SB13
CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033
KING COUNTY

RFDS REV: 6.0
RFDS DATE: 12/19/14

PROJECT SUMMARY

PROPERTY OWNER: CARILLON PROPERTIES
ADDRESS: 3240 CARILLON POINT
KIRKLAND, WA 98033

NAD83
LATITUDE: 47° 39' 22.5" N
LONGITUDE: 122° 12' 25.3" W
TOP OF STRUCTURE: ±67'-7" AGL
BASE OF STRUCTURE: ±21.3' AMSL

CODE INFORMATION:
ZONING CLASSIFICATION: COMMERCIAL (PLA 15A)
BUILDING CODE: IBC 2012
CONSTRUCTION TYPE: IIB
OCCUPANCY: S-2
JURISDICTION: CITY OF KIRKLAND
PROPOSED BUILDING USE: TELECOMMUNICATIONS

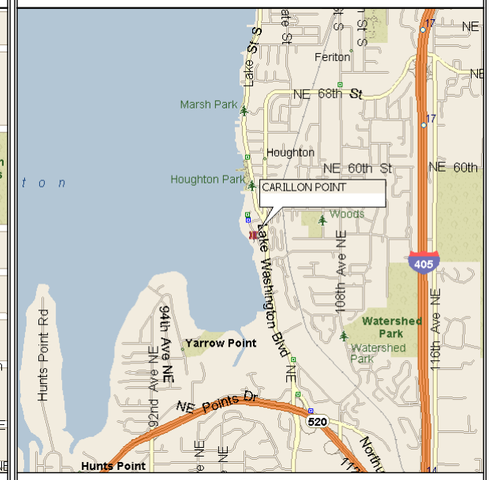
PARCEL INFORMATION:
PARCEL NUMBER: 1725059058
AREA OF PARCEL: ±494,841.60 SQ. FT. (±11.36 ACRES)
PROJECT AREA: ±152 SQ. FT. (EQUIPMENT SHELTER)
NEW IMPERVIOUS AREA: 0 SQ. FT.

A.D.A. COMPLIANCE: FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION
PARKING REQUIREMENTS ARE UNCHANGED. (NON ASSIGNED TECH PARKING)
TRAFFIC IS UNAFFECTED.

AREA MAP

NO SCALE

LOCATION MAP



NO SCALE

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A/E DOCUMENT REVIEW STATUS

CONSULTANT GROUP SIGN OFF	SIGNATURE	DATE
CONSTRUCTION COORDINATOR:		
LANDLORD'S REPRESENTATIVE:		
PROJECT MANAGER		
SITE ACQUISITION:		
AT&T SIGN OFF	SIGNATURE	DATE
RF ENGINEER:		
INTERCONNECT:		
OPERATIONS:		
COMPLIANCE:		
CONSTRUCTION MGR:		
PROJECT MANAGER:		

1	ACCEPTED: WITH OR NO COMMENTS, CONSTRUCTION MAY PROCEED
2	NOT ACCEPTED: RESOLVE COMMENTS AND RESUBMIT

ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.

PROJECT TEAM

A&E FIRM: B+T GROUP
2737 78TH AVENUE SE, SUITE 202
MERCER ISLAND, WA 98040
LISA TAYLOR: (501) 317-6851

CUSTOMER/ APPLICANT: AT&T MOBILITY CORPORATION
16221 NE 72ND WAY, RTC 3
P.O. BOX 97061
REDMOND, WA 98052

BUILDING OWNER: CARILLON PROPERTIES
3240 CARILLON POINT
KIRKLAND, WA 98033
(425) 822-1700

CONSULTANT FIRM: MASTEC NETWORK SOLUTIONS
1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

SITE ACQ.: RACHEL TITUS
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PERMITTING: JESSE LONDON
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CONSTRUCTION MANAGER: TRASK SIMONET
(425) 999-7306
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RF ENGINEER: KEN MOTT
(206) 829-0075
kmott@mastec.com

DRIVING DIRECTIONS

FROM SEA-TAC AIRPORT MERGE ONTO I-405 (NORTH). TAKE EXIT 14 TO MERGE ONTO WA-520 W TOWARD SEATTLE. TAKE THE 108TH AVE NE EXIT. TURN RIGHT AT 108TH AVE NE. TAKE THE 1ST LEFT ONTO NORTHUP WAY. TAKE THE 1ST RIGHT ONTO LAKE WASHINGTON BLVD NE. TURN LEFT AT ACCESS DRIVEWAY. TAKE THE 1ST LEFT ONTO CARILLON POINT. ARRIVE TO SITE, SITE IS ON RIGHT HAND SIDE.

LEGAL DESCRIPTION

POR GL 1 & 2 & BLKS F & G OF THE 2ND SUPL PLAT OF LK WN SH LDS TGW 2ND CL SHLDS ADJ ALL LY WLY OF W MGN LK WN BLVD-LESS POR N OF S LN OF N 1076.80 FT SD GL 1 & ITS WLY PROD - LESS POR THOF S OF LN BEG AT NXN 1902.66 FT S & PLW N LN GL 1 & W MGN LK WN BLVD TH S 03-09-13 E ALG W MGN 75 FT TO TPOB OF DESC LN TH N 88-35-53 W TO INNER HARBOR LN & TERMINUS THIS LN - LESS POR CONV BY REC 8907281497 AKA LOT B KK ALT LL #LL-91-50 REC 9104302101

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES:
- REMOVE & REPLACE (4) EXISTING ANTENNAS AT 65'-0".
- REMOVE ALL COAX NOT IN USE.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17.
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SEE SHEET GN-1 & GN-2 FOR ADDITIONAL CONSTRUCTION NOTES

CALL WASHINGTON ONE CALL
(800) 424-5555
CALL 3 WORKING DAYS
BEFORE YOU DIG!

at&t Your World. Delivered.

MasTec Network Solutions
1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
CARILLON PT
2000 CARILLON POINT
KIRKLAND, WA 98033
EXISTING ROOFTOP

PROJECT NO: 90140.001
CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.

JOHN WELTON KELLY III
STATE OF WASHINGTON
45021
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
4/22/15

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: T-1
REVISION: 4

90140_Carillon PT_11462.dwg - Sheet:T-1 - User: mwessel - Apr 22, 2015 - 4:17pm

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY CLIENT OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF CLIENT CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY CLIENT CONSTRUCTION PROJECT MANAGER.

2. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.

3. FOR COLLOCATION SITES: CONTACT BUILDING OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.

4. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS 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 ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.

5. 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 SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.

6. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCE. CLIENT IS NOT RESPONSIBLE FOR ANY ERRORS RESULTING FROM THIS PRACTICE WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS.

7. OWNER, CONTRACTOR, AND CLIENT CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.

8. 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.

9. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.

10. THE CONTRACTOR SHALL PROVIDE CLIENT PROPER INSURANCE CERTIFICATES NAMING CLIENT AS ADDITIONAL INSURED, AND CLIENT PROOF OF LICENSE(S) AND PE & PD INSURANCE.

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

12. 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.

13. ALL WORK PERFORMED ON THE 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.

14. GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.

15. A COPY OF GOVERNING AGENCY APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW, SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. THE PLANS ARE NOT TO BE USED BY THE WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY CLIENT CONSTRUCTION PROJECT MANAGER, WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.

16. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.

17. THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT AND SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.

19. THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR, OR SUBCONTRACTOR AS SPECIFIED IN THE AGREEMENT BETWEEN SUBCONTRACTOR AND CONTRACTOR, SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.

20. THE REFERENCES ON THE DRAWINGS ARE FOR CONVENIENCE ONLY AND SHALL NOT LIMIT THE APPLICATION OF ANY DRAWING OR DETAIL.

21. ALL DIMENSIONS ON THE PLANS ARE TO FACE OF STUD (F.O.S.) UNLESS NOTED OTHERWISE (U.N.O.).

22. ALL EXISTING CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
    A. PROPERTY NOTED TO BE RETURNED TO THE OWNER.
    B. PROPERTY NOTED TO BE REMOVED BY THE OWNER.

23. THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE THE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.

24. WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.

25. PRIOR TO THE POURING OF ANY NEW SLAB OVER AN EXISTING SLAB THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, CHASES, AND EQUIPMENT WHICH ARE TO BE IMPLEMENTED INTO THE NEW WORK. ALL ITEMS DESIGNATED TO BE ABANDONED SHALL BE NOTED AND DISCUSSED WITH THE OWNER AND CLIENT CONSTRUCTION PROJECT MANAGER AS PART OF THE AS-BUILT DRAWING PACKAGE.

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

27. BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.

28. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.

29. THE PROJECT, WHEN COMPLETED, SHALL COMPLY WITH LOCAL SECURITY CODES AND TITLE-24 ENERGY CONSERVATION REQUIREMENTS. (TITLE-24 WHEN APPLICABLE)

30. ALL GLASS AND GLAZING IS TO COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION - SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS (42 FR 1428, CFR PART 1201) AND LOCAL SECURITY REQUIREMENTS.

31. 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 OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

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

33. NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL MATCH IN FORM, TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.

34. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR SLEEVES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO INSURE A PROPER AND COMPLETE JOB.

35. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A PROJECT LEVEL, STRAIGHT, AND TRUE ACCORDING TO THE PLANS. THE CONTRACTOR SHALL COMPARE THE LINES AND LEVELS OF THE EXISTING CONDITIONS WITH THOSE SHOWN ON THE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. CLIENT SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.

36. THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.

37. WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.

38. THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT DO SO ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.

39. GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.

40. TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE RECEIVED PROPERLY BY THE WORK OF OTHER TRADES.

41. ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT PREMISES AND SHALL BE LEFT IN A CLEAN (BROOM FINISH) CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.

42. CLIENT DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER. GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE SO THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT ONLY: UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.

43. CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. CALL 811.

44. CONTRACTOR TO REPLACE AND/OR REROUTE ANY EXISTING UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.

45. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO PLACEMENT OF TOWER FOOTING AND OTHER STRUCTURES TO BE PLACED IN GROUND. SEE GENERAL NOTE #6 ON THIS SHEET.

46. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.

47. CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO CLIENT ALONG WITH REDLINED CONSTRUCTION SET.

48. CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO CLIENT UPON COMPLETION.

49. GENERAL CONTRACTOR IS TO COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO CLIENT REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.

50. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY CLIENT CONSTRUCTION MANAGER.

51. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. (EXCEPTION) THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.

52. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.

53. THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT AND MAKE FINAL PAYMENT FOR SAID DOCUMENT.

54. THE ARCHITECT/ENGINEER IN CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND/OR SPECIFICATIONS.

55. CLIENT WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. CLIENT PROJECT APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.

56. ALL ANTENNAS MOUNTED ON ROOF SUPPORT FRAMES TO BE PROVIDED BY CLIENT COMMUNICATIONS.

57. CONTRACTOR TO PROVIDE TRENCH AS REQUIRED TO INSTALL BOTH ELECTRICAL AND TELEPHONE UNDERGROUND CONDUITS (#40 PVC) PER S.C.E. WORKORDER. BACKFILL WITH CLEAN SAND AND COMPACT TO THE SATISFACTION OF THE DISTRICTS INSPECTOR. REPLACE FINISH GRADE WITH MATCHING MATERIALS (GRASS, ASPHALT, CONCRETE, ETC.)

58. CONTRACTOR TO PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT EXISTING GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.

59. CONTRACTOR TO PATCH AND REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN EXISTING SURFACE DRAINAGE SLOPES.

60. CONTRACTOR TO REPLACE LANDSCAPE VEGETATION THAT WAS DAMAGED DUE TO CONSTRUCTION, AND TO MODIFY REMAINING IRRIGATION LINES TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.

61. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCUR, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.

62. IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS WITHIN CONCEALED (SHROUDED) SUPPORT FRAMES OR TRIPODS, THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHROUD IS SIMULATING (IN APPEARANCE) DESIGNATED EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK FASTENERS IN ALL FRP CONSTRUCTION, WHEN PHOTOSIMULATIONS ARE PROVIDED. THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTOSIMULATION. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.

63. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO A CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS WITHIN THE ROOF SLAB - RESULTING FROM AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" - HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.

64. GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TIES FOR ALL CABLE TRAY TIE DOWNS AND ALL OTHER GENERAL TIE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON CLIENT PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANDUIT CORP. METAL LOCKING TIES MODEL NO. MLT4S-CP UNDER SERIES-304 (OR EQUAL). PANDUIT PRODUCT DISTRIBUTED BY TRIARC.

65. ALL WORK TO BE DONE BETWEEN HOURS OF 8:00 AM AND 5:00 PM, EXCLUDING HOLIDAYS

SPECIAL NOTES:

1. PLANS PART OF THIS SET ARE COMPLEMENTARY. INFORMATION IS NOT LIMITED TO ONE PLAN. DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT, WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY THE OWNER ON OTHER PROJECTS OR EXTENSION TO THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. THESE PLANS WERE PREPARED TO BE SUBMITTED TO GOVERNMENTAL BUILDING AUTHORITIES FOR REVIEW FOR COMPLIANCE WITH APPLICABLE CODES AND IT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO BUILD ACCORDING TO APPLICABLE BUILDING CODES.

2. IF CONTRACTOR OR SUB-CONTRACTOR FIND IT NECESSARY TO DEVIATE FROM ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE ARCHITECT WITH 4 COPIES OF THE PROPOSED CHANGES FOR HIS APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING THE EXECUTION OF THE WORK.

3. IN EVERY EVENT, THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL BE INTERPRETED TO BE A MINIMUM ACCEPTABLE MEANS OF CONSTRUCTION BUT THIS SHALL NOT RELIEVE THE CONTRACTOR, SUB-CONTRACTOR, AND/OR SUPPLIER/MANUFACTURER FROM PROVIDING A COMPLETE AND CORRECT JOB WHEN ADDITIONAL ITEMS ARE REQUIRED TO THE MINIMUM SPECIFICATION. IF ANY ITEMS NEED TO EXCEED THESE MINIMUM SPECIFICATIONS TO PROVIDE A COMPLETE, ADEQUATE AND SAFE WORKING CONDITION, THEN IT SHALL BE THE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE DRAWINGS. FOR EXAMPLE, IF AN ITEM AND/OR PIECE OF EQUIPMENT REQUIRES A LARGER WIRE SIZE (I.E. ELECTRICAL WIRE), STRONGER OR LARGER PIPING, INCREASED QUANTITY (I.E. STRUCTURAL ELEMENTS), REDUCED SPACING, AND/OR INCREASED LENGTH (I.E. BOLT LENGTHS, BAR LENGTHS) THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE BID/PROPOSAL. THESE DOCUMENTS ARE MEANT AS A GUIDE AND ALL ITEMS REASONABLY INFERRED SHALL BE DEEMED TO BE INCLUDED.

4. THESE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.

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EXISTING ROOFTOP

PROJECT NO:	90140.001
CHECKED BY:	LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
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1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
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4	4/22/15	DGJ	CONSTRUCTION

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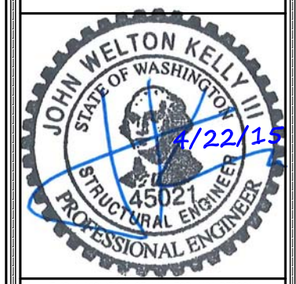

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SHEET NUMBER:	REVISION:
GN-1	4

90140_Carillon PT_11462.dwg – Sheet:GN-1 – User: rnwesel – Apr 22, 2015 – 4:17pm

DESIGN CRITERIA:

1. THE STRUCTURAL DESIGN OF THIS PROJECT IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2012 WITH WASHINGTON STATE BUILDING CODE AMENDMENTS (2012 IBC)
2. DESIGN LOADS:
   DESIGN DATA FOR KING COUNTY, WA:

-ROOF SNOW LOAD	N/A (NOT A ROOFTOP SOLUTION)
-BASIC WIND SPEED	85 MPH (3 SEC GUST)
-WIND EXPOSURE	B
-SEISMIC ZONE	D

STRUCTURAL STEEL NOTES:

1. SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW PRIOR TO FABRICATION.
2. STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) SHALL BE BASED ON THE A.I.S.I. "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION. SUPERVISION SHALL BE IN ACCORDANCE WITH 2012 IBC CHAPTER 22, BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE CONSULTANT. THE CONSULTANT SHALL BE FURNISHED WITH A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS.
3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

   TYPE OF MEMBER

A. WIDE FLANGE SHAPE	ASTMA-992, Fy 50 KSI
B. OTHER SHAPE, PLATES AND ROD	ASTM A36, Fy 36 KSI
C. PIPE COLUMNS	ASTM A53, Fy 35 KSI
D. STRUCTURAL TUBING	ASTM A500, Fy 46 KSI
E. ANCHOR BOLTS	ASTM A307
F. CONNECTION BOLTS	ASTM A325

4. ALL MATERIAL TO BE HOT DIPPED GALVANIZED AFTER FABRICATION PER A123/A123M-00.
5. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.I. AND AWS STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70 XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.
6. COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE, AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."
7. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
8. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
9. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION SPECIFICATION AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
10. ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
11. TOUCH UP ALL FIELD DRILLING AND WELDING WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

BUILDING NOTES:

1. PROVIDE SUPPORTS FOR THE ANTENNA COAX CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA COAX CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.

ABBREVIATED ROOF TOP SAFETY PROCEDURES (WHEN APPLICABLE):

(AS PER "ACCIDENT PREVENTION PROGRAM" - BY PERMISSION OF WREN CONSTRUCTION, INC. - 03/01/99)

FALL PROTECTION METHODS AND EQUIPMENT
ROOF TOP INSTALLATIONS

1. FOR WORK IS BEING PERFORMED WITHIN 25' OF AN UNPROTECTED ROOF EDGE, THE CONSTRUCTION SUPERVISOR SHALL DESIGNATE A TRAINED SAFETY MONITOR TO OBSERVE THE MOVEMENTS AND ACTIVITIES OF THE CONSTRUCTION WORKERS.
2. SAFETY MONITOR SHALL WARN CONSTRUCTION WORKERS OF HAZARDS (I.E., BACKING UP TOWARD A ROOF EDGE, ETC.) OR UNSAFE ACTIVITIES. THE SAFETY MONITOR MUST BE ON THE SAME ROOF AND WITHIN VISUAL AND VERBAL DISTANCE OF THE CONSTRUCTION WORKERS.
3. CONSTRUCTION INVOLVING WORKERS TO APPROACH WITHIN 6' OR LESS OF AN UNPROTECTED ROOF EDGE, REQUIRES WORKERS TO USE SAFETY LINE.
4. SAFETY LINE SHALL BE MINIMUM ½" DIAMETER NYLON, WITH A NOMINAL TENSILE STRENGTH OF 5400 LBS.
5. SAFETY LINE SHALL BE ATTACHED TO A SUBSTANTIAL MEMBER OF THE STRUCTURE.
6. SAFETY LINE LENGTH SHALL BE SET ALLOWING CONSTRUCTION WORKER TO REACH EDGE OF ROOF, BUT NOT BEYOND.
7. SAFETY BELTS SHALL BE WORN BY ALL CONSTRUCTION WORKERS.
8. MONTHLY SAFETY INSPECTION AND MAINTENANCE OF THE FALL PROTECTION EQUIPMENT SHALL OCCUR BY THE SAFETY COMMITTEE REPRESENTATIVES, INCLUDING:

   INSPECTION OF CONSTRUCTION AREA FOR HAZARDS
   USE OF AN INSPECTION CHECKLIST
   INTERVIEWING COWORKERS REGARDING SAFETY CONCERNS
   REPORTING AND DOCUMENTING ANY HAZARDS
   REPORTING HAZARDS TO THE SAFETY COMMITTEE FOR CONSIDERATION
   POSTING RESULTS OF INSPECTION AND ANY ACTION TAKEN
   RECEIVING AN UNBIASED REVIEW OF ONE'S OWN WORK AREA BY ANOTHER COWORKER SAFETY REPRESENTATIVE

REFER TO ROOFTOP WORK AREA SAFETY PROTOCOL
NATIONAL ASSOCIATION OF TOWER ERECTORS 2000 PUBLICATION

REFERENCED OSHA REGULATION/STANDARDS SHALL BE REVIEWED BY TOWERERECTORS, EQUIPMENT INSTALLERS, AND TOWER/ROOF TOP CONTRACTORS/SUBCONTRACTORS
29 CFR 1926.500 - SCOPE, APPLICATION, AND DEFINITIONS
29 CFR 1926.501 - DUTY TO HAVE FALL PROTECTION
19 CFR 1926.502 - FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES

SYMBOLS AND ABBREVIATIONS

A/C	AIR CONDITIONING
AGL	ABOVE FINISH GRADE
APPROX	APPROXIMATELY
BLDG	BUILDING
BLK	BLOCKING
CLG	CEILING
CLR	CLEAR
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
DBL	DOUBLE
DIA	DIAMETER
DIAG	DIAGONAL
DN	DOWN
DET	DETAIL
DWG	DRAWING
EA	EACH
ELEV	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EQUIP	EQUIPMENT
EXT	EXTERIOR
FIN	FINISH
FLUOR	FLUORESCENT
FLR	FLOOR
FT	FOOT
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GRND	GROUND
GYP BD	GYPSUM WALL BOARD
HORZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING VENTILATION AIR CONDITIONING
ID	INSIDE DIAMETER
IN	INCH
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
IBC	INTERNATIONAL BUILDING CODE
LBS	POUNDS
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MFR	MANUFACTURE
MGR	MANAGER
MIN	MINIMUM
MISC	MISCELLANEOUS
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PPC	POWER PROTECTION CABINET
PROJ	PROJECT
PROP	PROPERTY
PT	PRESSURE TREATED
REQ	REQUIRED
RM	ROOM
RO	ROUGH OPENING
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
SF	SQUARE FOOT
SS	STAINLESS STEEL
STL	STEEL
STRUCT	STRUCTURAL
STD	STUD
SUSP	SUSPENDED
TNNG	TINNED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VIF	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
WP	WATER PROOF

—— UGT —— UGT ——	UNDERGROUND TELCO
—— UGP —— UGP ——	UNDERGROUND POWER
	GROUND WIRE
	COAXIAL CABLE
	ANTENNA
℄	CENTERLINE
(E)	EXISTING
(P)	PROPOSED
X	DETAIL NUMBER
X-X	SHEET NUMBER

SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC 2006 SECTION 1704.

SOILS/GEOTECHNICAL:
- ☐SHORING INSTALLATION AND MONITORING
- ☐OBSERVE AND MONITOR EXCAVATION
- ☐VERIFY SOIL BEARING _____ psf BEARING
- ☐SUBSURFACE DRAINAGE PLACEMENT
- ☐VERIFY FILL MATERIAL AND COMP ACTION
- ☐VERIFY CONDITIONS AS ANTICIPATED
- ☐PILE PLACEMENT (AUGER CAST/DRIVEN PILE)
- ☐OTHER

REINFORCED CONCRETE:
- ☐REINFORCING STEEL AND CONCRETE PLACEMENT
- ☐PRESTRESSED/PRECAST CONCRETE FABRICATION AND ERECTION
- ☐BATCH PLANT INSPECTION
- ☐SHOTCRETE
- ☐GROUTING
- ☐OTHER

STRUCTURAL STEEL:
- ☐FABRICATION AND SHOP WELDS
- ☐ERECTION AND FIELD WELDS AND BOLTING
- ☐OTHER _____

STRUCTURAL ALUMINUM:
- ☐FABRICATION AND SHOP WELDS
- ☐ERECTION AND FIELD WELDS AND BOLTING
- ☐OTHER _____

STRUCTURAL MASONRY:
- ☐CONTINUOUS
- ☐PERIODIC
- ☐_____

OTHER: _____

ANCHORING TO CONCRETE:
- ☐BOLTS INSTALLED IN CONCRETE
- ☐POST-INSTALLATION ADHESIVE ANCHORS
- ☐POST-INSTALLATION MECHANICAL ANCHORS

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EXISTING ROOFTOP

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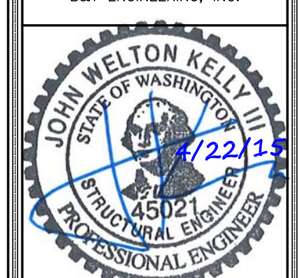

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SHEET NUMBER: GN-2
REVISION: 4

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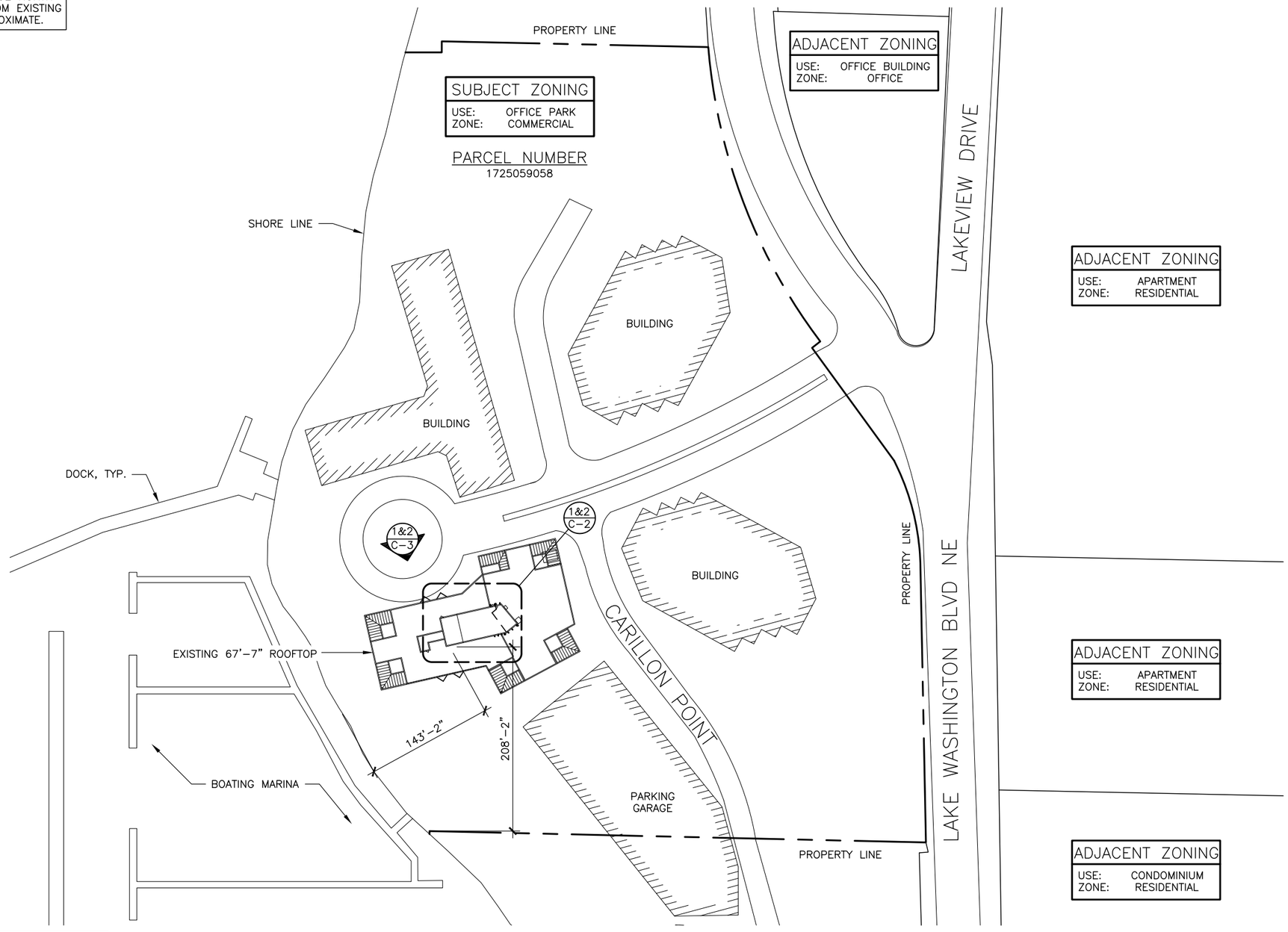
THIS IS NOT A SURVEY

ALL INFORMATION AND TRUE NORTH HAVE BEEN OBTAINED FROM EXISTING DRAWINGS AND ARE APPROXIMATE.



POR GL 1 & 2 & BLKS F & G OF THE 2ND SUPL PLAT OF LK WN SH LDS TGW 2ND CL SHLDS ADJ ALL LY WLY OF W MGN LK WN BLVD–LESS POR N OF S LN OF N 1076.80 FT SD GL 1 & ITS WLY PROD – LESS POR THOF S OF LN BEG AT NXN 1902.66 FT S & PLW N LN GL 1 & W MGN LK WN BLVD TH S 03–09–13 E ALG W MGN 75 FT TO TPOB OF DESC LN TH N 88–35–53 W TO INNER HARBOR LN & TERMINUS THIS LN – LESS POR CONV BY REC 8907281497 AKA LOT B KK ALT LL #LL–91–50 REC 9104302101

1 OVERALL SITE PLAN

SCALE: 11x17: 1/128" = 1'-0" 24x36: 1/64" = 1'-0"

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JOHN WELTON KELLY III
STATE OF WASHINGTON
45021
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
4/22/15

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SHEET NUMBER: C-1

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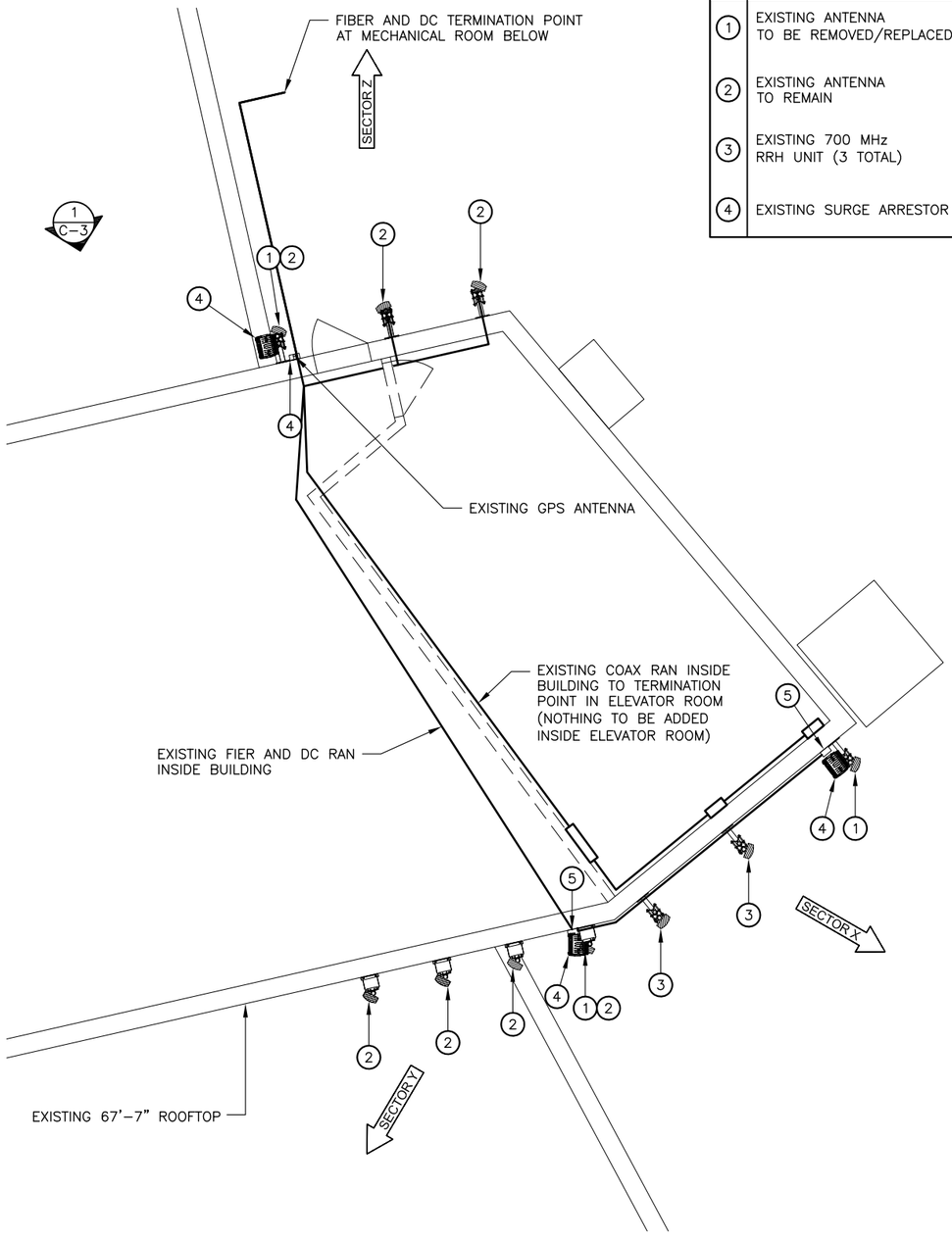
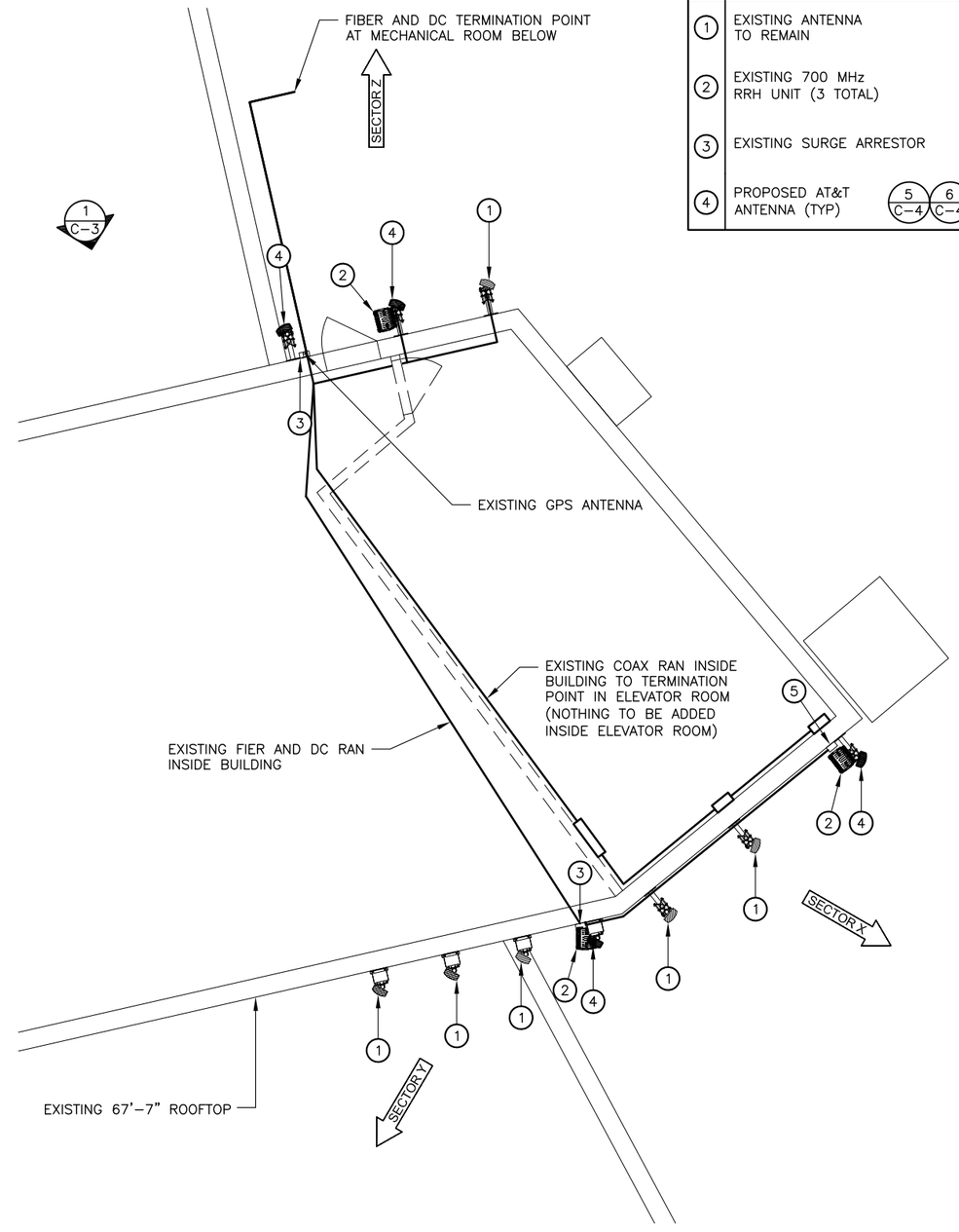


#	ANTENNA NOTES
1	EXISTING ANTENNA TO BE REMOVED/REPLACED
2	EXISTING ANTENNA TO REMAIN
3	EXISTING 700 MHz RRH UNIT (3 TOTAL)
4	EXISTING SURGE ARRESTOR

1 EXISTING ENLARGED SITE PLAN

SCALE: 11x17: 1/8" = 1'-0" 24x36: 1/4" = 1'-0"

N



#	ANTENNA NOTES
1	EXISTING ANTENNA TO REMAIN
2	EXISTING 700 MHz RRH UNIT (3 TOTAL)
3	EXISTING SURGE ARRESTOR
4	PROPOSED AT&T ANTENNA (TYP) 5 C-4 6 C-4

2 PROPOSED ENLARGED SITE PLAN

SCALE: 11x17: 1/8" = 1'-0" 24x36: 1/4" = 1'-0"

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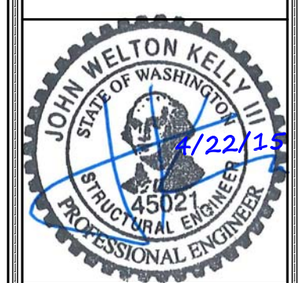

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REVISION: 4

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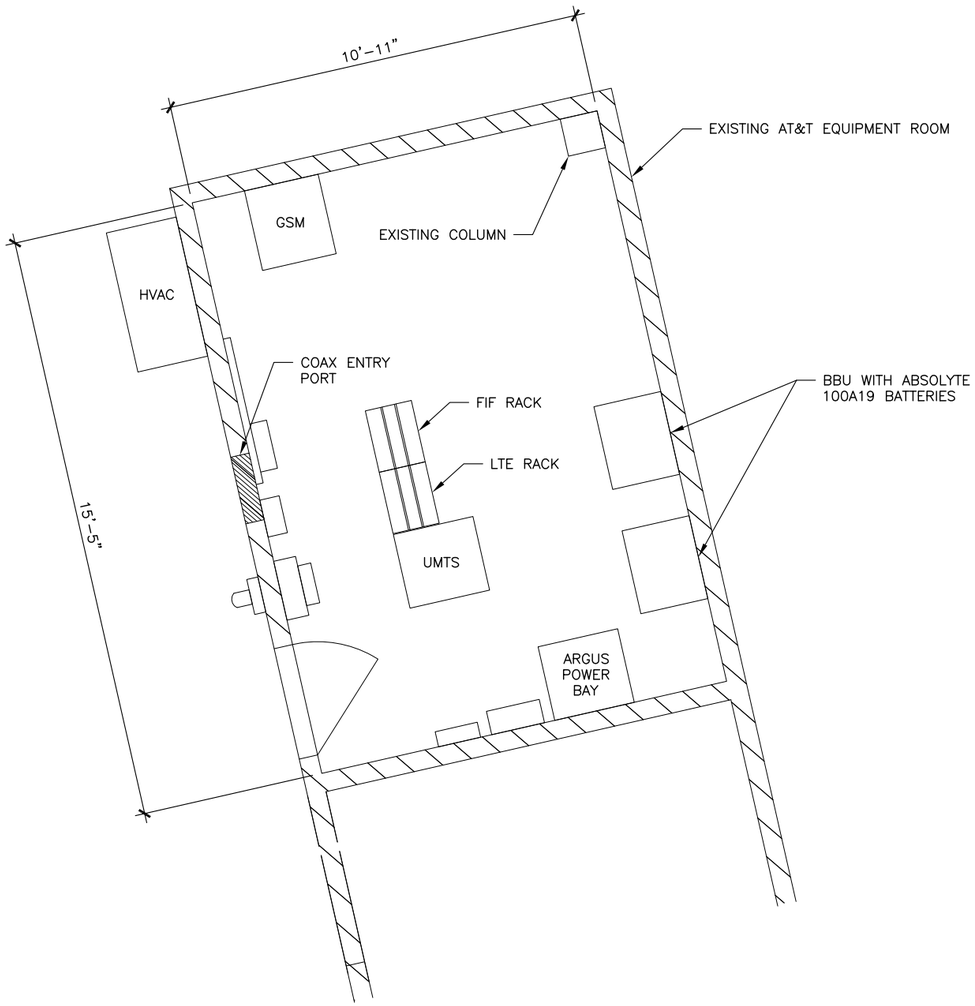

1 EXISTING EQUIPMENT ROOM PLAN

SCALE: 11x17: 1/4" = 1'-0" 24x36: 1/2" = 1'-0"

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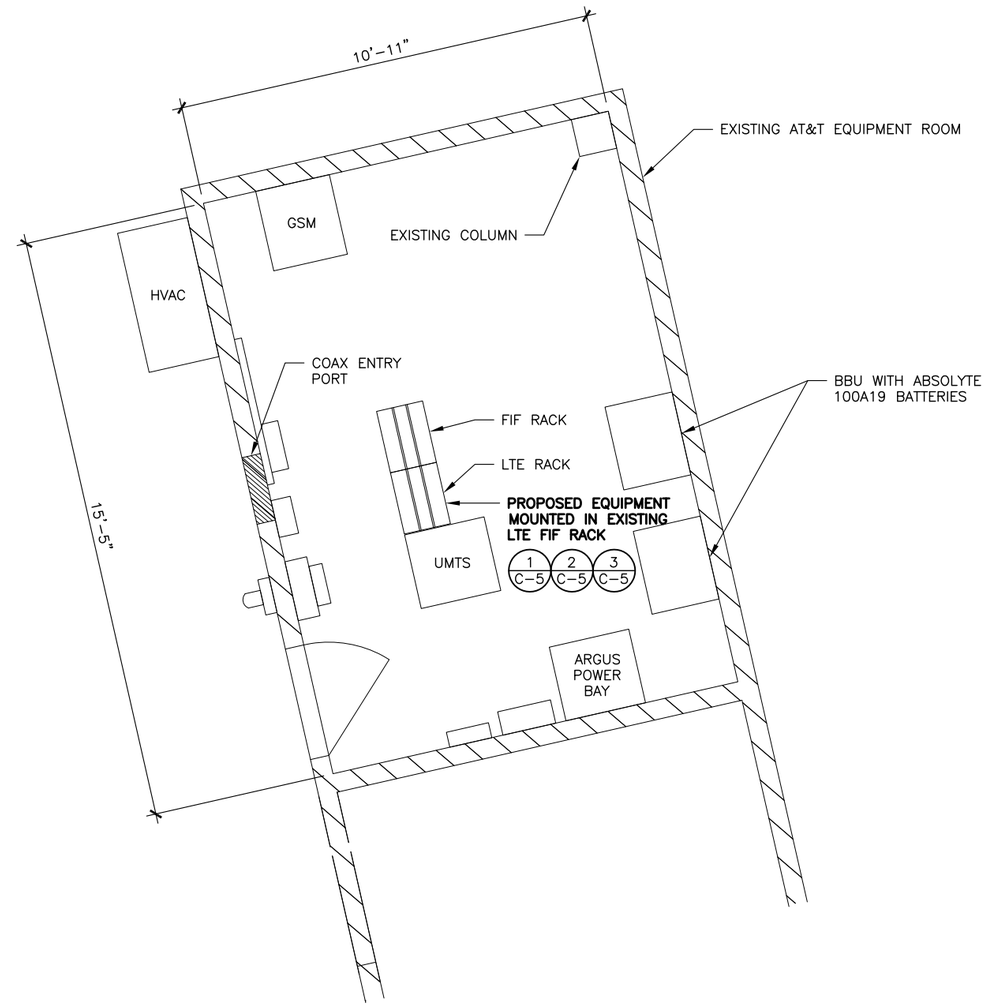
NOTE:
NEW CORE DRILLING NEEDED FOR ADDITIONAL FIBER AND DC POWER TO THE ROOF. MATCH EXISTING PATH.



2 PROPOSED EQUIPMENT ROOM PLAN

SCALE: 11x17: 1/4" = 1'-0" 24x36: 1/2" = 1'-0"

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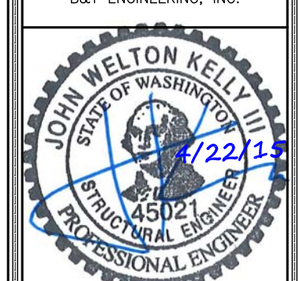

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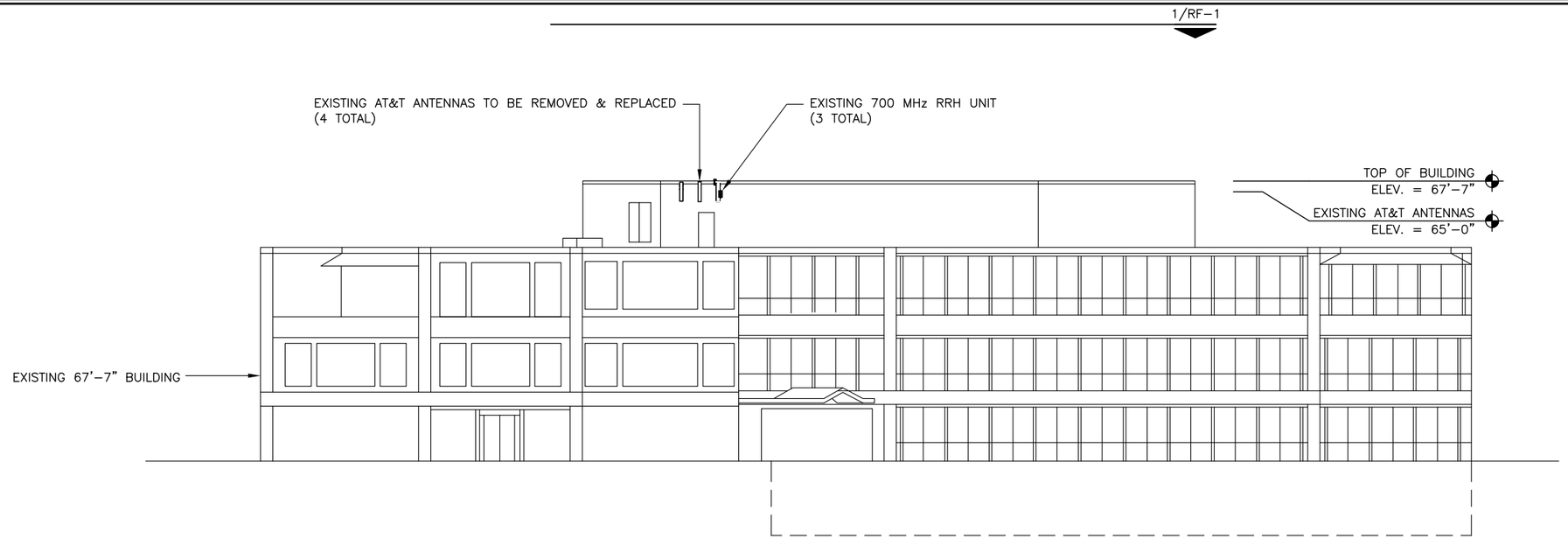
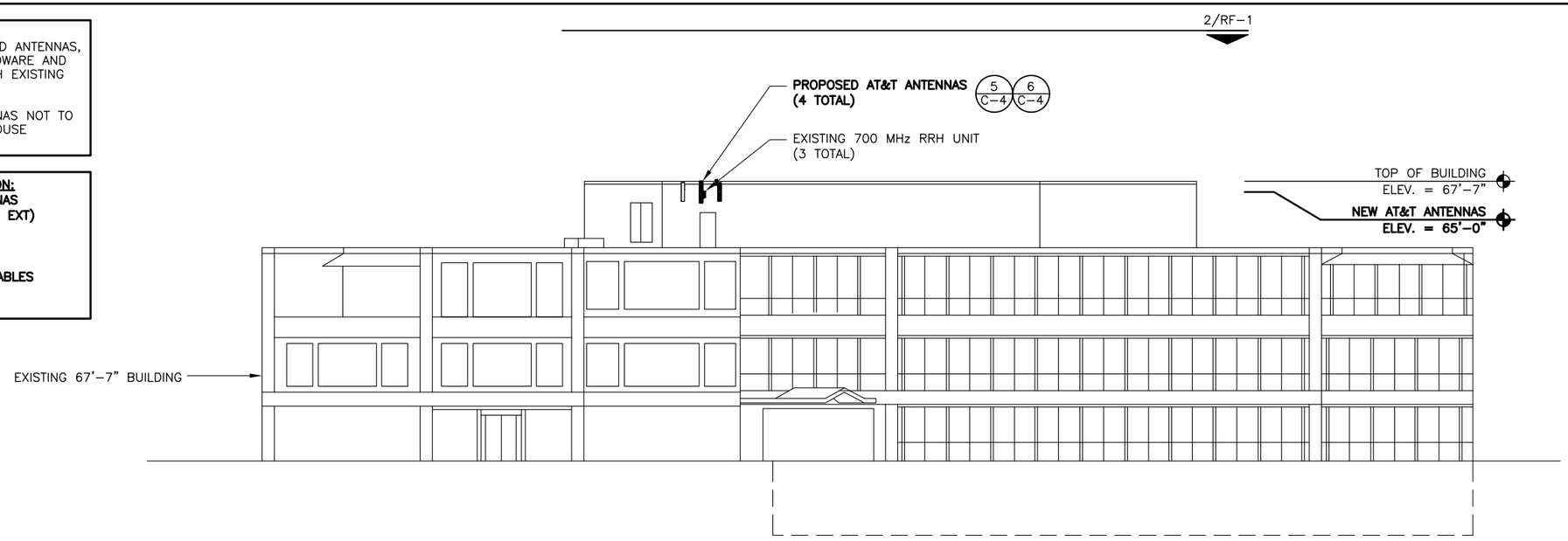


1 EXISTING BUILDING NORTHWEST ELEVATION
SCALE: 11x17: 1/2" = 1'-0" 24x36: 1" = 1'-0"

NOTES:
1. PAINT PROPOSED ANTENNAS, MOUNTING HARDWARE AND COAX TO MATCH EXISTING CONDITIONS.
2. TOP OF ANTENNAS NOT TO EXCEED PENTHOUSE ROOFLINE.

FINAL CONFIGURATION:
(10) PANEL ANTENNAS
(6) RRHS (3 INT/3 EXT)
(12) TMAS
(1) FC-12
(3) DC-2
(12) 7/8" COAX CABLES
(3) FIBER LINES
(6) DC CABLES



2 PROPOSED BUILDING NORTHWEST ELEVATION
SCALE: 11x17: 1/16" = 1'-0" 24x36: 1/8" = 1'-0"

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SB13
CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING ROOFTOP

PROJECT NO:	90140.001
CHECKED BY:	LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

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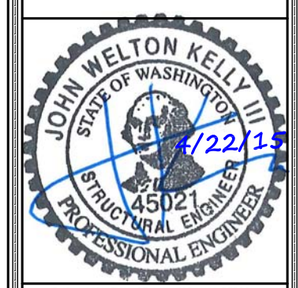

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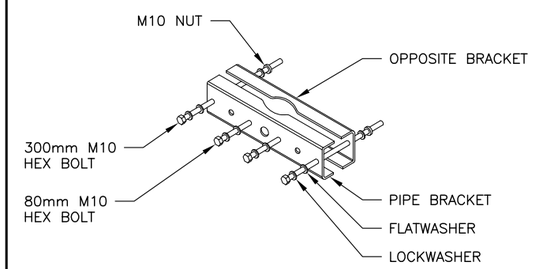
SHEET NUMBER:	REVISION:
C-3	4

90140_Carillon PT_11462.dwg - Sheet:C-3 - User: mwesel - Apr 22, 2015 - 4:18pm

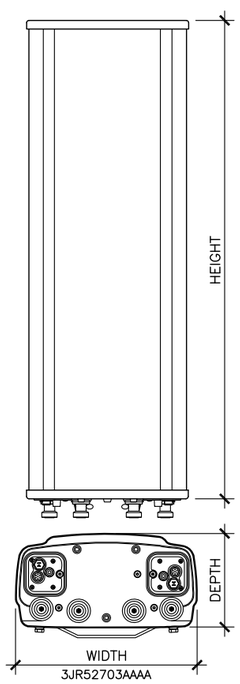
1 NOT USED
SCALE: N.T.S.

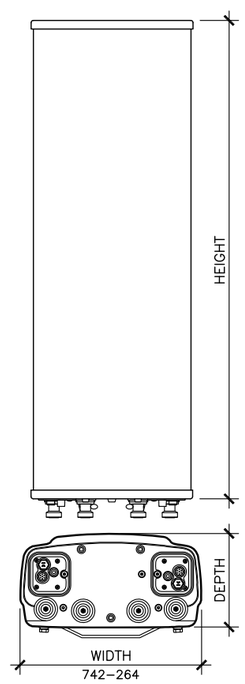
2 NOT USED
SCALE: N.T.S.



3 RRH MOUNTING PIPE CLAMP
SCALE: N.T.S.

4 NOT USED
SCALE: N.T.S.

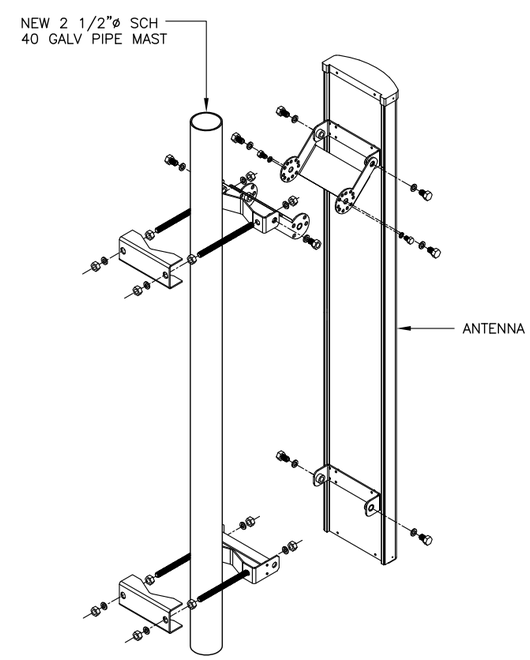




ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
742-264	51.8"	10.3"	5.5"	36.4 lbs
3JR52703AAAA	96"	13.4"	16.5"	163.8 lbs

NOTES:
1. VERIFY ANTENNA DIMENSIONS WITH MANUFACTURER.
2. ANTENNA MOUNTING KIT FOR 2 TO 4.5 O.D. MAST (MODEL #DM380) (QTY. 2)
3. LOCKING TILT MOUNT KIT 0-13 DEGREES DOWNTILT ANGLE (MODEL #DB5083)
4. VERIFY FINAL ANTENNA MODEL WITH CURRENT VERSION OF THE AT&T RFDS.

5 PANEL ANTENNA DETAIL
SCALE: N.T.S.



6 ANTENNA MOUNTING DETAIL
SCALE: N.T.S.

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2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001
CHECKED BY: LRT

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STATE OF WASHINGTON
45027
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PROFESSIONAL ENGINEER
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SHEET NUMBER: C-4
REVISION: 4

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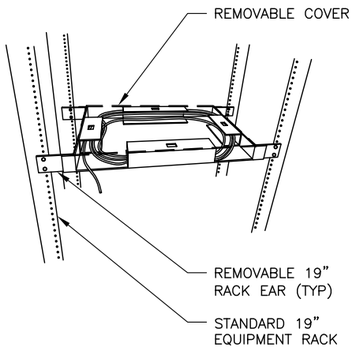
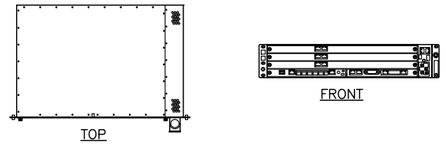


1 EXCESS CABLE TRAY

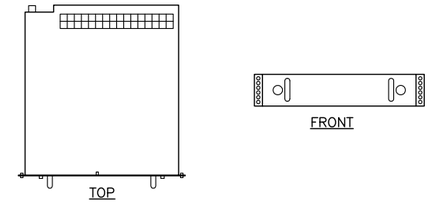
SCALE: N.T.S.



BBU	
MANUFACTURER	ALCATEL LUCENT
MODEL	99926 BBU
HEIGHT	3.469"; 2U (RACK UNITS)
DEPTH	11.81"
WIDTH	19"
WEIGHT	26 LBS

2 BBU DETAIL

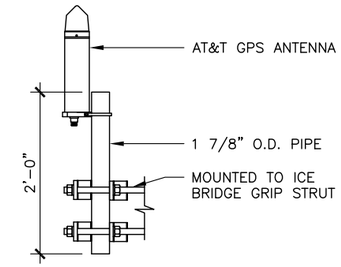
SCALE: N.T.S.



SURGE SUPPRESSOR	
MANUFACTURER	ALCATEL LUCENT
MODEL	DC6-48-60-RM
HEIGHT	3.469"; 2U (RACK UNITS)
DEPTH	20.1"
WIDTH	16.8"
WEIGHT	26 LBS

3 RAYCAP SURGE SUPPRESSOR

SCALE: N.T.S.



1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CONNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
3. ADD LUCENT, 408762045, KS24535L10, 1:2 GPS SPLITTER, ASSEMBLY
4. THE GPS IS TO HAVE A MINIMUM 10'-0" SEPARATION FROM ANY TRANSMITTING ANTENNA.

4 LTE GPS ANTENNA

SCALE: N.T.S.

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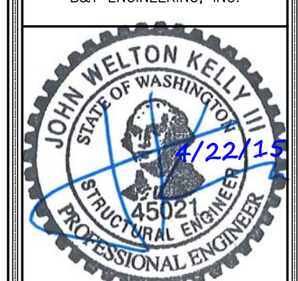

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SHEET NUMBER:	REVISION:
C-5	4

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A. GENERAL

1. EXAMINE THE SITE CONDITIONS VERY CAREFULLY AND THE SCOPE OF PROPOSED WORK TOGETHER WITH THE WORK OF ALL OTHER TRADES AND INCLUDE IN THE BID PRICE ALL COSTS FOR WORK SUCH AS EQUIPMENT AND WIRING MADE NECESSARY TO ACCOMMODATE THE ELECTRICAL SYSTEMS SHOWN AND SYSTEMS OF OTHER TRADES.
2. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
3. PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES.
4. OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION.
5. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE, AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE OWNER.
6. CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
7. PRIOR TO BEGINNING WORK COORDINATE ALL POWER AND TELCO WORK WITH THE LOCAL UTILITY COMPANY AS IT MAY APPLY TO THIS SITE. ALL WORK TO COMPLY WITH THE RULES AND REGULATIONS OF THE UTILITIES INVOLVED.
8. FABRICATION AND INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM SHALL BE DONE IN A FIRST CLASS WORKMANSHIP PER NECA STANDARD 1–2000 BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH WORK AND SHALL SCHEDULE THE WORK IN AN ORDERLY MANNER SO AS NOT TO IMPEDE PROGRESS OF THE PROJECT.
9. DURING PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF THE ELECTRICAL SYSTEMS, LOCATING EACH CIRCUIT PRECISELY AND DIMENSIONING EQUIPMENT, CONDUIT AND CABLE LOCATIONS. UPON COMPLETION OF THE INSTALLATION, TRANSFER ALL RECORD DATA TO BLACK LINE PRINTS OF THE ORIGINAL DRAWINGS AND SUBMIT THESE DRAWINGS AS RECORD DRAWINGS TO THE CONSULTANT.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. GENERAL CONTRACTOR IS RESPONSIBLE FOR REQUESTING CONNECTION OF COMMERCIAL POWER FROM THE POWER COMPANY. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR.
12. COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE COMPANY. APPLY FOR TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT.

B. BASIC MATERIALS AND METHODS

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW. MATERIALS AND EQUIPMENT SHALL BE THE STANDARD PRODUCTS OF MANUFACTURER'S CURRENT DESIGN. ANY FIRST–CLASS PRODUCT MADE BY A REPUTABLE MANUFACTURER MAY BE USED PROVIDING IT CONFORMS TO THE CONTRACT REQUIREMENTS AND MEETS THE APPROVAL OF THE CONSULTANT AND THE OWNER.
3. ARRANGE CONDUIT, WIRING, EQUIPMENT, AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCES AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND FIT THE WORK IN EACH LOCATION WITHOUT SUBSTANTIAL ALTERATION. WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE.
4. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.
5. MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC.
6. SEAL AROUND CONDUITS AND AROUND CONDUCTORS WITHIN CONDUITS ENTERING THE MODULAR CABINETS WHERE PENETRATION OCCURS WITH A SILICONE SEALANT TO PREVENT MOISTURE PENETRATION INTO BUILDING.
7. SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING.
8. MAKE NECESSARY CONNECTIONS FOR BATTERY IN EMERGENCY LIGHT FIXTURE. CONNECT EXTERIOR LIGHT FIXTURE (PROVIDED BY SHELTER MANUFACTURER) TO EXTERNAL JUNCTION BOX.

C. CONDUCTORS AND CONNECTORS

1. UNLESS NOTED OTHERWISE, ALL CONDUCTORS SHALL BE COPPER, MINIMUM SIZE #12 AWG, WITH THERMOPLASTIC INSULATION CONFORMING TO NEMA WC5 OR CROSS–LINKED POLYETHYLENE INSULATION CONFORMING TO NEMA WC7. (TYPES THHN OR THWN). INSULATION SHALL BE RATED FOR 90 CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC.
2. ALL CONDUCTORS USED FOR GROUNDING SHALL BE COPPER AND SHALL HAVE GREEN INSULATION.
3. FOR COPPER CONDUCTORS #6 AWG AND SMALLER USE 3M SCOTCH–LOK OR T&B STA–KON COMPRESSION TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATION CAPS. FOR COPPER CONDUCTORS LARGER THAN #6 AWG USE SOLDERLESS, IDENT HEX SCREW OR BOLT TYPE PRESSURE CONNECTORS OR DOUBLE COMPRESSION C–CLAMP CONNECTORS, UNLESS SPECIFIED OTHERWISE ON DRAWINGS.
4. UNLESS NOTED OTHERWISE ALL LUGS SHALL BE TIN PLATED COPPER, TWO–HOLE, LONG BARREL, COMPRESSION TYPE.
5. CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES. SPLICES ARE NOT ACCEPTABLE. IF SPLICES ARE UNAVOIDABLE PRIOR APPROVAL FROM THE ENGINEER MUST BE OBTAINED.

D. RACEWAYS AND BOXES

1. ALL CONDUIT SHALL BE UL LABELED.
2. ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD.
3. SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST–METAL BOXES SHALL CONFORM TO NEMA 81 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE.

E. GROUNDING

1. ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION NEC.
2. GROUND LUGS ARE SPECIFIED UNDER SECTION 3 "CONDUCTORS AND CONNECTORS".
3. ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI–OXIDANT AGENT, SUCH AS NO–OX, NOALOX, PENETROX OR KOPRSHIELD.
4. GROUND ALL EXPOSED METALLIC OBJECTS ON BUILDING EXTERIOR INCLUDING BUILDING TIE DOWN BRACKETS.
5. PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
6. DO NOT INSTALL GROUND RING OUTSIDE OF PROPERTY LINE.
7. REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE.
8. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING EXTERIOR GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
9. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY THERMO–WELDING WITH ERICO T–319 GALVANIZING BAR.
10. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING CONNECTED.
11. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO EXTERIOR GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLUB LECTROSOL #15–501.
12. CONTRACTOR SHALL NOTIFY AT&T WHEN THE BURIED GROUND RING IS INSTALLED SO THE REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED WITH SOIL. CONTACT: AT&T PROJECT MGR.
13. FOR METAL FENCE POST GROUNDING, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST.
14. WHERE MECHANICAL CONNECTORS (TWO–HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI–OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS.
15. BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN–UNION GT SERIES CLAMP, BLACKBURN GUV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY, NO SUBSTITUTES ACCEPTED.

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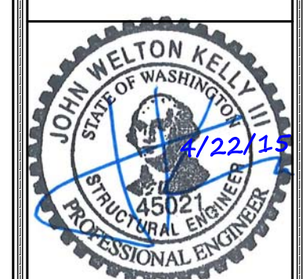

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G-1	4

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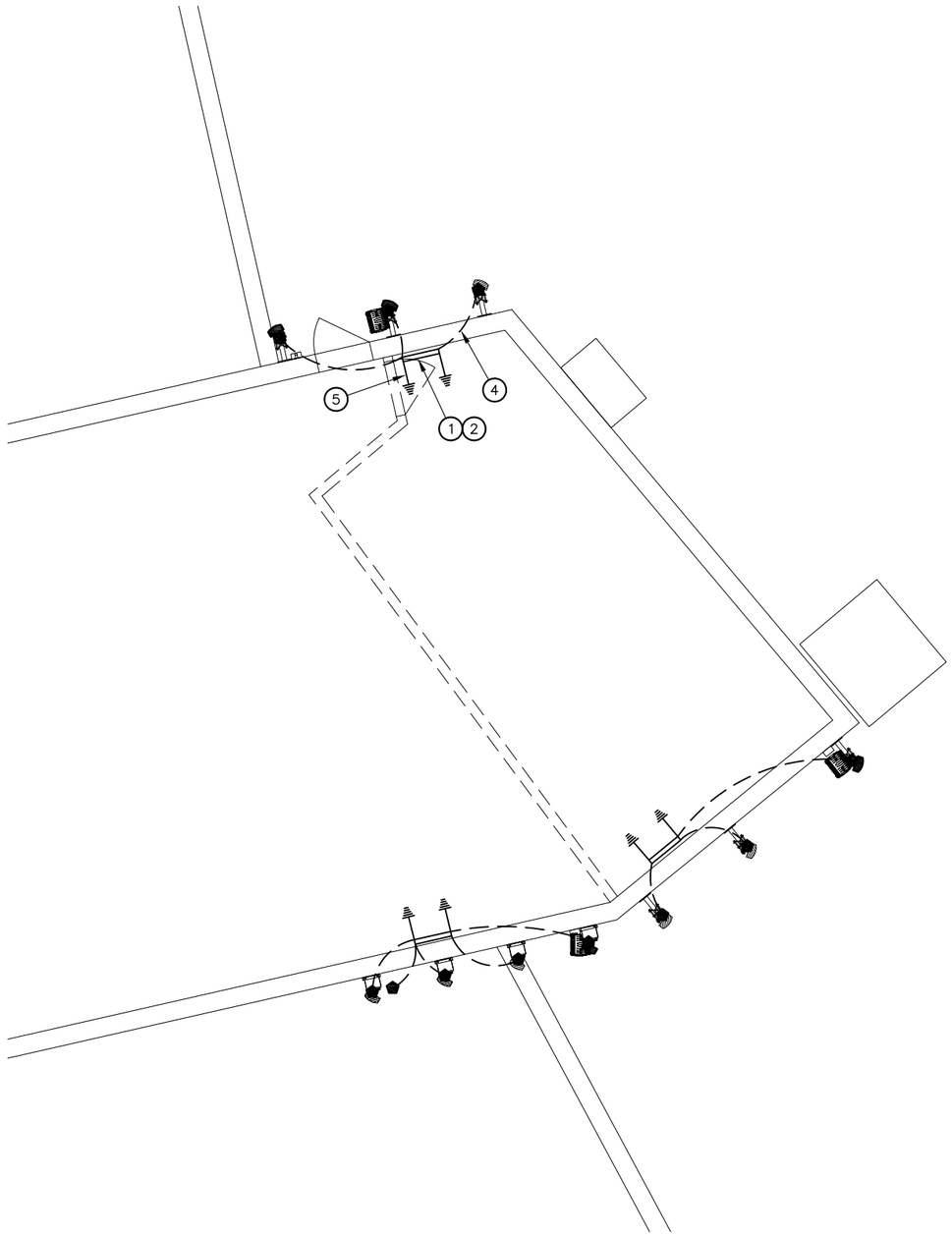

1 GROUNDING PLAN
SCALE: N.T.S.

N

GROUNDING NOTES

1. (E) GROUND BUSS BAR, TYP.
2. (E) MAIN GROUND CONNECTION POINT. (V.I.F.)
3. NOT USED
4. (E) #2 STRANDED GREEN INSULATED COPPER GROUNDING LEAD, TYP. (V.I.F.)
5. PROPOSED #2 STRANDED GREEN INSULATED COPPER GROUNDING LEAD, TYP.

GROUNDING NOTES

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
2. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED GROUND BARS. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
3. ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THNN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
4. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AN AT&T WIRELESS, LLC. REPRESENTATIVE.
5. REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
6. ELECTRICAL CONTRACTORS TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED AT&T WIRELESS, LLC. REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING.
7. NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

GROUNDING ROD NOTES

1. ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOWN THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
2. POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFOREMENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.

LEGEND

- COPPER GROUND ROD
- GROUND INSPECTION WELL
- COMPRESSION LUG
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- GROUND WIRE
- VERIFY & TIE INTO EXISTING GROUNDING SYSTEM

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SHEET NUMBER: G-2
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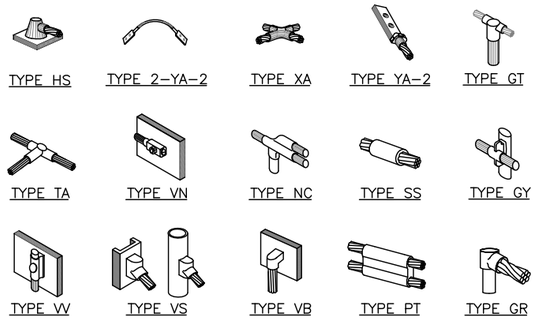


NOTE:

ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

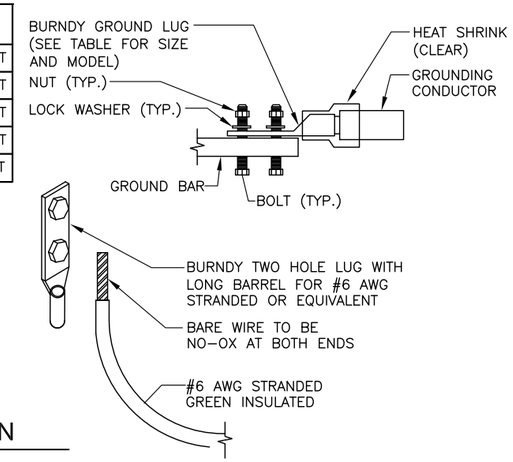
1 CADWELD GROUNDING CONNECTIONS

SCALE: N.T.S.

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT

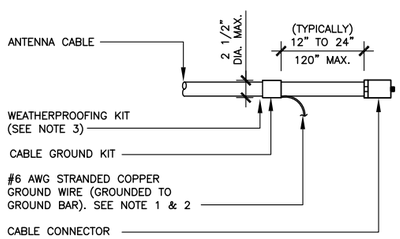
NOTES:

1. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
2. COPPER SHIELD, ANTIOX, CR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
3. ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



2 MECHANICAL LUG CONNECTION

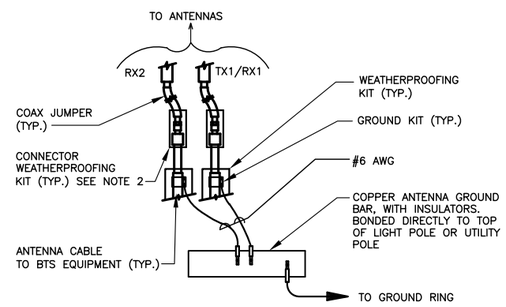
SCALE: N.T.S.



1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND KIT CONNECTION

SCALE: N.T.S.



NOTES:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.

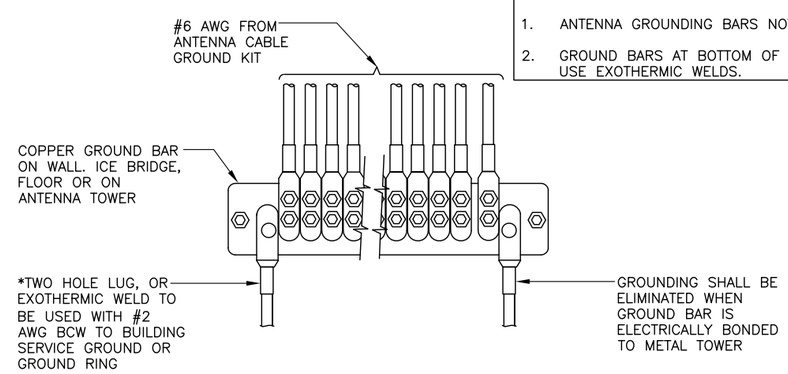
WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION

SCALE: N.T.S.

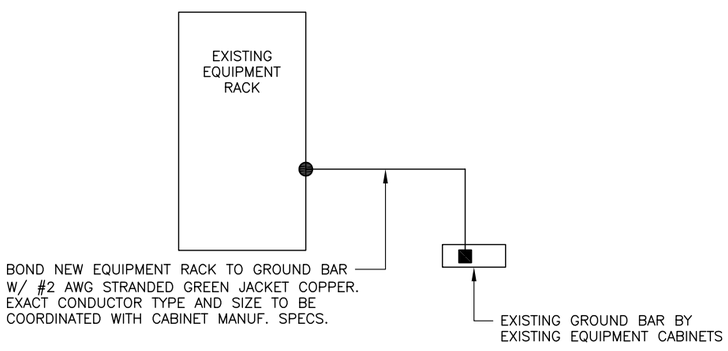
NOTES:

1. ANTENNA GROUNDING BARS NOT TO USE INSULATORS.
2. GROUND BARS AT BOTTOM OF TOWERS SHALL ONLY USE EXOTHERMIC WELDS.



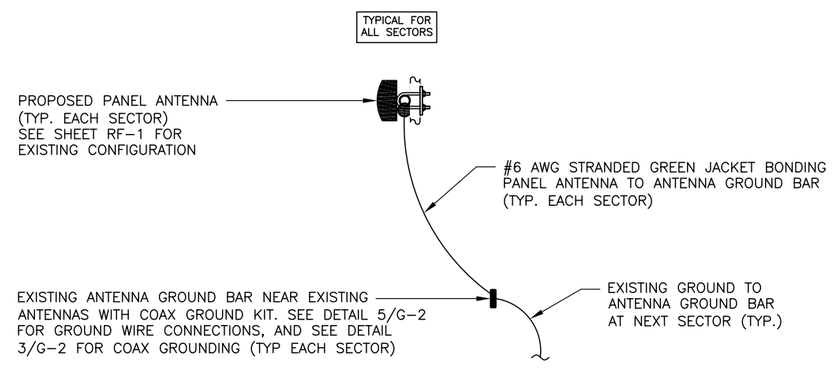
5 GROUNDWIRE INSTALLATION

SCALE: N.T.S.



6 TYPICAL EQUIPMENT AREA GROUNDING PLAN

SCALE: N.T.S.



7 TYPICAL ANTENNA GROUNDING PLAN

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CARILLON PT

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EXISTING ROOFTOP

PROJECT NO:	90140.001
CHECKED BY:	LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

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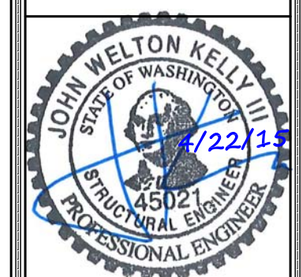

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SHEET NUMBER: G-3

REVISION: 4

90140_Carillon PT_11462.dwg - Sheet:G-3 - User: mwesel - Apr 22, 2015 - 4:18pm

EXISTING ANTENNA CONFIGURATION AND SCHEDULE

SECTOR X	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	120°	65'-0"	1	KMW	AM-X-CD-16-65-00T-RET	4°	0°	YES	–	1	FIBER	315'	NO
GSM 850	120°	65'-0"	1	KATHREIN	742-264	0°	-3°	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 1900						0°		YES					
UMTS 850	140°	65'-0"	1	KATHREIN	742-264	3°	-3°	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						0°		YES					

SECTOR Y	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	210°	65'-0"	1	POWERWAVE	P65-17-XLH-RR	6°	2°	YES	–	1	FIBER	315'	NO
UMTS 850	210°	65'-0"	1	KATHREIN	742-264	8°	0°	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						4°		YES					
GSM 1900	210°	65'-0"	1	POWERWAVE	7721	3°	0°	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 850	210°	65'-0"	1	KATHREIN	739-684	7°	0°	YES	–	–	–	–	NO

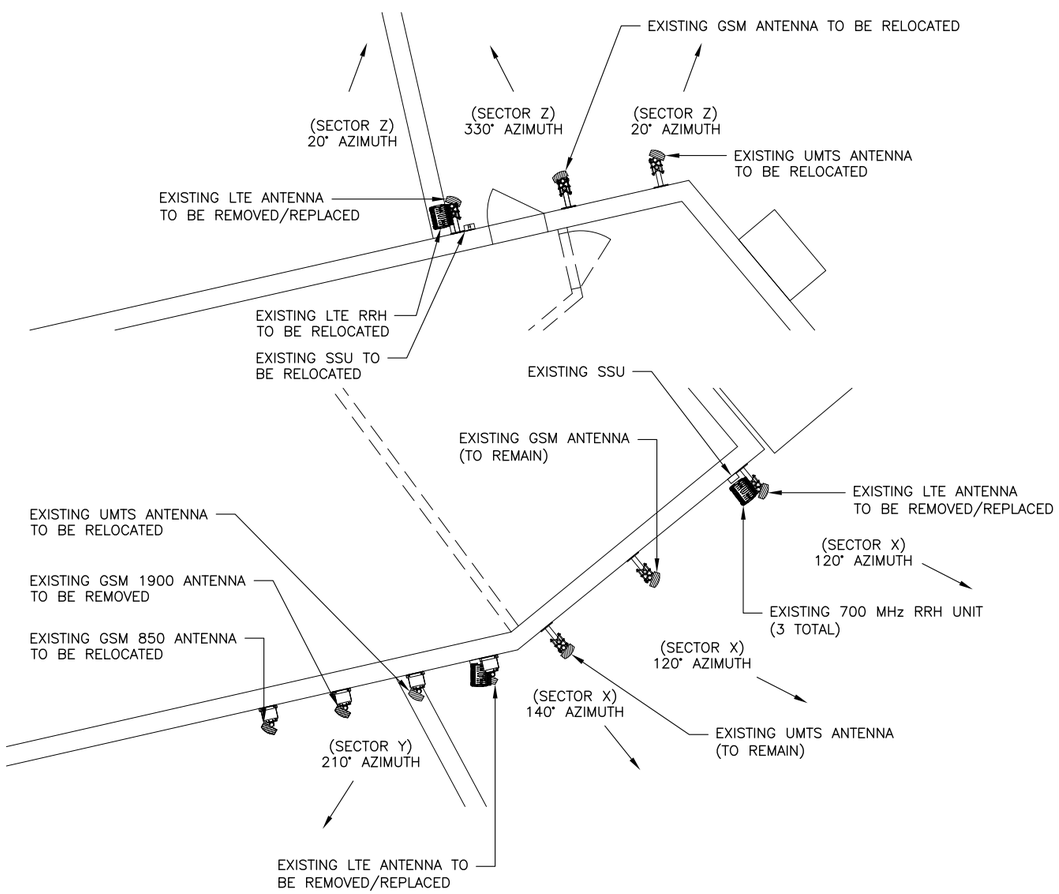
SECTOR Z	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	20°	65'-0"	1	KATHREIN	80010764	3°	2°	YES	–	1	FIBER	315'	NO
GSM 850	330°	65'-0"	1	KATHREIN	742-264	8°	0°	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 1900						4°		YES					
UMTS 850	20°	65'-0"	1	KATHREIN	742-264	8°	4°	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						4°		YES					

FINAL ANTENNA CONFIGURATION AND SCHEDULE

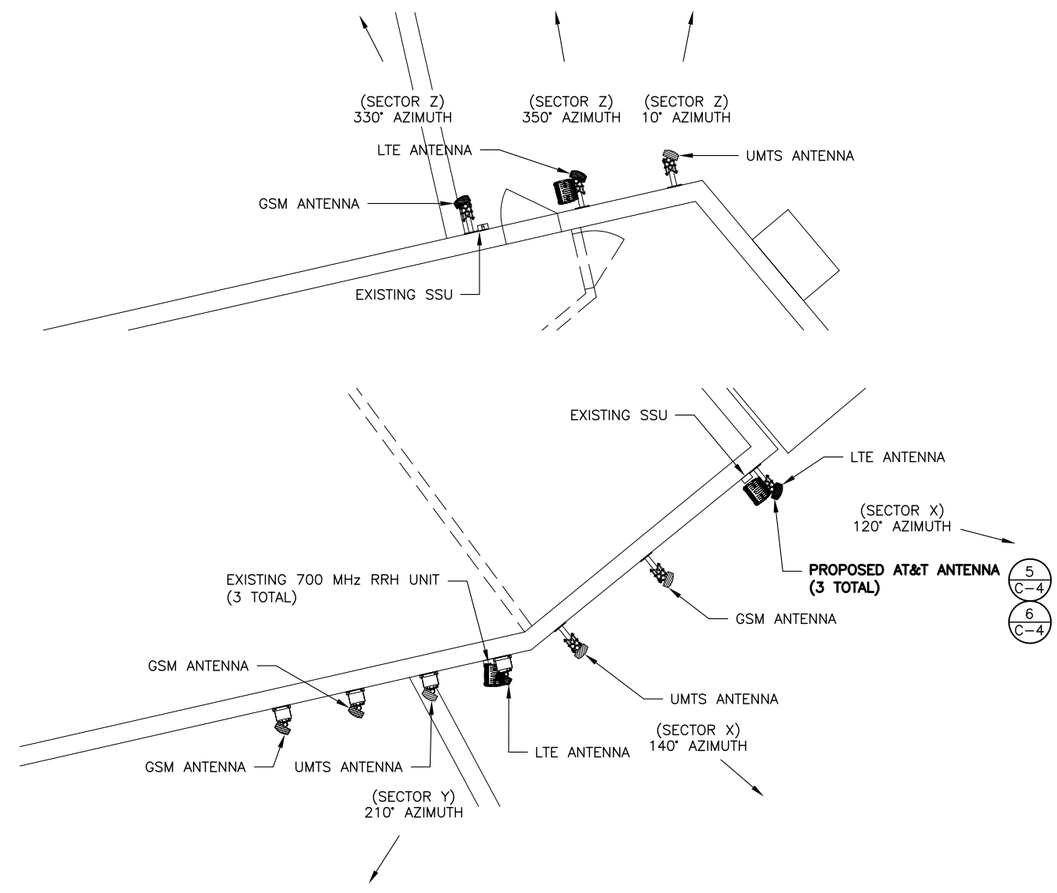
SECTOR X	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	120°	65'-0"	1	ALU AA	3JR52702AAAA	4°	0°	YES	–	1 (INT) 1 (EXT)	1	FIBER	315'	NO
LTE 1900						3°		YES						
GSM 850	120°	65'-0"	1	KATHREIN	742-264	0°	-3°	YES	(2) CS7993.08	–	2	7/8"	190'	YES
GSM 1900						0°		YES						
UMTS 850	140°	65'-0"	1	KATHREIN	742-264	3°	-3°	YES	(2) LGP 21401	–	2	7/8"	190'	YES
UMTS 1900						0°		YES						

SECTOR Y	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	210°	65'-0"	1	ALU AA	3JR52703AAAA	7°	2°	YES	–	1 (INT) 1 (EXT)	1	FIBER	315'	NO
LTE 1900						2°		YES						
UMTS 850	210°	65'-0"	1	KATHREIN	742-264	8°	0°	YES	(2) LGP 21401	–	2	7/8"	190'	YES
UMTS 1900						4°		YES						
GSM 1900	210°	65'-0"	1	POWERWAVE	7721	3°	0°	YES	(2) CS7993.08	–	1	7/8"	190'	YES
GSM 850	210°	65'-0"	1	KATHREIN	739 684	7°	0°	YES	–	–	1	7/8"	190'	YES

SECTOR Z	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
GSM 850	330°	65'-0"	1	KATHREIN	742-264	8°	0°	YES	(2) CS7993.08	–	2	7/8"	190'	YES
GSM 1900						4°		YES						
LTE 700	20°	65'-0"	1	ALU AA	3JR52703AAAA	2°	2°	YES	–	1 (INT) 1 (EXT)	1	FIBER	315'	NO
LTE 1900						3°		YES						
UMTS 850	20°	65'-0"	1	KATHREIN	742-264	8°	4°	YES	(2) LGP 21401	–	2	7/8"	190'	YES
UMTS 1900						4°		YES						



1 EXISTING ANTENNA ORIENTATION
SCALE: N.T.S.



2 PROPOSED ANTENNA ORIENTATION
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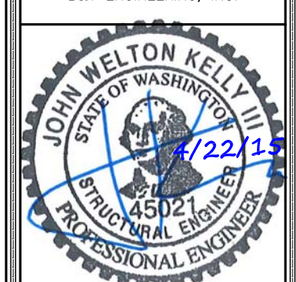

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SHEET NUMBER: RF-1
REVISION: 4

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