DENARGO MARKET METROPOLITAN DISTRICT NO. 2

141 Union Boulevard, Suite 150 Lakewood, Colorado 80228-1898 Tel: 303-987-0835 800-741-3254 Fax: 303-987-2032

NOTICE OF A SPECIAL MEETING AND AGENDA

Board of Directors			<u>Office</u>	Term/Expires		
Donald D. Cabrera Todd T. Wenskoski VACANT VACANT VACANT			Treasurer Asst. Secretary	2020/May 2020 2022/May 2022 2022/May 2022 2020/May 2020 2022/May 2022		
Ann E	E. Finn		Secretary			
DATE TIME PLAC	/:	July 22, 2019 4:30 p.m. Waterford RiNo (Conference Room) 2797 Wewatta Way Denver, Colorado 80216				
I.	ADMI	NISTRATIVE MATTERS	5			
	A.	Present Disclosures of Por	tential Conflicts of Intere	st.		
 B. Approve Agenda; confirm location of the meeting C. Review and approve the Minutes of the June (enclosure). D. Acknowledge resignations of Kate E. Abrams, June Metzger effective as of June 27, 2019. E. Consider appointment of Laura Newman, David the vacancies on the Board of Directors. (Notice of Daily Journal on July 9, 2019). 		n location of the meeting	and posting of meeting notices.			
		Review and approve the Minutes of the June 26, 2019 special meeting (enclosure).				
			son M. Mitchell and Daniel V.			
		the vacancies on the Boar	d of Directors. (Notice of			
	F.	Consider appointment of Consid	Officers:			
		President Treasurer Secretary Asst. Secretary				
		Asst. Secretary				
		Asst. Secretary				

II. PUBLIC COMMENT

A. Members of the public may express their views to the Board on matters that affect the District. Comments will be limited to three (3) minutes per person.

III. FINANCIAL MATTERS

- A. Conduct Public Hearing to consider Amendment to the 2018 and 2019 Budgets and consider adoption of Resolutions to Amend the 2018 and 2019 Budgets and Appropriate Expenditures.
- B. Review and consider acceptance of 2018 Audited Financial Statements (to be distributed) and authorize execution of Representations Letter or approve Request for Extension of Time to File Audit (enclosure).

IV. LEGAL MATTERS

- A. Ratify approval of Eligible Governmental Entity Agreement between Denargo Market Metropolitan District Nos. 1, 2 & 3 and the Statewide Internet Portal Authority of the State of Colorado (enclosure).
- B. Discuss request from AT & T for installation of a Cell Site in the Denargo Market Park (enclosures).
 - 1. Consider approval of Small Cell Lease Agreement by and between the District and new New Cingular Wireless PCS, LLC.

V. OPERATIONS

- A. Discuss site visit and ongoing operations of the District.
- VI. ADJOURNMENT <u>THE NEXT REGULAR MEETING IS SCHEDULED FOR NOVEMBER 19, 2019.</u>

MINUTES OF A SPECIAL MEETING OF THE BOARD OF DIRECTORS OF THE DENARGO MARKET METROPOLITAN DISTRICT NO. 2 HELD JUNE 26, 2019

A special meeting of the Board of Directors (referred to hereafter as the "Board") of the Denargo Market Metropolitan District No. 2 (referred to hereafter as the "District") was held on Wednesday, the 26th day of June, 2019, at 4:30 p.m., at The Waterford at RiNo, 2797 Wewatta Way, Denver, Colorado 80216. The meeting was open to the public.

ATTENDANCE

Directors In Attendance Were:

Donald D. Cabrera Todd T. Wenskoski Daniel V. Metzger Jason M. Mitchell

Following discussion, upon motion duly made by Director Metzger, seconded by Director Cabrera and, upon vote, unanimously carried, the absence of Director Abrams was excused.

Also In Attendance Were:

Ann E. Finn; Special District Management Services, Inc.

Paula Williams, Esq.; McGeady Becher P.C.

Jason Carroll; CliftonLarsonAllen LLP

Sarah Rockwell; Kaplan Kirsch Rockwell

Jeffrey Jones; FORMATIV

Laura Newman and David Smith; Golub & Company LLC

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

<u>Disclosure of Potential Conflicts of Interest</u>: The Board discussed the requirements pursuant to the Colorado Revised Statutes to disclose any potential conflicts of interest or potential breaches of fiduciary duty to the Board and to the Secretary of State. Attorney Williams noted that disclosures of potential conflicts of interest statements for each of the Directors had been filed

with the Secretary of State seventy-two hours in advance of the meeting. Ms. Finn requested that the Directors consider whether they had any additional conflicts of interest to disclose. It was noted for the record that there were no additional disclosures made by the Directors present at the meeting and incorporated for the record those applicable disclosures made by the Board members prior to this meeting in accordance with the statutes.

ADMINISTRATIVE MATTERS

Agenda: Ms. Finn reviewed with the Board a proposed Agenda for the District's Special Meeting.

Following discussion, upon motion duly made by Director Metzger, seconded by Director Cabrera and, upon vote, unanimously carried, the Agenda was approved, as presented.

<u>Approval of Meeting Location</u>: The Board entered into a discussion regarding the requirements of Section 32-1-903(1), C.R.S., concerning the location of the District's Board meeting.

Following discussion, the Board noted that the meeting location is within the boundaries of the District.

<u>HB 19-1087 – Local Public Meeting Notices Posted on Website</u>: Ms. Finn updated the Board on recent legislation that will allow districts to post meeting notices via the District's website and will no longer require physical posting of the meeting notices within the boundaries of the District. The new legislation takes effect August 2, 2019.

The Board authorized staff to take steps necessary to establish a District website.

<u>Minutes</u>: The Board reviewed the Minutes of the November 20, 2018 regular meeting.

Following discussion, upon motion duly made by Director Metzger, seconded by Director Cabrera and, upon vote, unanimously carried, the Board approved the Minutes of the November 20, 2018 regular meeting.

PUBLIC COMMENT

There were no public comments.

FINANCIAL MATTERS

<u>Unaudited Financial Statements</u>: Mr. Carroll reviewed with the Board the unaudited financial statements of the District setting forth the cash deposits, investments, budget analysis, and accounts payable vouchers for the period ending May 31, 2019 and the schedule of cash position as of June 12, 2019.

Following review, upon motion duly made by Director Cabrera seconded by Director Metzger and, upon vote, unanimously carried, the unaudited financial statements were accepted for the period ending May 31, 2019 and the schedule of cash position as of June 12, 2019, as amended.

2018 Audit: The Board deferred discussion on this matter as the draft 2018 Audit is not complete.

<u>Letter to Vectra Bank Regarding Custodial Agreement</u>: The Board reviewed a Letter to Vectra Bank regarding Custodial Agreement and authorization of the transfer of funds.

Following review and discussion, upon motion duly made by Director Metzger, seconded by Director Cabrera and, upon vote, unanimously carried, the Board ratified approval of sending the Letter to Vectra Bank regarding Custodial Agreement and authorized the transfer of funds.

Advance Request (Contributed Land) to Vectra Bank: The Board reviewed an Advance Request (Contributed Land) to Vectra Bank.

Following review and discussion, upon motion duly made by Director Metzger, seconded by Director Mitchell and, upon vote, unanimously carried, the Board ratified approval of the Advance Request (Contributed Land) to Vectra Bank in the amount of \$472,970.88.

LEGAL MATTERS	There were no legal matters to discuss.
OTHER MATTERS	There were no other matters to discuss

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There being no further business to come before the Board at this time, upon motion duly made, seconded and upon vote, unanimously carried the meeting was adjourned.

Respect	fully submitted,
By:	
	Secretary for the Meeting



Dianne E. Ray, CPA State Auditor

Request for Extension of Time to File Audit

This request must be submitted no later than six months follow a school districts fiscal year end, 8 months following housing authority's fiscal year end and seven months following all other local government's fiscal year end. All requests submitted after the due date will not be considered.

Requests may be submitted to fax number 303-869-3061 or email osa.lg@state.co.us.

Government Name:	Denargo Market Metro District No. 2
Name of Contact:	Michael Ellington
Address:	8390 E. Crescent Parkway, Suite 300
City/Zip Code	Greenwood Village, CO 80111
Phone Number:	303-779-5710
Fax Number:	303-779-0348
E-mail	Michael.ellington@claconnect.com
Fiscal Year Ending (mm/dd/yyyy):	12/31/2018
Amount of Time Requested (in days): Not to exceed 60 days	60
Comments (optional):	

I understand that if the audit is not submitted within the approved extension of time the government named in the extension request will be considered in noncompliance without further notice, and the State Auditor shall take further action as prescribed by Section 29-1-606(5)(b), C.R.S.

Must be signed by a member of the governing board.

Signature	
Printed Name:	
Title:	
Date:	





ELIGIBLE GOVERNMENTAL ENTITY AGREEMENT BETWEEN THE STATEWIDE INTERNET PORTAL AUTHORITY OF THE STATE OF COLORADO AND DENARGO METROPOLITAN DISTRICT NOS. 1, 2 AND 3.

This Eligible Governmental Entity Agreement ("Agreement") by and between the Colorado Statewide Internet Portal Authority ("SIPA"), and Denargo Market Metropolitan District Nos. 1, 2 and 3 ("EGE") (each a "Party" and collectively "Parties"), is made and entered into on this _____ day of July, 2019.

RECITALS

WHEREAS, SIPA and EGE wish to enter into a cooperative agreement under which services can be provided at the discretion of both Parties; and

WHEREAS, pursuant to § 24-37.7-105 C.R.S., SIPA operates to provide electronic access for members of the public, state agencies, and local governments to electronic information, products, and services; and

WHEREAS, pursuant to §§ 24-37.7-102 and 24-37.7-104, C.R.S., SIPA operates as a political subdivision of the State of Colorado; and

WHEREAS, pursuant to § 24-37.7-104, SIPA is authorized to enter into agreements and contracts with state agencies and local governments, and all state agencies and local governments are authorized to enter into and do all things necessary to perform any such arrangements or contracts; and

WHEREAS, § 29-1-203, C.R.S., authorizes local governments to cooperate or contract with each other to provide any function or service lawfully authorized to each other; and

WHEREAS, SIPA provides for the dissemination, sharing, and use of information, products, and services via the internet; and

WHEREAS, neither Party is committing funds or required to perform services as part of this agreement; and

WHEREAS, SIPA has entered into certain contracts with its contractors to operate the Colorado.gov Portal and to provide an array of electronic information, products, and services via the internet (e.g., "Colorado Statewide Internet Portal Authority Portal Integrator Contract with Colorado Interactive, LLC", as may be amended (hereinafter "Master Contract") and "COPE

Master Contract With Implementation Contractor to Support SaaS Collaboration, Office Productivity, & Email Solution" (hereinafter "COPE Contract") and other contracts to expand its array of electronic information, products, and services available to EGE; and

WHEREAS, SIPA will provide applications and services to EGE pursuant to Task Orders, Statements of Work, Work Orders; or any agreed-upon documentation under this Agreement; and

WHEREAS, a Task Order, Statement of Work, Work Order, or other agreed-upon documentation will be prepared for each application or service and mutually signed by SIPA and EGE;

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, SIPA and EGE agree as follows:

- 1. EGE shall make available to SIPA electronic information maintained and owned by EGE as is necessary to complete the agreed-upon work as set forth in a Work Order, Task Order, Statement of Work, or any agreed-upon documentation under this Agreement. As mutually agreed upon in subsequent Work Orders, Task Orders, Statements of Work, or any other agreed-upon documentation under this Agreement, EGE will provide reasonable levels of support in placing online with SIPA certain EGE-owned electronic information, as mutually agreed by EGE and SIPA, with due regard to the workload and priorities of EGE and SIPA.
- 2. SIPA may, with the authorization of EGE, through the Portal, make public electronic information made available to it available to the general public, including EGE's public electronic information. The Parties agree to use their best efforts to provide adequate and uninterrupted service under the terms of this Agreement. However, neither Party shall be liable for interruption of service when the same shall be due to circumstances beyond the reasonable control of either Party, its agents or employees, including but not limited to unanticipated equipment malfunction, periodic maintenance or update of the computer systems upon which such EGE electronic information reside, or interruption of service due to problems with the Colorado statewide area network or due to problems with any telecommunications provider.
- 3. SIPA and EGE may enter into Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation under this Agreement. Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation under this Agreement shall describe specific Services and/or Applications to be provided to EGE. EGE acknowledges that Services and/or Applications are usually offered by SIPA's contractors. Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation shall cover the purchase of goods and services from SIPA through the use of EGE funds. All Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation involving EGE funds may be approved by the EGE official with authority to execute such agreement. Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation shall contain specific time or performance milestones for SIPA's contractor(s), timelines for completion of relevant Task Orders, Purchase Orders, Statements of Work, or any agreedupon documentation, including design specifications and other criteria relevant to the completion of applicable Task Orders, Purchase Orders, Statements of Work, or any

- agreed-upon documentation, criteria and procedures for acceptance by EGE and remedying incomplete or inaccurate work for each phase of relevant Task Orders, Purchase Orders, Statements of Work, or any agreed-upon documentation.
- 4. SIPA shall be responsible for the operation of, and all costs and expenses associated with, establishing and maintaining electronic access to EGE electronic information, databases or other software applications, including (but without limitation) the cost of purchasing, developing, and maintaining programs used to interface with EGE software applications that provide access to EGE-owned electronic information, products, and services. EGE acknowledges SIPA may at its discretion use Contractors to perform certain obligations. EGE's maximum financial obligation for establishing and maintaining electronic access to EGE databases or other software applications shall be limited to the amount(s) set forth and appropriated pursuant to each individual Work Order, Task Order, Statement of Work, or any agreed-upon documentation under this Agreement.
- 5. Each Party shall have the right to terminate this Agreement by giving the other Party 10 days' written notice. Unless otherwise specified in such notice, this Agreement will terminate at the end of such 10-day period, and the liabilities of the Parties hereunder for further performance of the terms of this Agreement shall thereupon cease, but the Parties shall not be released from any duty to perform up to the date of termination. Work authorized under an individual Work Order, Task Order, Statement of Work or any other agreed-upon documentation under this Agreement, will be subject to the terms and conditions of that document.
- 6. None of the terms or conditions of this Agreement gives or allows any claim, benefit, or right of action by any third person not a party hereto. Nothing in this Agreement shall be deemed as any waiver of immunity or liability limits granted to SIPA or EGE by the Colorado Governmental Immunity Act or any similar statutory provision.
- 7. This Agreement (and related Task Orders, Work Orders, Statements of Work, and agreed-upon documentation) constitutes the entire agreement of the parties hereto and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended, modified, or changed, in whole or part, only by written agreement approved by each party.
- 8. Neither SIPA nor its contractors have responsibility for the accuracy or completeness of the electronic information contained within EGE's databases. SIPA and its contractors shall be responsible only for the accurate and complete transmission of electronic information to and from such EGE databases, in accordance with the specifications of any EGE-owned software. For the purposes of the Colorado Open Records Act, EGE shall at all times be the custodian of records. Neither SIPA nor its contractors shall be deemed to be either the custodian of records or the custodian's agent.
- 9. This Agreement and any written amendments thereto may be executed in counterpart, each of which shall constitute an original and together, which shall constitute one and the same agreement. Delivery of an executed signature page of this Agreement by facsimile or email

transmission will constitute effective and binding execution and delivery of this Agreement.

10. Confidential information for the purpose of this Agreement is information relating to SIPA's or EGE's research, development, trade secrets, business affairs, internal operations, management procedures, and information not disclosable to the public under the Colorado Open Records Act or some other law or privilege. Confidential information does not include information lawfully obtained through third parties, which is in the public domain, or which is developed independently without reference to a Party's confidential information. Neither Party shall use or disclose, directly or indirectly, without prior written authorization, any confidential information of the other. SIPA shall use its reasonable best efforts to ensure that its contractors protect EGE confidential information from unauthorized disclosure. Notwithstanding anything to the contrary herein, each Party acknowledges that given the subject matter of this Agreement, such Party shall not disclose confidential information of the other (whether in written or electronic form) to any third party, except as required by law or as necessary to carry out the specific purpose of this Agreement; provided, however, that if such disclosure is necessary, any third party who receives such confidential information shall also be bound by the nondisclosure provisions of this Section 10. Upon termination of this Agreement, the Parties shall return or destroy (at the other Party's request) all confidential information of the other and if such information is destroyed, each Party shall demonstrate evidence of such destruction to the other.

11. Miscellaneous Provisions

- A. <u>Independent Authority</u>. SIPA shall perform its duties hereunder as an independent authority and not as an employee of EGE. Neither SIPA nor any agent or employee of SIPA shall be deemed to be an agent or employee of EGE. SIPA and its agents shall pay when due all required employment taxes and income tax and local head tax on any monies paid by EGE pursuant to this Agreement. SIPA acknowledges that SIPA and its employees or agents are not entitled to EGE employment or unemployment benefits unless SIPA or a third party provides such benefits and that EGE does not pay for or otherwise provide such benefits. SIPA shall have no authorization, express or implied, to bind EGE to any agreements, liability, or understanding except as expressly authorized by EGE. SIPA and its agents shall provide and keep in force workers' compensation (and provide proof of such insurance when requested by EGE) and unemployment compensation insurance in the Agreement required by law, and shall be solely responsible for the acts of SIPA, its employees and agents.
- B. <u>Non-discrimination</u>. SIPA agrees to comply with the letter and the spirit of all applicable state and federal laws respecting illegal discrimination and unfair employment practices.
- C. <u>Choice of Law.</u> The laws of the State of Colorado (except Colorado laws related to choice of law or conflict of law) and rules and regulations issued pursuant thereto shall be applied in the interpretation, execution, and enforcement of this Agreement. At all times during the performance of this Agreement, SIPA shall strictly adhere to all applicable

federal and state laws, rules, and regulations that have been or may hereafter be established. Any legal action related to this Agreement shall be brought in either a state or federal court within the City and County of Denver, Colorado.

- D. <u>Software Piracy Prohibition</u>. No State or other public funds payable under this Agreement shall knowingly be used for the acquisition, operation, or maintenance of computer software in violation of United States copyright laws or applicable licensing restrictions. SIPA hereby certifies that, for the term of this Agreement and any extensions, SIPA has in place appropriate systems and controls to prevent such improper use of public funds. If EGE determines that SIPA is in violation of this paragraph, EGE may exercise any remedy available at law or equity or under this Agreement, including, without limitation, immediate termination of the Agreement and any remedy consistent with United States copyright laws or applicable licensing restrictions.
- F. <u>Notices</u>. All notices required or permitted under this Agreement shall be in writing and delivered personally, by facsimile, by email or by first class certified mail, return receipt. If delivered personally, notice shall be deemed given when actually received. If delivered by facsimile or email, notice shall be deemed given upon full transmission of such notice and confirmation of receipt during regular business hours. If delivered by mail, notice shall be deemed given at the date and time indicated on the return receipt. Notices shall be delivered to:

If to SIPA:

Statewide Internet Portal Authority

Attn: EGE Administrator

Street Address: 1300 Broadway, Suite 440

City, State, Zip: Denver, CO 80203

Phone: (720) 409-5634

Fax: (720) 409-5642

Email: sipa@cosipa.gov

If to EGE: Denargo Market Metropolitan District Nos. 1, 2 and 3

c/o Special District Management Services, Inc.

Attn: Ann Finn, District Manager

Street Address: 141 Union Boulevard, Suite 150

City, State, Zip: Lakewood, CO 80228

Phone: 303-987-0835

Fax: 303-987-2032

Email: afinn@sdmsi.com

And/or

McGeady Becher P.C.

Attn: Paula Williams, Esq.

Street Address: 450 E. 17th Avenue, Suite 400

City, State, Zip: Denver, CO 80203

Phone: 303-592-4380

Fax: 303-592-4385

Email:

And to other address or addresses as the parties may designate in writing.

- G: <u>Third Party Beneficiary:</u> EGE shall enjoy those rights of a third party as may be set forth expressly in any contract between SIPA and its contractors under which SIPA provides electronic information, products, and services to EGE, including the Master Contract Section 20.M., as may be amended.
- H. <u>Disputes</u>. Any failure of either Party to perform in accordance with the terms of this Agreement shall constitute a breach of the Agreement. Any dispute concerning the performance of this Agreement which cannot be resolved at the operational level shall be referred to superior management and staff designated by each Party. Failing resolution at this level, EGE may ask the SIPA Board of Directors to address the dispute. If the dispute is not resolved after reference to the SIPA Board of Directors, the Parties may use whatever procedures may be available, including but not limited to termination of the Agreement.

This Agreement is entered into as of the day and year set forth above.				
	Date:			
Name:				
Title:				
Entity: Statewide Internet Portal Authority				
	Date:			
Name: Laura Newman				
Title: President				
Entity: Denargo Market Metropolitan District Nos. 1, 2 and 3				
Address: 141 Union Boulevard, Suite 150, Lakewood, Co 80228				
Phone: 303-987-0835				
Email: afinn@sdmsi.com - lnewman@goco.com				

Lisa Hunt

From:

Ann Finn

Sent:

Thursday, June 27, 2019 2:47 PM

To:

Lisa Hunt

Subject:

Denargo MD No. 2

Attachments:

COL07004F_R03.CD.0.pdf; Stand Alone Pole1.jpg; Stealth Pole.jpg

Lisa, Please add this item to the next agenda. Thanks, Ann

From: Kirk, Audra < <u>KirkA@bv.com</u>>
Sent: Thursday, June 27, 2019 10:58 AM

To: Ann Finn <afinn@sdmsi.com> **Subject:** AT&T small cell site

Good Morning Ann,

My name is Audra Kirk, I work at Black and Veatch and am writing to you on behalf of AT&T. AT&T is in the process of adding new small cell sites in areas where call reception is bad and in areas that are known to have dropped calls. AT&T's engineers have identified the area near Denargo Market as one of these troubled areas. AT&T would like to put a small cell site on the property of Denargo Market, specifically on the grass area that is bordered by 28th Street, Wewatta Way and Broadway. I have attached construction documents of a similar pole for you to review. I have also attached a photo of a stand alone small cell pole.

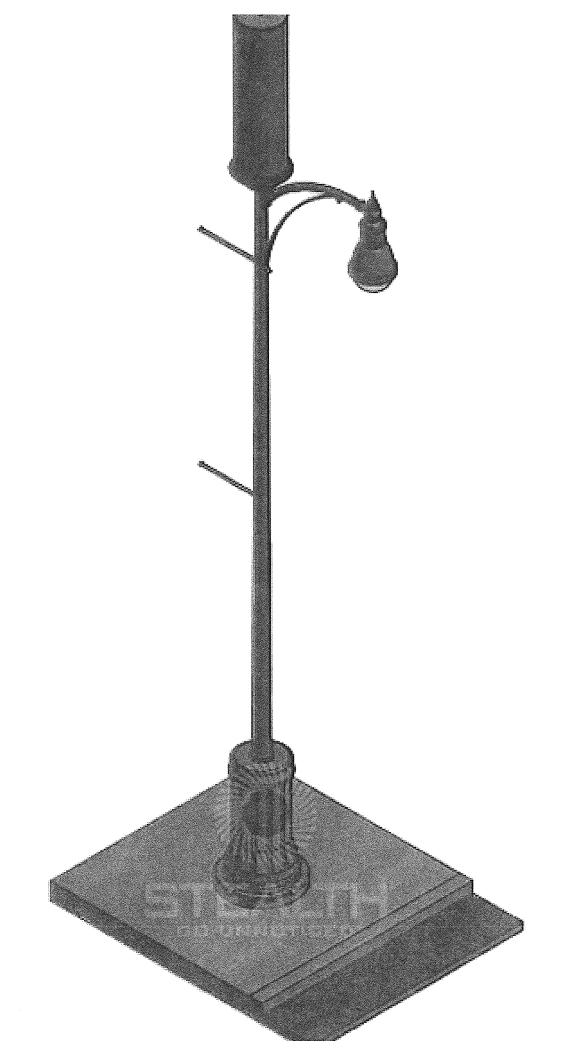
AT&T will work with you on the exact location of the pole, as well as the type of pole that would go there. For example, if you felt that you needed more lighting in the area, we could install a lighted pole. I have also attached an example of that. In addition, AT&T will pay a minimal annual lease for the use of your property.

Please review the drawings and let me know if you have any questions or concerns.

Thank you for your time and have a nice day.

AUDRA L. KIRK | Site Acquisition Specialist, Contractor

Land Services & Acquisition Group, Telecommunications
Black & Veatch Corporation | 4600 South Syracuse Street, Suite 800, Denver, CO 80237
+1 720-834-0041 P | KirkA@BV.com
Building a World of Difference.®



SCOPE OF WORK

AT&T WIRELESS PROPOSES A NEW WIRELESS INSTALLATION ON A NEW POLE. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL (1) NEW POLE
-) CANISTER ANTENNA
- INSTALL) ANTENNA MOUNT INSTALL (3) RADIO UNITS WITH ENCLOSURE
- INSTALL (1) METER SOCKET

SITE ADDRESS:

SITE CONTACT: FA NUMBER:

HUB USID:

NODE USID:

LATTTUDE (NAD 83):

LONGITUDE (NAD 83):

GROUND ELEVATION:

ANTENNA TIP HEIGHT:

ZONING JURISDICTION:

OCCUPANCY GROUP: CONSTRUCTION TYPE: POWER COMPANY:

TELEPHONE COMPANY:

RF ENGINEER:

LEASING AGENT:

ZONING AGENT:

CONSTRUCTION MANAGER:

COUNTY:

AP.N.:

INSTALL (1) LOAD CENTER INSTALL (1) SAFETY SWITCH

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

ENGINEERING

2015 INTERNATIONAL BUILDING CODE (IBC) OR LATEST ADOPTED CODE 2017 NATIONAL ELECTRIC CODE OR LATEST ADOPTED CODE 2016 CITY AND COUNTY OF DENVER AMENDMENTS TIA/EIA-222-G CODE OR LATEST EDITION

1853 BASSETT ST DENVER, CO 80202

14809961

189799

191024

DENVER

N39 75767°

W105.00233*

4,622' AMSL

0233220024000

XCEL ENERGY

CLAUDIO POZZI

SHAWN TURK (720) 834-4361

SHAWN TURK (720) 834-4361

(720) 834-0038

AT&T

29'-6" AGL

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL



CRAN_COL07004F_R03

FA #: 14809961

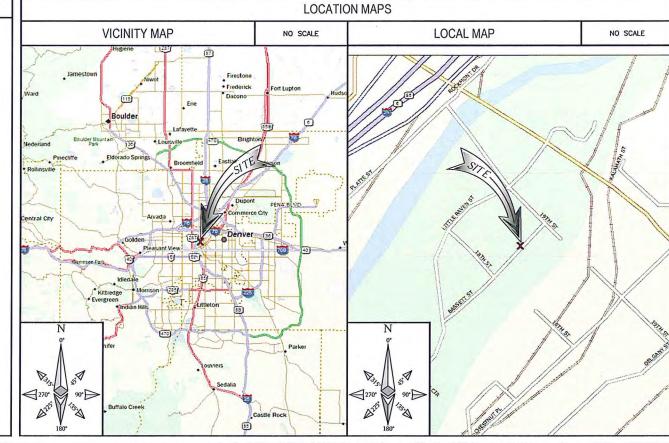
HUB USID #: 189799

NODE USID #: 191024

1853 BASSETT ST

DENVER, CO 80202

PROJECT INFORMATION CITY AND COUNTY OF DENVER



	DRAWING INDEX	
SHEET NO.	SHEET TITLE	
T-1	TITLE SHEET	
A-1	OVERALL SITE PLAN	
A-2	POLE ELEVATIONS AND RISER DETAILS	
A-3	EQUIPMENT DETAILS	
A-4	ELECTRICAL AND GROUNDING DETAILS	
E-1 ELECTRICAL DETAILS		
G-1 POLE GROUNDING ELEVATION AND DETAILS		
CN-1 LEGEND AND ABBREVIATIONS		
GN-2	GN-2 GENERAL NOTES	
GN-3	GN-3 GENERAL ELECTRICAL NOTES	
GN-4	GN-4 CITY OF DENVER REQUIRED NOTES	
GN-5	CITY OF DENVER REQUIRED NOTES	
	FOR REFERENCE	
_	SABRE POLE DRAWINGS	
-	SMALL CELL SITE SURVEY	

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

SUBCONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME



UNDERGROUND SERVICE ALERT 1-800-922-1987 48 HOURS BEFORE YOU DIG





SUITE 400 ENGLEWOOD, CO 80112



4600 SOUTH SYRACUSE STREET DENVER, COLORADO 80237

PROJECT NO:	129054.8080
DRAWN BY:	WHN
CHECKED BY:	ВСР

-	-	-
•	- 1	-
-	-	9
0	02/25/19	ISSUED FOR REVIEW
REV	DATE	DESCRIPTION

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

COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

TITLE SHEET

SHEET NUMBER

-1

CONTACT INFORMATION

ENGINEER:

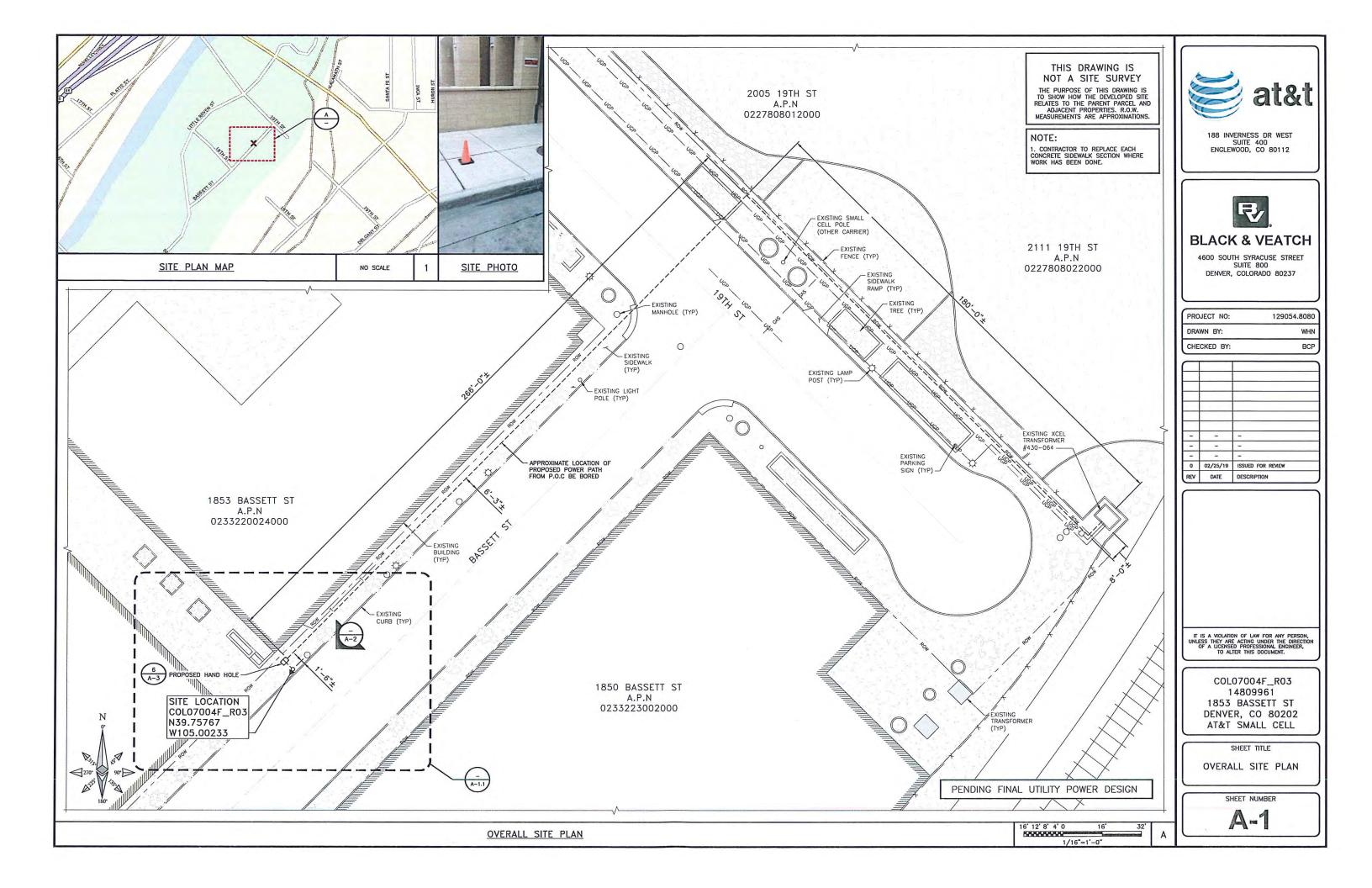
CONTACT:

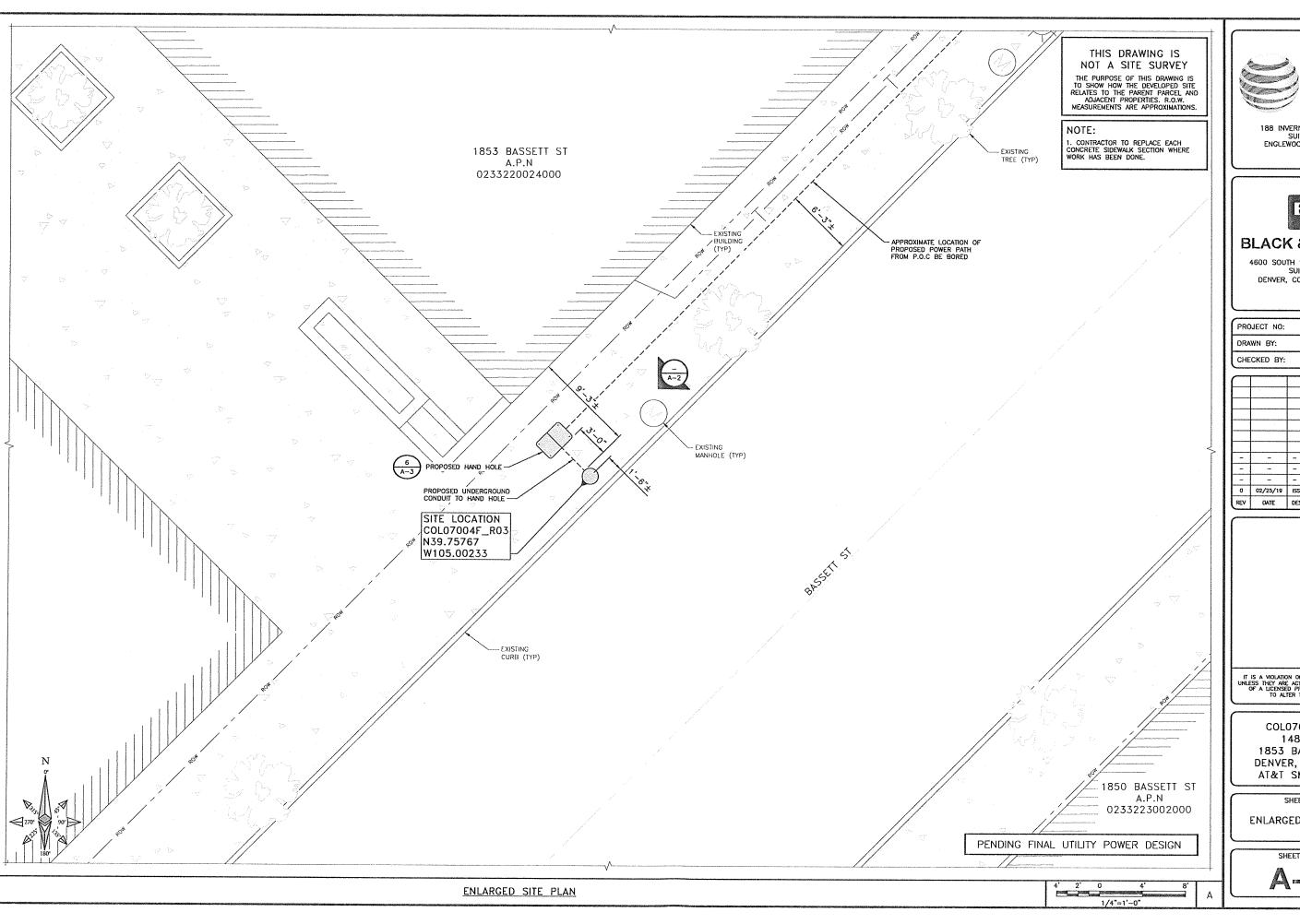
JEFF SIGL (303) 256-4086

DIRECTIONS FROM AT&T OFFICE:

HEAD EAST ON HISTORIC U.S. 66 E/MANCHESTER RD.GO STRAIGHT ON INVERNESS DR W, TURN LEFT ONTO E DRY CREEK RD, KEEP RIGHT ON TO I-25 N RAMP, KEEP RIGHT ONTO ACCESS ROAD, GO STRAIGHT ONTO LIPAN ST, TURN LEFT ON TO 19TH ST, SITE WILL BE ON THE RIGHT.

DRIVING DIRECTIONS







188 INVERNESS DR WEST SUITE 400 ENGLEWOOD, CO 80112



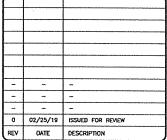
BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

 PROJECT NO:
 129054.8080

 DRAWN BY:
 WHN

 CHECKED BY:
 BCP



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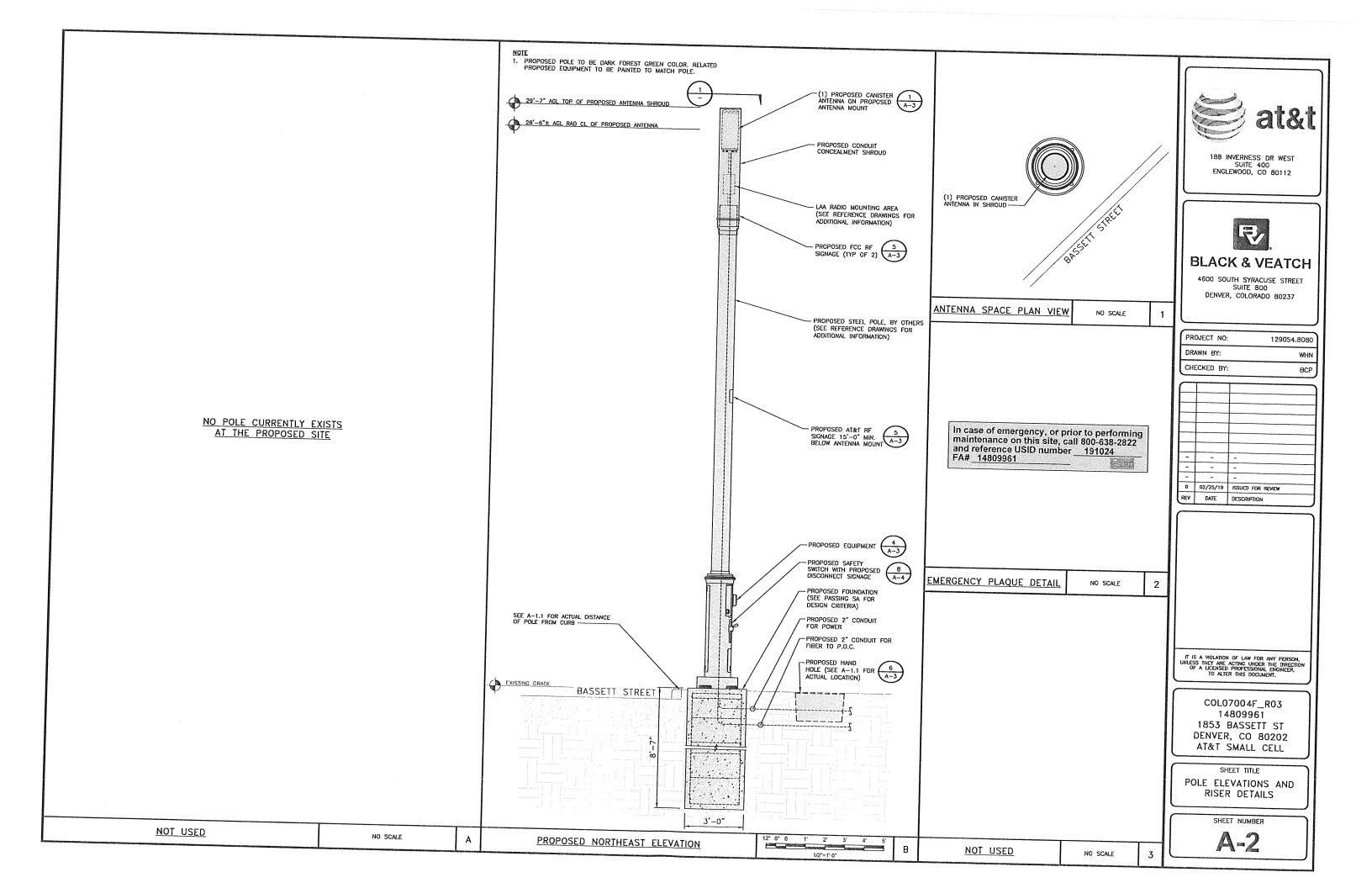
COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

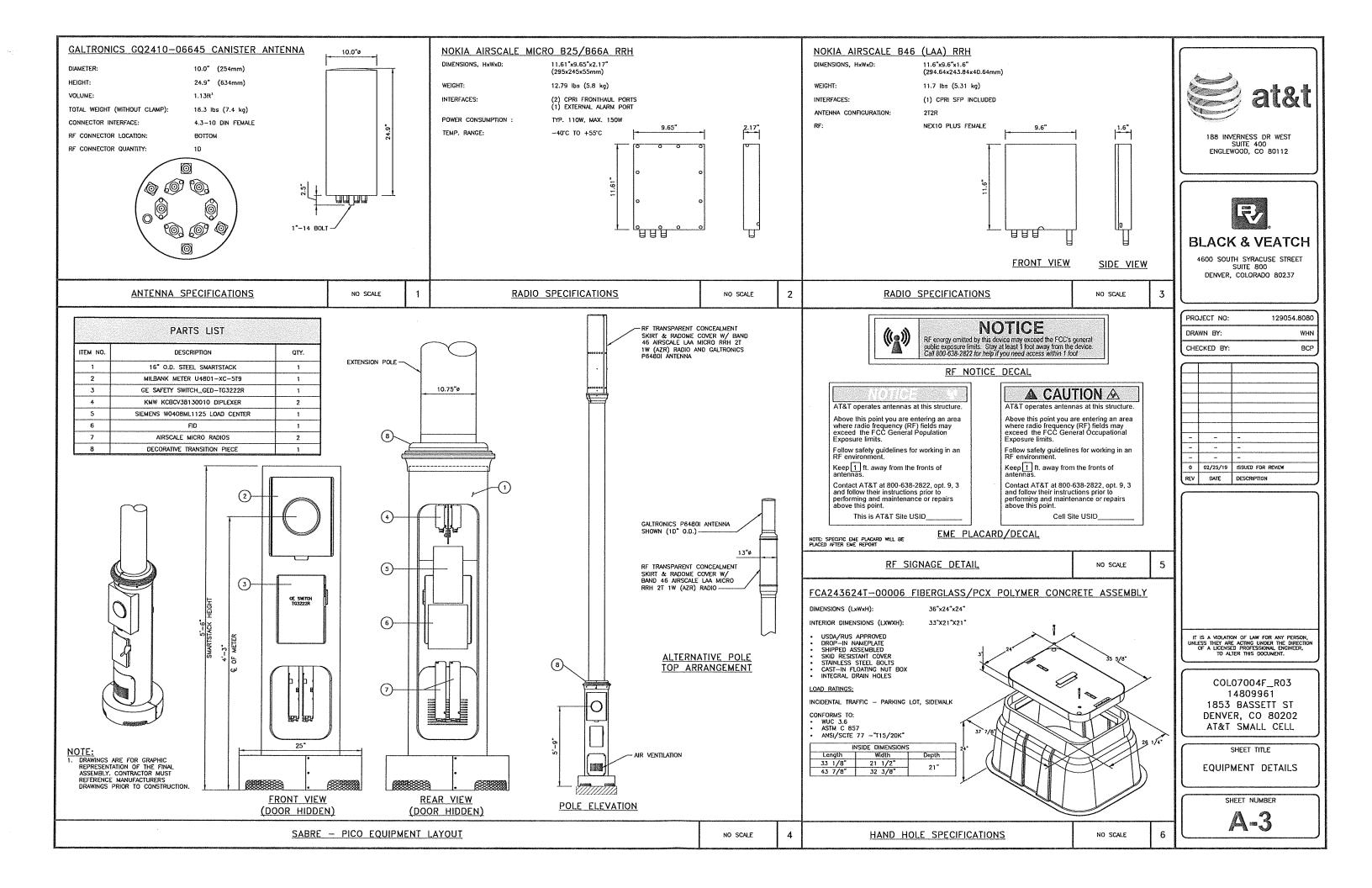
SHEET TILL

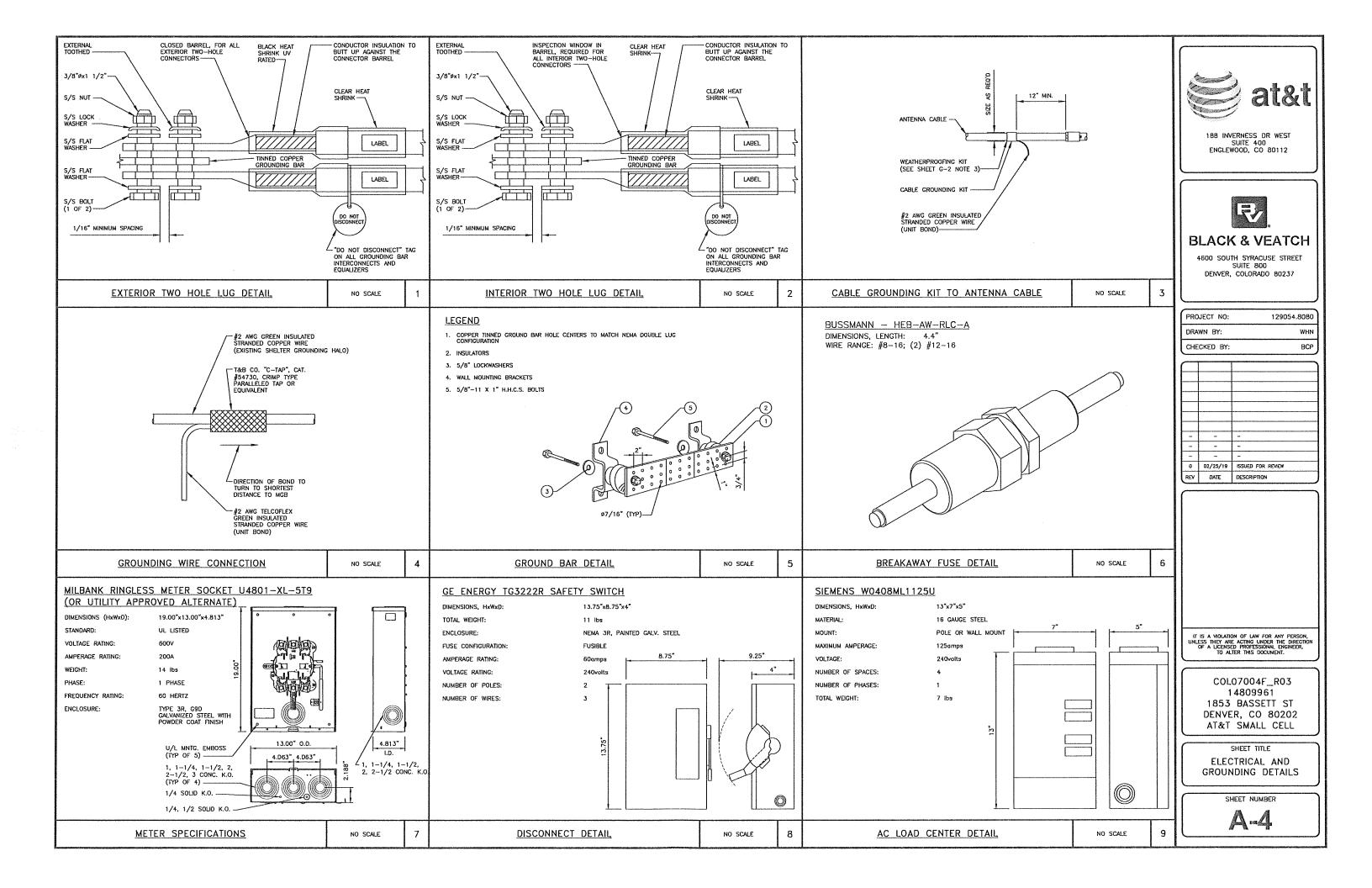
ENLARGED SITE PLAN

SHEET NUMBER

A-1.1







NO	FROM	то	CONFIGURATION
1	INCOMING ELECTRICAL SERVICE P.O.C.	PROPOSED FUSIBLE SAFETY SWITCH	CONDUCTORS AND CONDUIT SIZE PER UTILITY DESIGN
2	PROPOSED FUSIBLE SAFETY SWITCH	PROPOSED METER	CONDUCTORS AND CONDUIT SIZE PER UTILITY DESIGN
3	PROPOSED METER	PROPOSED AC LOAD CENTER	(3) #4 CU THWN-2
4	PROPOSED AC LOAD CENTER	AT&T RADIO ∯1	(2) #14 CU THWN-2 (1) #14 CU EGC
5	PROPOSED AC LOAD CENTER	AT&T RADIO ∯2	(2) #14 CU THWN-2 (1) #14 CU EGC
6	PROPOSED AC LOAD CENTER	AT&T RADЮ ∯3	(2) #14 CU THWN-2 (1) #14 CU EGC

60A, 24	60A, 240VAC FEEDER & BRANCH CONDUCTOR MAXIMUM DISTANCE				
∯4 AWG	>322'-0"	5% VOLT DROP @ 60A			
#3 AWG	322'-400'	5% VOLT DROP @ 60A			
#2 AWG	400'-526'	5% VOLT DROP @ 60A			
#1 AWG	526'-667'	5% VOLT DROP @ 60A			
1/0 AWG	667'834'	5% VOLT DROP @ 60A			

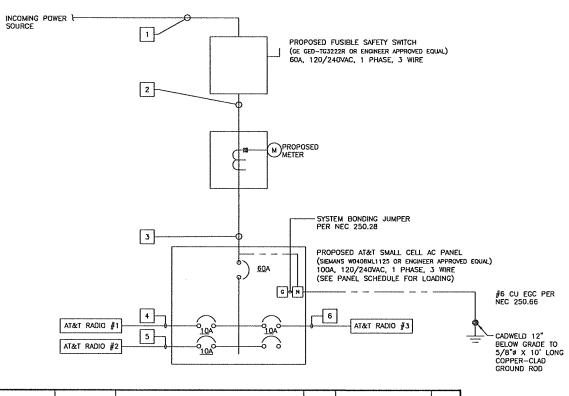
AC RUN MAXIMUM LENGTH IS 834'-0" INCLUDING BURIED DEPTH. ANY AC RUN LENGTHS BEYOND THIS MAXIMUM SHALL BE ADDRESSED WITH THE APPROPRIATE ENGINEERING TEAMS AS SOON AS THE SITUATION ARISES.

NOTES:

1. ALL NEW CONDUCTOR WIRE TO BE INSTALLED SHALL BE COPPER THWN-2, THW-2, RHW-2, XHHW-2 WIRE UNLESS NOTED OTHERWISE.

NOT USED

- 2. ALL INSTALLED CONDUCTORS AND SIGNAL CABLES TO BE CLEARLY MARKED "AT&T SMALL CELL" WITH BRASS OR FIBERGLASS TAGS.
- 3. ALL GROUNDING AND BONDING TO BE PER THE RECOGNIZED EDITION OF THE NATIONAL ELECTRIC CODE (NEC).



NOT USED



188 INVERNESS DR WEST SUITE 400 ENGLEWOOD, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

AMERICA CONTRACTOR	PROJECT NO:	129054.8080
	DRAWN BY:	WHN
	CHECKED BY:	ВСР

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0	02/25/19	ISSUED FOR REVIEW
REV	DATE	DESCRIPTION

Site Name:	1853 BASSEIT ST						MODEL NU	MBER:	SIEMENS W0408ML1125								
SITE NUMB	BER: COL070047_R03						PHASE:		1	T		WIRE:			3		1
VOLTAGE:		240	/120	Volts AC	l		BUSS RATI	NG:	60	AMP5							1
MAIN BREA	AKER:	60	AMPS														1
MOUNT:		POLE														1	1
ENCLOSUR	RE TYPE:	NEMA 3R															1
PANEL STA	ATUS:	PROPOSED	AT&T PICO														
скт	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	Demand Factor	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	Demand Factor	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	AIRSCALE MICRO 4T/4R 20W B68	10	1	NEW	150	1.00	1.00	300		1.00	1.00	150	NEW	1	10	ARSCALE MICRO 4T/4R 20W B25	2
3	ARSCALE LAA MICRO RRH 2T 1W B46	10	1	NEW	80	1.00	1.00		80						· · · · · · · · · · · · · · · · · · ·		4
5																	6
7							Ī										8
							1000	PHENS A	PRESER								
	1. PANEL SCHEDULE LOAD	ING AND	CIRCUIT	ARRANGE	MENTS			300	80	VA.							
	REFLECT POST-CONSTRUC	TION EQL	JIPMENT.					1	TOTAL	KVA	0.38						
									TOTAL	AMPS	1.58	≤ 80:	OF MAIN	BREAKER			1

3

NO SCALE

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COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

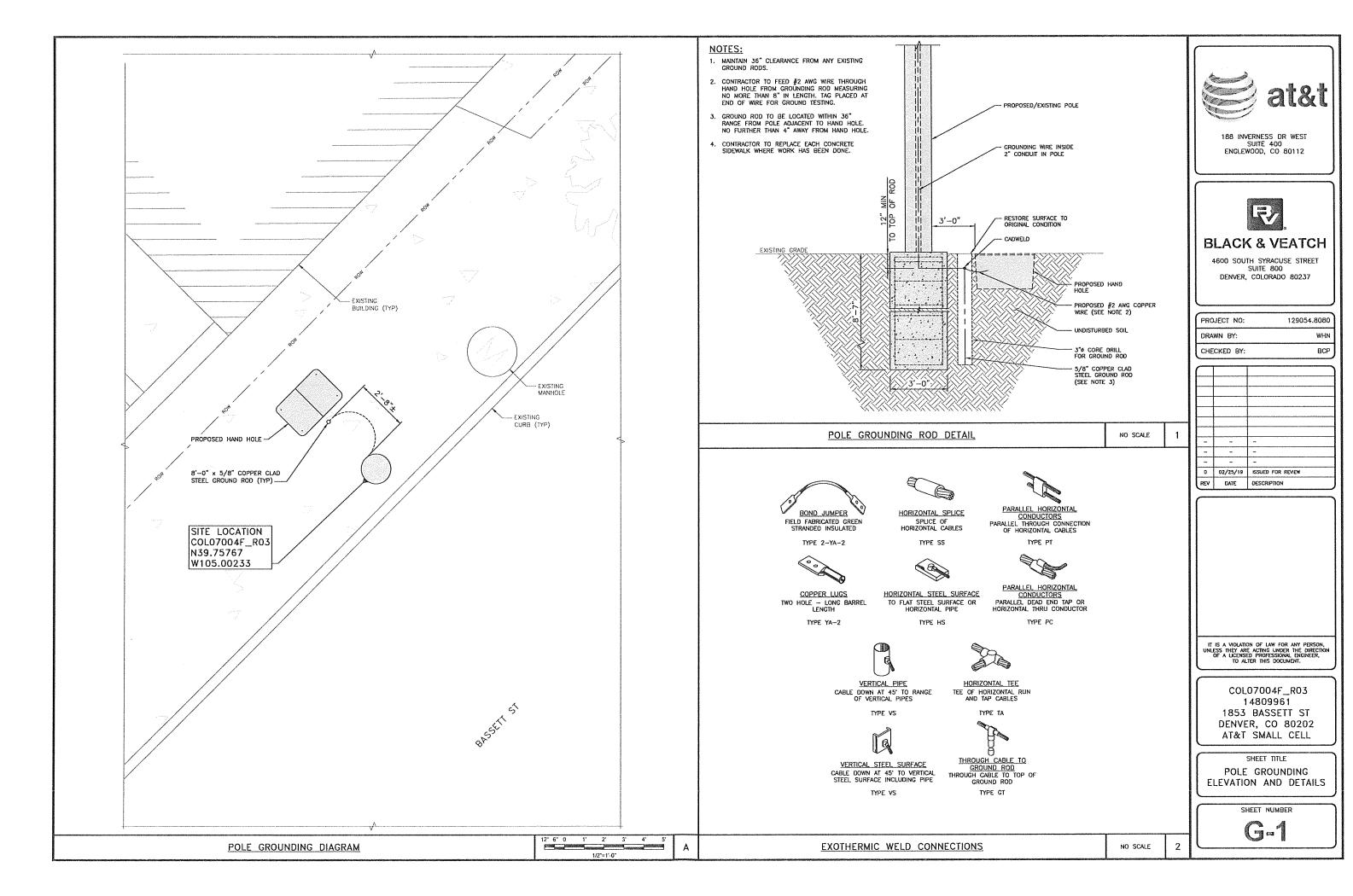
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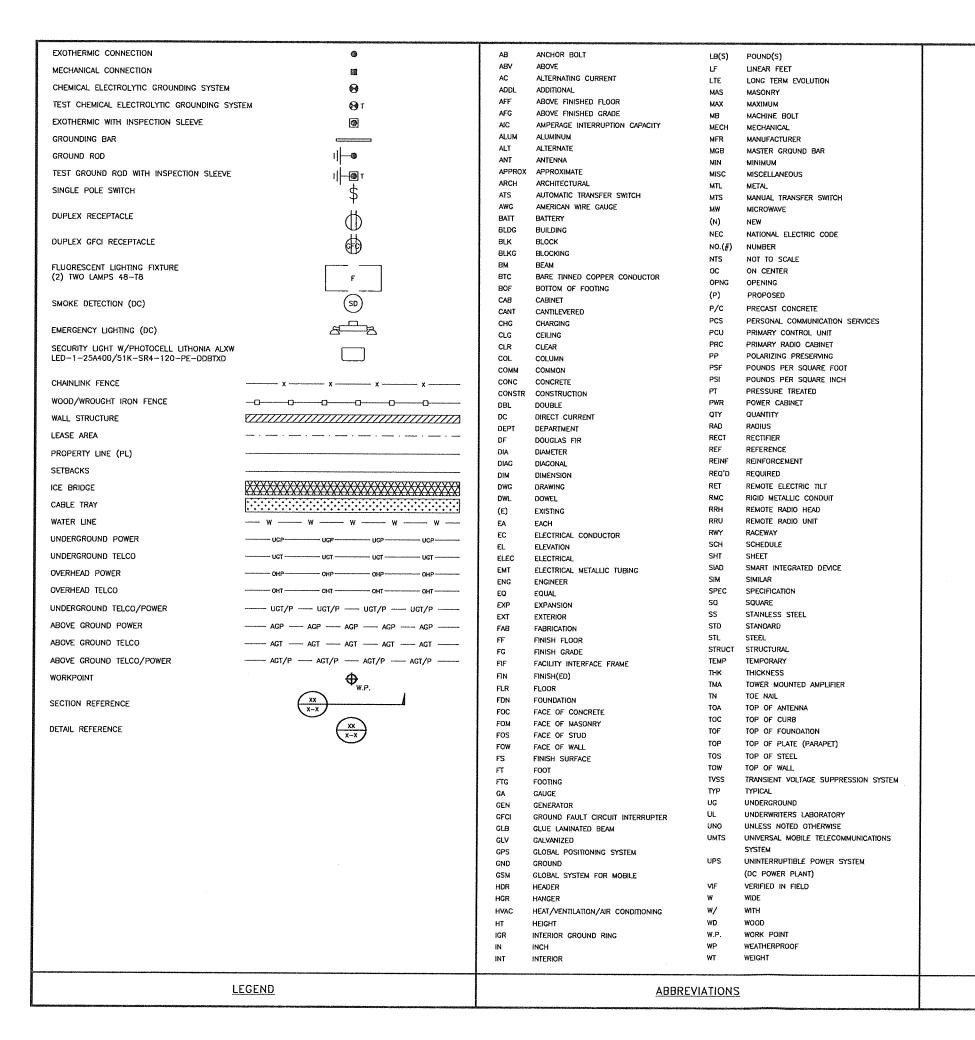
NO SCALE

ELECTRICAL ONE-LINE DIAGRAM (PICO)	NO SCALE	1	NOT USED	NO SCALE	2

NO SCALE

NOT USED







188 INVERNESS DR WEST SUITE 40D ENGLEWOOD, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

PRO	JECT NO:	129054.8080
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COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE

LEGEND AND
ABBREVIATIONS

SHEET NUMBER

GN-1

GENERAL CONSTRUCTION NOTES

GENERAL CONSTRUCTION

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY: GENERAL CONTRACTOR - OVERLAND CONTRACTING INC. (B&V)

- 2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- 3. GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPUSHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES, GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED, THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIRECTAMENTAL OUTLINE OUTLINE UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED.

 SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO
- 10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- 11, GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- 12. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- 13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- 14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES, CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- 15. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- 16. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF
- 17. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- 21. THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- 22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
- 23. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- 24. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- 25. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION, EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- 26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAYEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- 30. CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

- 31. CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION
- 32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE. AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
- 33. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH,
- 34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED
- 35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN
- 36. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR
- 37. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- 38. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER, CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 39. NO WHITE STROBE LIGHTS ARE PERMITTED, LIGHTING, IF REQUIRED, WILL MEET FAA STANDARDS AND
- 40. ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

- 41. DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT ANSI/TIA-222 OR APPLICABLE LOCAL CODES.
- 42. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS NOTED OTHERWISE.
- 43. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS NOTED OTHERWISE.
- 44. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM
- 45. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK NUTS, DOUBLE NUTS AND SHALL BE TOROUED TO MANUFACTURER'S RECOMMENDATIONS.
- 46. CONTRACTOR SHALL INSTALL ANTENNA PER MANUFACTURER'S RECOMMENDATION FOR INSTALLATION AND GROUNDING.
- 47. ALL UNUSED PORTS ON ANY ANTENNAS SHALL BE TERMINATED WITH A 50-OHM LOAD TO ENSURE ANTENNAS PERFORM AS DESIGNED. ONCE TERMINATED, APPLY A SINGLE LAYER OF BUTYL OR TWO WRAPS OF SELF-FUSING TAPE OVER THE CAP/NUT AND CONNECTOR NECK FOLLOWED BY A MINIMUM OF 2 WRAPS OF QUALITY BLACK VINYL TAPE OVER THE BUTYL OR SELF-FUSING TAPE. DO NOT COVER AND HEAT DISSIPATING SURFACES WITH WEATHERPROOFING.
- 48. PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT FOR TIGHTNESS AND ENSURE THAT THEY ARE PLUMB. ANTENNA AZIMUTHS SHALL BE SET FROM TRUE NORTH AND BE ORIENTED WITHIN +/- 5% AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5% AS DEFINED BY THE RFDS. REFER TO ND-00246.
- 49. JUMPERS FROM THE TMA'S MUST TERMINATE TO OPPOSITE POLARIZATIONS IN EACH SECTOR.
- 50. CONTRACTOR SHALL RECORD THE SERIAL #, SECTOR, AND POSITION OF EACH ACTUATOR INSTALLED AT THE ANTENNAS AND PROVIDE THE INFORMATION TO AT&T.
- 51. TMA'S SHALL BE MOUNTED ON PIPE DIRECTLY BEHIND ANTENNAS AS CLOSE TO ANTENNA AS FEASIBLE IN
- 52. ANTENNAS SHALL HAVE A 2'-0" MIN. CENTER TO CENTER HORIZONTAL SEPARATION.

TORQUE REQUIREMENTS

- 53. ALL RF CONNECTIONS SHALL BE TIGHTENED BY A TORQUE WRENCH.
- 54. ALL RF CONNECTIONS, GROUNDING HARDWARE AND ANTENNA HARDWARE SHALL HAVE A TORQUE MARK INSTALLED IN A CONTINUOUS STRAIGHT LINE FROM BOTH SIDES OF THE CONNECTION. A. RF CONNECTION BOTH SIDES OF THE CONNECTOR.
- B. GROUNDING AND ANTENNA HARDWARE ON THE NUT SIDE STARTING FROM THE THREADS TO THE SOLID SURFACE. EXAMPLE OF SOLID SURFACE: GROUND BAR, ANTENNA BRACKET METAL.
- 55. ALL 8M ANTENNA HARDWARE SHALL BE TIGHTENED TO 9 LB-FT (12 NM).
- 56. ALL 12M ANTENNA HARDWARE SHALL BE TIGHTENED TO 43 LB-FT (58 NM).
- 57. ALL GROUNDING HARDWARE SHALL BE TIGHTENED UNTIL THE LOCK WASHER COLLAPSES AND THE GROUNDING HARDWARE IS NO LONGER LOOSE
- 58. ALL DIN TYPE CONNECTIONS SHALL BE TIGHTENED TO 18-22 LB-FT (24.4 29.8 NM).
- 59. ALL N TYPE CONNECTIONS SHALL BE TIGHTENED TO 15-20 LB-IN (1.7 2.3 NM).

FIBER & POWER CABLE MOUNTING

- 60. THE FIBER OPTIC TRUNK CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY. WHEN INSTALLING FIBER OPTIC TRUNK CABLES INTO A CABLE TRAY SYSTEM, THEY SHALL BE INSTALLED INTO AN INTER DUCT AND A PARTITION BARRIER SHALL BE INSTALLED BETWEEN THE 600 VOLT CABLES AND THE INTER DUCT IN ORDER TO SEGREGATE CABLE TYPES. OPTIC FIBER TRUNK CABLES SHALL HAVE APPROVED CABLE RESTRAINTS EVERY (60) SIXTY FEET AND SECURELY FASTENED TO THE CABLE TRAY SYSTEM. NFPA 70 (NEC) ARTICLE 770 RULES SHALL APPLY.
- 61. THE TYPE TC-ER CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS. OR CABLE TRAY AND SHALL BE SECURED AT INTERVALS NOT EXCEEDING (6) SIX FEET. AN EXCEPTION; WHERE TYPE TO-ER CABLES ARE NOT SUBJECT TO PHYSICAL DAMAGE, CABLES SHALL BE PERMITTED TO MAKE A TRANSITION BETWEEN CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY WHICH ARE SERVING UTILIZATION EQUIPMENT OR DEVICES, A DISTANCE (6) SIX FEET SHALL NOT BE EXCEEDED WITHOUT CONTINUOUS SUPPORTING NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.
- 62. WHEN INSTALLING OPTIC FIBER TRUNK CABLES OR TYPE TC-ER CABLES INTO CONDUITS, NFPA 70 (NEC) ARTICLE 300 RULES SHALL APPLY.

COAXIAL CABLE NOTES

- 63. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
- 64. CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
- 65. CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERSION.
- 66. ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE SHALL BE 1/2" DIA. LDF AND SHALL NOT EXCEED 6'-0".
- 67. ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE, IN AN APPROVED MANNER, AT DISTANCES NOT TO EXCEED 4'-0" OC.
- 68. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING BOTH THE INSTALLATION AND GROUNDING OF ALL COAXIAL CABLES, CONNECTORS, ANTENNAS, AND ALL OTHER EQUIPMENT.
- 69. CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCORDANCE WITH AT&T STANDARDS.

GENERAL CABLE AND EQUIPMENT NOTES

- 70. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMAS, DIPLEXERS, AND COAX CONFIGURATION, MAKE AND MODELS PRIOR TO INSTALLATION.
- 71. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S RECOMMENDATIONS.
- 72. CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON
- 73. ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERPROOFED, EXCEPT THE RET CONNECTORS, USING BUTYL TAPE AFTER INSTALLATION AND FINAL CONNECTIONS ARE MADE. BUTYL TAPE SHALL HAVE A MINIMUM OF ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SHALL BE WRAPPED THREE TIMES. WEATHERPROOFING SHALL BE SMOOTH WITHOUT BUCKLING. BUTYL BLEEDING IS NOT
- 74. IF REQUIRED TO PAINT ANTENNAS AND/OR COAX: A. TEMPERATURE SHALL BE ABOVE 50' F.
- B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORD.
 C. FOR REGULATED TOWERS, FAA/FCC APPROVED PAINT IS REQUIRED.
 D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NUMBERS.
- 75. ALL CABLES SHALL BE GROUNOED WITH COAXIAL CABLE GROUND KITS. FOLLOW THE
- MANUFACTURER'S RECOMMENDATIONS.

 A. GROUNDING AT THE ANTENNA LEVEL.
- B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADDITIONAL CABLE GROUNDING
- REQUIRED. C. GROUNDING AT BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
- D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
 E. GROUNDING INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.
- 76. ALL PROPOSED GROUND BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUND BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUND BAR. TERMINATIONS MAY BE EXOTHERMIC
- 77. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANTENNA AND THE COAX CONFIGURATION IS THE CORRECT MAKE AND MODELS, PRIOR TO INSTALLATION.
- 78. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S SPECIFICATION & RECOMMENDATIONS.
- 79. ANTENNA CONTRACTOR SHALL FURNISH AND INSTALL A 12'-0" T-BOOM SECTOR ANTENNA MOUNT, IF APPLICABLE, INCLUDING ALL HARDWARE.
- 8D. CLOSEOUT DELIVERABLES SHALL INCLUDE PHOTOS OF ALL MOUNTING HARDWARE INSTALLED TIGHT AND
- 81. INSTALLATION MANUALS FOR RAYCAP REDLINED TO COMPLY WITH AT&T SPECIFICATIONS CAN BE ACCESSED IN THE BLACK & VEATCH TURF SOW LIBRARY VIA THE FOLLOWING URL:
- https://black and veatch. share point.com/teams/ESS/Telecom/Projects/Public Networks/ATT/ATTTurf/Projects/Public Networks/ATT/ATTTURF/Public Networks/ATT/ATTTURFATTTurfScopeofworkdocuments/_layouts/15/stort.ospx#/Shared%20Documents/Forms/Alliterns.aspx



188 INVERNESS DR WEST SUITE 400 FNG1FW000, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

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	CHECKED BY:	BCP

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COL07004F R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GNZ



UNDERGROUND SERVICE ALERT 811 1-800-922-1987 48 HOURS BEFORE YOU DIG

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GENERAL ELECTRICAL NOTES

PART 1 - GENERAL

- CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS
- B. THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL OEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWING SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.
- 1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES.
- A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.

1.3 REFERENCES

- A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWMINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.
 - ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
 ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)

 - ICE (INSULATED CARLE ENGINEERS ASSOCIATION)
 - NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
 NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)

 - 6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)

1.4 SCOPE OF WORK

- A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND BE OPERATIONAL.
- B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT.
- D. THE CONTRACTOR SHALL FURNISH TO THE OWNER WITH CERTIFICATES OF A FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT.

PART 2 - PRODUCTS

- A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS.
- B. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.
- C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL FOUPMENT IN ACCORDANCE WITH ARTICLE 11D.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE

2.2 MATERIALS AND EQUIPMENT

- RIGID METAL CONDUIT (RMC) SHALL BE HDT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
- 2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.
- CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON, ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
- NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.

- 1. AC CONDUCTORS SHALL BE FLAME--RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 60D VOLT, SIZE AS INDICATED, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
- #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
- SOLDERLESS, COMPRESSION—TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
- 4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS.
- 5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).

- DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE-D OR ENGINEERED APPROVED EQUAL.
- D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:
- 1. INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2—(*)CS OR K2L—(*)CS (*) LENGTH AS REQUIRED.

- 2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON-TRAFFIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB-22. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS ID NUMBERING, AND THE ELECTRICAL POWER SOURCE.
- 3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL

F. SYSTEM GROUNDING:

- ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED, COPPER. ABOVE GRADE GROUNDING CONDUCTORS SHALL BE SUNLIGHT RESISTANT TINNED STRANDED COPPER AND INSULATED WHERE NOTED.
- GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION.
 STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THEY SHALL NOT BE
 FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS
 BY WAY OF STENCILING OR DESIGNATION PLATE.
- 3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS. INTERIOR CONNECTIONS USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK.
- 4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
- 5. GROUND RODS SHALL BE ERICO ∯615800, COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"x10"-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE AT&T SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STATERS, AND EQUIPMENT CABINETS.

F. OTHER MATERIALS:

- THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
- 2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.

G. PANELS AND LOAD CENTERS

1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.

PART 3 - EXECUTION

- A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.

- A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER.
- B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
- C. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR DPERATION.

A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

- ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
- PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
- 3. INSTALL SCH. 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER RDADWAYS, PARKING LOTS, STREETS, AND ALLEYS. CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL OTHER NON-TRAFFIC APPLICATIONS (REFER TO
- 4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
- 5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE OUARTER-BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
- FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
- 7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
- 8. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOYED.
- ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
- 10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS, IDENTIFY PULL STRINGS AT EACH END.
- 11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
- 12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO ENSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
- 13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

B. CONDUCTORS AND CABLE

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

208/240/120 VOLT SYSTEMS BLACK RED GROUNDING GREEN

SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDULETS APPROVED FOR THIS PURPOSE.

- PULLING LUBRICANTS SHALL BE UL APPROVED, CONTRACTOR SHALL USE NYLDN OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.
- CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS IS PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.

- ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&T GROUNDING AND BONDING STANDARDS TP-76416, ND-00135, AND THE NATIONAL ELECTRICAL CODE.
- PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
- 3. ALL GRDUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT, ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
- BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUND RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUND RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
- TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ENSURE PERMANENT AND EFFECTIVE GROUNDING.
- CONTRACTOR SHALL VERIFY THE LOCATIONS DF GROUNDING TIE—IN—POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S
- ALL GRDUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXCITHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
- APPLY CORROSION—RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE KOPR-SHIELD ANTI-OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONNECTIONS.
- A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS. 10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE 6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.
- DIRECT BURIEO GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
- 12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
- 13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.
- 14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
- 15. IF CDAX ON THE ICE BRIDGE IS MORE THAN 6 FT, FROM THE GROUND BAR AT THE BASE OF THE TOWER, A SECOND GROUND BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LINE ARRESTORS.
- 16. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.

- A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.
- B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO CDMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON-COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS CDMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FDR NON-COMPLIANCE.

C. TEST PROCEDURES

- 1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST
- PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.
- MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.
- PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 DHMS.



188 INVERNESS DR WEST SUITE 400 ENGLEWOOD, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

PROJECT NO 129054.8080 DRAWN BY: CHECKED BY: BCP

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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.

COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE GENERAL ELECTRICAL NOTES

SHEET NUMBER

GN=3

GENERAL DESIGN REQUIREMENTS FOR SMALL CELL INFRASTRUCTURE

- NO PART OF ANY PROPOSED EQUIPMENT OR INFRASTRUCTURE SHALL INFRINGE UPON MINIMUM PEDESTRIAN ACCESSIBLE ROUTE (PAR) SURFACES, ANY EQUIPMENT PROPOSED TO OVERHANG SUCH SURFACES MUST BE MOUNTED 80° OR HIGHER ABOVE WALK GRADE.
- ALL NEW FREESTANDING SMALL CELL ANTENNA POLES SHALL BE LOCATED TO AVOID ANY CONFLICTS WITH VEHICLES PARKED OR TRAVELING ON ADJACENT ROADWAY. CROSS SLOPES OF ADJACENT STREETS CAN CAUSE SOME LARGER VEHICLES TO LEAN INTO AMENITY ZONES.
- ALL NEW FREESTANDING SMALL CELL ANTENNA POLES SHALL BE 30' OR LESS IN TOTAL HEIGHT UNLESS PREVIOUSLY COORDINATED WITH PUBLIC WORKS.
- ALL POLES SHALL BE DESIGNED FOR "STEALTH", SO THAT SMALL CELL EQUIPMENT IS CONTAINED WITHIN THE POLE ITSELF TO THE MAXIMUM EXTENT FEASIBLE.
- ALL POLES SHALL BE DESIGNED TO AVOID EXISTING STREET TREES WITH NO PROPOSED DISTURBANCE WITHIN 5' OF THE EXISTING ORIP-LINE OF ANY TREE.
- 6. LANDSCAPING RESTORATION SURROUNDING EACH POLE LOCATION SHALL BE DETAILED TO MEET ADJACENT
- ALL ELECTRIC AND FIBER OPTIC CONDUIT PROPOSED TO EACH POLE LOCATION SHALL BE DESIGNED TO BE LOCATED TO AVOID UNPAVED AREA BETWEEN ROADWAY CURB AND SIDEWALK, GENERALLY REFERRED TO AS 'TREE LAWN' OR "AMENITY ZONE" TO THE MAX EXTENT FEASIBLE.
- POLES OR ASSOCIATED EQUIPMENT SHALL BE COMPOSED OF STEEL PAINTED FEDERAL GREEN IN COLOR, WITH A FINISH THAT IS CORROSION AND GRAFFITI RESISTANT AND CAN BE REPAIRED/REPAINTED TO ORIGINAL FINISH
- OWNERSHIP NAME, UNIQUE POLE IDENTIFICATION NUMBER MATCHING COMPANY POLE CODE FROM MASTER TRACKER, AND CONTACT PHONE NUMBER FOR EACH FREESTANDING POLE LOCATION MUST BE CLEARLY POSTED AS A PERMANENT PLAQUE ON EACH POLE AT 3 TO 6 FEET IN HEIGHT.
- 10. ALL ASSOCIATED UNDERGROUND VAULTS OR PULL-BOXES SHALL BE APPROPRIATELY LABELED TO IDENTIFY
- 11. ALL POLE LOCATIONS SHALL BE DESIGNED TO CURRENT NATIONAL AND LOCAL ELECTRIC CODE INCLUDING

GENERAL NOTES

- ALL CURRENT DENVER TRANSPORTATION STANDARDS AND DETAILS FOR THE ENGINEERING DIVISION SHALL BE FOLLOWED.
- 2. THE APPLICANT AND CONTRACTOR ARE RESPONSIBLE FOR OBTAINING ALL PROJECT PERMITS ASSOCIATED WITH CONSTRUCTION AND RELATED ACTIVITIES SUCH AS STREET OCCUPANCY, STREET CUT, CONSTRUCTION, EROSION CONTROL AND PARKS PERMITS.
- THE CONTRACTOR SHOULD REMOVE MATERIALS AND EQUIPMENT FROM THE ROW BY THE CLOSE OF DAILY
- NO WORK SHALL BE PERMITTED AT NIGHT OR ON SATURDAYS, SUNDAYS, AND HOLIDAYS OR AS RESTRICTED BY CITY NOISE ORDINANCE WITHOUT PRIOR AUTHORIZATIONS OR UNLESS OTHERWISE SPECIFIED IN THIS PERMIT. CITY MAY RESTRICT WORK ON ROW DURING ADVERSE WEATHER CONDITIONS OR DURING PERIODS OF HIGH TRAFFIC VOLUME.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND STANDARDS ON THE JOB SITE AT ALL TIMES.
- THE CONTRACTOR SHALL NOTIFY CCD CONSTRUCTION ENGINEERING ROW DISTRICT INSPECTOR AND PUBLIC WORKS RIGHT OF WAY (PW ROW) CONSTRUCTION INSPECTIONS AT (303) 446-3469 OR WMDPWDESCE@DENYERGOV.ORG: 1) TWO DAYS BEFORE COMMENCING WORK IN THE ROW: 2) WHEN SUSPENDING OPERATIONS FOR 5 OR MORE WORKING DAYS; 3) TWO WORKING DAYS BEFORE RESUMING SUSPENDED WORK; AND 4) UPON COMPLETION OF WORK.
- THE APPLICANT AND CONTRACTOR ARE RESPONSIBLE FOR BEING AWARE OF, NOTIFYING, COORDINATING, AND SCHEDULING ALL INSPECTIONS REQUIRED FOR FINAL APPROVALS AND PROJECT ACCEPTANCE.
- 8. ALL WORK, INCLUDING CORRECTION WORK, IS SUBJECT TO NOTIFICATION AND INSPECTION.
- IN THE EVENT THAT AN EMERGENCY REPAIR TO EXISTING FACILITIES IS NECESSARY, THE PW ROW CONSTRUCTION INSPECTIONS SHALL IMMEDIATELY BE NOTIFIED VIA TELEPHONE AT (303) 446-3469. EMERGENCY PROCEDURES SHALL BE COORDINATED BEFOREHAND, WHERE POSSIBLE, AND NO WORK WILL BE ALLOWED UNTIL NOTIFICATION IN RECEIVED. THE TELEPHONE NOTIFICATION MUST BE FOLLOWED UP WITH A LETTER TO PW ROW CONSTRUCTION INSPECTIONS AS SOON AS POSSIBLE.
- 10. ALL TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS ALL IRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS REQUIRED BY THE MOST RECENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION." THESE REGULATIONS ARE DESCRIBED IN SUBPART P, PART 1926 OF THE CODE OR FEDERAL REGULATIONS. SHEETING AND SHORING MAY BE UTILIZED WHERE NECESSARY TO PREVENT ANY EXCESSIVE WIDENING OR SLOUGHING OF THE TRENCH. THE CONTRACTOR MAY BE REQUIRED TO USE AN APPROVED PILING INSTEAD OF SHEETING AND SHORING. THE CONTRACTOR SHALL ACCEPT SOLE LIABILITY AND RESPONSIBILITY FOR COMPLYING WITH THE CURRENT OSHA REGULATIONS
- ALL WORK WILL BE PROPERLY BACKFILLED PRIOR TO THE END OF THE WORKDAY; NO OPEN HOLES AND/OR TRENCHES ARE ALLOWED OVERNIGHT. ALL WORK IS TO BE IN ACCORDANCE WITH PERMIT REDUIREMENTS AND APPLICABLE STANDARDS.
- 12. WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- 13. ALL POTHOLES MUST BE CORE DRILLED OR SAW CUT TO 2' X 2'.
- 14. UNLESS CONFINED IN A PREDEFINED BERM CONTAINMENT AREA, THE CLEANING OF CEMENT DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED. (ORMC §. 56-102 (A.)(C.))
- WHERE ROW FENCES NEED TO BE REMOVED OR CUT TO FACILITATE CONSTRUCTION, APPROVAL MUST BE GIVEN BY PW ROW CONSTRUCTION INSPECTIONS BEFORE WORK IS PERFORMED. EXISTING LINE MUST BE ESTABLISHED BY GOOD SURVEY PRACTICES. THE CONTRACTOR WILL SUPPLY AND INSTALL NEW MATERIALS REQUIRED TO RESTORE FENCE TO ACCEPTABLE CONDITION. NEW POSTS AND WIRE WILL BE REQUIRED INCLUDING CORNER POSTS FOR CATES PLACED IN LOCATIONS AS DETERMINED BY THE ORIGINAL SURVEY, FENCES WILL BE PLACED ACCORDING TO FENCING STANDARDS OF THE PUBLIC WORKS DEPARTMEN
- 16. IF LIVESTOCK IS PRESENT IN THE AREA OF FENCE REMOVAL, A TEMPORARY FENCE, EQUIVALENT TO THE EXISTING, WILL BE REQUIRED TO CONTAIN LIVESTOCK UNTIL NEW FENCE IS IN PLACE; TEMPORARY FENCE WILL
- 17. UTILITY PLAN REVIEW APPROVAL DOES NOT CONSTITUTE APPROVAL FOR ANY WORK ON, IN, UNDER, OR OVER PRIVATE PROPERTY.

ROADWAY NOTES

- CONSTRUCTION OF ANY PORTION OF THE PUBLIC ROADWAY, INCLUDING THE PAVEMENT STRUCTURE, SUBSURFACE SUPPORT, DRAINAGE, LANDSCAPING ELEMENTS, AND ALL APPURTENANT FEATURES, SHALL COMPLY WITH THE PROVISIONS OF THE MOST CURRENT VERSION OF THE CITY & COUNTY OF DENVER RULES & REGULATIONS, CITY STANDARD SPECIFICATIONS, AND STANDARD DETAILS.
- 2. MATERIAL REMOVED FROM ANY PORTION OF THE ROADWAY SECTION MUST BE REPLACED IN ACCORDANCE WITH THE PUBLIC WORKS RULES & REGULATIONS GOVERNING STREET CUTS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE TRAFFIC CONTROL THROUGHOUT THE PROJECT, INCLUDING PROPER TRAFFIC CONTROL DEVICES ANO/OR PERSONNEL AS REQUIRED. A TRAFFIC CONTROL PLAN IS SUBJECT TO COOT ANO/OR PW ROW CONSTRUCTION INSPECTIONS FOR APPROVAL PRIOR TO COMMENCING WORK ON PUBLIC ROW. A COPY OF APPROVED TRAFFIC CONTROL PLANS MUST BE AVAILABLE ON SITE DURING WORK. TRAFFIC CONTROL TO BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), SECTION VI.
- THE TRAFFIC CONTROL PLAN MUST INCLUDE PROTECTIVE MEASURES WHERE MATERIALS AND EQUIPMENT MAY BE STORED ON ROW.
- PRIOR TO FINAL ACCEPTANCE, ALL DISTURBED PORTIONS OF ROW SHALL BE CLEANED UP AND RESTORED TO THEIR ORIGINAL CONDITION, SUBJECT TO CITY APPROVAL.
- NO CLEATED OR TRACKED EQUIPMENT MAY WORK IN OR MOVE OVER PAVED SURFACES WITHOUT MATS.
- RESTORATION IS REQUIRED FOR ANY HOLES OR CUTS MADE IN WALKING AND/OR PAVED SURFACES, INCLUDING THOSE FOR TEST HOLES OR POTHOLING FOR INVESTIGATION ACTIVITIES FOR ANY LOCATES.
- ANY POTHOLES DRILLED INTO SIDEWALKS WILL REQUIRE FULL PANEL REPLACEMENT, PERMANENT PATCHING OF POTHOLES OR CUTS IS ALSO REQUIRED IN ASPHALT PAVEMENTS, AND FOR CONCRETE PAVEMENT WITH UP TO 2 POTHOLES. WHEN 3 OR MORE POTHOLES EXIST, THEN FULL STREET PANEL REPLACEMENTS ARE REQUIRED. ALL RESTORATION SHALL BE PER CITY AND COUNTY OF DENVER TRANSPORTATION STANDARDS AND DETAILS. CONTACT PW CONSTRUCTION ENGINEERING AT 303-446-3469 IF MORE INFORMATION IS REQUESTED.
- WHEN AN EXISTING ASPHALT STREET IS CUT, THE STREET MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BEFORE ANY CUTS ARE MADE; PATCHING SHALL BE DONE IN CONFORMANCE WITH THE PUBLIC WORKS RULES & REGULATIONS GOVERNING STREET CUTS. THE FINISHED PATCH SHALL BLEND SMOOTHLY INTO THE EXISTING SURFACE, ALL LARGE PATCHES SHALL BE PAVED WITH A SELF-PROPELLED ASPHALT PAVING MACHINE.
- 10. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE ANY PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE CUTTING IS TO TAKE
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS.
- 12. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE

UTILITY NOTES

- CAUTION: LOCATION OF EXISTING UTILITIES IS SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AS SUPPLIED BY THE UTILITY PROVIDERS INCLUDING TYPE, SIZE, LOCATION AND NUMBER OF UTILITIES. PRIOR TO DATE OF CONSTRUCTION CONTRACTOR SHALL VERIFY EXISTING UTILITIES WITH THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AND/OR UTILITY COMPANIES, FOR ADDITIONAL INFORMATION CONTACT: UNCC AT 1-800-922-1987. THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND FACILITIES PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES TO COORDINATE SCHEDULING. SHOULD ANY CONFLICTS, RECONSTRUCTION, OR OTHER INTERRUPTIONS IN SERVICE BE REQUIRED, CONTRACTOR SHALL COORDINATE UTILITY SCHEDULING.
- THE APPLICANT SHALL CORRECTLY SHOW ON SUBMITTED DRAWINGS THE LOCATIONS OF ALL UTILITIES IN THE VICINITY WHERE THE APPLICANT MAY BORE, TRENCH, EXCAVATE, AND INSTALL CONDUIT, FIBER, FIBER ENCLOSURES, VAULTS, AND HANDHOLDS. IN THE EVENT THAT THE CONDUIT RUN, FIBER ENCLOSURES, VAULTS, OR HANDHOLDS ARE LOCATED WITHIN THE VICINITY OF ANY UTILITY, THE APPLICANT SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION THAT WILL PREVENT DAMAGE TO THE INSTALLATION UNDER NORMAL UTILITY OPERATING CONDITIONS IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN INFORMATION ON EACH OF THE UTILITIES AS APPLICABLE SUCH AS GAS PRESSURE, STEAM AND WATER PRESSURES, TEMPERATURES, ETC.
- IT IS THE RESPONSIBILITY OF THE APPLICANT TO EXAMINE THE SITE FOR EVIDENCE OF FAILURES OF OR DEFICIENCIES IN UTILITY COMPANY FACILITIES (I.E. XCEL, DENVER WATER, DENVER PUBLIC WORKS, WMD, ETC.)
 AND TO IMMEDIATELY CALL ANY SUCH EVIDENCE OF PRE-EXISTING DAMAGE TO THE ATTENTION OF THE UTILITY
 COMPANY ALONG WITH PROPER DOCUMENTATION. THE APPLICANT HEREBY AGREES THAT THE REPAIR OF ANY AND ALL DAWAGES (DIRECT OR INDIRECT), THAT MAY BE SUBSECUENTLY DISCOVERED AND PROVEN TO HAVE BEEN CAUSED BY THE CONSTRUCTION ACTIVITIES, IS THE SOLE RESPONSIBILITY OF THE APPLICANT WITHOUT SUCH EVIDENCE OF PRE-EXISTING DAMAGE. THE APPLICANT HERBY AGREES THAT ANY AND ALL DAMAGES (DIRECT OR INDIRECT) TO LITHLITY COMPANY FACILITIES, WHICH MAY BE SUBSEQUENTLY DISCOVERED WITHIN (DIRECT OR INDIRECT) OF UTILITY COMPANY FACILITIES, WHICH MAY BE SUBSEQUENTLY DISCOVERED WITHIN THOSE AREAS WHERE CONSTRUCTION OCCURRED WITHIN SIX FEET OF UTILITY COMPANY FACILITIES (DIRECT OR INDIRECT), AND WITHIN A PERIOD OF THREE YEARS FROM THE DATE OF CONSTRUCTION, WERE CAUSED BY THE CONSTRUCTION ACTIVITIES. FURTHERMORE, THE REPAIR IS AGREED TO BE THE SOLE RESPONSIBILITY OF THE APPLICANT. IT SHALL BE THE APPLICANTS RESPONSIBILITY TO PROTECT ALL UTILITY COMPANY FACILITIES WITHIN THE AREA OF CONSTRUCTION. THIS INCLUDES ALL STEPS NECESSARY TO PREVENT SUBSIDENCE OF THE SOIL ADJACENT TO OR NEAR UTILITY COMPANY FACILITIES.
- ANY CASING OR SLEEVE SO INSTALLED UNDER THE ROADWAY SHALL BE THE SAME DIAMETER AS THE BORE SO AS TO ELIMINATE A VOID AROUND THE CASING. IN THE EVENT JACKING OPERATIONS RESULT IN VOIDS, THE RESULTANT VOIDS SHALL BE GROUTED OR OTHERWISE BACKFILLED, SUBJECT TO CITY APPROVAL. ENDS OF BOREO SECTIONS SHALL NOT BE COVERED BEFORE BEING INSPECTED.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST A 10 CLEAR ZONE TO UTILITIES AT ALL TIMES IN ACCORDANCE WITH CITY STANDARDS. THE CONTRACTOR/APPLICANT SHALL CLEARLY IDENTIFY OWNER NAME & CONTACT INFO
- FOR ALL MANHOLES IN ASPHALT STREETS, ADD A 2"RISER RING DIRECTLY UNDER THE COVER TO FACILITATE FUTURE ROTOMILL/OVERLAY OPERATIONS.

DENVER WATER NOTES

- THE CONTRACTOR SHALL NOTIFY DENVER WATER AT (303) 628-6682 PRIOR TO ANY CONSTRUCTION THAT COULD AFFECT OR DISTURB A DENVER WATER FACILITY.
- APPLICANT ASSUMES FULL RESPONSIBILITY FOR ALL DAMAGES INCURRED TO DENVER WATER FACILITIES DUE TO ACTIMITIES AUTHORIZED BY THE APPROVED PLANS.
- DENVER WATER, AT THE SOLE EXPENSE OF THE APPLICANT WILL MAKE ALL REPLACEMENT OR REPAIR OF DENVER WATER FACILITIES ATTRIBUTED TO THE WORK.
- IN THE EVENT THE APPLICANT'S FACILITIES ARE DAMAGED OR DESTROYED DUE TO DENVER WATER'S REPAIR, REPLACEMENT AND/OR OPERATION OF ITS FACILITIES, REPAIRS SHALL BE MADE BY THE APPLICANT AT ITS SOLE EXPENSE.

- ADDING FIBER OPTICS TO AN EXISTING DUCT NOT PREVIOUSLY PERMITTED REQUIRES THE DUCT TO BE SUBJECT TO THE AFOREMENTIONED PROVISIONS.
- PARALLEL DUCTS OR CABLE WILL NOT BE PERMITTED WITHIN FIVE (5) FEET OF A DENVER WATER FACILITY (MAINS OR CONDUITS), AND A MINIMUM OF TEN (1D) FEET OF CLEARANCE IS REQUIRED BETWEEN POTABLE AND NON-POTABLE MAINS (E.G., STORM, SANITARY, REUSE).
- WHEN CROSSING A DENVER WATER MAIN OR CONDUIT, A MINIMUM VERTICAL CLEARANCE OF EIGHTEEN (18) INCHES IS REQUIRED.
- A DENVER WATER REPRESENTATIVE MUST BE PRESENT WHEN INSTALLATION CROSSES A SIXTEEN (16) INCH OR
- LOCATES AND POTHOLES SHALL BE REQUIRED FOR ALL CROSSINGS INVOLVING DENVER WATER FACILITIES INCLUDING, BUT NOT LIMITED TO, HYDRANT LATERAL RUNS AND SERVICE LINE CROSSINGS.
- 10. IN THE EVENT OF A CONFLICT WITH REQUIREMENTS, THE LATEST VERSIONS OF DENVER WATER'S ENGINEERING STANDARDS AND CAPITAL PROJECTS CONSTRUCTION STANDARDS SHALL SUPERSEDE THESE PROVISIONS

FORESTRY & LANDSCAPING NOTES

- UTILITY PROJECTS THAT DO NOT GO THROUGH THE OFFICE OF THE CITY FORESTER (OCF) REVIEW PROCESS OR DO NOT RECEIVE OCF APPROVAL; OCF RESERVES THE RIGHT TO PLANT IN THE PRW AND CANNOT BE HELD LIABLE FOR ANY DAMAGE THAT OCCURS TO UTILITY WITHIN PRW WHERE UTILITY IS NOT PLACED AT A
- OCF RESERVES THE RIGHT TO DECLARE UNENCUMBERED SPACE IN THE PRW FOR FUTURE AND REPLACEMENT PRW TREES. SHOULD THESE AREAS BE VIOLATED BY ANY UTILITY, THE UTILITY OWNER SHALL (RE)MOVE
- THE CONTRACTOR SHALL NOT SPRAY, CUT, OR TRIM TREES OR OTHER LANDSCAPING ELEMENTS WITHIN ROW, UNLESS SUCH WORK IS OTHERWISE SPECIFIED OR CLEARLY INDICATED ON THE APPROVED PLANS.
- ANY DISTURBED LANDSCAPING WILL BE REPLACED TO EQUAL OR BETTER CONDITION THAN THAT WHICH EXISTED
- SEEDING, SODDING, AND PLANTING SHALL BE AS SPECIFIED OR OTHERWISE APPROVED BY THE CITY. CONSTRUCTION, MAINTENANCE, AND WATERING REQUIREMENTS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS. WHERE LANDSCAPE RESTORATION MUST BE DELAYED DUE TO SEASONAL REQUIREMENTS, A SEPARATE PERMIT MAY AUTHORIZE SUCH WORK.
- THE CITY REQUIRES COMPLIANCE WITH THE FOLLOWING WHEN WORK IS NECESSARY AND/OR REQUIRED ADJACENT TO TREES IN THE PRW OR OTHER PUBLIC SPACES:
 - A. TREE PROTECTION ZONE (TPZ) IS THE AREA EQUAL TO 1.5 FEET PER 1—INCH DIAMETER TREE MEASURED AT 4.5 FEET ABOVE GRADE OR THE DRIPLINE OF THE TREE, WHICHEVER IS GREATER.

 1. TPZ FENCING SHALL BE ESTABLISHED PRIOR TO WORK COMMENCING, SEE TREE PROTECTION DETAIL AVAILABLE ON WEBSITE.
 - II. NO MODIFICATION OF TPZ FENCING SHALL OCCUR WITHOUT PRIOR AUTHORIZATION FROM OCF.
 - II. NO MODIFICATION OF THE FENCING SHALL OCCUR WITHOUT PRIOR AUTHORIZATION FROM OCF.

 III. NO EXCAVATION OR EQUIPMENT STORAGE SHALL OCCUR WITHIN THE TPZ WITHOUT PRIOR

 AUTHORIZATION FROM OCF

 IV. HAND WORK ONLY WITHIN THIS AREA UNLESS PRIOR AUTHORIZATION GIVEN BY OCF.

 V. ROOTS 2 INCHES AND LARGER SHALL NOT BE CUT. IF CONFLICT ARISES, CONTRACTOR MUST

 CONTACT OCF PRIOR TO CONTINUANCE OF WORK.
 - B. ALL PIT LOCATIONS MUST BE STAKED AND APPROVED PRIOR TO AN EXCAVATION.
 - C. TRENCHING SHALL NOT OCCUR WITHIN THE TPZ WITHOUT VERIFYING LOCATION OF EXISTING ROOTS THAT MAY BE IMPACTED BY EXCAVATION:
 - I. APPROVED ROOT DISCOVERY METHODS INCLUDE: HAND WORK, AIR SPADE, GROUND PENETRATING
 - I. APPROVED FOR OTHER OCF APPROVED METHOD.

 II. ADJUST THE ROUTE TO AVOID ROOTS AS MUCH AS POSSIBLE.

 III. MINIMIZE THE WORK PIT TO NO WIDER THAN THE TRENCH.

 IV. STORE SOIL OPPOSITE THE TREE SIDE OF THE TRENCH.

 - . BACKFILL QUICKLY AND CLEANLY, AND WATER ROOTS DEEPLY.

 I, EXPOSED ROOTS MUST BE KEPT MOIST AT ALL TIMES. COVER EXPOSED ROOTS WITH BURLAP OR OTHER MATERIAL THAT WILL HOLD MOISTURE AGAINST EXPOSED ROOTS.
 - D. TUNNELING/DIRECTIONAL BORING MUST BE AT LEAST 36 INCHES BELOW GRADE. 48 INCHES PREFERRED. INNELINO/DIRECTIONAL BUTWING MOST BE AT LEAST 30 INCHES BELOW FINAL GRADE.

 I. FINAL DEPTH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE.

 DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY

 RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VIOLATION OF THE 36-INCH

 MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM
 - E. THE CRITICAL ROOT ZONE (CRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 1 LINEAR FOOT RADIUS
 - R 1-INCH DIAMETER OF TREE TRUNK MEASURED AT 4.5 FEET ABOVE THE GROUND.

 I. NO ROOT DISTURBANCE SHALL OCCUR WITHIN THIS AREA.

 O. IF NOT POSSIBLE, CONTRACTOR MUST MEET WITH OCF PERSONNEL ON SITE.

 WHEN WORK OCCURS WITHIN CRZ, EXCAVATION MUST BE PERFORMED WITH HAND-TOOLS, AIR SPADE, OR OTHER OCF APPROVED METHOD,
 - F. THE STRUCTURAL ROOT ZONE (SRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 0.9 TIMES PER INCH
- F. THE STRUCTURAL ROOT ZONE (SRZ) IS THE AREA WITHIN THE TPZ AND EQUAL TO 0.9 TIMES PER INCH DIAMETER OF THE TREE MEASURED AT 4.5 FEET ABOVE THE GROUND (0.9*K).

 I. NO ACTIVITY SHALL OCCUR WITHIN THIS ZONE WITH THE EXCEPTION OF DIRECTIONAL BORING AT A MINIMUM DEPITH OF 36 INCHES BELOW GRADE, 48 INCHES PREFERRED.

 o. FINAL DEPITH OF INSTALLED UTILITY MUST BE AT A MINIMUM OF 36 INCHES BELOW FINAL GRADE. DUE TO THE INABILITY TO CONSISTENTLY MAINTAIN ACCURATE BORING DEPTHS, IT IS STRONGLY RECOMMENDED TO TARGET A DEPTH OF 48 INCHES TO ENSURE NO VOLATION OF THE 36-INCH MINIMUM DEPTH OCCURS. THE CITY MAY ORDER THE LOWERING OF INSTALLED UTILITIES WHEN THEY ARE DISCOVERED NOT TO BE DEEPER THAN THE 36-INCH MINIMUM.

 7. SHOULD ANY TREE DAMAGE OCCUR, CONTRACTOR SHALL CONTRACT THE OCF IMMEDIATELY.

 A. RETAIN AN OCF LICENSED TREE COMPANY TO PRUNE BROKEN BRANCHES AS WELL AS COMPENSATORY PRINING IS NECESSARY FROM ROOT LOSS.
- PRUNING IF NECESSARY FROM ROOT LOSS.
- THE CITY & COUNTY OF DENVER TREE RETENTION AND PROTECTION SPECIFICATIONS MUST BE FOLLOWED. FOR A COPY OF THE TREE PROTECTION SPECIFICATIONS PLEASE CONTACT THE OFFICE OF THE CITY FORESTER AT (720) 913-0651 OR EMAIL AT FORESTRY DENVERGOV. ORG



188 INVERNESS DR WEST SUITE 400 FNGLEWOOD, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

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REV	DATE	DESCRIPTION

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.

> COL07004F R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE CITY OF DENVER REQUIRED NOTES

SHEET NUMBER

GN-4

EROSION CONTROL NOTES

THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL POTENTIAL POLLUTANTS GENERATED DURING DEMOLITION OR CONSTRUCTION WORK ASSOCIATED WITH THIS PROJECT, BE PREVENTED FROM DISCHARGE TO STORMWATER CONVEYANCE SYSTEMS IN THE VICINITY OF THIS PROJECT SITE IN

- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, WATERWAYS, WETLANDS, AND OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN THE FLOW LINES OF STORM DRAWAGE APPURTENANCES, AND PUBLIC RIGHTS OF WAYS OF THE CITY AND COUNTY OF DERIVER, AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. ALL REMOVALS SHALL BE CONDUCTED IN A TIMELY MANNER.
- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY. (SEC.49-552; REVISED MUNICIPAL CODE)
- THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES, OTHER THAN PORTABLE TOILETS, IS
- THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL IMPLEMENT THE
- FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ON SITE DURING CONSTRUCTION:

 A. VEHICLE TRACKING CONTROL: THIS BMP IS REQUIRED AT ALL ACCESS POINTS FOR INGRESS/EGRESS FORM OFF-SITE IMPERVIOUS SURFACES TO CONSTRUCTION SITE PERVIOUS AREAS THAT ARE USED BY VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT.
- INLET PROTECTION: THIS BMP IS REQUIRED ON ALL EXISTING OR PROPOSED STORM SEWER INLETS IN THE VICINITY OF THE CONSTRUCTION SITE THAT MAY RECEIVE SITE RUNOFF. THE BMP MUST BE APPROPRIATE TO THE TYPE OF STORM INLET AND APPROPRIATE FOR THE GROUND SURFACE AT THE
- C. INTERIM SITE STABILIZATION: THIS BMP IS REQUIRED TO PROVIDE A MEASURE FOR PREVENTING THE DISCHARGE OF SEDIMENT FROM CONSTRUCTION SITES WHERE OVERLOT GRADING OR OTHER SITE DISTURBANCE HAS OCCURRED. THIS BMP IS PARTICULARLY NECESSARY ON SITES WHERE CONSTRUCTION ACTIVITIES/DISTURBANCE WILL BE LIMITED TO SMALL AREAS OF THE PROJECT SITE. ACCEPTABLE BMPS INCLUDE:

 I. PRESERVING EXISTING VEGETATION

 - SEEDING AND PLANTING
 - MULCHING

 - MULCHING AND SEEDING
 TEMPORARY/PERMANENT RE-VEGETATION OPERATIONS
 - VI. CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES WMD APPROVAL)
- D. WASTE MANAGEMENT/CONTAINMENT: THIS BMP REQUIRES THAT ALL CONSTRUCTION WASTES, FUFI S. LUBRICANTS, CHEMICAL WASTES, TRASH, SANITARY WASTES, CONTAININTED SOILS OR DEBRIS SHALL BE CONTAINED ON SITE, PROTECTED FROM CONTACT WITH PRECIPITATION OR SURFACE RUNOFF, PERIODICALLY REMOVED FROM THE CONSTRUCTION SITE, AND PROPERLY DISPOSED OF.
- E. SPILL PREVENTION/CONTAINMENT: THIS BMP DEFINES THE MEASURES PROPOSED FOR PREVENTING, CONTROLLING, OR CONTAINING SPILLS OF FUEL, LUBRICANTS, OR OTHER POLLUTANTS; AND PROTECTING POTENTIAL POLLUTANTS FROM CONTACT WITH PRECIPITATION OR RUNOFF.
- CHUTE WASHOUT CONTAINMENT: WATER USED IN THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, BERMED CONTAINMENT AREA ON THE JOB SITE. THE REQUIRED CONTAINMENT AREA IS TO BE BERMED SO THAT WASH WATER IS TOTALLY CONTAINED. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA SHALL BE ALLOWED TO INFILTRATE OR EVAPORATE. DRIED CEMENT WASTE IS REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED OF.
 - I. THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).
- G. SWEEPING: THIS BMP REQUIRES THAT IMPERVIOUS SURFACES WHICH ARE ADJACENT TO OR CONTAINED WITHIN CONSTRUCTION SITES BE SWEPT ON A DAILY BASIS OR AS NEEDED DURING THE DAY WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ON TO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE FLUSHING OFF PAVED SURFACES WITH WATER IS
- H. PERIMETER CONTROL: THIS BMP REQUIRES THAT A CONSTRUCTION SITE INSTALL A PERIMETER CONTROL MEASURE ALONG THE EDGE OF THE CONSTRUCTION SITE, TO PREVENT, OR FILETR THE DISCHARGE OF SURFACE RUNOFF FROM THE CONSTRUCTION SITE. THE TYPE OF PERIMETER CONTROL USED SHALL BE DETERMINED BASED ON—SITE CONDITIONS AND LOCATION. MAINTENANCE AND REPAIR OF THE CONTROL MEASURE SHALL OCCUR AS NEEDED, IN A TIMELY MANNER.
- STOCK PILES: SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. STABILIZATION OF STOCKPILES LOCATED WITHIN 100 FEET OF RECEIVING WATERS, OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING STOCKPILE CONSTRUCTION. STABILIZATION AND PROTECTION OF THE STOCKPILE MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING: MULCHING, TEMPORARY/PERMANENT REVEGETATION OPERATIONS, CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES DENVER PUBLIC WORKS APPROVAL), OR EROSION CONTROL MATTING/GEOTEXTILES. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF RECEIVING WATERS, DRAINAGEWAY OR THE SITE PERIMETER, ADDITIONAL SEDIMENT CONTROLS SHALL BE REQUIRED.
- SAW CUTTING OPERATIONS: THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK DAY. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER)
- K. STRUCTURAL CONTROLS: DEVELOPMENT SITES THAT ARE REQUIRED TO PROVIDE DETENTION AND WATER OUALITY ENHANCEMENT FACILITIES FOR STORM RUNOFF NEED TO INSTALL THE DETENTION FACILITIES EARLY IN THE CONSTRUCTION BUILD—OUT OF THE SITE. PROJECTS THAT ARE USING UNDERGROUND DETENTION ARE REQUIRED TO INSTALL A PRETREATMENT STRUCTURE(S) OR SEDIMENTATION BASIN(S) AS A MEANS OF TREATING POTENTIALLY POLLUTED STORM WATER PRIOR TO ENTERING THE DETENTION STRUCTURE. USE OF THESE STRUCTURES IS REQUIRED FOR ENTRAPPING SEDIMENT AND CONSTRUCTION DEBRIS DURING THE ACTIVE CONSTRUCTION PHASE OF THE PROJECT. A NARRATIVE SECTION OF A MANAGEMENT PLAN SHOULD ADDRESS OPERATION AND MAINTENANCE OF THE STRUCTURAL CONTROLS BEING USED AS AN ACTIVE CONSTRUCTION BMP.
- EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL BE MAINTAINED AND KEPT IN EFFECTIVE OPERATING CONDITION FOR THE DURATION OF THIS PROJECT. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IMMEDIATELY UPON DISCOVERY OF ANY DEFICIENCY OR DEFECT.

CONCRETE AND GENERAL STRUCTURAL NOTES

- 1. DESIGN INFORMATION AND GENERAL REQUIREMENTS:
- - A. DESIGN CONFORMS TO 2015 INTERNATIONAL BUILDING CODE, W/ LOCAL AMENDMENTS.
 - TIA-222-G, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS WITH THE EXCEPTION OF LOCAL CODE REQUIREMENTS FOR FROST DEPTH.
 - C. AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- 1.2 LOADS A. GROUND SNOW LOAD SHALL BE 35 PSF.
 - B. WIND LOAD SHALL BE 115 MPH ULTIMATE BASED ON ASCE 7-10 SPECIAL WIND REGION.

- 1.3 MISCELLANEOUS
 A. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
- 2. FOUNDATION NOTES:
- 2.1. <u>EARTHWORK FOR FOUNDATIONS</u>

 A. FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED SOILS OR COMPACTED STRUCTURAL FILL CAPABLE OF SUPPORTING A NET ALLOWABLE BEARING PRESSURE OF 1500 PSF.
 - B. DESIGN, FURNISH, AND INSTALL ALL TEMPORARY SHEETING, SHORING, AND DRAINAGE TO MAINTAIN THE EXCAVATION AND PROTECT SURROUNDING STRUCTURES AND UTILITIES.
 - C. THOROUGHLY COMPACT AND LEVEL BOTTOM OF FOOTINGS PRIOR TO PLACING ANY CONCRETE.
 - D. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR.
- 2.2 GEOTECHNICAL

 A. THE FOUNDATIONS SHALL NOT BEAR ON ORGANIC SOILS, VOIDS, DELETERIOUS SOILS, CONDUITS, LOOSE SOILS OR FULLY SATURATED SOILS. IF ANY OF THESE OR OTHER COMPROMISED SOIL CONDITIONS ARE PRESENT DURING CONSTRUCTION, IT SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF
- 2.3 CONCRETE FORMWORK
 - CONCRETE CONSTRUCTION SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE," ACI 301-10.
 - B. FORMWORK SHALL CONFORM TO "SPECIFICATIONS FOR STRUCTURAL CONCRETE." ACI 301-10.
- 2.4 <u>REINFORCEMENI</u>
 A. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. WELDED WIRE SHALL CONFORM TO ASTM A185 (FLAT SHEET), MINIMUM LAP SPLICE LENGTH SHALL BE 40 BAR DIAMETERS U.N.O. BARS SHALL BE SECURELY HELD IN ACCURATE POSITION BY SUITABLE ACCESSORIES, TIE BARS, SUPPORT BARS, ETC. HOOK LENGTHS SHALL BE 12 BAR DIAMETERS.
- 2.5 PRECAST CONCRETE NOTES

 A. MINIMUM 28 DAY COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 4500 PSI.
 - MAXIMUM SLUMP, PRIOR TO ADDITION OF SUPER PLASTICIZERS, AS FOLLOWS:
 - C. MIX DESIGN TO BE IN ACCORDANCE WITH ACI 318, CHAPTER 26. NO CALCIUM CHLORIDE ADMIXTURE OR OTHER ADMIXTURE CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE.
 - COARSE AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33 SIZE #57. COARSE AGGREGATE FOR LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C330 GRADED 3/4" TO
 - E. COLD WEATHER PLACEMENT SHALL COMPLY WITH ACL 306.1.
 - F. HOT WEATHER PLACEMENT SHALL COMPLY WITH ACI 305 R.
 - G. ALL PROJECTIONS ABOVE GRADE TO BE CHAMFERED 1:1 FOR THE ENTIRE HEIGHT OF THE PROJECTION.
 - H. THE MAXIMUM TEMPERATURE OF ALL CONCRETE AT DELIVERY TO THE SITE SHALL BE 85°F
 - TOTAL DELIVERY TIME SHALL BE LESS THAN 75 MINUTES.
 - J. CEMENT TYPE SHALL BE TYPE II. WATER CEMENT RATIO SHALL BE 0.45 MAXIMUM
 - K. AIR ENTRAINMENT TO BE 5% (±1%).



188 INVERNESS DR WEST SUITE 400 ENGLEWOOD, CO 80112



BLACK & VEATCH

4600 SOUTH SYRACUSE STREET DENVER, COLORADO 80237

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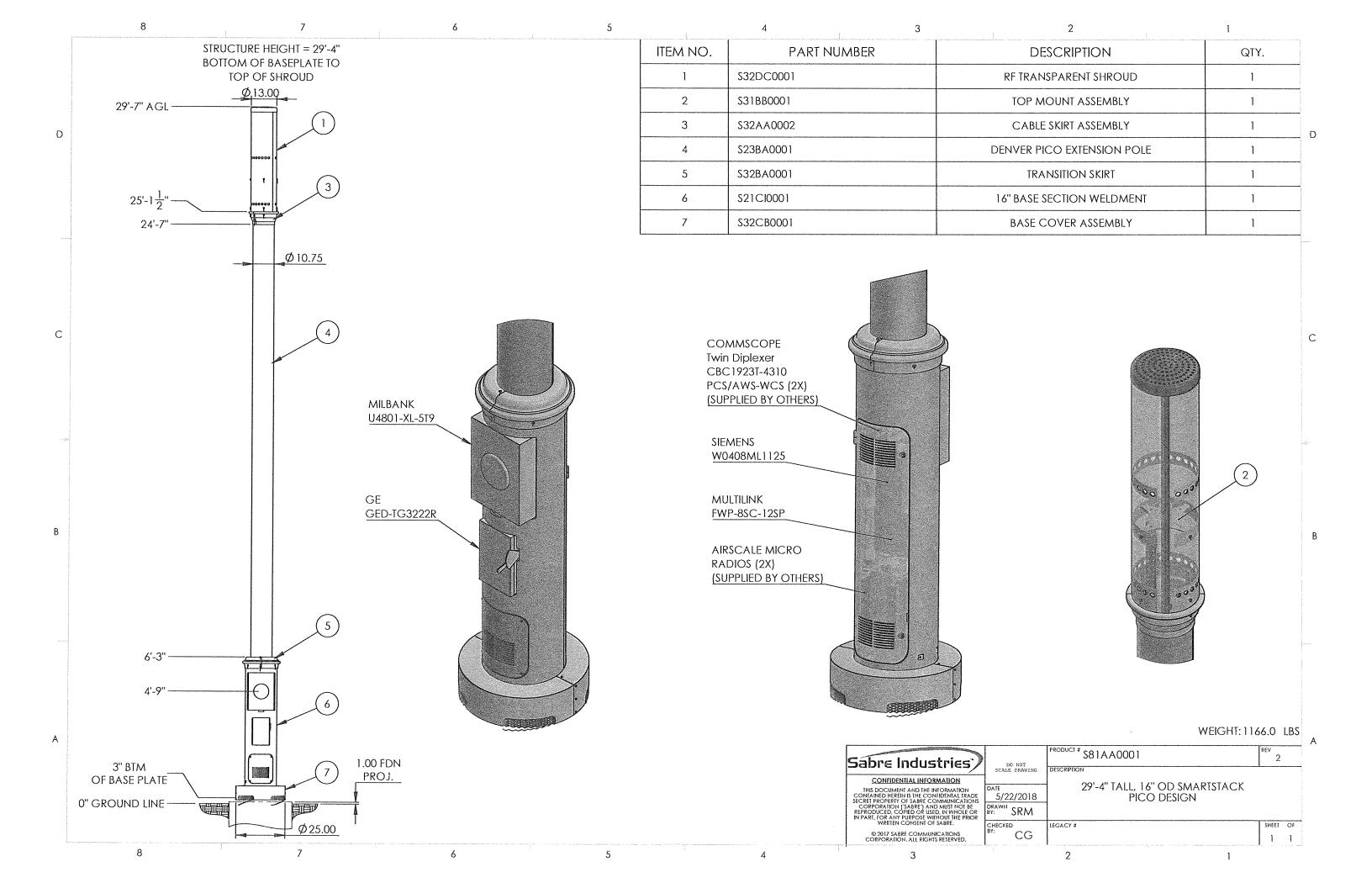
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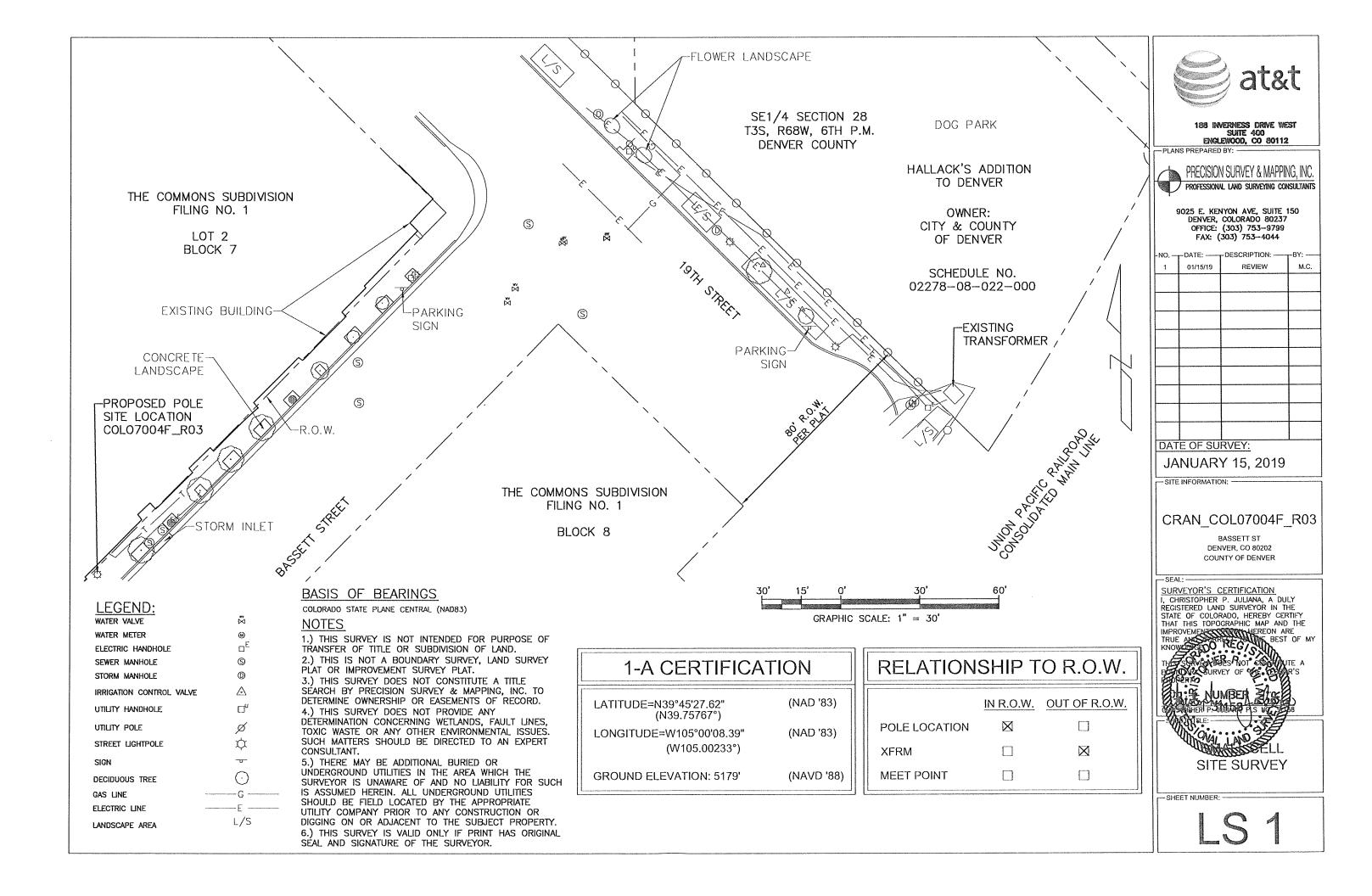
IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

> COL07004F_R03 14809961 1853 BASSETT ST DENVER, CO 80202 AT&T SMALL CELL

SHEET TITLE CITY OF DENVER REQUIRED NOTES

SHEET NUMBER





SMALL CELL LEASE AGREEMENT

This Small Cell Lease Agreement ("<u>Agreement</u>") is made and entered into as of the Effective Date by and between Lessor and Lessee.

SUMMARY OF BUSINESS TERMS

Lessor					
Lessee	New Cingular Wireless PCS, LLC, a Delaware limited liability company				
Effective Date	The latest signature date below				
Initial Term	Ten (10) years				
Extension Terms	Four (4) automatic extensions of five (5) years each				
Rent	\$ per year, commencing on the Initial Term commencement date				
Rent Increase	Ten percent (10%) every five (5) years after the Rent commencement date				
Attachment(s)	Exhibit 1: Description of Leased Site				
Lessor Notice Address					
Lessee Notice	New Cingular Wireless PCS, LLC, Attn: TAG-LA; Re: FA#:,				
Address	Site ID:(State), 575 Morosgo Drive NE, Atlanta, GA 30324				
	With a copy to the AT&T Legal Department:				
	New Cingular Wireless PCS, LLC, Attn: AT&T Legal Dept Network Operations, Re: FA#:, Site ID: (State), 208 S. Akard Street, Dallas, TX 75202-4206				

- 1. GRANT OF LEASE. Lessor hereby grants Lessee a lease of a certain portion of Lessor's property shown on Exhibit 1 to occupy, utilize, replace or upgrade Lessor's property, structures and utility infrastructure pursuant to this Agreement ("Leased Site"). Lessee may use the Leased Site for the transmission and reception of communications signals, and the construction. modification, maintenance, operation, repair, replacement and upgrade of communications equipment and related improvements ("Equipment"). Equipment shown on Exhibit 1, if any, describes the initial installation only and does not limit Lessee's right to modify the Equipment. Lessee and its agents shall have pedestrian and vehicular access twenty-four (24) hours per day, seven (7) days per week over Landlord's property from the public right of way to the Leased Site.
- 2. TERM This Agreement shall commence as of the Effective Date, and, if not lawfully terminated sooner, remain in full force and effect for the Initial Term. The Agreement will automatically extend for the Extension Terms unless Lessee provides Lessor written notice of termination at least ninety (90) days prior to the expiration of the Initial Term or the then applicable Renewal Term, as the case may be.
- 3. RENT, BILLING AND PAYMENT. Rent will commence on the date Lessee starts construction of the Equipment on the Leased Site, and Lessee shall make the first payment of the Rent within ninety (90) days after the parties acknowledge in writing the Rent commencement date. Rent shall be paid annually on or before the anniversary of the Rent commencement date.

- Rent is for the use of the Leased Site, including the portion of the property, structures, utility infrastructure and utility service described on Exhibit 1. Rent increases by the Rent Increase percentage described above.
- 4. LESSEE OBLIGATIONS. At its own expense, Lessee shall erect, install, repair and maintain its Equipment in safe condition and good repair in accordance with the requirements and specifications of all applicable laws, rules and regulations in effect on the Effective Date. Lessee shall ensure that its employees and agents which perform work in furtherance of this Agreement are adequately trained and skilled to perform the work as required by this Agreement. Lessee will operate its Equipment in compliance with all FCC regulations regarding radio frequency interference with the radio signal transmissions of Lessor and other third parties in or upon the Leased Site, which transmissions are operated in compliance with all applicable laws, rules and regulations.
- 5. LESSOR OPERATIONS. Lessor will not, nor will Lessor permit its employees, tenants, licensees, invitees or agents to cause physical or radio frequency interference with Lessee's existing Equipment or Lessee's ability to comply with the terms and conditions of this Agreement. If Lessee reasonably determines that such interference is occurring, Lessor will meet and confer with Lessee within five (5) days of Lessor's receipt of notice of interference from Lessee, will diligently work in good faith with Lessee to determine the cause of the interference, and will develop workable

8/30/2018

solutions to resolve the interference in a mutually acceptable manner. Lessor will not grant after the date of this Agreement a lease or any right to any third party if such third party's use may cause physical or radio frequency interference with Lessee's Equipment, Lessee's use of the Leased Site, or Lessee's ability to comply with the terms and conditions of this Agreement.

- 6. INSURANCE. Lessee shall at its sole expense maintain the following insurance coverage and limits during the Term of this Agreement. Workers' Compensation and Employer's Liability insurance, as required by statute, with Employer's Liability limits of \$500,000 each accident, \$500,000 by disease policy limits, and \$500,000 by disease each employee. Commercial General Liability insurance written on Insurance Services Office (ISO) Form CG 00 01 or equivalent, with limits of \$2,000,000 General Aggregate, \$1,000,000 Each Occurrence, \$1,000,000 Each Occurrence - Personal Injury and Advertising Injury, and \$2,000,000 Products/Completed Operations Aggregate. Business Automobile Liability insurance of \$1,000,000 Combined Single Limit for each Accident for Bodily Injury and Property Damage, extending to all company owned, leased, and non-owned vehicles. Lessee may meet the required insurance coverage and limits with any combination of primary and umbrella/excess liability insurance. Lessee shall provide at least thirty (30) days advance written notice of cancellation or non-renewal of any required insurance that is not replaced. Notwithstanding the foregoing, Lessee may self-insure the required insurance under the same terms and conditions as outlined above.
- LIMITATION LIABILITY. NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT TO THE CONTRARY, IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, **EXEMPLARY** OR INDIRECT DAMAGES SUFFERED BY THE OTHER PARTY OR BY ANY CUSTOMER OR ANY PURCHASER OF SUCH OTHER PARTY OR ANY OTHER PERSON, FOR LOST PROFITS OR OTHER **BUSINESS** INTERRUPTION DAMAGES, WHETHER BY VIRTUE OF ANY STATUTE, IN TORT OR IN CONTRACT, EXCEPT THAT THE **EXPRESS INDEMNIFICATION OBLIGATIONS** MADE BY THE PARTIES IN SECTION 8 OF THIS AGREEMENT SHALL STILL APPLY.
- 8. INDEMNIFICATION. To the extent permitted by applicable laws, each party shall indemnify and defend the other from and against any and all liabilities, damages or claims for damage, including but not limited to all actual and reasonable costs, attorneys' fees, and other charges and expenditures that the indemnified party may incur, asserted by third parties against the indemnified party by reason of the indemnifying party's negligence, willful misconduct or breach of the terms of this Agreement, including acts or omissions by the

indemnifying party's agents, contractors, or subcontractors, except to the extent that such liabilities, damages or claims are a result of the negligence or willful misconduct of the indemnified party or by the indemnified party's agents, contractors, or subcontractors.

- 9. DEFAULT AND REMEDIES. It shall be a default under this Agreement if a party fails to perform any material term or condition of this Agreement where such failure continues for a period of more than sixty (60) days after receipt of written notice from the other party of a detailed description of such failure to perform. Notwithstanding the foregoing, no default will be deemed to exist if a party has commenced to cure the alleged failure to perform within such sixty (60) day period, and thereafter such efforts are prosecuted to completion with reasonable diligence. Delay in curing an alleged failure to perform will be excused if due to causes beyond the reasonable control of the party against whom the failure to perform has been alleged. If a party does not cure its default as allowed herein, the party not in default may thereafter elect to pursue any rights or remedies available at law or in equity.
- 10. VOLUNTARY TERMINATION. Lessee may terminate this Agreement for any reason or no reason without further liability to Lessor at any time prior to the commencement of construction of the Equipment on the Leased Site. Lessee may terminate this Agreement after the Rent commencement date for any reason or no reason effective upon the later of (i) thirty (30) days' following written notice to Lessor and (ii) the date of removal of the Equipment.
- 11. CASUALTY. In the event of damage to Leased Site that is reasonably expected to disrupt Lessee's operations for more than forty-five (45) days, Lessee may place a temporary facility, if feasible, at a location equivalent to Lessee's current use of the Leased Site until such time as the Leased Site is restored and the Equipment is returned to full operation. If the parties agree to a permanently relocated Leased Site to be shown on an amendment to this Agreement, Lessee may permanently relocate the Leased Site to the new location and the terms and conditions of this Agreement will continue to apply to the relocated Leased Site.

12. MISCELLANEOUS.

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- 12.2. Memorandum of Lease. The parties agree to execute, acknowledge and deliver to the other a recordable Memorandum of Lease for this Agreement within fifteen (15) business days after receipt of an accurate and recordable Memorandum of Lease.
- 12.3. Exhibits. In the event of any inconsistency between the provisions of this Agreement and any Exhibits attached hereto, the provisions of this Agreement shall supersede the provisions of any such incorporated Exhibits unless such Exhibit specifies otherwise.
- 12.4. <u>Survival</u>. The terms and conditions of this Agreement that by their nature require performance by either party after the termination or expiration of this Agreement shall be and remain enforceable notwithstanding such termination or expiration of this Agreement for any reason whatsoever.
- 12.5. Entire Agreement; Amendments. This Agreement (including the Exhibits hereto) embodies the entire agreement between Lessor and Lessee with respect to the subject matter of this Agreement and supersedes all prior and contemporaneous agreements and understandings, oral or written, with respect thereto. Each party acknowledges that the other party has not made any representations other than those contained herein. This Agreement may not be amended or modified orally, but only by an agreement in writing signed by the Parties.
- 12.6. <u>Dispute Resolution</u>. The parties will attempt in good faith to resolve any dispute under this Agreement through face-to-face negotiations before resorting to other available remedies. If the matter has not been resolved within thirty (30) days of the first face-to-face negotiation session, the parties agree that the dispute (other than a request injunctive relief) will be resolved

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through final and binding arbitration, which shall be the exclusive remedy. The arbitration shall be conducted in accordance with the Rules and Procedures of the American Arbitration Association (if the parties have not agreed to use a different arbitration process), and shall be conducted by an arbitrator mutually agreed upon by the parties. The arbitration shall be held in the state where the Leased Site is situated. The arbitration award shall be supported by law and substantial evidence and judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction thereof. Nothing in this paragraph, however, shall preclude the parties from seeking injunctive relief at any time before any court, tribunal or regulatory agency having jurisdiction.

12.7. WAIVER OF JURY TRIAL. EACH PARTY WAIVES ITS RIGHT TO A JURY TRIAL ON DISPUTES ARISING FROM THIS AGREEMENT.

- 12.8. Waiver; Severability. No provision of this Agreement may be waived except in a writing signed by both parties. The failure of either party to insist on the strict enforcement of any provision of this Agreement shall not constitute a waiver of any provision. If any portion of this Agreement is found to be unenforceable, the remaining portions shall remain in effect, and the Parties shall begin negotiations for a replacement of the invalid or unenforceable portion.
- 12.9. Execution in Counterparts. This Agreement may be executed in multiple counterparts, including by counterpart facsimiles or scanned email counterpart signature, each of which shall be deemed an original, and all such counterparts once assembled together shall constitute one integrated instrument.

NEW CINGULAR WIRELESS PCS, LLC,

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed as of the Effective Date.

a Delaware limited habitity company
By: AT&T Mobility Corporation Its: Manager
Ву:
Name:
lts:
Date:

8/30/2018 3

EXHIBIT 1

LEASED SITE

Leased Site address:
Leased Site pole/structure identification:
Leased Site utility identification: Connections to electrical wiring as shown on the Plans, including usage of Lessor's electrical service on an unmetered basis.
Lessee Site Identification: [LESSEE TO COMPLETE]
FA / USID:
Site Name: CRAN_POLYGON NAME_NODE #
PTN / PACE:
Structure Latitude and Longitude (Approximate): [LESSEE TO COMPLETE]
Equipment Plans: See the attached plan set dated 20 prepared by
consisting of () page(s). Lessee may modify the Equipment at any time as set forth in the Agreement.