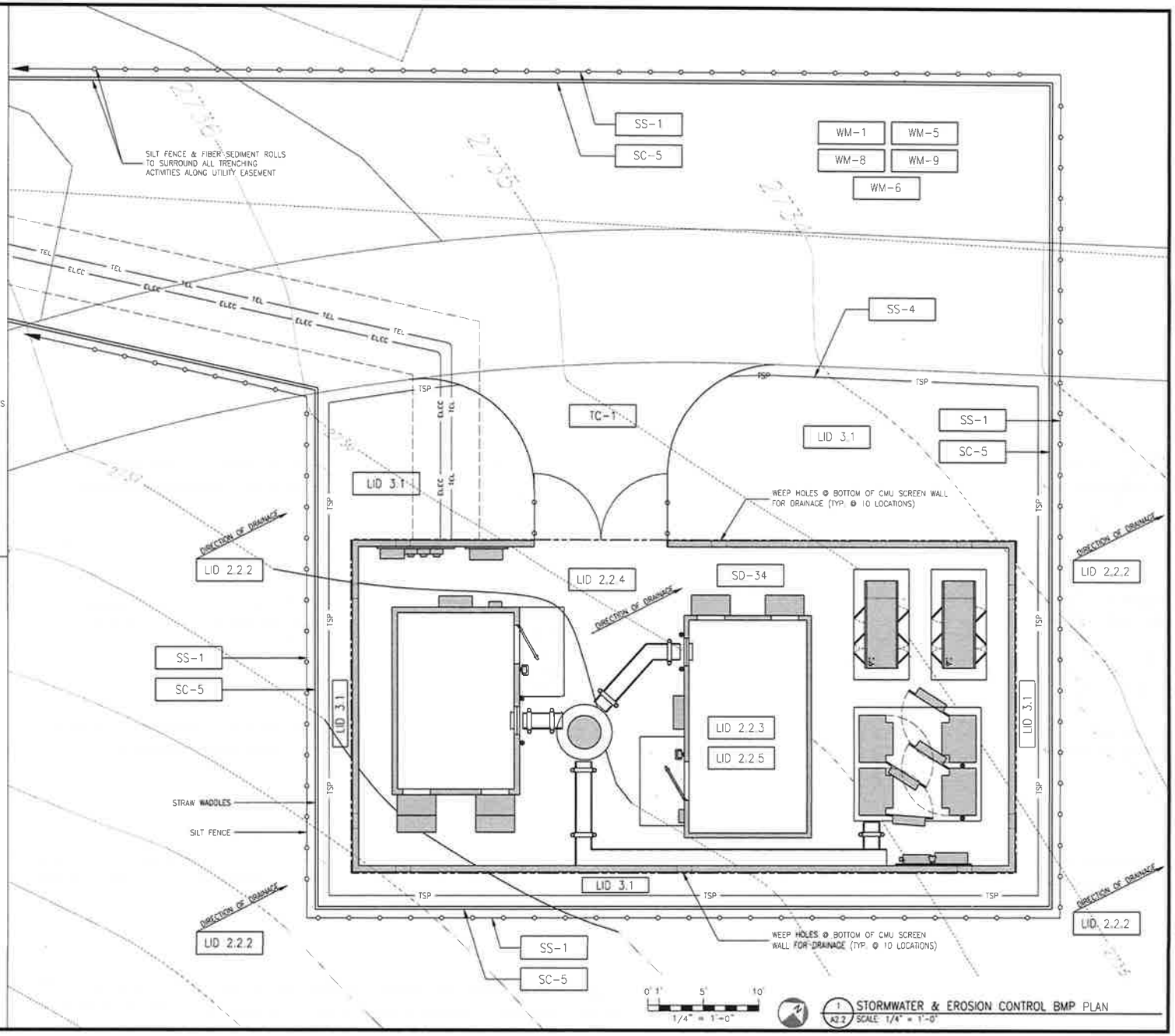
2. ALL STOCK PILES OF UNCOMPACTED SOIL & OR BUILDING MATERIALS THAT ARE INTENDED TO BE LEFT UNPROTECTED FOR A PERIOD GREATER THAN (7) CALENDAR DAYS ARE TO BE PROVIDED WITH EROSION & SEDIMENT CONTROLS. SUCH SOIL MUST BE PROTECTED EACH DAY WHEN THE PROBABILITY OF RAIN IS 40% OR GREATER.

3. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSED THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS THAT ARE TO BE POURED IN PLACE ON THE SITE.

4. ALL EROSION/SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES.

5. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.

6. THE STORAGE OF ALL CONSTRUCTION MATERIALS & EQUIPMENT MUST BE PROTECTED AGAINST ANY POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.



1 A2.2 STORMWATER & EROSION CONTROL BMP PLAN
SCALE: 1/4" = 1'-0"

MST ARCHITECTS

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

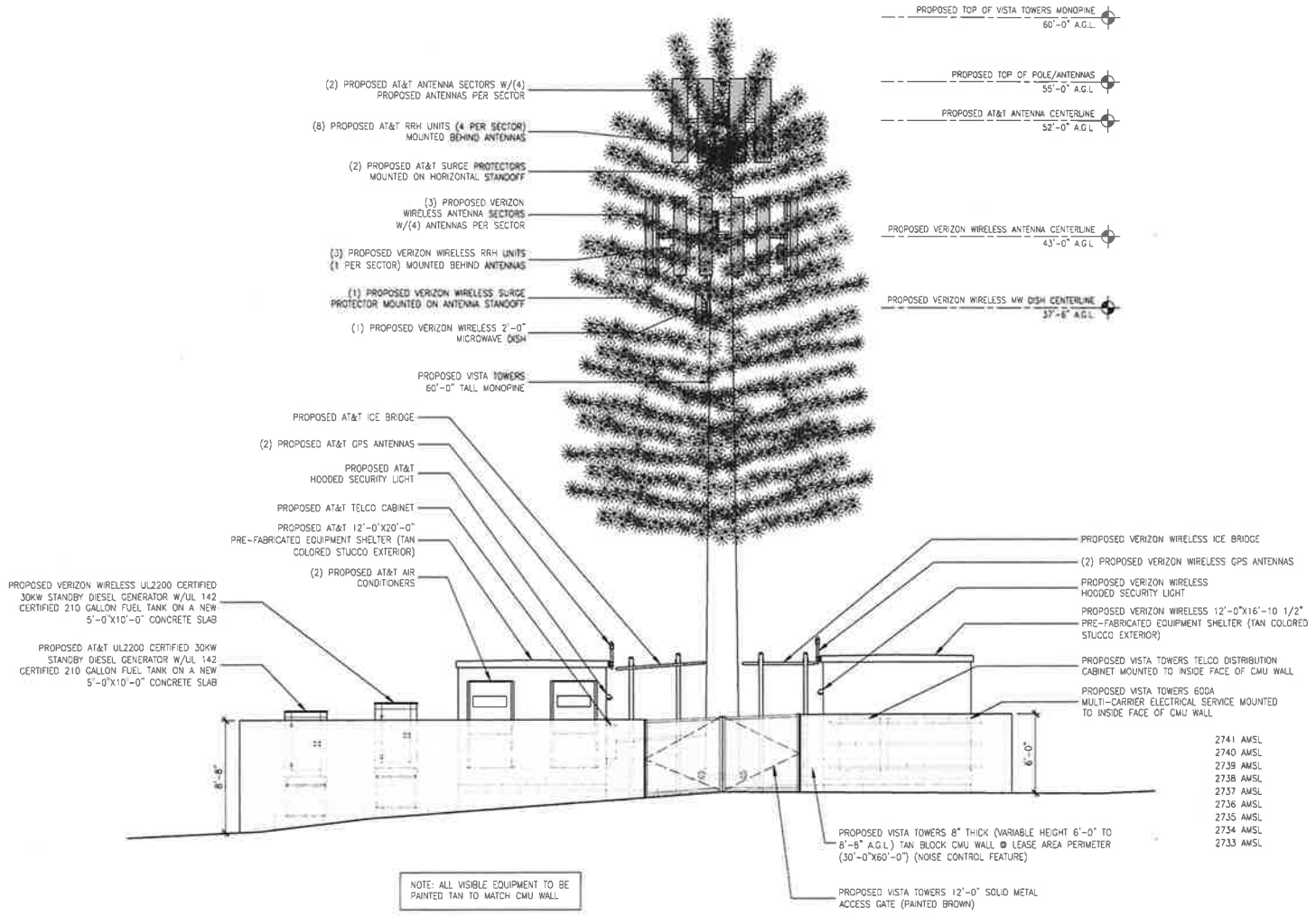
SHEET TITLE
STORMWATER & EROSION CONTROL BMP PLAN

Revisions:

File: 188.46_A11.dwg
Drawn By: TST
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A2.2



1 A3.1 WEST ELEVATION
SCALE 1/4" = 1'-0"

MST ARCHITECTS

Vista Towers Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

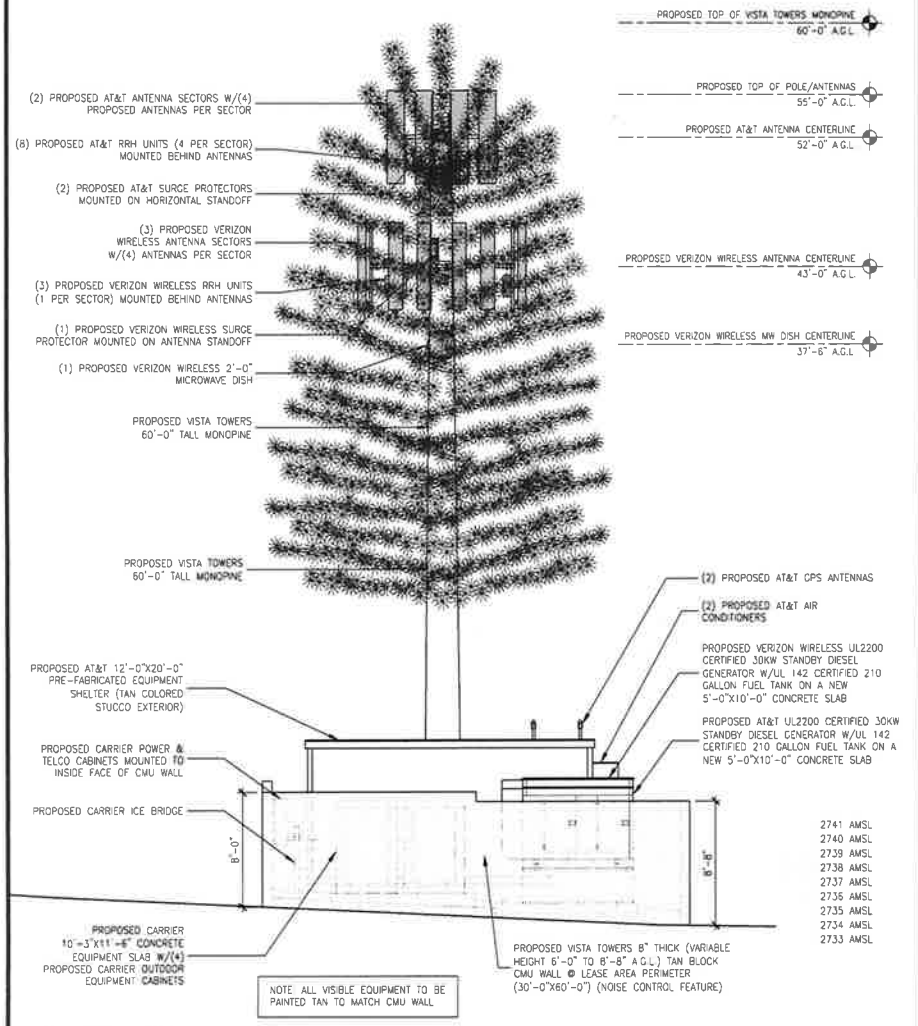
SHEET TITLE: PROJECT ELEVATIONS SHEET 1

Revisions:
1 --
2 --
3 --
4 --
5 --

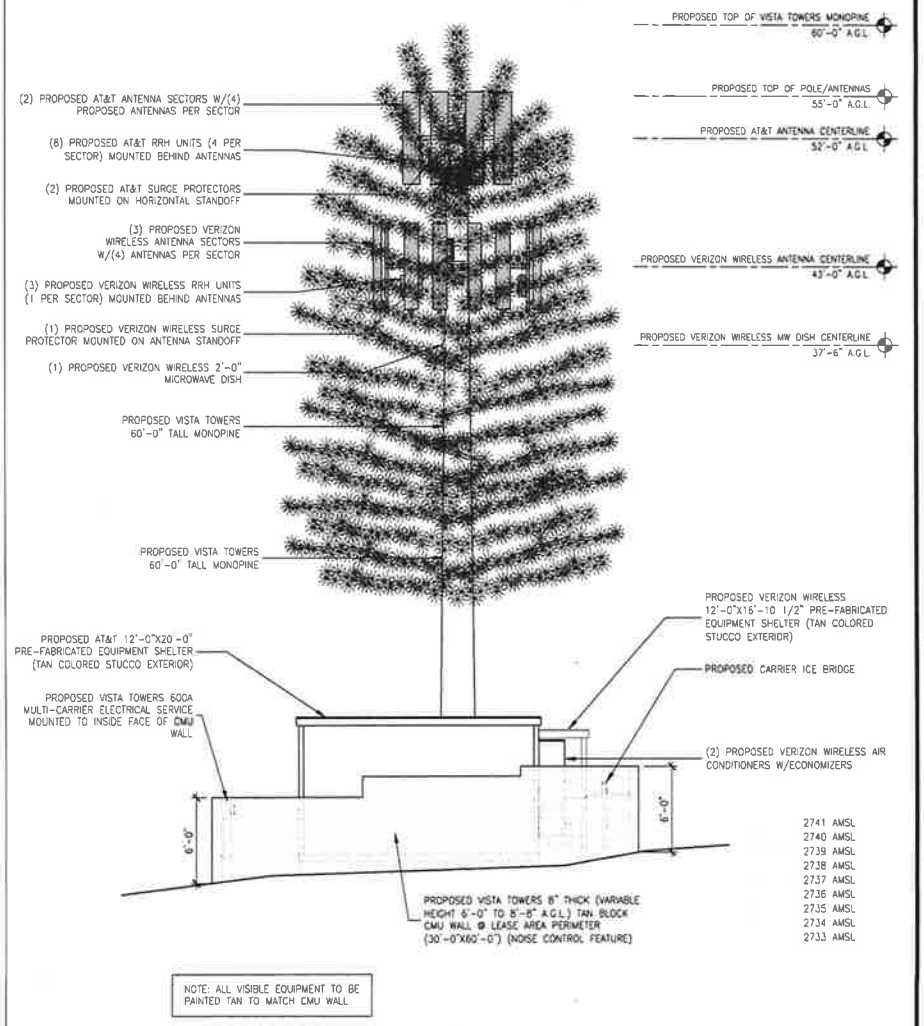
File: 188.46_A3.1.dwg
Drawn By: TST
Checked By: MST
Scale: AS NOTED
Date: 12/06/12

Job No. 188.46

A3.1



2 A3.2 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



1 A3.2 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

MST ARCHITECTS

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

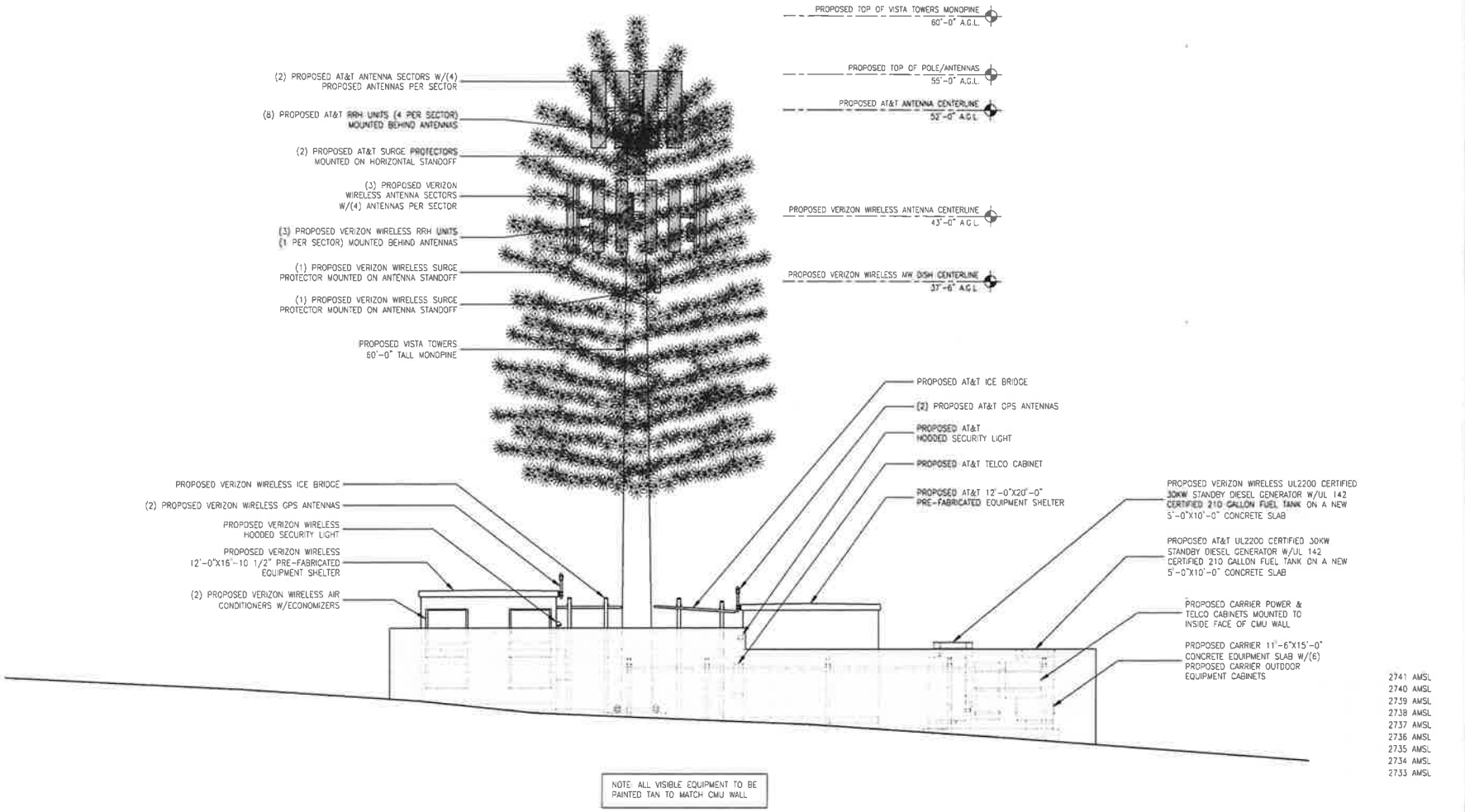
SHEET TITLE
PROJECT ELEVATIONS SHEET 2

Revisions:
1. --
2. --
3. --
4. --

File: 188.46_A32.dwg
Drawn By: TSP
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A3.2



1 / A3.3 EAST ELEVATION
SCALE 1/4" = 1'-0"

MST ARCHITECTS
801 Alhambra Blvd., Suite 3, Sacramento, CA 95816
916-455-5400 Fax 916-455-5401
www.mstarchitects.com

NOTE: DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF MST ARCHITECTS, INC. WHETHER THE PROJECT FOR WHICH THEY WERE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY OTHERS ON OTHER PROJECTS, OR EXTENSIONS OF THIS PROJECT, EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO MST ARCHITECTS, INC. ©2011 MST ARCHITECTS

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE: PROJECT ELEVATIONS SHEET 3

Revisions:
1 --
2 --
3 --
4 --
5 --

File: 188.46 _A33.dwg
Drawn By: TZI
Checked By: MST
Scale: AS NOTED
Date: 12/26/13

Job No. 188.46

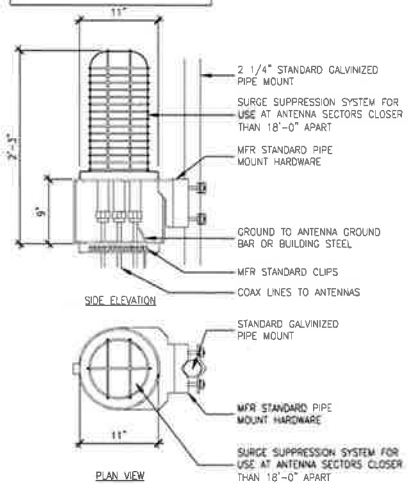
A3.3

RAYCAP DC6-48-60-18-8F SURGE SUPPRESSION

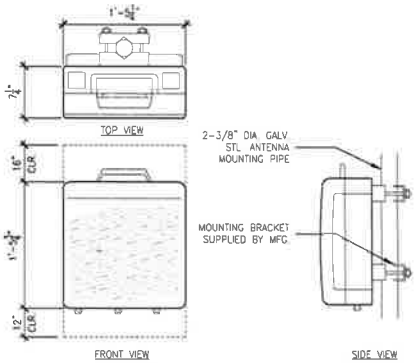
DIMENSIONS: 11"ø X 27" TALL WITH 9" BASE

WEIGHT: ±50 LBS (INCLUDING MOUNTING HARDWARE)

NOTE: SURGE PROTECTORS TO BE MOUNTED WITHIN 15' MAX. TO RRU'S



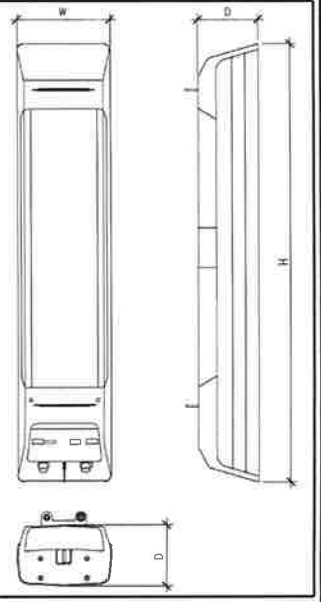
3 / A4.1 DC SURGE SUPPRESSION (RAYCAP DC6-48-60-18-8F)
SCALE: 1-1/2" = 1'-0"



PASSIVE CONVECTION FANLESS ENCLOSURE
UNIT WEIGHT: +/- 50 LBS

2 / A4.1 REMOTE RADIO UNIT RRUS-11
SCALE: 1-1/2" = 1'-0"

ANTENNA MODEL	AIR KRC118 055/1 (6')
ACTIVE ANTENNA/RADIO	PCS 2 TX / 4 RX
BYPASS ANTENNA	700/850 MHz +/- 45°
ANTENNA HBW	68° (700/850 MHz) 65° (PCS)
ANTENNA VBW	TBD
ANTENNA GAIN	13.3 dBd (700/850 MHz) 17.5 dBi (AWS)
ANTENNA TILTING RANGE	2-12° (700/850 MHz) 2-12° (PCS)
INTERFACE	• TWO OPTICAL FIBER PORTS (CPRI) FOR ACTIVE ANTENNA/RADIO • ONE POWER CONNECTOR, -48 V DC • TWO 7/16 FEMALE CONNECTORS FOR PASSIVE ANTENNA, WITH RET SUPPORT (AISG 2.0)
NUMBER OF UMTS CARRIER	UP TO 4
LTE	UP TO 20 MHZ 2X2 MIMO
SUPPORTED BASEBAND	DUW, DUL1, DUS2
DIMENSION	78"H x 14.8"W x 8.6"D
WEIGHT	110 LBS
HW AVAILABILITY	3Q '13
SW DEPENDENSY	L13A L13B (MIXED MODE)



1 / A4.1 ANTENNA DETAIL
SCALE: 1/4" = 1'-0"

MST ARCHITECTS

NOT SUBMITTED FOR CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS, NOTES, DETAILS, SPECIFICATIONS, AND REPORT ALL ERRORS, OMISSIONS, OR DISCREPANCIES TO THE ARCHITECT. THE ARCHITECT DISCLAIMS ALL RESPONSIBILITY FOR WORK PERFORMED WITHOUT ADEQUATE DIMENSIONS, OR WHICH MAY BE IN VIOLATION OF ANY GOVERNMENTAL LAW, RULE, OR REGULATION.

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE: AT&T EQUIPMENT SPECIFICATIONS

Revisions:
1 --
2 --
3 --
4 --
5 --

File: 188.46_A10.dwg
Drawn By: RSF
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

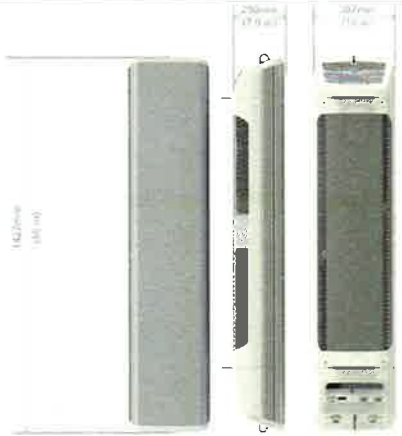
Job No. 188.46

A4.1

AIR 21 - Key Data

- Radio:
  - Frequency bands: 1900 MHz (B2) and 1700/2100 MHz (B4)
  - One active antenna/radio, supporting e.g. 2x2 MIMO, 2 Tx + 4 Rx
  - 8 Carriers (4 carriers per radio)
  - IBW = 20 MHz per radio
- Antenna
  - One best in class 65° passive antenna: 17.2 to 17.8 dBi gain
  - Two integrated RETs, one per frequency band, -2° - 12° tilt
  - Vertical beam width: 6.5° - 7.1°
  - Dual column for UL beam-forming / 4-way RX Diversity
- Interfaces
  - Two optical fiber ports (CPRI) for active antenna/radio
  - One power connector, -48 V DC
  - Two 7/16 female connectors for passive antenna, with RET support
  - Two N female connectors for LMU (RX sharing ports) on 1900 MHz variant
- Physical Characteristics and Environment:
  - H x W x D = 1422 x 307 x 200 mm (56" x 12" x 7.9")
  - 41.5 kg (91 lbs). Two mounting brackets - add'l 2.1 kg (5 lbs)
  - <750 N Wind load (worst direction, static @ 150 km/h)
  - Operating temperature range: -40°C to +55°C (-40°F to +131°F)
  - Heat dissipation 300 W

AIR 21 - Dimensions



2 ANTENNA DETAIL 2
A4.2 SCALE: 1/4" = 1'-0"

Product Specifications

COMMSCOPE

SBNH-1D6565B

Andrew® Dual Band Antenna, 698-896 MHz and 1710-2180 MHz, 65° horizontal beamwidth, RET compatible

- Innovative alpha technology providing for attractive, low wind load mechanical package
- Improved peak performance minimizes field installation and delivers new standards for reliability

Electrical Specifications

Frequency Band, MHz	698-806	806-896	1710-1880	1850-1990	1920-2180
Gain, dBi	15.5	15.2	16.4	16.7	17.0
Beamwidth, Horizontal, degrees	70	67	69	65	65
Beamwidth, Vertical, degrees	14.4	13.9	7.1	6.5	6.8
Beam Tilt, degrees	0-12	0-12	0-6	0-6	0-6
VSWR, Internal, dB	15	15	15	15	15
Front to Back Ratio at 180°, dB	25	25	26	25	25
Front to Back Total Power at 180° ± 30°, dB	20	20	20	20	20
CPR at Boresight, dB	20	20	25	25	25
CPR at Sector, dB	10	9	10	10	9
Isolation, dB	30	30	30	30	30
Isolation, Intersystem, dB	30	30	30	30	30
PIM3 (Transmitters), dBc	-153	-153	-153	-153	-153
PIM3 (Receivers), dBc	-153	-153	-153	-153	-153
Input Impedance, ohms	50Ω	50Ω	50Ω	50Ω	50Ω
Polarization	±45°	±45°	±45°	±45°	±45°
Connectors	N-form	12 mm	N-form	N-form	N-form

Mechanical Specifications

Type	Sector panel
Connector Interface	7/16 DIN Female
Connector Location	Bottom
Connector Quantity	4
Lightning Protection	DC grounded
Radome Material	Fiberglass, UV resistant
Radome Color	Gray
Overall Dimensions	1422.0 x 307.0 x 200.0 mm (56.0 x 12.0 x 7.9 in)
Weight, Approx.	41.5 kg (91.0 lb)
Temp. Range, Operating	-40 to +55°C (-40 to +131°F)

Dimensions

Depth	200.0 mm (7.9 in)
Length	1422.0 mm (56.0 in)
Width	307.0 mm (12.0 in)
Tilt Weight	2.1 kg (5 lb)

Remote Electrical Tilt (RET) Information

Adjustment Time, full range, maximum	20 s
Annual Failure Rate, maximum	0.5%
Power Consumption, during motor movement, maximum	13 W

Product Specifications

COMMSCOPE

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

Included Products

DB380 — Pipe Mounting Kit for 2.4"-4.5" (60-115mm) OD round members on wide panel antennas. Includes 2 heavy duty, galvanized steel downtilt mounting brackets assembly and associated hardware. This kit is compatible with the DB390 pipe mount kit for panel antennas that are equipped with two mounting brackets.

DB3083 — Downtilt Mounting Kit for 2.4"-4.5" (60-115 mm) OD round members. Includes a heavy duty, galvanized steel downtilt mounting bracket assembly and associated hardware. This kit is compatible with the DB390 pipe mount kit for panel antennas that are equipped with two mounting brackets.

Product Specifications

COMMSCOPE

DB380

Pipe Mounting Kit for 2.4"-4.5" (60-115mm) OD round members on wide panel antennas. Includes 2 clamp sets and double nuts.

General Specifications

Mount Type	Pipe mount
Antenna Brand	Andrew®
Application	Radome
Includes	Brackets, Hardware
Package Quantity	1

Mechanical Specifications

Color	Silver
Material Type	Galvanized steel

Dimensions

Compatible Diameter, maximum	114.3 mm (4.5 in)
Compatible Diameter, minimum	61.0 mm (2.4 in)
Net Weight	2.8 kg (6.2 lb)

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

Product Specifications

COMMSCOPE

DB3083

Downtilt Mounting Kit for 2.4"-4.5" (60-115 mm) OD round members. Includes a heavy duty, galvanized steel downtilt mounting bracket assembly and associated hardware. This kit is compatible with the DB390 pipe mount kit for panel antennas that are equipped with two mounting brackets.

General Specifications

Mount Type	Downtilt mount
Antenna Brand	Andrew®
Application	Outdoor
Includes	Brackets, Hardware
Package Quantity	1

Mechanical Specifications

Color	Silver
Material Type	Galvanized steel

Dimensions

Compatible Diameter, maximum	114.3 mm (4.5 in)
Compatible Diameter, minimum	61.0 mm (2.4 in)
Net Weight	2.4 kg (5.3 lb)

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
China RoHS SJ/T 11364-2006	Above Maximum Concentration Value (MCV)
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

1 ANTENNA DETAIL 1
A4.2 SCALE: 1/4" = 1'-0"

MST ARCHITECTS
[illegible]

[illegible]

Vista Towers
Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

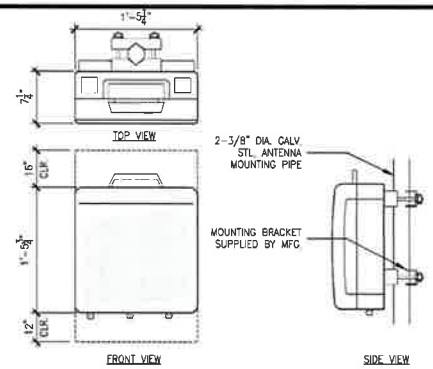
SHEET TITLE: VERIZON WIRELESS EQUIPMENT DETAILS

Revisions:
1 --
2 --
3 --
4 --
5 --

File: 188.46 _A42.dwg
Drawn By: [illegible]
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A4.2



PASSIVE CONVECTION FANLESS ENCLOSURE
UNIT WEIGHT: +/- 50 LBS

2 / A4.3 REMOTE RADIO UNIT RRUS-11
SCALE: 1-1/2" = 1'-0"

DATA SHEET

DC Surge Protection for RRH/Integrated Antenna Radio Head
RxxDC-1064-PF-48
Sector Model

Raycap's flexible sector protection and distribution products provide protection for up to 2 Remote Radio Heads/Integrated Antennas. The solutions mitigate the risk of damage due to lightning and provide high levels of availability and reliability to radio equipment.

Features
- Employs the Strikesorb® 30-V1-HV Surge Protective Device (SPD) specifically designed for the Remote Radio Head (RRH) installation environment and certified for use in DC applications and at low DC operating voltages (48V).
- The Strikesorb 30-V1-HV is a Class I SPD, certified by VDE per the IEC 61643-1 standard as suitable for installation in areas where direct lightning exposure is expected. Strikesorb 30-V1-HV is able to withstand direct lightning currents of up to 5kA (10/350) and induced surge currents of up to 60kA (8/20).
- Provides very low let through / clamping voltage - unique for a Class I product - as it does not employ spark gaps or other switching elements. Strikesorb offers unique protection levels to the RRH equipment as well as the Base Band Units.
- Alarms for SPD sacrifice, Moisture detection and intrusion.
- Fully recognized to the UL 1449 3rd Edition Safety Standard.
- Patent pending design

Benefits
- Offers unique maintenance-free protection against direct lightning currents
- Protects up to 2 Remote Radio Heads and connects up to 8 fiber pairs
- Utilizes an IP 67 rated enclosure, allowing for indoor or outdoor installation on a roof or tower top
- Configurable cable ports are designed to accommodate varying diameters of hybrid (combined power and fiber optic) or standard cables with diameters up to 1.7" (will fit most standard 1½" coax class cables) depending upon port configuration
- Lightweight aerodynamic design provides maximum flexibility for tower top installation
- Companion to the RxxDC-4750-PF-48 / RxxDC-3315-PF-48 (Tower/Base/Rooftop/Rooftop Distribution) models

Sector Model
RxxDC-1064-PF-48

Companion Base Models:
RxxDC-4750-PF-48
RxxDC-3315-PF-48

DC1-A4-60-180

© 2013 Raycap. All rights reserved.

G02-00-235 130109

Raycap

www.raycapsurgeprotection.com

SPECIFICATIONS

DC Surge Protection for RRH/Integrated Antenna Radio Head
RxxDC-1064-PF-48
Sector Model

Electrical

Model Numbers	RxxDC-1064-PF-48
Nominal Operating Voltage	-48 VDC
Nominal Discharge Current (I_n)	20 kA 8/20 µs
Maximum Surge Current (I_{max})	60kA 8/20 µs
Maximum Impulse (Lightning) Current per IEC 61643-1	5 kA 10/350 µs
Maximum Continuous Operating Voltage (U_c)	75 VDC
Voltage Protection Rating (VPR) per UL 1449 3rd Edition	400V
Protection Class as per IEC 61643-1	Class I
SPD Alarm	alarm certified
Intrusion Sensor	integrated
Moisture Sensor	infrared moisture detector
Strikesorb Module Type	30-V1-HV **Strikesorb modules installed to protect 2 Remote Radio Heads**

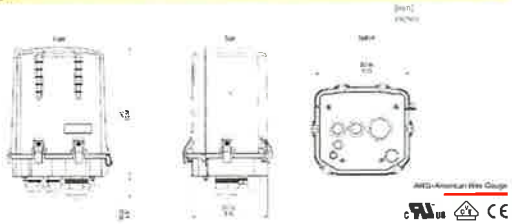
Mechanical

Suppression Connection Method	Compression lug, #30 - #6 AWG (0.5 mm² - 16 mm²)
Fiber Connection Method	LC/LC Single Mode
Pressure Equalizing Vent	Gore™ vent
Environmental Rating	IP 67
Operating Temperature	-40° C to +70° C
UV Resistant	Yes
Weight	System 14 lbs (6.35 kg)
Compress Wind Loading	150mph (sustained) 95 lbs (432.5 N)

Strikesorb modules are compliant to the following Surge Protection Device (SPD) Standards:

Standards	ANSI/UL 1449 3rd Edition
	IEEE C62.41
	NEMA LS 1, IEC 61643-1:2005 2nd Edition (Class I Protection)
	IEC 61643-12
	EN 61643-11:2002 (including A11:2007)

Product Diagram



Raycap

www.raycapsurgeprotection.com

G02-00-235 130109

1 / A4.3 SURGE PROTECTOR DETAIL
SCALE: 1/4" = 1'-0"

MST ARCHITECTS

Vista Towers Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE: VERIZON WIRELESS EQUIPMENT DETAILS

Revisions:
1 --
2 --
3 --
4 --
5 --

File: 188.46_A4.3.dwg
Drawn By: TB
Checked By: MST
Scale: AS NOTED
Date: 12/06/13

Job No. 188.46

A4.3

SD030

GENERAC | INDUSTRIAL

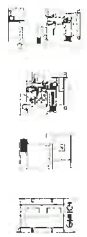
Industrial Diesel Generator Set

EPA Emissions Certification: Tier 4i

30 kW Diesel

Standby Power Rating
37.5kVA 30kW 60 Hz

Prime Power Rating*
30kVA 24KW 60 Hz



features	benefits
[illegible]	[illegible]

primary codes and standards

GENERAC INDUSTRIAL

SD030 — application and engineering data

ENGINE SPECIFICATIONS

ALTERNATOR SPECIFICATIONS

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

GENERAC INDUSTRIAL

SD030 — operating data (60Hz)

POWER RATINGS (kW)

STARTING CAPABILITIES (kVA)

FUEL

Fuel Consumption Rates*

COOLING

COMBUSTION AIR REQUIREMENTS

RADIAL

EXHAUST

GENERAC INDUSTRIAL

SD030 — standard features and options

GENERATOR SET

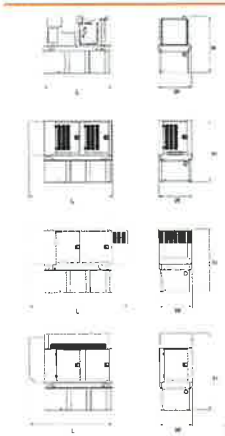
ENGINE SYSTEM

ALTERNATOR SYSTEM

CONTROL SYSTEM

GENERAC INDUSTRIAL

SD030 — dimensions, weights and sound levels



DIMENSIONS

STANDARD ENCLOSURE

LEVEL 1 ACOUSTIC ENCLOSURE

LEVEL 2 ACOUSTIC ENCLOSURE

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Generac Power Systems, Inc. • 545 W29290 HWY 59 Waukesha, WI 53189 • generac.com

---

GENERAC

STATEMENT OF EXHAUST EMISSIONS
2012 DIESEL FUELED GENERATOR

The measured emission values provided here are proprietary to Generac and its authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc. The data provided shall not be meant to include information made public by Generac.

Generator Model	SD030	Aspiration	Turbocharged
kW$_e$ Rating	30	Rated RPM	1800 RPM
Engine Family	CKMCL2.39A45	EPA Certificate #	CKMCL2.39A45-009
Engine Model	A2400T-Gen1	CARB Certificate #	U-R-046-0068
Rated Engine Power (BHP)*	49	SCAQMD CEP #:	Not Required
Fuel Consumption (gal/hr)*	2.74	Emission Std. Category	Tier 4 Interim

*Engine Power and Fuel Consumption are declared by the Engine Manufacturer of Record and the U.S. EPA

Emissions based on data submitted to EPA by the engine manufacturer

CO	NOx + NMHC	PM	
1.60	4.39	0.25	Grams/kW-hr
1.34	3.21	0.19	Grams/bhp-hr

•The stated values are actual exhaust emission test measurements obtained from an engine representative of the type described above
•Values based on 5-mode testing are official data of record as submitted to regulatory agencies for certification purposes. Testing was conducted in accordance with prevailing EPA & CARB protocols which are typically accepted by SCAQMD and other regional authorities
•No emission values provided above are to be construed as guarantees of emission levels for any given Generac generator unit.
•Generac Power Systems reserves the right to revise this information without prior notice
•Consult state and local regulatory agencies for specific permitting requirements
•The emission performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a site-by-site basis and must be consulted by the permit applicant/equipment owner prior to equipment purchase or installation. The data supplied herein by Generac Power Systems cannot be construed as a guarantee of insurability of the generating set.

INDUSTRIAL SALES
P.O. BOX 8 WAUKESHA, WI 53187 262-544-4800 FAX 262-544-4854

DATA SUBJECT TO CHANGE WITHOUT NOTICE

1 / A4.4 STANDBY GENERATOR DATASHEETS
SCALE: NONE

MST ARCHITECTS

Vista Towers • Wireless Site Solutions

BANNER GRADE
36342 HIGHWAY 78
JULIAN, CA 92036

SHEET TITLE: STANDBY GENERATOR DATASHEETS

Revisions:

File: 188.48 _A4.4.dwg
Drawn By: [illegible]
Checked By: [illegible]
Scale: AS NOTED
Date: 12/06/13

Job No. 188.48

A4.4