



**BOARD BUSINESS MEETING B**

**Monday, April 18, 2022**  
**5:30 PM**  
**Board Room**  
**514 W. Quincy Street**  
**San Antonio, TX 78212**

**AGENDA**

- 1. Meeting Called to Order
  - A. Roll Call of Board Members Present and Declaration of Quorum Present \_\_\_\_\_  
Absent \_\_\_\_\_
    - 1. Mrs. Christina Martinez
    - 2. Ms. Alicia Sebastian
    - 3. Mr. Arthur Valdez
    - 4. Mr. Ed Garza
    - 5. Ms. Leticia Ozuna
    - 6. Mrs. Patti Radle
    - 7. Mrs. Sarah Sorensen
  - B. Recording of Interim Superintendent Present
    - 1. Dr. Robert Jaklich
  - C. Pledge of Allegiance to the U. S. Flag
  - D. Salute to the Texas Flag - "Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible."
  - E. Citizens' Presentations - 60-minute total time limit for this item
- 2. **Recognitions**
  - A. Recognition of Ashley Johnson, Founder and President of Project Prom Dress 4
  - B. Recognition of Brackenridge High School for Winning the College Cup for the Highest Percentage of Class of 2021 Graduates Enrolling in College 6

**BOARD OF TRUSTEES**



Christina Martinez, President  
Alicia Sebastian, Vice President

Arthur V. Valdez, Secretary  
Ed Garza, Trustee

1 Leticia Ozuna, Trustee  
Patti Radle, Trustee

Sarah Sorensen, Trustee  
Dr. Robert Jaklich, Interim Superintendent



C.	Recognition of Inner Rodriguez Bonifacio, SAISD Alumni from Sam Houston High School, Class of 2020, the SAISD College Alumni Advisors, the Postsecondary Navigators, the City of San Antonio, Communities in Schools, and the SAISD Foundation	7
<b>3.</b>	<b>Governance</b>	
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C.	Approval of Change Order Number One for Additional Professional Services to Architects for the 2020 Bond Program for Leadership in Energy and Environmental Design	75
D.	Approval of Change Order Number Four for Additional Scope on the Brackenridge High School 2016 Bond Project	77
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D.	Approval of Construction Manager at Risk for Major Renovations and Upgrades under the 2020 Bond Program	89
E.	Approval of Procurement Services’ Recommendations for Bids, Proposals, and Awards	91
F.	Approval of Minutes for the Following Meetings	
1.	March 16, 2022 Internal Audit Subcommittee Meeting	95
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4.	March 28, 2022 Special Board Meeting	100
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6.	March 30, 2022 Special Board Meeting	102
<b>5.</b>	<b>Closed Session</b>	
A.	The Board will convene in closed session as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071, TGC 551.072 and TGC 551.074)	
1.	Deliberation regarding the purchase, exchange, lease or value of real estate, including legal issues on the acquisition process. (TGC 551.071 and TGC 551.072)	
2.	Deliberation regarding personnel matters, including but not limited to employment, duties, discipline, reassignment, resignation, retirement, reclassification, and dismissal of an employee. (TGC 551.071 and TGC 551.074)	

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**2** Leticia Ozuna, Trustee  
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Sarah Sorensen, Trustee  
Dr. Robert Jaklich, Interim Superintendent



- 3. Consultation with legal counsel regarding pending litigation related to face covering and vaccination requirements. (TGC 551.071)
  - 4. Deliberation regarding the appointment and employment of the next superintendent of schools and consultation with legal counsel regarding legal issues related to the superintendent search, if necessary. (TGC 551.071 and TGC 551.074)
  - 5. Deliberation and consultation with legal counsel on the employment of Dr. Jaime Aquino as Superintendent of Schools. (TGC. 551.071 and TGC 551.074)
  - 6. Consultation with legal counsel regarding the Superintendent’s Search Contract with One-Fourth Consulting, LLC d/b/a JG Consulting (TGC 551.071)
- B. The Board will reconvene in Open Session and take appropriate action on items discussed in Closed Session.

**6. Adjournment**

- A. Adjournment

**NOTICE:**

- 1. The Board may go into executive session at any time during the meeting for personnel, real estate, security, school children, negotiated contracts for prospective gifts or donations, consultation and/or legal issues, or as otherwise permitted under the Open Meetings Act, as set out in Subchapter 551 of Title 5 of the Texas Government Code.
- 2. Recess: The Board of Trustees may recess the meeting at any time and reconvene the meeting within 24 hours. The reconvened meeting will occur at the same location as the original meeting and will address the original agenda without the need for reposting.

Any individual in need of services for the visually-impaired, the hearing-impaired, and/or non-English speakers should call the Board Services Office at 554-2289 by 12:00 p.m. on the date of the meeting.

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**3** Leticia Ozuna, Trustee  
Patti Radle, Trustee

Sarah Sorensen, Trustee  
Dr. Robert Jaklich, Interim Superintendent

**SAISD BOARD AGENDA SUMMARY FORM**

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**AGENDA TITLE:** Recognition of Ashley Johnson, Founder and President of Project Prom Dress

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Dr. Robert Jaklich, Interim Superintendent

**PRESENTER:** Jenny Arredondo, Senior Executive Director, Child Nutrition Services

**MEETING DATE:** April 18, 2022

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**I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to recognize Ashley Johnson, Founder and President of Project Prom Dress.

For eight years and counting, Ms. Johnson has provided high school students in need of formal attire to attend prom. Since 2014, she has collected thousands of dresses, suits, shoes, and accessories and distributed them to teens through word-of-mouth, social media, and pop-up shops. The teens are also matched with hair stylists and makeup artists who have donated their services to finish off the look at no cost. Because of Ms. Johnson’s generous spirit and huge heart, she makes students dreams come true.

For the last 7 years, Ms. Johnson has worked as a Clerk in the Child Nutrition Department. Her primary roles are assisting campus managers with daily functions and with reconciling meal counts used to prepare federal reimbursement claims. Her passion and dedication for serving students in SAISD goes well beyond the call of her daily duties and “Project Prom Dress” is an amazing example of that. On behalf of the Child Nutrition Department and SAISD team, it is an honor and privilege to work alongside Ms. Johnson. She exemplifies the true meaning of selflessness and provides a once in a lifetime opportunity to many of our students.

**II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

N/A

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

**IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership, or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff, and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.

- [ ] SAISD will facilitate a successful Bond initiative and its implementation.
- [ ] SAISD will become a national model urban school district where every child graduates and is educated so that he or she is prepared to be a contributing member of the community.

## SAISD BOARD AGENDA SUMMARY FORM

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**AGENDA TITLE:** Recognition of Brackenridge High School for Winning the College Cup for the Highest Percentage of Class of 2021 Graduates Enrolling in College

**PURPOSE:**  PRESENTATION/DISCUSSION  
 DISCUSSION/ACTION

**REQUESTED BY:** Patti Salzmann, Deputy Superintendent

**PRESENTER:** Liz Ozuna, Executive Director for College Readiness and Postsecondary Initiatives

**MEETING DATE:** April 18, 2022

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### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to recognize Brackenridge High School for winning the College Cup for having the highest college enrollment immediately after graduation.

The College Cup is awarded to the SAISD comprehensive high school with the highest college enrollment rate for their most recent graduates. This cup symbolizes the campus' dedication and commitment to opening the doors to postsecondary opportunities and celebrates the hard work of the Campus Leadership, Counselors, College Bound Advisors, Teachers, and Staff.

While the rest of the country saw college enrollment rates decline for the Class of 2021, Brackenridge's college enrollment rate remained at 53% in 2020 and 53% in 2021. This is the second year in a row that Brackenridge High School has had the highest college enrollment for graduates entering college in the year immediately after graduation from high school.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

N/A

### **III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

### **IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

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- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
- SAISD will facilitate a successful Bond initiative and its implementation.
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## SAISD BOARD AGENDA SUMMARY FORM

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**AGENDA TITLE:** Recognition of Inner Rodriguez Bonifacio, SAISD Alumni from Sam Houston High School, Class of 2020, the SAISD College Alumni Advisors, the Postsecondary Navigators, the City of San Antonio, Communities in Schools, and the SAISD Foundation

**PURPOSE:**  PRESENTATION/DISCUSSION  
 DISCUSSION/ACTION

**REQUESTED BY:** Patti Salzmann, Deputy Superintendent

**PRESENTER:** Liz Ozuna, Executive Director for College Readiness and Postsecondary Initiatives

**MEETING DATE:** April 18, 2022

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### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to recognize Inner Rodriguez Bonifacio, SAISD alumnus from Sam Houston High School class of 2020, the SAISD Postsecondary Navigators, the City of San Antonio, Communities in Schools, the SAISD Foundation, and the Postsecondary College Advisors (CAAs) for the success of an innovative postsecondary recapture and college enrollment project.

In November of 2021, SAISD embarked on a collaborative pilot project to identify and re-engage SAISD graduates from the Classes of 2020 and 2021 who had expressed an interest and intent in going to college and to support them in realizing their goal. These efforts helped 100 students enroll in college.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

N/A

### **III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

### **IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership, or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
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**SAISD BOARD AGENDA SUMMARY FORM**

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**AGENDA TITLE:** Update on College, Career, and Military Readiness District Outcomes

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Patti Salzman, Deputy Superintendent

**PRESENTER:** Johnny Vahalik, Assistant Superintendent for CCMR

**MEETING DATE:** April 18, 2022

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**I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board will receive an update on College, Career, and Military Readiness Outcomes, including an overview of longitudinal data for CCMR indicators, current year data, and support strategies for campuses and students.

**II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

N/A

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

**IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership, or public service activities.
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## SAISD BOARD AGENDA SUMMARY FORM

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**AGENDA TITLE:** Approval of the Joint Use Agreement between SAISD and City of San Antonio

**PURPOSE:** [ ] PRESENTATION/DISCUSSION  
[X] DISCUSSION/ACTION

**REQUESTED BY:** Dr. Kenneth J. Thompson, Chief Information Technology Officer

**PRESENTER:** Dr. Kenneth J. Thompson

**MEETING DATE:** April 18, 2022

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### I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL

The Board is requested to approve the partnership with the City of San Antonio to build a network which will provide internet access to SAISD students at home. This initiative has been branded *Connected Beyond the Classroom (CBTC)*. CBTC is a partnership with the City of San Antonio and Texas A & M San Antonio to roll out a network to our neighborhoods with low internet connectivity rates. This \$27 million city initiative will provide unlimited internet access to San Antonio ISD, Edgewood and Harlandale ISDs students in certain areas, replacing other connectivity programs (such our current student issued hotspots). This project requires that cellular towers be installed on the following campuses: Sarah King Elementary, Barkley-Ruiz Elementary, Ogden Elementary, Crockett Academy, and Margil Elementary, as well as a tower at Brady Park (adjacent to Storm Elementary). The district will provide special router devices to students in the Lanier cluster to facilitate their internet access.

### II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED

Company Name: City of San Antonio  
Address: 100 West Houston Street  
City/State/Zip: San Antonio, TX 78205  
Phone: 210-207-7985  
Point of Contact: John Rodriguez  
Email Address: [john.rodriguez@sanantonio.gov](mailto:john.rodriguez@sanantonio.gov)

### III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT

Contract Number: N/A  
Budget Code: Based on funding availability  
Program Start Date: August 1, 2022  
Program End Date: June 30, 2032  
Total Approximate Cost: \$103,950.00 Annually

**IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

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- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
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# Joint Use Agreement

This Joint Use Agreement (“**Agreement**”) is entered between the San Antonio Independent School District (“**District**”), a Texas political subdivision, and the City of San Antonio (“**City**” or “**Joint User**”), a Texas Municipal Corporation, (hereinafter individually referred to as “**Party**” and collectively referred to as the “**Parties**”).

## ARTICLE 1. PERTINENT INFORMATION

**SAISD  
Address:** 514 W Quincy St, San Antonio TX 78212 (Attention:  
Superintendent of Schools)

Copy to:

Chief Information Technology Officer  
514 W Quincy St  
San Antonio, TX 78212

**City Address:** City of San Antonio  
P.O. Box 8339966, San Antonio, Texas 78283-3966  
Attention: Assistant Director, Infrastructure, Information  
Technology Services Department

**Term:** This Agreement becomes effective upon the date it is signed by the last Party (the “**Acceptance Date**”), and shall continue in full force and effect for ten (10) years, unless or until terminated earlier by either Party as provided for in this Agreement; provided, however, that, following termination of this Agreement, each Party shall remain subject to the requirements of this Agreement with respect to any Data it has received from any disclosing Party until such time as the relevant Data is destroyed pursuant to the requirements of this Agreement or returned to the disclosing Party. The District’s annual payment obligations hereunder shall become effective on August 1, 2022 or, if City Facilities are not yet operational to provide internet service, upon the mutual written agreement of the Parties, not to be unreasonably withheld (the “**Effective Date**”).

**Premises:** Designated areas in District buildings and other physical facilities. Said Premises being more particularly described and shown by **Exhibit A** attached hereto and incorporated herein.

The Parties may agree to add additional District buildings and physical facilities to the Agreement. Additional District buildings and physical facilities will be added to **Exhibit A** as **Exhibit A-**

2, A-3, A-4, etc. The Parties agree that the decision to add additional District buildings and physical facilities are not considered Modifications subject to Section 12.7 of the Agreement.

**Scope of Permission:**

The joint use and benefit of the Premises by Joint User and its contractors and subcontractors, including ingress and egress over Premises identified in **Exhibit A** for the purpose of installation of City-owned monopole antenna towers (“**Towers**”) and Citizens Broadband Radio Service Devices (CBRS Antennas), together with a space for cables, fibers or the equivalent (Towers, CBRS Antennas, and related City-owned equipment will hereinafter be referred to as “**City Facilities**”) that will allow the District to provide Internet access to eligible District students.

The Joint User will be granted access to the District’s Intermediate Distribution Frame (IDF) and Main Distribution Frame (MDF) closets (“**IDF/MDF closets**”) at all District locations where City Facilities are installed. The Joint User will be permitted to install City-owned equipment in IDF/MDF closets that will exchange traffic to and from CBRS Devices and the District’s broadband network. The Joint User will also be permitted to install City-owned equipment in IDF/MDF closets that will allow use of City Facilities by Joint User for City purposes.

The Joint User shall own any cabling and electrical equipment deployed to support City Facilities. Ownership of electrical and cabling will automatically transfer to the District at the end of the Term of the Agreement or upon termination of the Agreement.

**ARTICLE 2. PERMISSION**

2.1 District acknowledges that Joint User’s activities, if within the Scope of Permission and conforming to the terms and conditions of this Agreement, are not anticipated to unreasonably interfere with the present operations of District’s use of the Premises. If the City Facilities interfere with District activities, the Parties will attempt to resolve the interference by amending this Agreement. Joint User shall have the right to keep and maintain the City Facilities in place until a mutual agreement can be reached, and District shall bear the cost of any relocation due to interference and the cost of remedying the interference. This Agreement does not create an easement, but only a license defined by the terms of this instrument.

2.2 Joint User shall have permission (“**Permission**”) to place the City Facilities in the locations set out in **Exhibit A**, Premises.

2.3 This Permission does not exempt Joint User from rules of general applicability that govern activities or construction on District property or within the Scope of Permission or from getting permits required generally for activities Joint User will be conducting within the Scope of Permission.

2.4 Reserved

### **ARTICLE 3. RESTRICTIONS ON USE**

3.1 This Permission does not grant Joint User authority to use or place City Facilities in any area beyond the Premises.

3.2 This Permission grants only a privilege to use the Premises. District conveys no real property interest. District may enter and use the Premises at any time for any purpose not unreasonably interfering with the Scope of Permission.

### **ARTICLE 4. DISTRICT RESPONSIBILITIES**

4.1 The City shall purchase and give to District up to a maximum of 1,575 Customer Premises Equipment (“CPE”) devices during the first year of the Agreement; however, the City may agree to modify the maximum number of CPE devices purchased during the first year of the Agreement in writing after the Effective Date of this Agreement. The Parties agree that the decision by the City to modify the maximum number of CPEs is not considered a Modification subject to Section 12.7 of the Agreement. The District shall be responsible for purchasing all other necessary CPE devices during the remaining term of the Agreement. Except for CPE devices returned to the City pursuant to the terms of Section 4.4 of the Agreement, CPE devices purchased by the City will be District property.

4.2 Upon receipt of CPE devices from the City, the District shall distribute CPE devices to eligible students or staff within ninety (90) days of date of execution of the Agreement provided the City Facilities have been installed.

4.3 The District will select students or staff eligible for CPE devices in accordance with District policies.

4.4 If the Agreement is terminated for any reason within the first 18 months of the Agreement, the City may, at its discretion, request return of the CPE devices purchased by the City.

4.5 Reserved

4.6 The District will provide technical assistance and support related to CPE devices including repair, replacement, and in-home connectivity issues, including answering questions from students and their parents in a timely manner. District will be responsible, at its discretion, for purchasing new devices and any other necessary components required for the service beyond the City’s initial contribution under Section 4.1. If the District increases the number of supported CPE devices in

operation on the network beyond the City’s initial contribution under Section 4.1, then District shall be responsible for the increase in associated Subscriber License Costs (Support Services, Subscriber Licenses, and Extended Warranty) related to the new devices.

4.6.1 District will participate with the City in detailed design review, site walks, and project meetings to facilitate installation of City Facilities.

4.6.2 Support the City and its vendors in deployment of City Facilities on Premises by making District building, electrical and IT personnel available.

4.6.3 Provide Joint User access to dedicated areas of District IT spaces for cabling, electrical, equipment racks needed by Joint User to install and operate City Facilities.

4.6.4 Support any surveys developed by research teams that provide feedback/evaluation/public impact of City Facilities on District students, and collaboratively capture student-user stories.

4.6.5 Develop a process for students to exchange broken CPE Devices. The District shall also develop a process to notify Joint User within three (3) District working days after any CPE Devices are reported by students or are otherwise determined by the District to be lost or stolen. Lost or stolen devices will be deactivated remotely by Joint User to prevent unauthorized use of the network.

4.6.6 Provide briefings to District leadership.

4.7 The District shall be responsible for the costs identified in Exhibit B (Support Services, Subscriber Licenses, and Extended Warranty), which are collectively referred to as “Subscriber License Costs”, that allow CPE devices to connect with the CBRS network. Subscriber License Costs are payable annually to the City by each anniversary of the Effective Date of this Agreement. **Exhibit B** outlines the Subscriber License Costs for the City’s initial contribution of devices as stated in Section 4.1 and a breakdown of the Subscriber License Costs by year and category. The Subscriber License Costs payable to City shall not be reduced to account for a reduction in the number of the CPE devices in operation by the District that is below the City’s initial contribution of devices. Starting on the fourth anniversary of the Effective Date of this Agreement, the Subscriber License Costs shall be increased each year by applying a percentage equal to the overall Consumer Price Index for the 12 months that immediately preceded the anniversary date or 2.5%, whichever is lower, to the prior year’s Subscriber License Costs. The City shall notify the District of such adjustment and the adjustment shall take effect immediately for the payment owed to the City for the fourth anniversary of the Effective Date of this Agreement. The Subscriber License Costs for all remaining years of the Agreement, and any renewal terms, shall be adjusted annually in the same manner as described in this section to reflect increases in the Consumer Price Index for the 12 months that immediately preceded the respective anniversary date or 2.5%, whichever is lower. These adjustments shall not constitute amendments to this Agreement and shall take effect immediately upon written notification by the City. The Subscriber License Costs in the last year of the Agreement shall be prorated to account for a period of Internet service that is less than one full year.

4.8 The District will pay monthly electrical costs generated from operating City Facilities.

4.9 District's payment for performance of functions or services under this Agreement must be made from current revenues available to the District. In the event that District does not provide payment for functions, devices, or services, City reserves the right to stop performance of any duties in this Agreement that relate to the functions, devices, or services that have not been paid for, and to keep and maintain the City Facilities in operation for the full Term of the Agreement.

4.10 If the District elects to stop providing students and staff Internet access services prior to the end of the Term, including due to termination as set forth in Section 8.1, the Joint User, at its sole option, will have the right to keep and maintain the City Facilities on the Premises for the remainder of the Term; however, in that event, the District shall have the right to collocate District-owned wireless antennas on Towers installed on Premises at its sole expense. The City will accommodate District requests provided (i) District wireless antennas do not result in any interference with the equipment of the City, (ii) the District pays the entire cost of Tower structural support, to the extent structural support is necessary to support District antennas, and (iii) District antennas are used exclusively for District purposes. If relocation of the City Facilities within the District property containing the identified Premises is requested due to an event identified in Section 8.1, the Parties shall agree upon a new location within the District property containing the identified Premises and District shall bear the cost of relocation. If no agreement can be reached, the City Facilities shall remain in place for the Term of the Agreement.

## ARTICLE 5. CONSTRUCTION, MAINTENANCE, AND OPERATIONS

5.1 **Costs.** Joint User is solely responsible for all costs of construction, installation, repairs, maintenance, operation, and the removal of the City Facilities and any other property placed by Joint User in the Premises (hereafter "**Joint User's Responsibilities**") except as provided elsewhere in this Agreement.

5.2 **Installation and Maintenance.** All City Facilities must be installed in the locations set out in **Exhibit A**. The City Facilities shall remain the exclusive property of City and shall not be considered fixtures. City, at its expense, may use any and all means reasonably necessary to control, secure or restrict access to the City Facilities to protect persons and property. Joint User must maintain all improvements constructed or installed by Joint User. In so doing, Joint User must adhere to all applicable safety standards and must adhere to all federal, state, or local laws, rules, or regulations.

5.3 **No Power to Bind.** Joint User cannot bind or permit another to bind District for payment of money or for any obligation.

5.4 **Contractors and Subcontractors.** City shall ensure its contractors and subcontractors entering the Premises or District property on an active campus have first undergone the criminal history background checks as required by applicable law. "**Active campus**" means a campus where student instruction or extracurricular activities are occurring. Contractors and subcontractors shall certify in writing to District that such checks have been done for its employees and agents before entering the Premises or District property. If background checks cannot be

completed within five (5) calendar days, District shall provide professional employee(s) to chaperone contractors/subcontractors so that construction or other activities authorized by this Agreement may proceed. Before commencing installation of the City Facilities, City's contractor and subcontractors shall purchase and maintain such insurance, including worker's compensation and commercial general liability insurance coverage, as will protect them and District from claims that may arise out of, or result from, the contractor's activities under this Agreement, whether such activities be by contractor or by any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Joint User must promptly pay anyone who could file a mechanics' or materialmen's lien on the Premises. If any such lien is filed and is not paid or bonded off within 10 days of notice, District may treat it as an event of default and terminate this agreement by delivering 10 days prior written notice to Joint User. Joint User remains obligated to clear the lien even after termination.

**5.5 City Improvements.** Joint User shall have the right, at its expense, to erect and maintain on the Premises improvements, personal property and facilities necessary to operate City Facilities as set forth on and in accordance and compliance with **Exhibit A**. **Exhibit A** shall contain a survey and legal description of the property and Building a site plan which includes all buildings, structures, Tower, City Facilities and related equipment; elevation drawings for the Tower; and specifications for all exterior colors, paint, other finishes and landscaping. The engineering specifications for the Tower shall specify the height of the Tower and designate the exact location, size, and type of antenna facilities to be installed. There shall be a fifteen-foot clearance between antenna arrays, unless a closer clearance is technically feasible and agreed to by Joint User. Joint User may include photo simulations of what the property, Building, and Premise will look like upon construction of the Tower and City Facilities and incorporate them in **Exhibit A**. It is understood that the Premises is the area used by the City as described in **Exhibit A**. The Parties understand and agree that at the time of execution of the Agreement, **Exhibit A** will consist of preliminary plans of City Facilities that will be installed at the initial District locations. The Parties also agree that final plans and specifications approved by the District as provided for in Section 5.7 of the Agreement will replace the initial **Exhibit A**. The final plans and specifications of the first Tower installation will be attached to the Agreement as **Exhibit A-1**, final plans and specifications of the second Tower installation will be attached to the Agreement as **Exhibit A-2**, etc. Finally, the Parties agree that the attachment of final plans and specifications to the Agreement are not considered Modifications subject to Section 12.7 requirements, but such plans and specification are subject to Section 5.7 of this Agreement.

**5.6 Tower Requirements.** City shall abide by the following requirements related to the erection of the Tower, including, but not limited to following:

- 5.6.1 the maximum height of all Towers shall not exceed 60 feet;
- 5.6.2 the structure shall not be used to support signs other than those required by governmental agencies for aircraft warning or other safety purposes;
- 5.6.3 the structure shall be designed to accommodate at least two separate antenna arrays; as set out in Section 4.10 of the Agreement, the District shall have the right to collocate district-owned wireless antennas on Towers under certain circumstances.

5.6.4 unless otherwise governed by State or Federal requirements, the structure shall be a galvanized finish; and

5.6.4 all structures shall comply with applicable law and regulations and meet the minimum structural load standards in the City of San Antonio building code.

5.7 **Approval of Plans.** Prior to commencing construction, Joint User shall submit plans and specifications for all improvements to District for District's written approval, not to be unreasonably withheld. No improvement, construction, installation or alteration shall be commenced until plans for such work have been approved by the District and all necessary permits have been properly issued. District may withhold approval if it determines that persons or District property are not adequately protected by constructing the City Facilities. If District withholds approval of plans, and Joint User determines that no adequate alternative is available, then no City Facilities shall be installed, and no Internet access service will be available at that location.

## ARTICLE 6. INSURANCE

As governmental entities, the Parties recognize that the Texas Constitution prohibits the Parties from indemnifying each other, unless an annual fund is established to cover the future contingency or otherwise allowed by law. Therefore, the City and District may self-insure its respective liability under this Agreement.

## ARTICLE 7. INDEMNITY

7.1. To the extent permitted to Municipalities and School Districts under Texas Law, District and City shall indemnify and hold the other harmless against any claim of liability or loss from personal injury or property damage resulting from or arising out of the negligence or willful misconduct of the indemnifying party, its employees, contractors or agents, except to the extent such claims or damages may be due to or caused by the negligence or willful misconduct of the other party, its employees, contractors or agents.

7.2. There are no third-party beneficiaries of this indemnity.

7.3. Reserved.

7.4. Nothing in this agreement waives governmental immunity or limitations on liability or other defenses of District or City under applicable provisions of the Texas Tort Claims Act, as set out in the Texas Civil Practice and Remedies Code, Section 101.001, *et seq.*, and the remedies authorized therein regarding claims or causes of action that may be asserted by third parties for accident, injury or death.

## ARTICLE 8. TERMINATION/EXPIRATION

8.1 In the event that District, in its reasonable discretion, (a) determines that Joint User's Permission conflicts or interferes with District's use of any of the Premises listed in **Exhibit A**, or

(b) any Premises listed in **Exhibit A** is sold or conveyed to a third party, District may terminate Permission and this Agreement relative for that identified Premises at any time before expiration of the Term by giving Joint User sixty (60) days prior written notice. Notwithstanding anything to the contrary, Joint User's right to keep and maintain the City Facilities on the Premises for the Term of this Agreement, as stated in Section 4.10, shall survive termination of this Agreement, except in the event of termination due to a material breach by Joint User.

8.2 Joint User may terminate the Agreement at any time in Joint User's sole discretion prior to expiration of the Term by abandoning its use of the Premises and promptly delivering notice to District. The District will have the option to purchase City Facilities if Joint User exercises its right to terminate the Agreement as provided for in this Section 8.2. If the Parties cannot agree on the fair market value of City Facilities, the facilities will be removed from Premises in accordance with the terms set out in Sections 8.3 and 8.4 herein below.

8.2A Either Party may terminate this Agreement due to the other Party's material breach of this Agreement. The Party claiming material breach shall notify in writing the other Party specifying the material breach and may terminate this Agreement if the material breach is not cured or sufficiently mitigated (to the non-breaching Party's reasonable satisfaction) within ninety (90) days of written notice thereof.

8.3 Upon expiration, or termination of this Agreement pursuant to Section 8.2 or 8.2A, all rights and privileges cease, and Joint User must promptly cease use of the Premises. Joint User shall be responsible for all costs of (a) removing existing facilities permitted by this agreement, and (b) restoring the Premises to a condition substantially equivalent to the condition of the Premises prior to this Agreement, substantial equivalence to be reasonably determined by District, provided that reasonable wear and tear and casualty damage are excepted. Electrical and cabling facilities will remain on the Premises and be the property of the District.

8.4 Joint User shall remove its improvements, property, and City Facilities within one-hundred eighty (180) days of termination pursuant to Section 8.2 or 8.2A or expiration of the Term.

8.5 In the event this Agreement is not terminated earlier as stated in this Article 8, this Agreement shall expire upon the conclusion of the ten (10) year Term. Upon expiration, the City Facilities shall be removed in accordance with Sections 8.3 and 8.4 herein above, unless the Parties later agree on other plans for purchase or removal of the City Facilities.

8.6 Any notice of termination or material breach must be in writing, and provided to the other Party via Certified Mail, Return Receipt Requested at the address listed in Article I of this Agreement. Notice will be deemed given on the third business day after the notice was deposited with the USPS.

## **ARTICLE 9. ASSIGNMENT**

This Agreement and any interest in this Agreement cannot be assigned by Joint User except after written consent is obtained from District.

## ARTICLE 10. CONDEMNATION

If the Premises are taken, in whole or in part, by eminent domain, then this Permission, at the option of District, ceases on the date title to the land so taken or transferred vests in the condemning authority. Joint User may on its own behalf make a claim in any condemnation proceeding involving the Premises for losses related to Joint User's communications equipment, relocation costs and, specifically excluding loss of Joint User's leasehold interest, any other damages Joint User may incur as a result of any such condemnation.

## ARTICLE 11. TAXES

District and City are governmental entities and do not expect to pay taxes during the Term. Joint User is responsible for any taxes arising from its use of the Premises under this agreement directly attributable to the Joint User's equipment or Joint User's use and occupancy of the Premises. In no case will City ever be responsible for any taxes, local, state, or federal assessed against District.

## ARTICLE 12. MISCELLANEOUS PROVISIONS

**12.1 Relationship Limited.** This Agreement creates only the relationship of District and Joint User. The Parties are not principal and agent, partners, joint venturers, or participants in any common enterprise.

**12.2 Nondiscrimination.** District and Joint User understand and agree to comply with the Non-Discrimination Policy of the City of San Antonio contained in Chapter 2, Article X of the City Code and further, shall not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, veteran status, age or disability, unless exempted by state or federal law, or as otherwise established herein.

**12.3 Consent/Approval of City.** As to any matter hereunder in which City's consent is required, the consent may be granted by the Information Technology Services Department Director, City of San Antonio, as designee of the City Manager, without council action, pursuant to Ordinance 2020-06-04-0346, unless the City Charter requires City Council action.

**12.4 Severability.** If any portion hereof is determined to be invalid or unenforceable, the determination does not affect the remainder hereof.

**12.5 Successors.** This Agreement inures to the benefit of and binds the representatives, successors, and permitted assigns of each Party. This clause does not authorize any assignment not otherwise authorized.

**12.6 Integration.** This Agreement represents the entire agreement between the Parties relative to the subject matter and may not be contradicted by evidence of prior, contemporaneous, or subsequent oral agreements of the Parties. There are no oral agreements between the Parties.

**12.7 Modification.** This Agreement may not be changed orally but only by a written subsequent agreement, signed by authorized representatives for the Parties.

12.8. **Third Party Beneficiaries.** This Agreement is intended for the benefit of the parties hereto and their successors and permitted assigns only.

12.9. **Notices.** Any notice provided for or permitted hereunder must be in writing and by certified mail, return receipt requested, addressed to the parties at their respective addresses set forth at Article I. The giving of notice is complete three business days after its deposit, properly addressed and postage prepaid, with the United States Postal Service. Failure to use certified mail does not defeat the effectiveness of notice actually received, but such notice is effective only on actual receipt. Address for notice may be changed by giving notice hereunder.

12.10. **Captions.** Paragraph captions in this Agreement are for ease of reference only and do not affect the interpretation hereof.

12.11. **Further Assurances.** The Parties must execute and deliver such additional documents and instruments as may be required to carry out the provisions hereof. But no such additional document(s) may alter the rights or obligations of the Parties as contained in this permission.

12.12. **Consideration.** In consideration for the rights granted herein, District operations, students and employees will receive the benefits of enhanced wireless communications arising from operation of the City Facilities.

12.13. **Authorizations and Quiet Enjoyment.** District covenants that Joint User, upon performing all the covenants, shall have the right to peaceably and quietly use the Premises for the Permissions in accordance with this Agreement, and District represents that District is seized of good and sufficient title and interest to the Premises and has full authority to enter into this Agreement. Each of the individuals who have executed this Agreement represents and warrants that he or she is duly authorized to execute this Agreement on behalf of their respective Party hereunder, and that all corporate, partnership, trust, governmental or other action necessary for such party to execute, enter into, and perform obligations in this Agreement have been duly taken by such Party and have occurred. Joint User's manner of acceptance of this Agreement shall be only by the signature of the City's Chief Information Technology Officer or their designee.

12.14. **Waiver of Revocable License at Will.** Notwithstanding the fact that this Agreement is a license and that a license is normally revocable at will by the grantor, the Parties hereto agree that the license granted by this Agreement is not revocable at will and that this Agreement can only be terminated in accordance with the provisions of this Agreement or as a result of a default that is not cured within any applicable notice and cure period set forth in this Agreement or otherwise as ordered by a court of competent jurisdiction.

12.15. **Interference.** City agrees to only install radio equipment of the type and frequency that will not cause measurable interference to the equipment of District as of the date of this Agreement. Should City's equipment cause measurable interference, and provided City gives written notice, City will take all steps necessary to correct and eliminate the interference. The Parties acknowledge that there will not be an adequate remedy at law for non-compliance with the provisions of this

paragraph and therefore, either party shall have the right to specifically enforce the provisions of this paragraph in a court of competent jurisdiction

**12.16 Governing Law/Venue.** This Agreement and all of the rights and obligations of the Parties hereto and all of the terms and conditions hereof shall be subject to, construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas, without giving effect to its principles of conflicts of law. Venue is mandatory and exclusive in Bexar County.

In Witness Whereof, the parties have caused their representatives to set their hands.

**City/Joint User:**

**District:**

**City of San Antonio**, a Texas municipal corporation

**San Antonio Independent School District**

By: \_\_\_\_\_

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## Exhibit A

### Site Locations & Mounting Method:

FINAL AGREED DEPLOYMENT ORDER	FINALIZED SITE NAMES	Site Address	MOUNTING METHOD	COMMENTS
1	Antonio Margil Elementary School	1000 Perez St, San Antonio, TX 78207	Monopole	
2	David Crockett Academy	2215 Morales St, San Antonio, TX 78207	Monopole	
3	Barkley-Ruiz Elementary School	1111 S Navidad St, San Antonio, TX 78207	Monopole	
4	Sarah S. King Elementary School	1001 Ceralvo St, San Antonio, TX 78207	Monopole	
5	Ira C. Ogden Elementary School	2215 Leal St, San Antonio, TX 78207	Monopole	

### Monopole/Tower Antenna Height and Azimuth

- Sector1 – x ft - 60
- Sector2 – x ft - 120
- Sector3 – x ft - 180
- Sector4 – x ft - 240
- Sector5 – x ft - 300
- Sector6 – x ft - 0

#### Qty 3 – SLX7000 CBSDs



Mounting assumption –  
mounted between antennas  
at x feet.

- **Unit Dimensions:**  
509 mm (w) x 236 mm (l) x 210 mm (h)  
20.0 in (w) x 9.3 in (l) x 8.3 in (h)
- **Unit Weight:**  
20 kg (44 lbs)

#### Coming down the tower/pole:

**Outdoor rated data cable -**  
- 1 per CBSD  
- Ethernet or fiber  
- less than 1/2 inch diameter

**Outdoor rated power cable -**  
- 1 per CBSD  
- less than 1/2 inch diameter

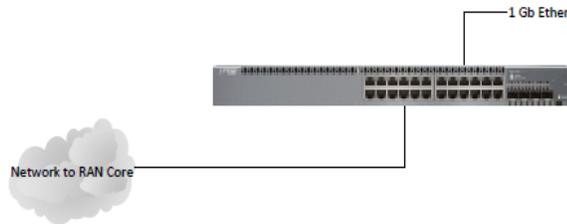
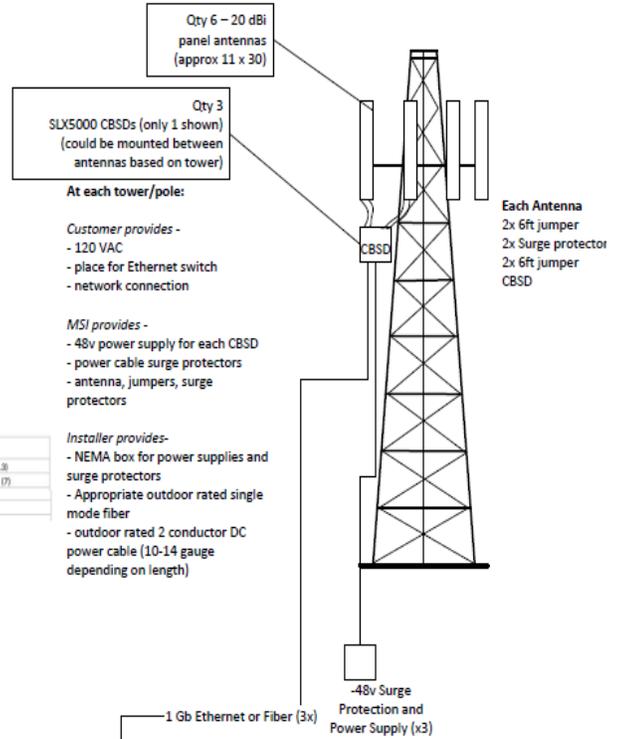
#### Qty 6 – Alpha AW3170



#### Mechanical Specifications

Dimension (LxW)	mm (in)	750 (30.3) x 280 (11.0) x 65 (2.6)
Packing Size (LxWxH)	mm (in)	793 (31.2) x 340 (13.4) x 178 (7)
Net Weight (antenna)	kg (lb)	4.1 (9.0)
Net Weight (mount)	kg (lb)	1.5 (3.4)

### Monopole/Tower 6 Sector Site



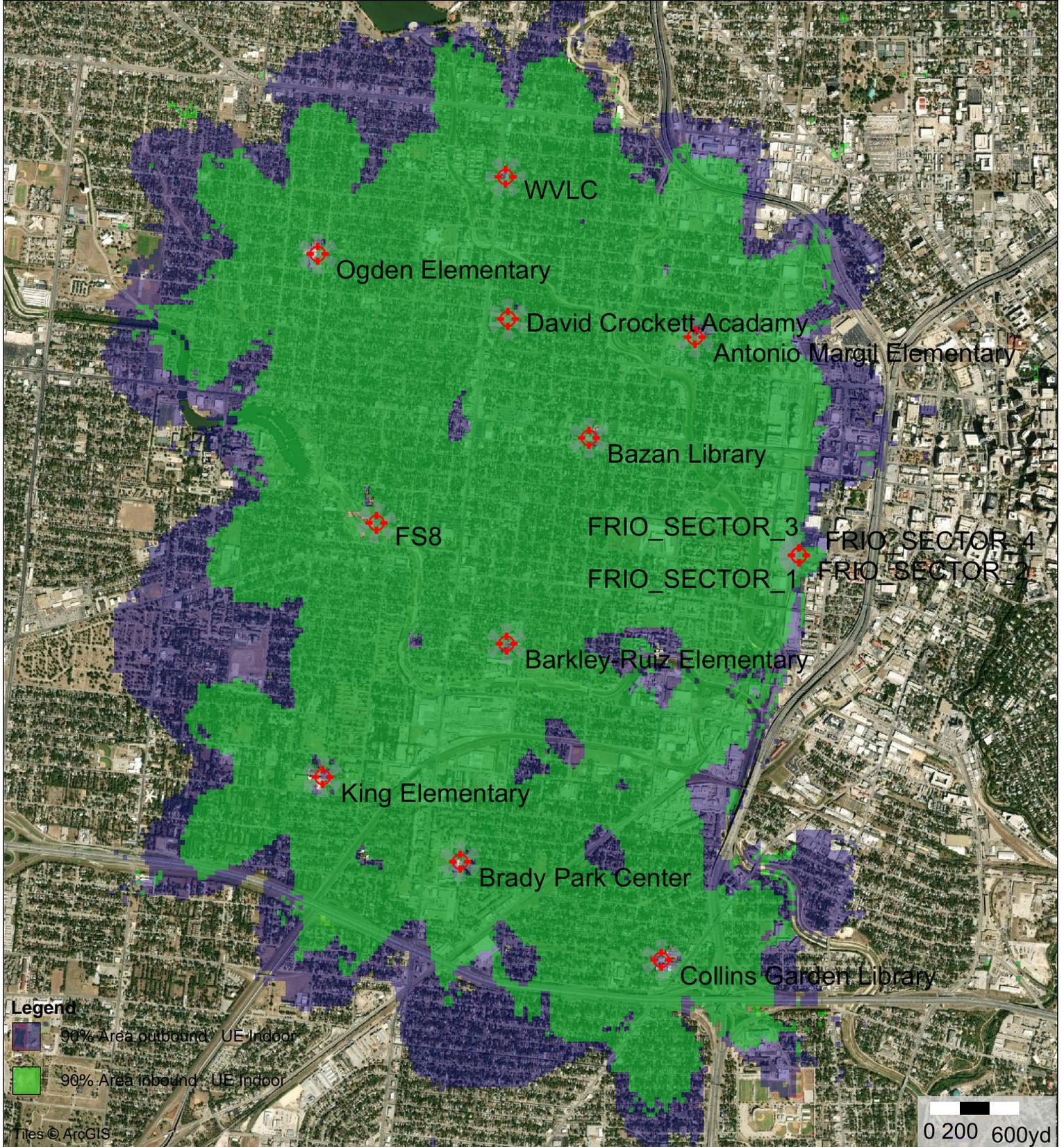
<b>MOTOROLA SOLUTIONS</b>	
PROJECT:	CUSTOMER NAME
TITLE:	MONOPOLE/TOWER
DESIGNED BY:	DATE:
D TAYLOR	04/08/21



# CoSA Phase 1 + 6 Expansion Sites

Modeled with - 5Mbps DL, 1Mbps UP,  
8dB building loss. For illustrative  
purposes only, no coverage guarantee

**MOTOROLA**  
SOLUTIONS



Printed: 12/10/2021  
System version: 2.8.10

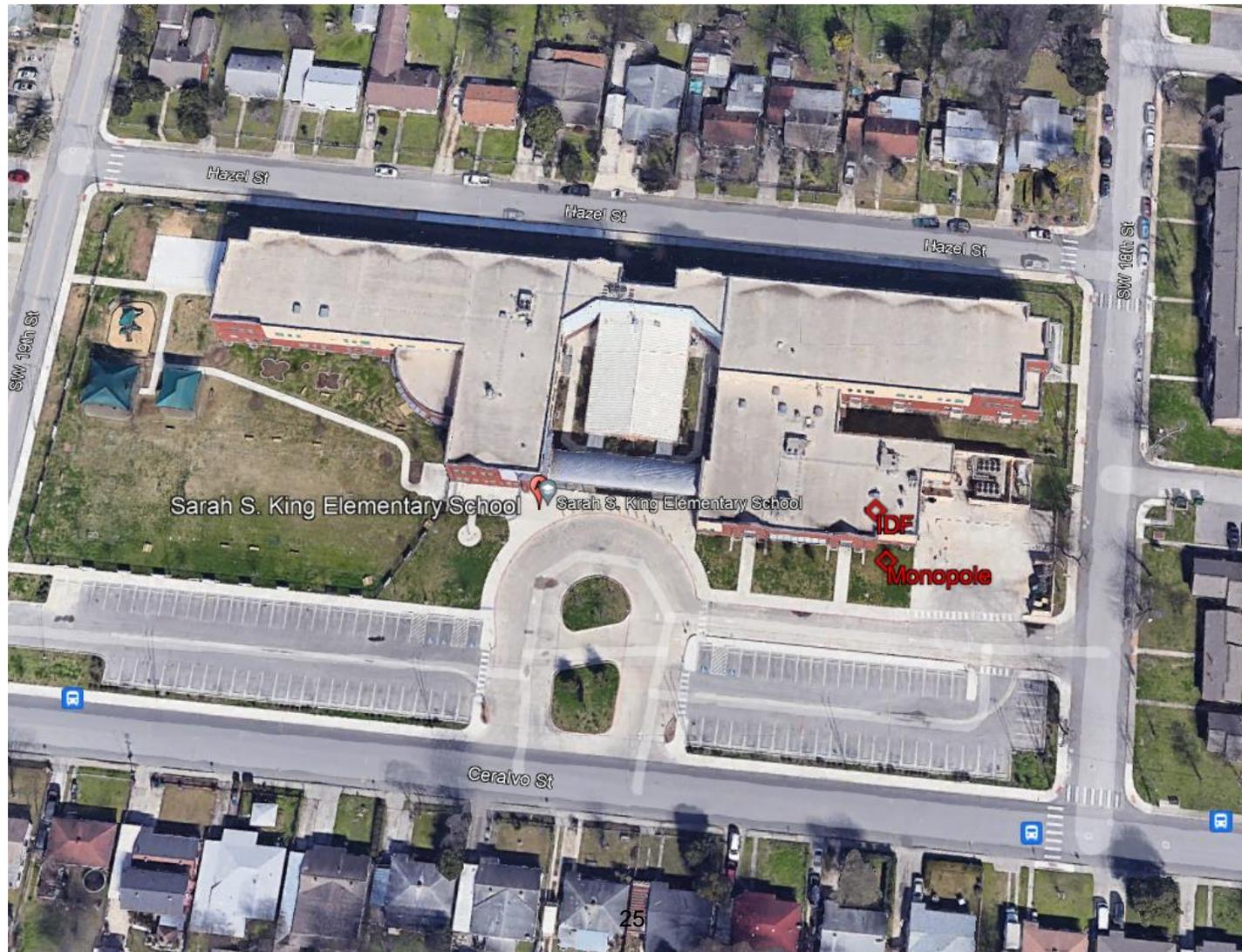
Solution: CoSA Phase 1 Sites  
Project: CoSA Expansion Sites (SAISD)  
Design: Design 4 Original Phase 1 with New  
ckg004

## Connected Beyond the Classroom Project

### Phase 3 – SAISD sites (total 5) + 1 CoSA site

SAISD sites - total 5

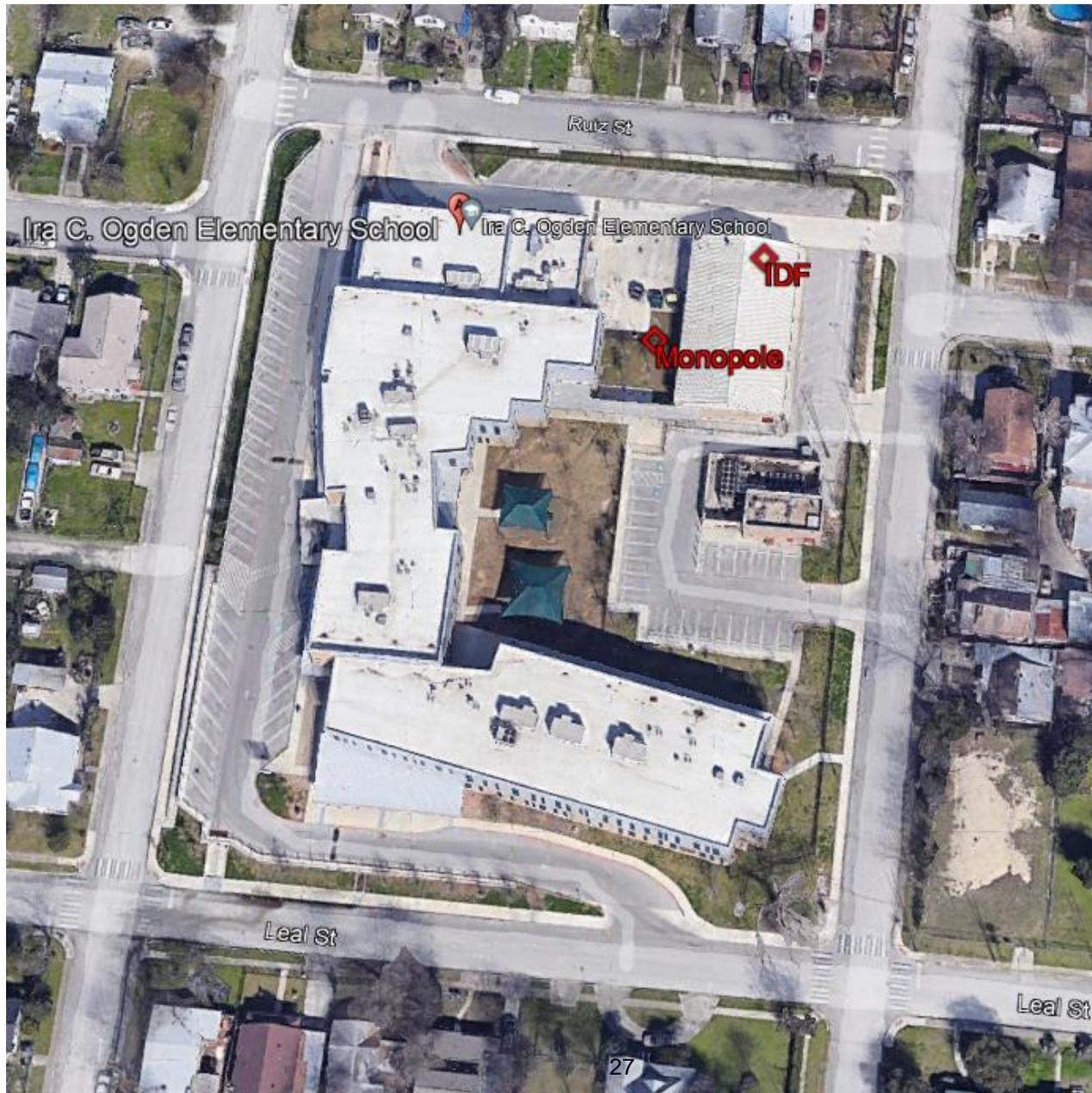
1. Sarah S. King Elementary - 1001 Ceralvo St, San Antonio, TX 78207 (80 ft Pole)



2. Barkley-Ruiz Elementary - 1111 S Navidad St, San Antonio, TX 78207 (60 ft Pole)



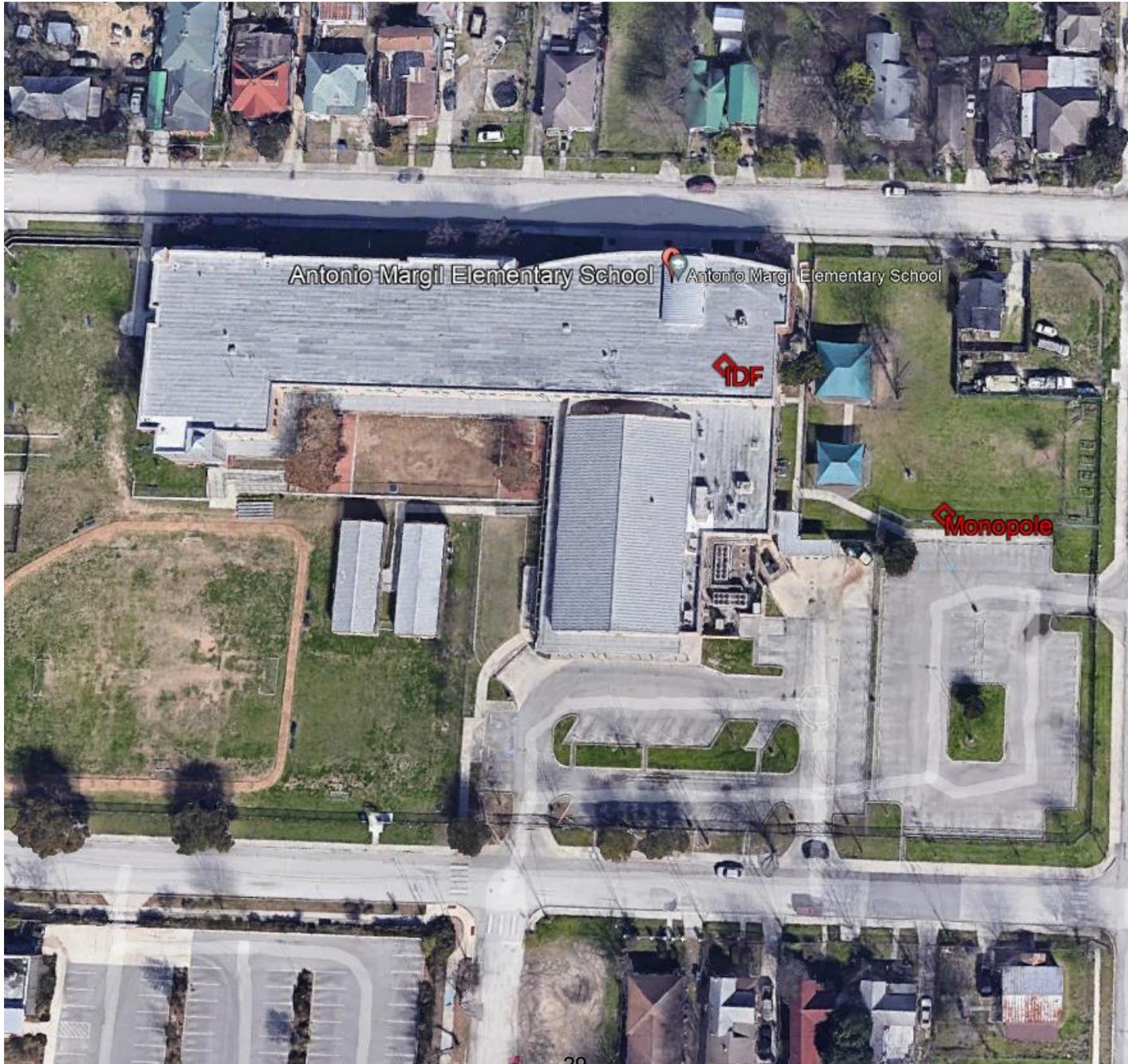
3. Ogden Elementary - 2215 Leal St, San Antonio, TX 78207 (60 ft Pole)



4. David Crockett Elementary - 2215 Morales St, San Antonio, TX 78207 (60 ft Pole)



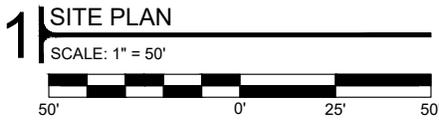
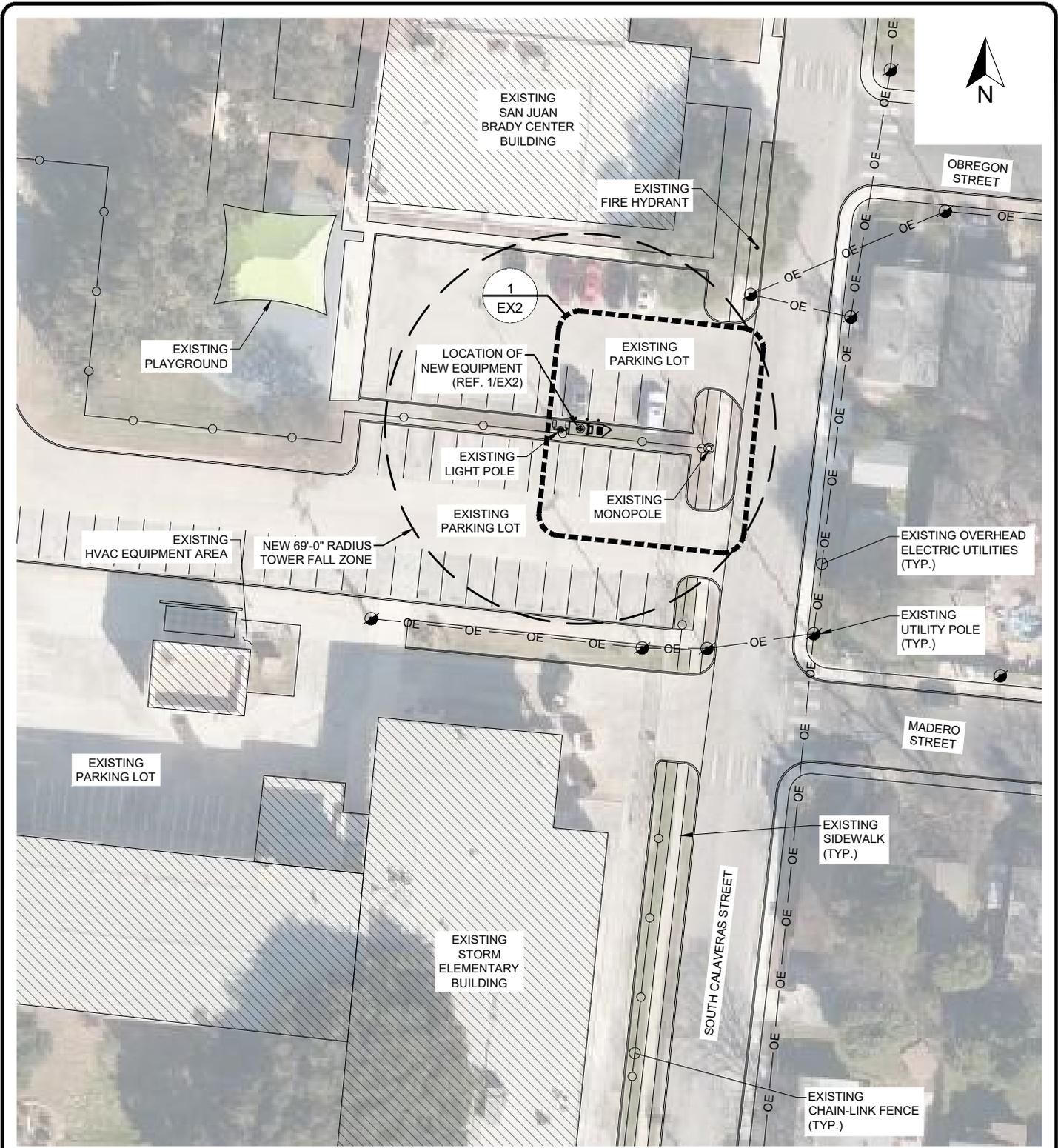
5. Margill Elementary - 1000 Perez St, San Antonio, TX 78207 (60 ft Pole)



CoSA – total 1 site

- 6. Brady Park: 2307 S Calaveras St, San Antonio, TX 78207 (60 ft Pole)






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 BRADY PARK - OPTION A

DATE PRINTED  
 11/10/21

**EX1**



EXISTING  
PARKING LOT

5'-10"

56'-6"

- NEW DIRECT EMBEDDED METAL POLE  
(REF. 1/EX3)
- NEW 3'-0" WIDE  
UTILITY H-FRAME
- NEW PIPE BOLLARD SPACED 4'-0" O.C.  
(TYP. OF 3)
- NEW 12'-0" x ±4'-6" FENCED COMPOUND  
(BY OTHERS)  
(WILL USE EXISTING FENCE AS BOUNDARY)

EXISTING  
CONCRETE  
SIDEWALK  
(TYP.)

4'-0"  
(TYP.)

±4'-6"

NEW PULL BOX  
(BY OTHERS)

NEW 30" LONG x 36" TALL x 16" WIDE  
NEMA 4R ENCLOSURE

EXISTING  
GRASS  
SURFACING  
(TYP.)

EXISTING  
MONOPOLE

2'-6"

3'-6"

12'-0"

EXISTING  
LIGHT POLE

EXISTING  
CHAIN-LINK  
FENCE  
(TYP.)

EXISTING  
PARKING LINE  
(TYP.)

EXISTING  
CURB  
(TYP.)

SOUTH CALAVERAS STREET

# 1 DETAILED SITE PLAN

SCALE: 1" = 10'



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BRADY PARK - OPTION A

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# EX2

TOP OF NEW LIGHTNING ROD  
ELEV. ± 62'-6" AGL (TO BE VERIFIED)

TOP OF NEW TOWER  
ELEV. ± 60'-0" AGL (TO BE VERIFIED)

(6) NEW AW3170 PANEL ANTENNAS ON  
NEW UWS6-NP STANDOFF MOUNT  
ELEV. ± 58'-6" AGL (RAD CENTER) (TO BE VERIFIED)

NEW SITE PRO 1 UWS6-NP MONOPOLE MOUNT  
W/ (6) 6'-0" LONG x 2-3/8" O.D. PIPES  
ELEV. ± 57'-0" AGL (MOUNT CENTER) (TO BE VERIFIED)

(3) NEW AIRHARMONY- 4200 MACRO BASE  
STATION ON MONOPOLE MOUNT  
(BELOW NEW PANEL ANTENNAS)  
(TYP. OF 1 PER SECTOR)  
ELEV. ± 55'-6" AGL (EQUIPMENT CENTER)

NEW 12" LONG x 6" WIDE CABLE PORT  
ELEV. ± 53'-0" AGL (PORT CENTER)

NEW LIGHTNING ROD  
(TO BE INSTALLED  
MINIMUM 24" ABOVE TOP  
OF NEW ANTENNAS)

NEW CABLE PORT  
(TYP. OF 2)

ROUTE NEW HYBRID CABLE INSIDE  
NEW METAL POLE

NEW ±60'-0" DIRECT  
EMBEDDED METAL POLE  
(REF. NOTE 1)

NEW 3'-0" WIDE UTILITY  
H-FRAME

NEW NEW 30" LONG X  
36" TALL X 16" WIDE  
NEMA 4R ENCLOSURE

BASE OF TOWER  
(±21.7" DIAMETER)

NEW 12" LONG X 6" WIDE CABLE PORT  
ELEV. 4'-0" AGL (PORT CENTER)

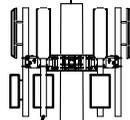
EXISTING GROUND ELEVATION  
ELEV. 0'-0" (REF.)

CONCRETE FOUNDATION PER  
FINAL POLE DESIGN  
(±36" DIAMETER)

± 18'-0" POLE EMBEDMENT  
BENEATH EXISTING GRADE  
(REF. NOTE 1)

**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



**1** TOWER ELEVATION  
SCALE: N.T.S.



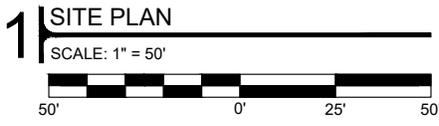
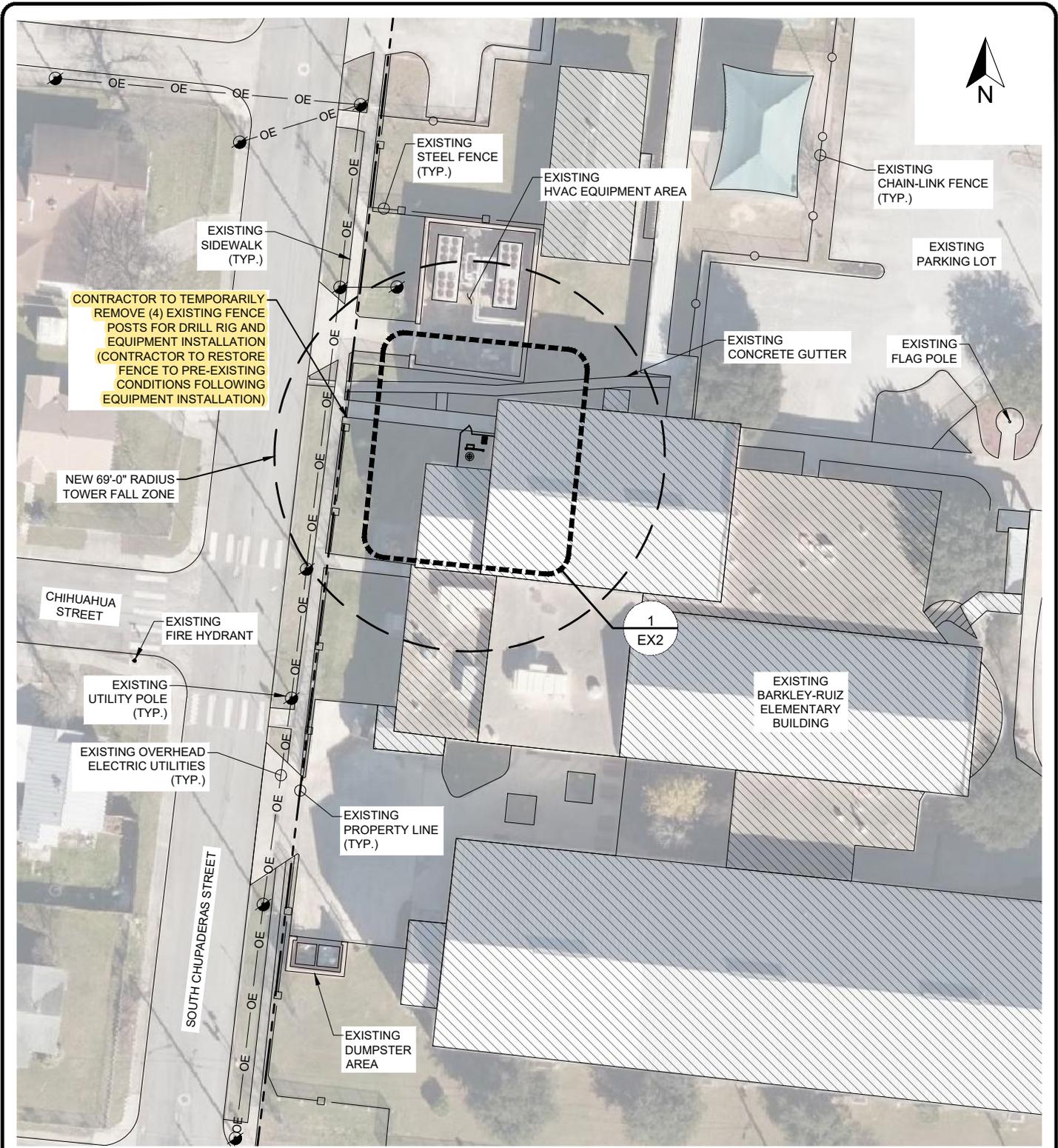
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**EX3**



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BARKLEY-RUIZ ELEMENTARY

DATE PRINTED  
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**EX1**

EXISTING HVAC EQUIPMENT AREA



EXISTING STEEL FENCE (TYP.)

EXISTING CONCRETE GUTTER

EXISTING SIDEWALK (TYP.)

EXISTING GRASS SURFACING (TYP.)

EXISTING TREE (TYP.)

EXISTING BARKLEY-RUIZ ELEMENTARY BUILDING

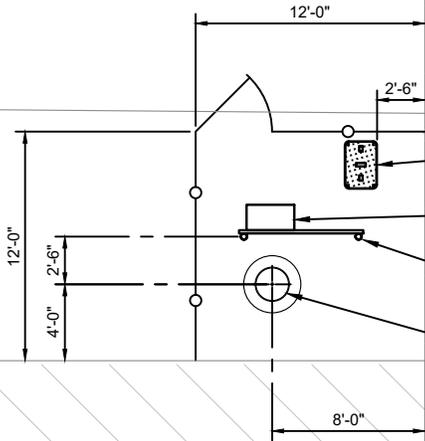
NEW 12'-0" x 12'-0" FENCED COMPOUND (BY OTHERS) (WILL USE BUILDING WALLS AS BOUNDARY FOR FENCE)

NEW PULL BOX (BY OTHERS)

NEW 30" LONG x 36" TALL x 16" WIDE NEMA 4R ENCLOSURE

NEW 6'-0" WIDE UTILITY H-FRAME

NEW DIRECT EMBEDDED METAL POLE (REF. 1/EX3)



### 1 DETAILED SITE PLAN

SCALE: 1" = 10'



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# EX2

TOP OF NEW LIGHTNING ROD  
ELEV. ± 62'-6" AGL (TO BE VERIFIED)

TOP OF NEW TOWER  
ELEV. ± 60'-0" AGL (TO BE VERIFIED)

(6) NEW AW3170 PANEL ANTENNAS ON  
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ELEV. ± 58'-6" AGL (RAD CENTER) (TO BE VERIFIED)

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W/ (6) 6'-0" LONG x 2-3/8" O.D. PIPES  
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NEW LIGHTNING ROD  
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MINIMUM 24" ABOVE TOP  
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NEW CABLE PORT  
(TYP. OF 2)

ROUTE NEW HYBRID CABLE INSIDE  
NEW METAL POLE

NEW ±60'-0" DIRECT  
EMBEDDED METAL POLE  
(REF. NOTE 1)

NEW 6'-0" WIDE UTILITY  
H-FRAME

NEW NEW 30" LONG X  
36" TALL X 16" WIDE  
NEMA 4R ENCLOSURE

BASE OF TOWER  
(±21.7" DIAMETER)

NEW 12" LONG X 6" WIDE CABLE PORT  
ELEV. 4'-0" AGL (PORT CENTER)

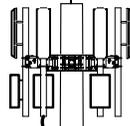
EXISTING GROUND ELEVATION  
ELEV. 0'-0" (REF.)

CONCRETE FOUNDATION PER  
FINAL POLE DESIGN  
(±36" DIAMETER)

± 18'-0" POLE EMBEDMENT  
BENEATH EXISTING GRADE  
(REF. NOTE 1)

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2. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



**1** TOWER ELEVATION  
SCALE: N.T.S.



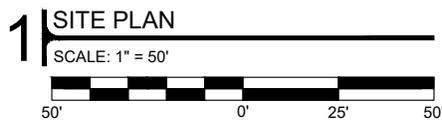
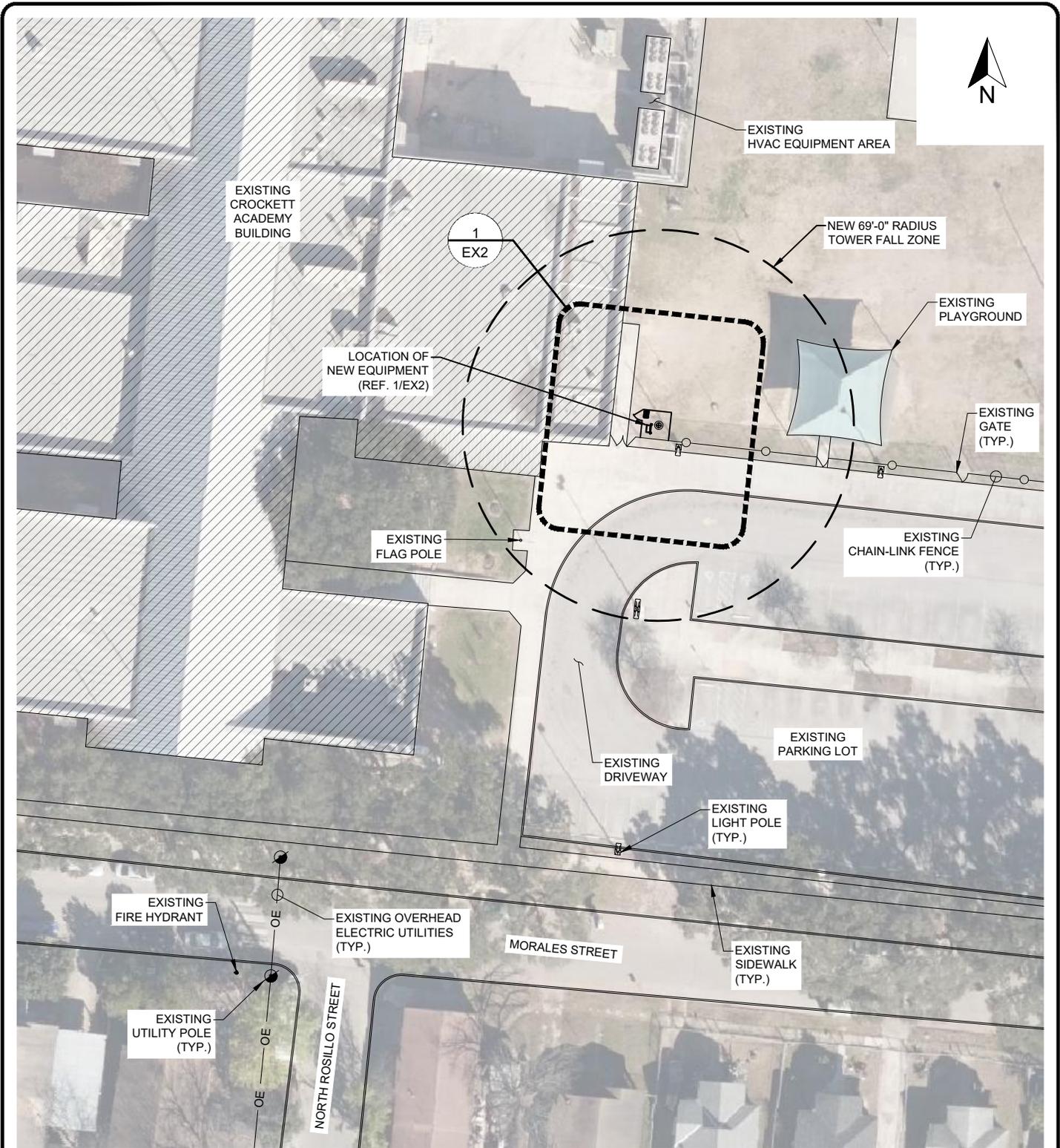
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**EX3**



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 CROCKETT ELEMENTARY

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**EX1**



EXISTING  
CROCKETT  
ACADEMY  
BUILDING

EXISTING  
CONCRETE  
SIDEWALK  
(TYP.)

EXISTING  
GRASS  
SURFACING  
(TYP.)

NEW 10'-0" x 10'-0"  
FENCED COMPOUND  
(BY OTHERS)  
(WILL USE EXISTING  
FENCE AS BOUNDARY)

NEW PULL BOX  
(BY OTHERS)

NEW 3'-0" WIDE  
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NEW  
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METAL POLE  
(REF. 1/EX3)

EXISTING  
CHAIN-LINK FENCE  
(TYP.)

EXISTING  
LIGHT POLE  
(TYP.)

EXISTING 9'-0" WIDE  
DOUBLE ACCESS GATE

EXISTING  
ASPHALT DRIVEWAY

16'-8"

4'-0"

2'-6"

10'-0"

5'-0"

10'-0"

# 1 DETAILED SITE PLAN

SCALE: 1" = 10'



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# EX2

TOP OF NEW LIGHTNING ROD  
ELEV. ± 62'-6" AGL (TO BE VERIFIED)

TOP OF NEW TOWER  
ELEV. ± 60'-0" AGL (TO BE VERIFIED)

(6) NEW AW3170 PANEL ANTENNAS ON  
NEW UWS6-NP STANDOFF MOUNT  
ELEV. ± 58'-6" AGL (RAD CENTER) (TO BE VERIFIED)

NEW SITE PRO 1 UWS6-NP MONOPOLE MOUNT  
W/ (6) 6'-0" LONG x 2-3/8" O.D. PIPES  
ELEV. ± 57'-0" AGL (MOUNT CENTER) (TO BE VERIFIED)

(3) NEW AIRHARMONY- 4200 MACRO BASE  
STATION ON MONOPOLE MOUNT  
(BELOW NEW PANEL ANTENNAS)  
(TYP. OF 1 PER SECTOR)  
ELEV. ± 55'-6" AGL (EQUIPMENT CENTER)

NEW 12" LONG x 6" WIDE CABLE PORT  
ELEV. ± 53'-0" AGL (PORT CENTER)

NEW LIGHTNING ROD  
(TO BE INSTALLED  
MINIMUM 24" ABOVE TOP  
OF NEW ANTENNAS)

NEW CABLE PORT  
(TYP. OF 2)

ROUTE NEW HYBRID CABLE INSIDE  
NEW METAL POLE

NEW ±60'-0" DIRECT  
EMBEDDED METAL POLE  
(REF. NOTE 1)

NEW 3'-0" WIDE  
UTILITY H-FRAME

NEW NEW 30" LONG X  
36" TALL X 16" WIDE  
NEMA 4R ENCLOSURE

BASE OF TOWER  
(±21.7" DIAMETER)

NEW 12" LONG X 6" WIDE CABLE PORT  
ELEV. 4'-0" AGL (PORT CENTER)

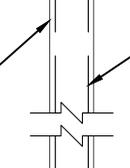
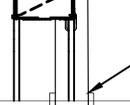
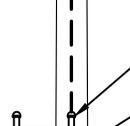
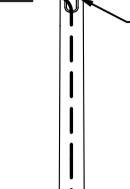
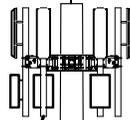
EXISTING GROUND ELEVATION  
ELEV. 0'-0" (REF.)

CONCRETE FOUNDATION PER  
FINAL POLE DESIGN  
(±36" DIAMETER)

± 18'-0" POLE EMBEDMENT  
BENEATH EXISTING GRADE  
(REF. NOTE 1)

**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



**1** TOWER ELEVATION  
SCALE: N.T.S.



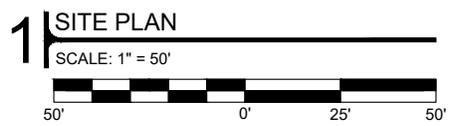
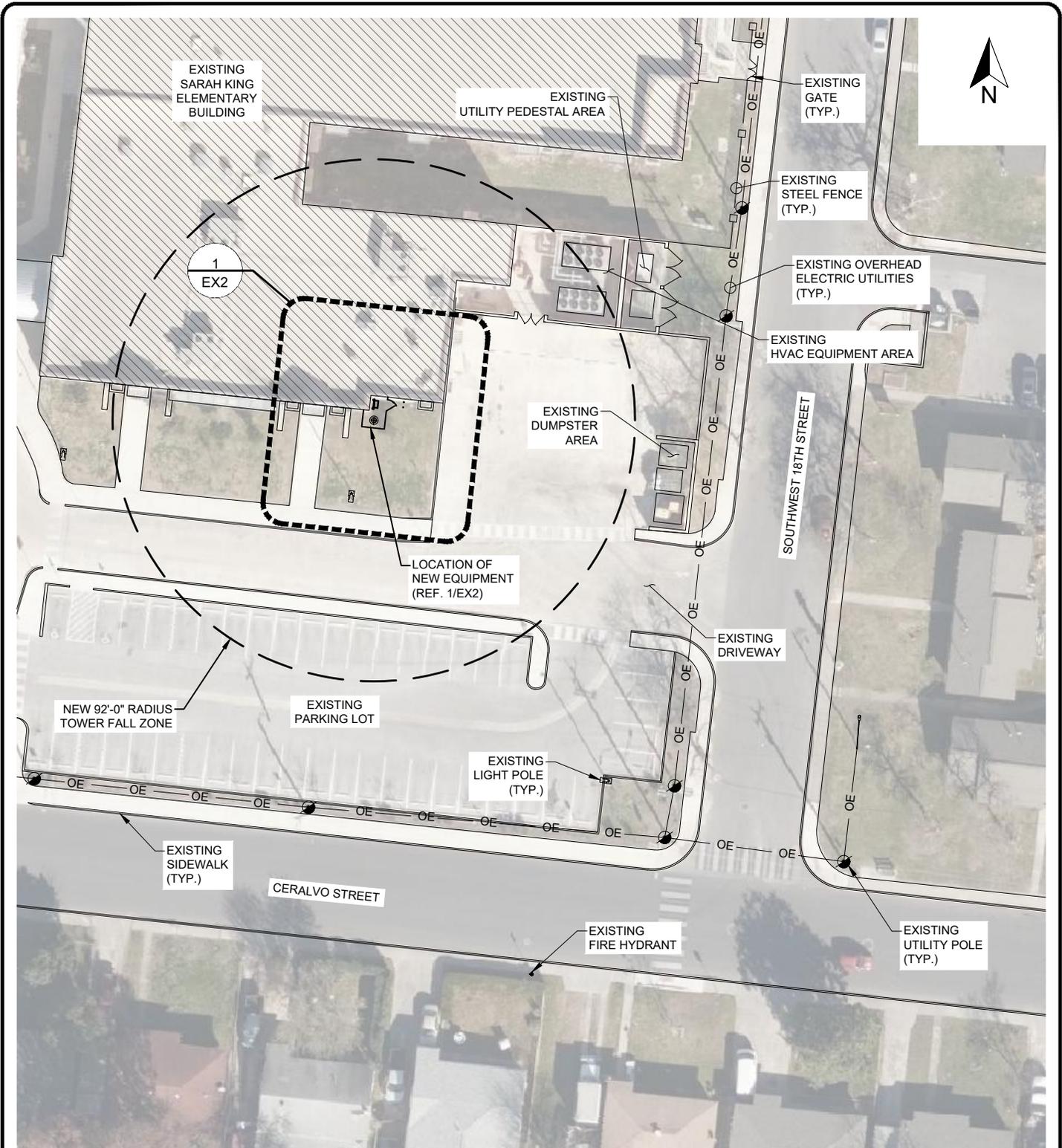
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**EX3**

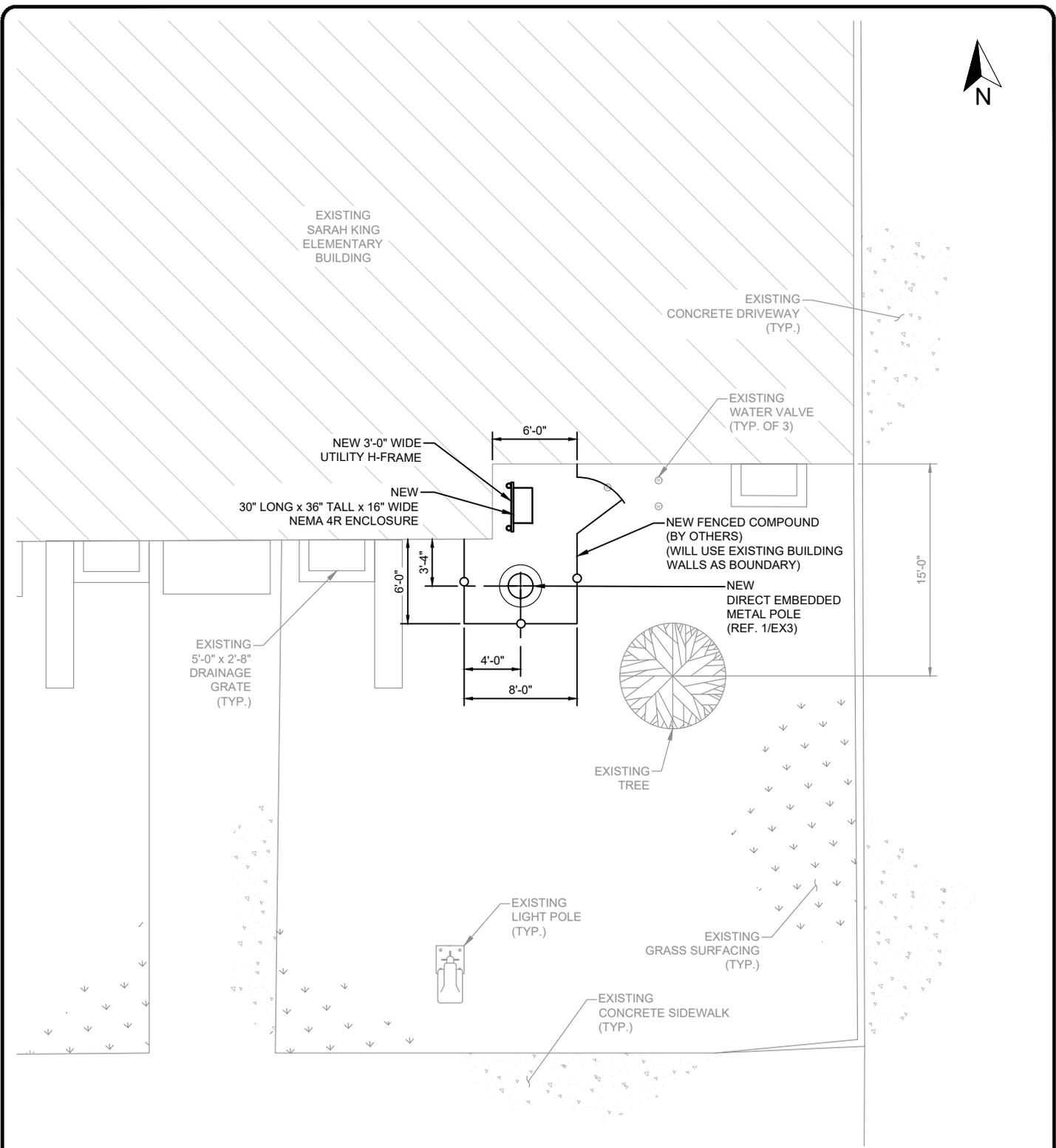


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**EX1**



**1** DETAILED SITE PLAN  
SCALE: 1" = 10'



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**EX2**

TOP OF NEW LIGHTNING ROD  
ELEV.  $\pm 82'-6"$  AGL (TO BE VERIFIED)

TOP OF NEW TOWER  
ELEV.  $\pm 80'-0"$  AGL (TO BE VERIFIED)

(6) NEW AW3170 PANEL ANTENNAS ON  
NEW UWS6-NP STANDOFF MOUNT  
ELEV.  $\pm 78'-6"$  AGL (RAD CENTER) (TO BE VERIFIED)

NEW SITE PRO 1 UWS6-NP MONOPOLE MOUNT  
W/ (6) 6'-0" LONG x 2-3/8" O.D. PIPES  
ELEV.  $\pm 77'-0"$  AGL (MOUNT CENTER) (TO BE VERIFIED)

(3) NEW AIRHARMONY- 4200 MACRO BASE  
STATION ON MONOPOLE MOUNT  
(BELOW NEW PANEL ANTENNAS)  
(TYP. OF 1 PER SECTOR)  
ELEV.  $\pm 75'-6"$  AGL (EQUIPMENT CENTER)

NEW 12" LONG x 6" WIDE CABLE PORT  
ELEV.  $\pm 73'-0"$  AGL (PORT CENTER)

NEW LIGHTNING ROD  
(TO BE INSTALLED  
MINIMUM 24" ABOVE TOP  
OF NEW ANTENNAS)

NEW CABLE PORT  
(TYP. OF 2)

ROUTE NEW HYBRID CABLE INSIDE  
NEW METAL POLE

NEW  $\pm 80'-0"$  DIRECT  
EMBEDDED METAL POLE  
(REF. NOTE 1)

NEW 12" LONG X 6" WIDE CABLE PORT  
ELEV. 4'-0" AGL (PORT CENTER)

EXISTING GROUND ELEVATION  
ELEV. 0'-0" (REF.)

CONCRETE FOUNDATION PER  
FINAL POLE DESIGN  
( $\pm 42"$  DIAMETER)

BASE OF TOWER  
( $\pm 22"$  DIAMETER)

$\pm 18'-0"$  POLE EMBEDMENT  
BENEATH EXISTING GRADE  
(REF. NOTE 1)

NEW 3'-0" WIDE  
UTILITY H-FRAME

NEW NEW 30" LONG X  
36" TALL X 16" WIDE  
NEMA 4R ENCLOSURE

**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
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**1** TOWER ELEVATION  
SCALE: N.T.S.



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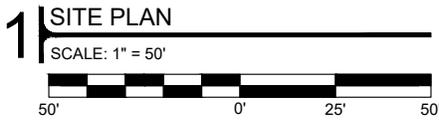
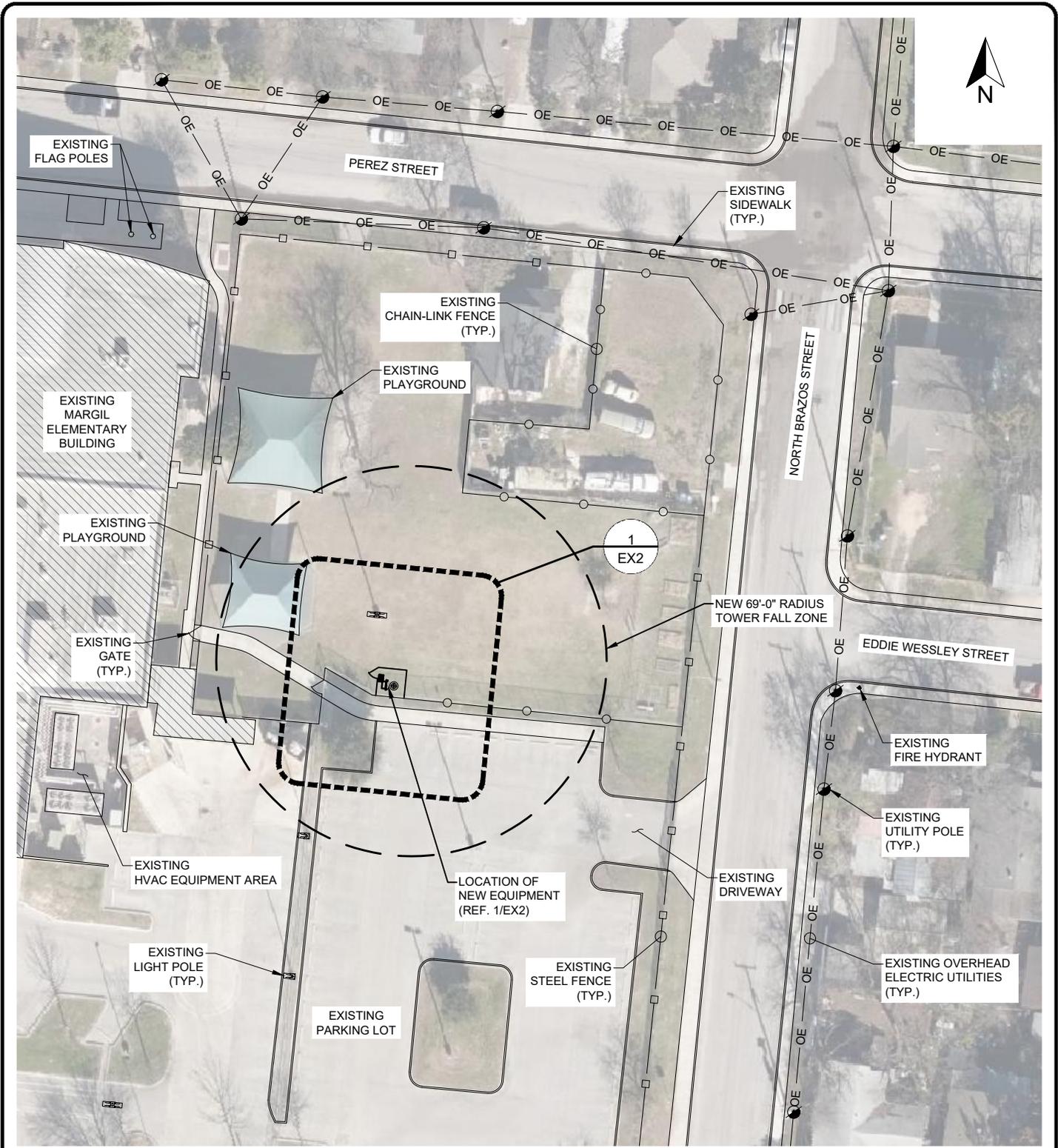
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**EX3**

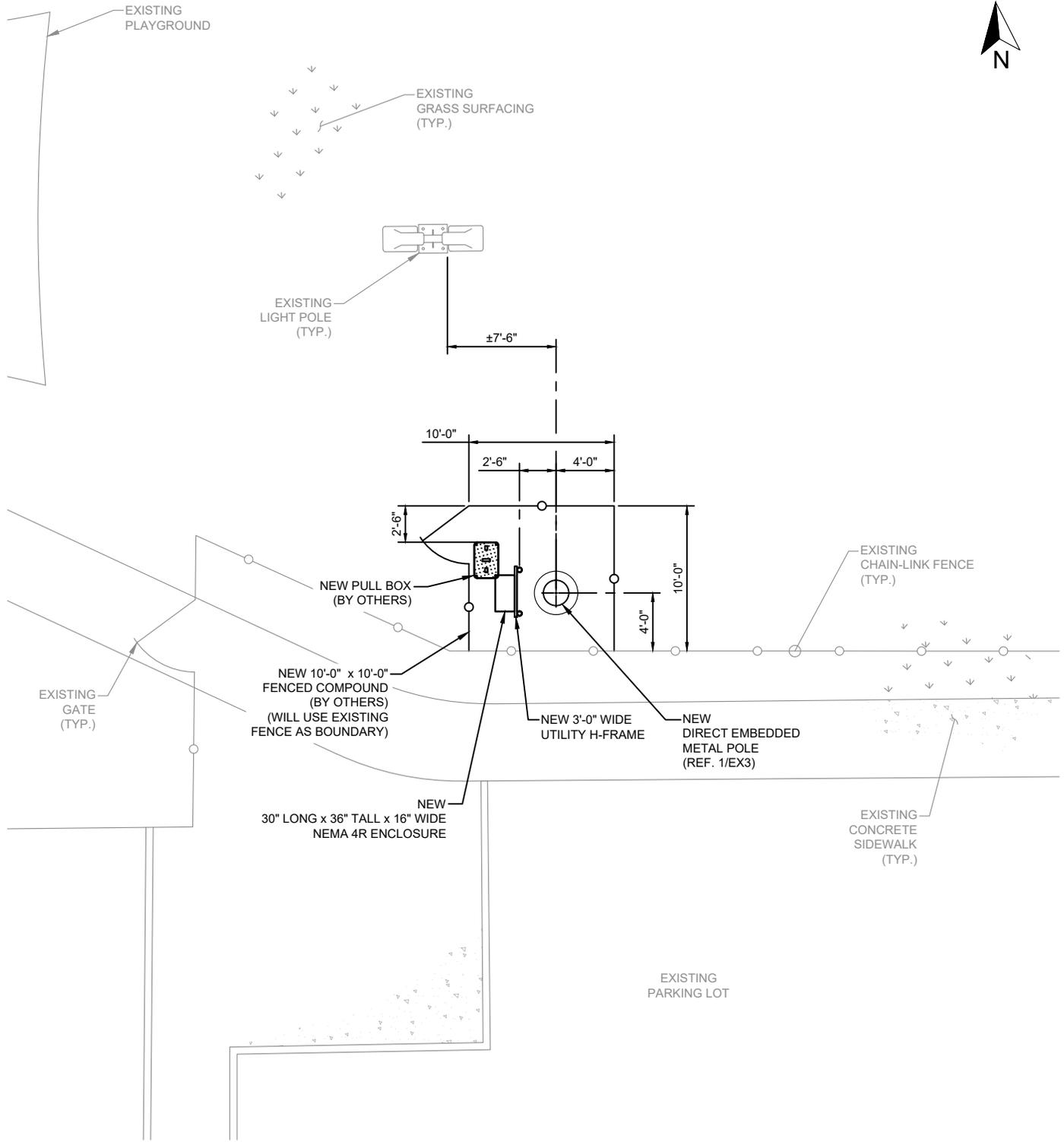


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**EX1**



**1** DETAILED SITE PLAN  
 SCALE: 1" = 10'



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**EX2**

TOP OF NEW LIGHTNING ROD  
ELEV. ± 62'-6" AGL (TO BE VERIFIED)

TOP OF NEW TOWER  
ELEV. ± 60'-0" AGL (TO BE VERIFIED)

(6) NEW AW3170 PANEL ANTENNAS ON  
NEW UWS6-NP STANDOFF MOUNT  
ELEV. ± 58'-6" AGL (RAD CENTER) (TO BE VERIFIED)

NEW SITE PRO 1 UWS6-NP MONOPOLE MOUNT  
W/ (6) 6'-0" LONG x 2-3/8" O.D. PIPES  
ELEV. ± 57'-0" AGL (MOUNT CENTER) (TO BE VERIFIED)

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STATION ON MONOPOLE MOUNT  
(BELOW NEW PANEL ANTENNAS)  
(TYP. OF 1 PER SECTOR)  
ELEV. ± 55'-6" AGL (EQUIPMENT CENTER)

NEW 12" LONG x 6" WIDE CABLE PORT  
ELEV. ± 53'-0" AGL (PORT CENTER)

NEW LIGHTNING ROD  
(TO BE INSTALLED  
MINIMUM 24" ABOVE TOP  
OF NEW ANTENNAS)

NEW CABLE PORT  
(TYP. OF 2)

ROUTE NEW HYBRID CABLE INSIDE  
NEW METAL POLE

NEW ±60'-0" DIRECT  
EMBEDDED METAL POLE  
(REF. NOTE 1)

NEW 3'-0" WIDE  
UTILITY H-FRAME

NEW NEW 30" LONG X  
36" TALL X 16" WIDE  
NEMA 4R ENCLOSURE

BASE OF TOWER  
(±21.7" DIAMETER)

NEW 12" LONG X 6" WIDE CABLE PORT  
ELEV. 4'-0" AGL (PORT CENTER)

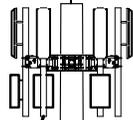
EXISTING GROUND ELEVATION  
ELEV. 0'-0" (REF.)

CONCRETE FOUNDATION PER  
FINAL POLE DESIGN  
(±36" DIAMETER)

± 18'-0" POLE EMBEDMENT  
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**1** TOWER ELEVATION  
SCALE: N.T.S.



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**EX3**



**CITY OF SAN ANTONIO  
NITRO- DATA SOLUTIONS**

SITE NAME

**KING ELEMENTARY**

SITE ADDRESS

**1001 CERALVO STREET  
SAN ANTONIO, TEXAS 78207**

**EXHIBIT A-1 SHEET INDEX**

SHEET NO.	DESCRIPTION	REV. NO.
T1	TITLE SHEET	-
GN1	GENERAL NOTES	-
C1.0	CIVIL NOTES	-
C1.1	GROUNDING NOTES	-
C2.0	SITE PLAN	-
C2.1	DETAILED SITE PLAN	-
C2.2	NEW EQUIPMENT PLAN	-
C3.0	TOWER ELEVATION	-
C3.1	ANTENNA & EQUIPMENT SCHEDULE	-
C3.2	ANTENNA PLANS	-
C6.0	EQUIPMENT DETAILS	-
C7.0	UTILITY & GROUNDING PLAN	-
C8.0	GROUNDING DETAILS	-
C8.1	GROUNDING DETAILS	-

**PROJECT TEAM**

LAND & TOWER OWNER

SAN ANTONIO INDEPENDENT SCHOOL DISTRICT  
514 WEST QUINCY STREET  
SAN ANTONIO, TEXAS 78212  
PHONE: (210) 554.2200

APPLICANT

SAN ANTONIO ISD  
CARE OF ENERTECH RESOURCES, LLC  
5920 WEST WILLIAM CANNON DRIVE  
BUILDING 1, SUITE 102  
AUSTIN, TEXAS 78749  
CONTACT: SLADE PETTIFIELD  
PHONE: (337) 302.4655  
EMAIL: CHRISTOPHER.PETTIFIELD@ENERTECHRESOURCES.COM

MOTOROLA PROJECT MANAGER

MOTOROLA SOLUTIONS  
CONTACT: NEIL CLATWORTHY  
PHONE: (313) 956.7529  
EMAIL: NEIL.CLATWORTHY@MOTOROLASOLUTIONS.COM

ENGINEER

ENERTECH RESOURCES, LLC  
1820 WATSON LANE EAST  
DRIVE  
BUILDING 1, SUITE 102  
AUSTIN, TEXAS 78749  
CONTACT:  
DALE SHUMAKER, P.E.  
PHONE: (830) 387.4502 EXT. 2451  
EMAIL: DALE.SHUMAKER@ENERTECHRESOURCES.COM

ENERTECH PROJECT MANAGER

CONTACT: MIKE GROSSMAN  
PHONE: (830) 387-2491  
EMAIL: MIKE.GROSSMAN@ENERTECHRESOURCES.COM

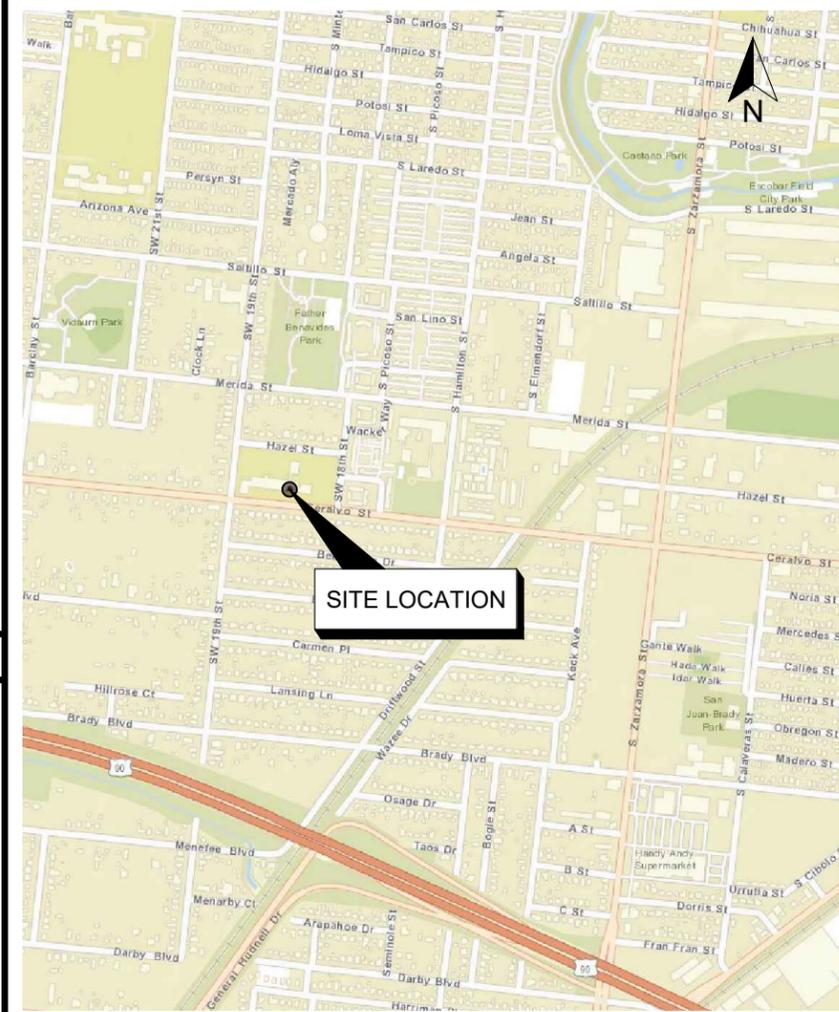
CONSTRUCTION MANAGER

ENERTECH RESOURCES, LLC  
1820 WATSON LANE EAST  
NEW BRAUNFELS, TEXAS 78130  
CONTACT: JEFF JONES  
PHONE: (830) 491-1124  
EMAIL: JEFF.JONES@ENERTECHRESOURCES.COM

CONTRACTOR

ENERTECH RESOURCES, LLC  
1820 WATSON LANE EAST  
NEW BRAUNFELS, TEXAS 78130  
PHONE: (830) 387.4502

**VICINITY MAP**



**FOR  
INFORMATION  
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**KING  
ELEMENTARY**

**PROJECT INFORMATION**

SITE LOCATION

LAT: 29° 24' 28.4" N (NAD 83)  
LONG: 98° 32' 15.0" W (NAD 83)  
ELEV: 669.3' AMSL (NAVD 88)

UTILITIES

ELECTRIC PROVIDER:  
CPS ENERGY  
PHONE: 1 (210) 353.2222

ONE-CALL TEXAS

CONTRACTOR TO CALL BEFORE  
DIGGING!!!  
PHONE: 811 OR 1.800.545.6000

PERMITTING

COUNTY: BEXAR  
JURISDICTION:  
CITY OF SAN ANTONIO  
ZONING:  
MF-33 (MULTI-FAMILY; 33 UNITS  
PER ACRE MAX.)  
OCCUPANCY: NONE  
BUILDING CODE: 2018 IBC  
USE: UN-MANNED  
TELECOMMUNICATIONS FACILITY



**SCOPE OF WORK**

INSTALLATION OF NEW ANTENNAS AND NEW COMMUNICATION EQUIPMENT ON A NEW 80'-0" DIRECT EMBED METAL POLE . INSTALLATION OF NEW NEMA 4R ENCLOSURE, UTILITY H-FRAME AND OTHER MISCELLANEOUS UPGRADES TO BE COMPLETED WITHIN DESIGNATED CONSTRUCTION AREA. NO ELECTRICAL WORK SHALL BE INCLUDED WITHIN THIS SCOPE OF WORK.

**ACCESS INFORMATION**

CONSTRUCTION MANAGER MUST CONTACT SITE OWNER TO COORDINATE ACCESS 48-HOURS IN ADVANCE OF ALL CONSTRUCTION ACTIVITIES

**ATTACHMENTS**

REFERENCE DRAWINGS

- ANTENNA SPECIFICATIONS  
ALPHA WIRELESS AW3170
- ANTENNA MOUNT SPECIFICATIONS  
SITE PRO 1 UWS6-NP
- EQUIPMENT SPECIFICATIONS
- MACRO BASE STATION SPECIFICATION  
AIRSPAN AIRHARMONY 4200
- UNITY NEMA 4R ENCLOSURE  
MODEL NO. 4RSDCT363616LTHPW
- POLE MANUFACTURER STAMPED DRAWING BY VALMONT; PENDING FINAL DESIGN
- EMBEDDED FOUNDATION STAMPED DRAWING BY VALMONT; PENDING FINAL DESIGN

**APPROVALS**

CUSTOMER REPRESENTATIVE	DATE
MOTOROLA RF ENGINEER	DATE
MOTOROLA PROJECT MANAGER	DATE
CONTRACTOR	DATE



TEXAS FIRM F-15232

SET ISSUED FOR REVIEW DATE 01/27/2022

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DRAWN BY	REVIEWED BY
KJG	DBS

**TITLE SHEET**

**T1**

**DIVISION 1 STANDARD PROVISIONS  
PART 1 GENERAL**

**1.1 INTENT**

- A. THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR THE CONSTRUCTION OF THIS PROJECT.
- B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
- C. THE INTENTION OF THESE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
- D. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- E. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED WITHOUT ISSUING A CHANGE ORDER.

**1.2 CONFLICTS**

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSIONS, WHICH MAY BE FOUND, SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.

**1.3 STORAGE**

- A. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

**1.4 CLEAN UP**

- A. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK, HE SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL HIS TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS AND SHALL LEAVE HIS WORK CLEAN AND READY FOR USE.
- B. EXTERIOR: VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
- C. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
- D. IF NECESSARY TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.

**1.5 QUALITY ASSURANCE**

- A. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE BUT NOT BE LIMITED TO THE LATEST VERSION OF THE FOLLOWING:  
  
ANSI/TIA - 222 - H- 2017  
INTERNATIONAL BUILDING CODE (IBC) 2018  
BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA) 1990  
NATIONAL ELECTRICAL CODE (NEC) WITH LOCAL AMENDMENTS 2020  
UNDERWRITER LABORATORIES APPROVED ELECTRICAL PRODUCTS  
AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)  
  
ANSI/NFPA - LIFE SAFETY CODE NFPA - 101 - 2018
- B. ALL WORK SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES.

**1.6 ADMINISTRATION**

- A. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THE PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO MOTOROLA PRIOR TO THE COMMENCEMENT OF ANY WORK.
- B. SUBMIT A BAR CHART TYPE PROGRESS SCHEDULE NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE. INDICATE A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK. SHOW COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.

- C. PRIOR TO COMMENCING CONSTRUCTION, THE CONSTRUCTION MANAGER SHALL SCHEDULE AN "ON-SITE" MEETING WITH ALL MAJOR PARTIES. THIS SHALL INCLUDE (THOUGH NOT LIMITED TO) THE PROPERTY OWNER, POWER COMPANY, RF ENGINEER AND THE CONTRACTOR.
- D. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE CONSTRUCTION MANAGER NOR WILL CELLULAR SERVICE BE ARRANGED.
- E. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AND SAFETY GLASSES AT ALL TIMES. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS.
- F. PROVIDE DAILY UPDATES ON SITE PROGRESS, EITHER VERBAL OR WRITTEN.
- G. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
- H. THE CONSTRUCTION MANAGER SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND SHELTER PLACEMENTS.

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**MOTOROLA SOLUTIONS**



**ENERTECH**



TEXAS FIRM F-15232

<b>SET ISSUED FOR</b>	<b>DATE</b>
REVIEW	01/27/2022

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<b>DRAWN BY</b>	<b>REVIEWED BY</b>
KJG	DBS

**GENERAL  
NOTES**

**GN1**

**DIVISION 2 - SITE WORK  
CIVIL WORK AND DRAINAGE**

**PART 1 GENERAL**

**2.1 WORK INCLUDED**

- A. SITE WORK AND DRAINAGE DETAILS ARE WRITTEN TO COVER A VARIETY OF POSSIBLE SITE CONFIGURATIONS. SPECIFIC SERVICES WILL BE PERFORMED AS INDICATED IN THE SITE PLAN AND AGREED UPON BY CUSTOMER AND THE CONSTRUCTION MANAGER.
- B. REFER TO COMPLETE DRAWING SET AND REFERENCED SPECIFICATIONS / STANDARDS FOR WORK INCLUDED.

**2.2 RELATED WORK**

- A. CONSTRUCTION FOR TOWER FOUNDATION.
- B. PLACEMENT OF TOWER AND EQUIPMENT RACK.
- C. INSTALLATION OF GROUNDING.
- D. INSTALLATION OF ANTENNA SYSTEM.

**2.3 DESCRIPTIONS**

- A. ACCESS ROAD, TURNAROUND AREAS, AND COMPOUND AREAS SHALL BE CONSTRUCTED TO PROVIDE A WELL-DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

**2.4 QUALITY ASSURANCE**

- A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION (USE AS NEEDED).
- B. VEGETATION AND LANDSCAPING, IF REQUIRED WITHIN THE CONTRACT, WILL BE PLACED AND MAINTAINED AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

**2.5 SEQUENCING**

- A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION. PLACE SILT FENCE OR OTHER REQUIRED EROSION CONTROLS DOWN GRADIENT OF CONSTRUCTION AREA.
- B. THE COMPLETED ROAD AND SITE AREA WILL BE CLEARED OF HEAVY GROWTH OF GRASS, TREES, SHRUBS, AND TOPSOIL PRIOR TO FOUNDATION CONSTRUCTION OR PLACEMENT OF BACKFILL OR SUB-BASE MATERIAL.
- C. CONSTRUCT TEMPORARY CONSTRUCTION ZONE ALONG ACCESS DRIVE WHEN REQUIRED FOR NEW TOWERS.
- D. APPLY SOIL HERBICIDE PRIOR TO PLACING BASE MATERIALS.
- E. IF REQUIRED, GRADE, SEED, FERTILIZE, AND MULCH DISTURBED AREA IMMEDIATELY AFTER BRINGING THE SITE AND ACCESS ROAD TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
- F. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE.
- G. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL HERBICIDE TO THE STONE SURFACE.

**PART 2 PRODUCTS**

**2.8 MATERIALS**

- A. ROAD AND SITE MATERIALS: FILL MATERIAL - ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- B. SOIL HERBICIDE SHALL BE EPA REGISTERED OF LIQUID COMPOSITION AND OF PRE-EMERGENCE DESIGN.
- C. SOIL STABILIZER FABRIC SHALL BE MIRAFI - 500X.

**2.9 EQUIPMENT**

- A. COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS.
- B. ALL LARGER AREAS SHALL BE COMPACTED BY SHEEPSFOOT VIBRATORY OR RUBBER TIERED ROLLERS WEIGHING AT LEAST FIVE TONS.
- C. SMALLER AREAS SHALL BE COMPACTED BY POWER- DRIVER HAND HELD TAMPERS.

**PART 3 EXECUTION**

**2.10 INSPECTIONS**

- A. LOCAL BUILDING INSPECTION SHALL RECEIVE ADEQUATE NOTIFICATION IN ADVANCE OF CONCRETE POURS WHEN REQUIRED.

**2.11 PREPARATION**

- A. CLEAR TREES, BRUSH AND DEBRIS FROM SITE AREA AND ACCESS ROAD

RIGHT OF WAY (IF REQUIRED).

- B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION EFFORTS CLEAR SITE OF ORGANIC MATERIAL TO MINIMUM OF SIX INCHES BELOW ORIGINAL GROUND LEVEL.
- C. DO NOT REMOVE TREES, BRUSH, OR DEBRIS FROM THE PROPERTY WITHOUT CONSTRUCTION MANAGER APPROVAL.
- D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, PROOF ROLL THE SOIL.
- E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, COVER CLEARED AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

**2.12 INSTALLATION**

- A. THE COMPOUND AND TURNAROUND AREAS SHALL BE AT THE SUB-BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS. GRADE OR FILL THE SITE AND ACCESS ROAD AS REQUIRED IN ORDER THAT THERE IS EVEN DISTRIBUTION OF SPOILS RESULTING FROM FOUNDATION EXCAVATIONS. THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE, ELEVATIONS ARE TO BE CALCULATED FROM FINISHED GRADES OR SLOPES, AS INDICATED.
- B. IF ANY, EXCESS SPOILS WILL BE CLEARED FROM JOB SITE AND NOT SPREAD BEYOND THE LIMITS OF OWNER/LEASED PROPERTY UNLESS AUTHORIZED BY PROJECT MANAGER.
- C. THE ACCESS ROAD SHALL BE BROUGHT TO BASE COURSE ELEVATION PRIOR TO FOUNDATION CONSTRUCTION TO PERMIT USE. COMPACTION SHALL BE DONE DURING CONSTRUCTION OF THE SITE.
- D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
- E. WHEN IMPROVING AN EXISTING ACCESS ROAD, GRADE THE EXISTING ROAD TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.
- F. THE FINISH GRADE, INCLUDING TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF ONE FOOT BEYOND THE SITE FENCE AND SHALL COVER THE AREA AS INDICATED.
- G. RIPRAP SHALL BE APPLIED TO THE SIDES OF DITCHES OR DRAINAGE SWALES.
- H. RIPRAP SHALL BE APPLIED TO THE SIDE SLOPES OF ALL FENCED SITE AREAS, PARKING AREAS AND TO ALL OTHER SLOPES GREATER THAN 2:1.
- I. RIPRAP ENTIRE DITCH FOR SIX FEET IN ALL DIRECTIONS AT CULVERT OPENINGS OR AS INDICATED IN THE DRAWINGS.
- J. SEED, FERTILIZER AND STRAW COVER SHALL BE APPLIED TO ALL OTHER DISTURBED AREAS AND DITCHES, DRAINAGE, SWALES NOT OTHERWISE RIPRAPPED.
- K. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES NOR CULVERTS BE PLACED SO THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SITE. IF DESIGN OR ELEVATIONS CONFLICT WITH THIS GUIDANCE, THE CONSTRUCTION MANAGER SHOULD BE ADVISED IMMEDIATELY.
- L. IF DITCH LIES WITH SLOPES GREATER THAN TEN PERCENT, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES 45 DEGREES OFF THE DITCH LINE. RIPRAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX FEET ABOVE THE CULVERT ENTRANCE.
- M. SEED AND FERTILIZER SHALL BE APPLIED TO SURFACE CONDITIONS, WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
- N. PLACE SEED AS DIRECTED BY THE SEED PRODUCER.
- O. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO RE-WORK BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

**2.13 FIELD QUALITY CONTROL**

- A. COMPACTION SHALL BE AT LEAST 95% OF MAXIMUM DENSITY AND WITHIN 4% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
- B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT WILL BE WRAPPED, TIED WITH HOSE-PROTECTED WIRE AND SECURED.
- C. ALL EXPOSED AREAS SHALL BE PROTECTED AGAINST WASHOUTS AND SOIL EROSION. STRAW BALES WILL BE PLACED AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS.

**DIVISION 4 - ANTENNA SYSTEM**

**PART 1 GENERAL**

**4.1 WORK INCLUDED**

- A. INSTALL NEW COAX, ANTENNAS, AND MOUNTS AS INDICATED ON DRAWINGS AND VERIFIED BY RF ENGINEER.
- B. SUPPLY AND INSTALL GROUND BARS AND GROUNDING SUPPLIES AS INDICATED IN THE DRAWINGS.
- C. LABEL CABLES.

**4.2 RELATED WORK**

- A. FURNISH THE FOLLOWING WORK AS SPECIFIED UNDER CONSTRUCTION DOCUMENTS, BUT COORDINATE WITH OTHER TRADES PRIOR TO BID.
  - 1. FLASHING OPENING INTO OUTSIDE WALLS.
  - 2. SEALING AND CAULKING ALL OPENINGS.
  - 3. PAINTING.
  - 4. CUTTING AND PATCHING.
  - 5. ENTRY PORT/PORT HOLE CUSHIONS.
  - 6. ANTENNA/CABLE GROUNDING.

**4.3 REQUIREMENTS OF REGULATORY AGENCIES**

- A. FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE AND INSTALL IN CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.
- B. INSTALL ANTENNA CABLES AND GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- C. EIA-ELECTRICAL INDUSTRIES ASSOCIATION RS-222, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- D. FAA-FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-IH, OBSTRUCTION MARKING AND LIGHTING.
- E. AISC-AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
- F. NEC-NATIONAL ELECTRICAL CODE-ON TOWER LIGHTING KITS.
- G. UL-UNDERWRITERS' LABORATORIES APPROVED.
- H. IN ALL CASES, PART 77 OF THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OF SPECIFICATIONS.

**4.4 MATERIALS**

- A. ALL MATERIALS/HARDWARE SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

**4.5 COAX LABELING**

- CONTRACTOR SHALL PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING PER THE FOLLOWING INSTRUCTIONS:
  - A. ALL TRANSMISSION LINES SHALL BE MARKED WITH APPROPRIATE COLOR TAPE BANDS (ONE INCH WIDE COLOR TAPE) FOR IDENTIFICATION NEAR ANTENNA, JUST BEFORE ENTERING THE SHELTER/BUILDING/WATER TANK AS WELL AS INSIDE THE SHELTER/BUILDING/WATER TANK, WITHIN 24" OF THE ENTRY PORT. TAPE SHALL BE FADE-RESISTANT, WEATHER-RESISTANT, UV-RESISTANT AND CHEMICAL RESISTANT. REFERENCE HH-I-595C.
  - B. WHERE VISIBILITY END TO END IS NOT POSSIBLE, ADDITIONAL BANDING SHALL BE INSTALLED.

**4.6 GROUNDING**

- B. ANTENNA AND CABLE GROUNDING SHALL BE INSTALLED CONTEMPORANEOUSLY WITH INSTALLATION. NO UNGROUNDED COAX SHALL BE ROUTED INTO THE SHELTER OR CONNECTED TO EQUIPMENT.
- C. REFERENCE SEPARATE GROUNDING NOTES SHEET E1 FOR ADDITIONAL NOTES.

**FOR  
INFORMATION  
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**KING  
ELEMENTARY**

**MOTOROLA SOLUTIONS**



**ENERTECH**



TEXAS FIRM F-15232

**SET ISSUED FOR** REVIEW      **DATE** 01/27/2022

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<b>DRAWN BY</b> KJG	<b>REVIEWED BY</b> DBS
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**CIVIL  
NOTES**

**C1.0**

**GROUNDING SPECIFICATIONS**

**PART 1 GENERAL**

A. GROUNDING SHALL BE INSTALLED PER MOTOROLA R56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES.

**CONNECTIONS**

A. ALL EXTERNAL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS, BY IRREVERSIBLE HIGH COMPRESSION, AND/OR BY 2-HOLE LONG BARREL LUGS. NO SINGLE-HOLE, CRIMP-ON, OR SOLDER CONNECTIONS SHALL BE USED. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE SPLICE. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

B. ALL INTERIOR GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE-TYPE (COMPRESSION) CONNECTIONS. MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED.

**GROUND RODS**

A. ALL GROUND RODS SHALL BE COPPER-CLAD STEEL 5/8" DIAMETER X 8'-0" LONG AND OF THE NUMBER AND AT LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICALLY IN UNDISTURBED EARTH.

B. GROUND RODS SHALL BE LOCATED SO AS TO AVOID THE TOWER FOUNDATION.

C. IF ROCK IS ENCOUNTERED, GROUND RODS MAY BE DRIVEN AT AN OBLIQUE ANGLE OF NOT GREATER THAN 45 DEGREES FROM VERTICAL OR MAY BE BURIED HORIZONTALLY AND PERPENDICULAR TO THE BUILDING, IN A TRENCH AT LEAST 36" DEEP.

D. GROUND RODS SHALL BE BURIED TO A MINIMUM DEPTH OF 30 INCHES BELOW FINISHED GRADE, WHERE POSSIBLE, OR BURIED BELOW THE FREEZE LINE, WHICHEVER DEPTH IS GREATER.

E. GROUND RODS SHALL NOT BE INSTALLED MORE THAN 15 FEET APART (OR TWICE THE LENGTH OF THE ROD) AND NOT LESS THAN 6 FEET (PER NFPA 70, ARTICLE 250-56).

**GROUND BARS**

A. ALL GROUND BARS SHALL BE 1/4" THICK BARE COPPER PLATES AND OF SUFFICIENT SIZE TO GROUND ATTACHMENTS INDICATED IN THE DRAWINGS (MIN. 2" X 12"). HOLES SHALL BE 7/16" DIAMETER ON 3/4" CENTERS TO PERMIT THE CONVENIENT USE OF TWO-HOLE LUGS.

B. THE METHOD OF ATTACHMENT OF THE GROUNDING ELECTRODE CONDUCTOR TO EXTERIOR AND TOWER GROUND BARS SHALL BE EXOTHERMIC OR IRREVERSIBLE HIGH COMPRESSION.

**CABLES**

A. ALL EXTERIOR GROUNDING CABLES SHALL BE #2 STRANDED GREEN JACKETED COPPER WIRE UNLESS INDICATED OTHERWISE ON DRAWINGS.

B. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. ALL BENDS SHALL BE MADE WITH THE GREATEST PRACTICAL RADIUS AND SHALL NOT BE LESS THAN 8".

C. ALL CONDUITS SHALL BE MECHANICALLY SUPPORTED.

D. ALL METALLIC CONDUIT SHALL USE GROUND-BUSHING CONNECTIONS.

E. ALL CONDUITS USED AS RACEWAYS FOR GROUNDING CONDUCTORS SHALL BE BONDED AT BOTH ENDS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).

F. PROVIDE WIRE PROTECTION PIPES AT ALL GROUND WIRES AT GRADE LEVEL PER GROUND WIRE PROTECTION DETAIL.

**GROUNDING RING**

A. THE GROUND RING ENCIRCLING THE BUILDING SHALL BE A MINIMUM SIZE OF NO. 2 AWG BARE TINNED SOLID COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT A MINIMUM DEPTH OF 36 INCHES. CONDUCTOR BENDS SHALL HAVE A MINIMUM RADIUS OF 8 INCHES.

B. ALL EXTERNAL GROUND RINGS ARE TO BE JOINED TOGETHER AND ALL CONNECTIONS SHALL BE EXOTHERMIC OR IRREVERSIBLE HIGH COMPRESSION. NO LUGS OR CLAMPS WILL BE ACCEPTED.

**FENCE/GATE**

A. GROUND ALL SECTIONS OF FENCE AND GATE AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. ALL CONNECTIONS FOR THE FENCE GROUND SYSTEM SHALL BE EXOTHERMIC WELD AND

INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

**DISSIMILAR METALS**

A. BONDING OF TWO DISSIMILAR METALS MAY RESULT IN GALVANIC CORROSION, A REACTION THAT OCCURS AT THE JUNCTION OF DISSIMILAR METALS WHEN THEY ARE EXPOSED TO MOISTURE. THE DEGREE AND RATE OF CORROSION DEPENDS ON THE RELATIVE POSITION OF THE METALS IN THE ELECTROCHEMICAL SERIES. TO DETERMINE THE LIKELIHOOD OF TWO METALS REACTING REFERENCE SECTION 6.5.2 IN THE R56 SPECIFICATIONS.

1. THE SAME METAL SHALL BE USED THROUGHOUT THE SYSTEM WHEN POSSIBLE.

2. EXOTHERMICALLY WELD CONNECTIONS OF DIFFERENT METALS WHEN WELD MATERIAL IS AVAILABLE FOR THE METALS BEING BONDED.

3. COPPER CONDUCTORS SHALL NOT BE INSTALLED ON ALUMINUM ROOFING OR SIDING.

4. ALUMINUM AND COPPER SHALL NOT BE DIRECTLY CONNECTED TO EACH OTHER UNLESS USING EXOTHERMIC WELDING MATERIALS SPECIFICALLY INTENDED FOR THESE TWO METALS TO MAKE THE CONNECTION. ALUMINUM AND COPPER MAY BE JOINED WITH THE USE OF A LISTED BIMETALLIC TRANSITION CONNECTOR OF STAINLESS STEEL. THESE CONNECTORS SHALL BE LISTED FOR THE SIZE AND NUMBER OF CONDUCTORS AND MARKED WITH AL/CU. THESE CONNECTIONS SHALL BE LIBERALLY COATED WITH A CONDUCTIVE ANTIOXIDANT AT THE POINT OF INSERTION INTO THE CONNECTOR.

5. COPPER SHALL NOT COME IN CONTACT WITH GALVANIZED STEEL.

6. TINNED COPPER SHALL BE USED WHEN CONNECTING TO A GALVANIZED STEEL STRUCTURE.

**ANTI-OXIDANT**

A. ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN ALL EXTERNAL MECHANICAL CONNECTIONS. CARE SHALL BE TAKEN TO USE THE APPROPRIATE ANTI-OXIDANT TYPE. ZINC ANTI-OXIDANT (GRAY COLOR) SHALL BE USED WHEN CONNECTING TO GALVANIZED AND ALUMINUM OBJECTS AND COPPER ANTI-OXIDANT (COPPER COLOR) SHALL BE USED WHEN CONNECTING TO COPPER OBJECTS.

**TEST PROCEDURE**

A. THE GROUND SYSTEM RESISTANCE SHALL NOT EXCEED 10 OHMS. A DESIGN GOAL OF 5 OHMS IS RECOMMENDED. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARD RESISTANCE TESTING.

B. GROUND TEST MUST BE PERFORMED PRIOR TO UTILITY CONNECTION AND GROUND CONNECTION TO ANY EXISTING SITE COMMON GROUNDING ELECTRODE SYSTEM.

GROUNDING SYMBOLS

	GROUND ROD
	GROUND ROD & INSPECTION WELL
	GROUND BAR
	EXOTHERMIC WELD
	IRREVERSIBLE HIGH COMPRESSION CONNECTION
	MECHANICAL CONNECTION (2-HOLE LUG, CONDUIT GROUND CLAMP, ETC.)
	GROUND CONDUCTOR

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**MOTOROLA SOLUTIONS**

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**GROUNDING NOTES**

**C1.1**

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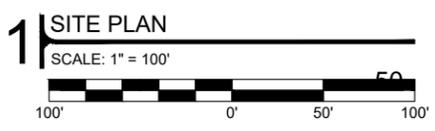
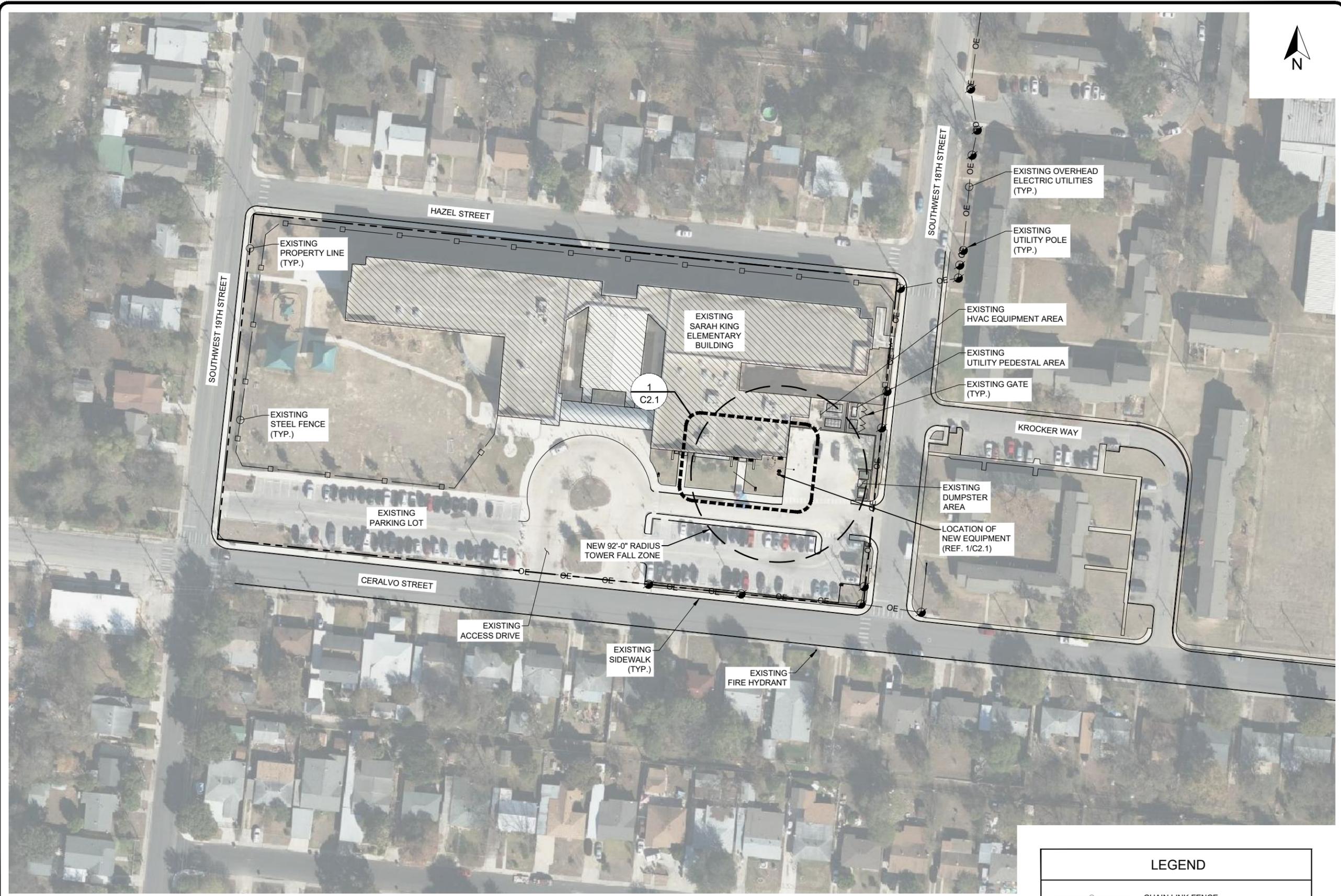
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**SITE PLAN**

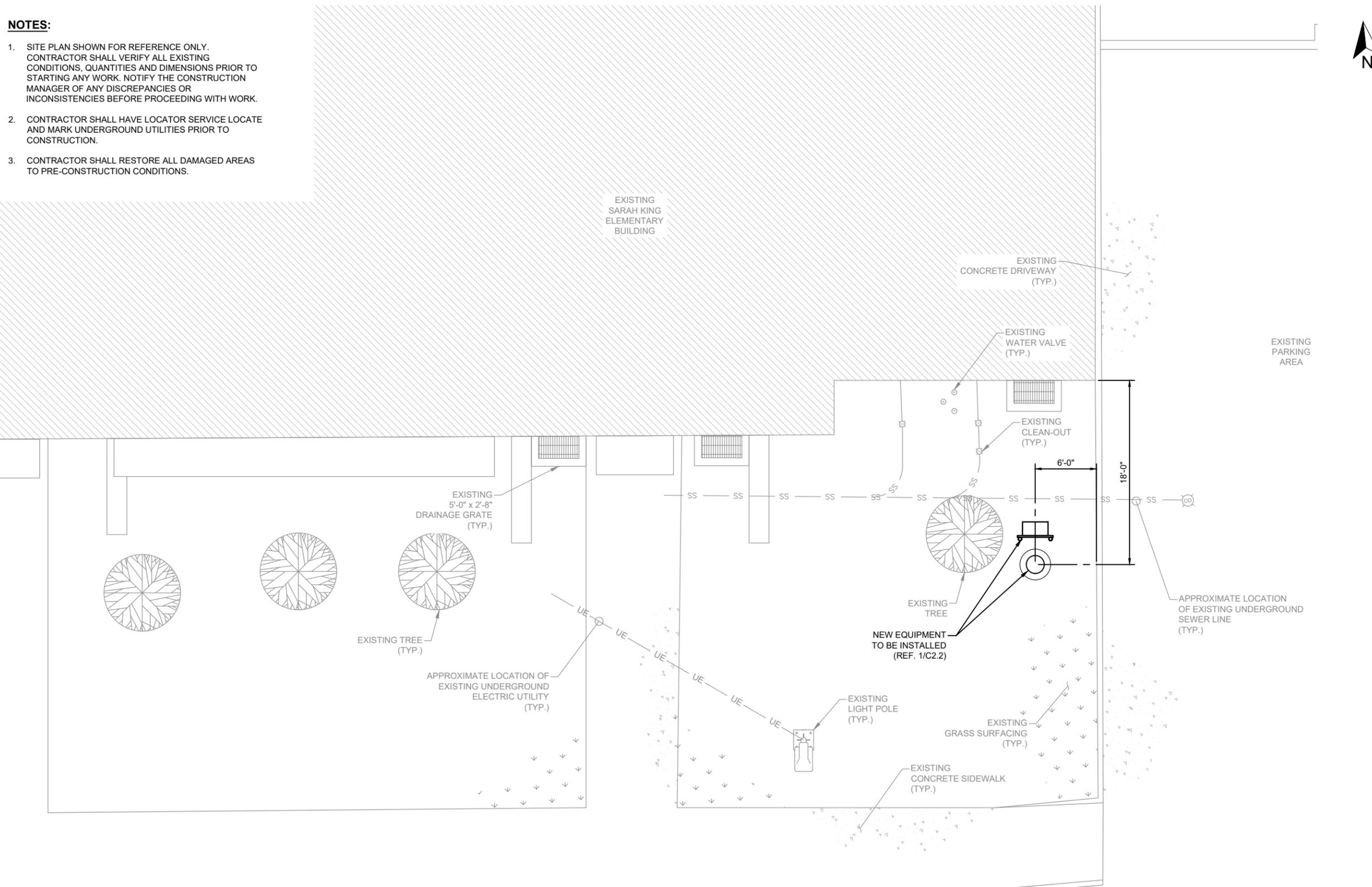
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LEGEND	
	CHAIN LINK FENCE
	OVERHEAD ELECTRIC UTILITY
	STEEL FENCE
	PROPERTY LINE

**NOTES:**

1. SITE PLAN SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO STARTING ANY WORK. NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH WORK.
2. CONTRACTOR SHALL HAVE LOCATOR SERVICE LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.



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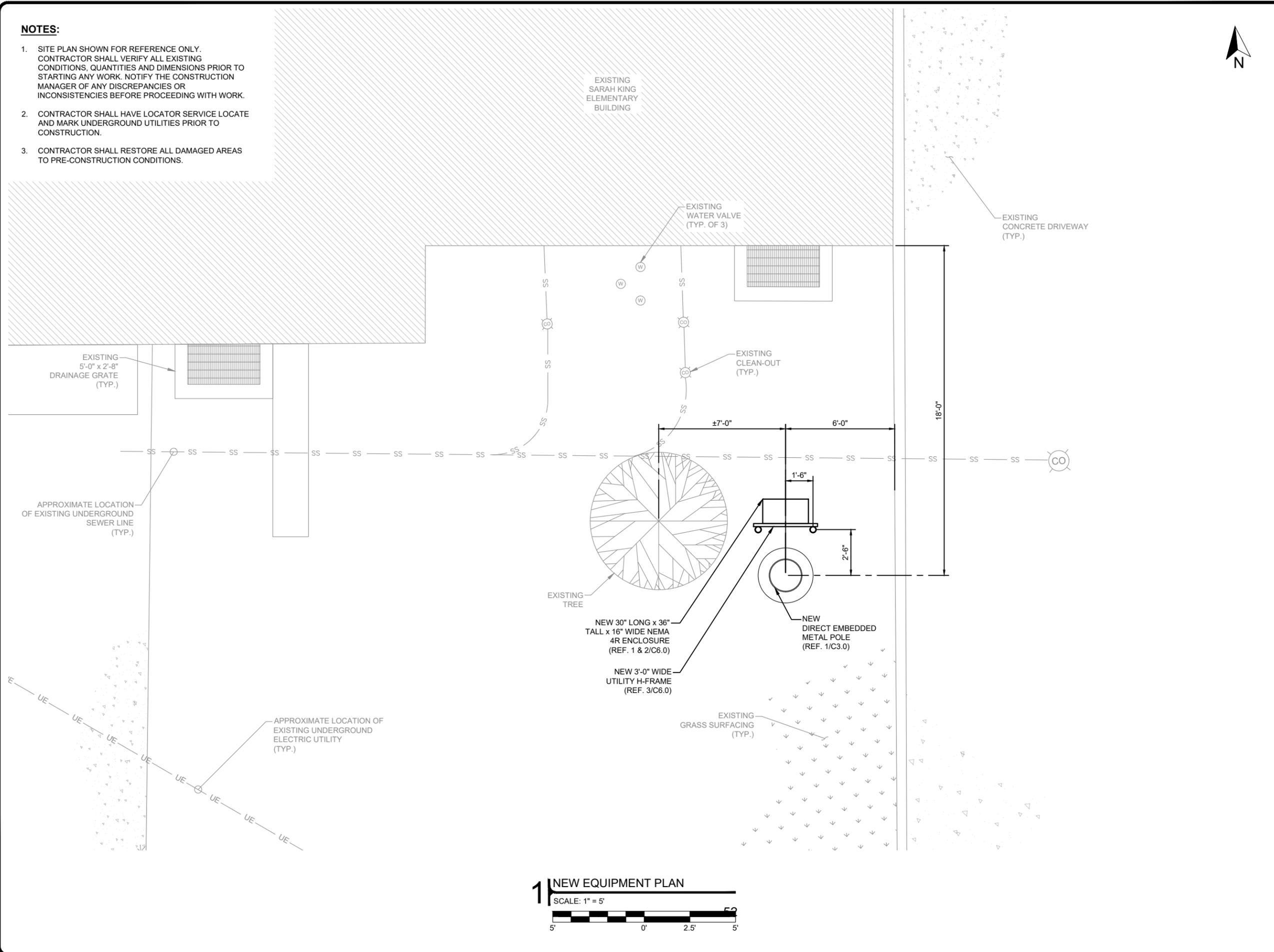
**DETAILED  
SITE PLAN**

**C2.1**



**NOTES:**

1. SITE PLAN SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO STARTING ANY WORK. NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH WORK.
2. CONTRACTOR SHALL HAVE LOCATOR SERVICE LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.



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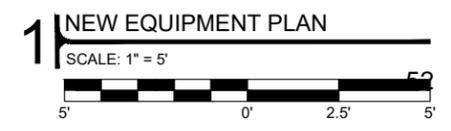
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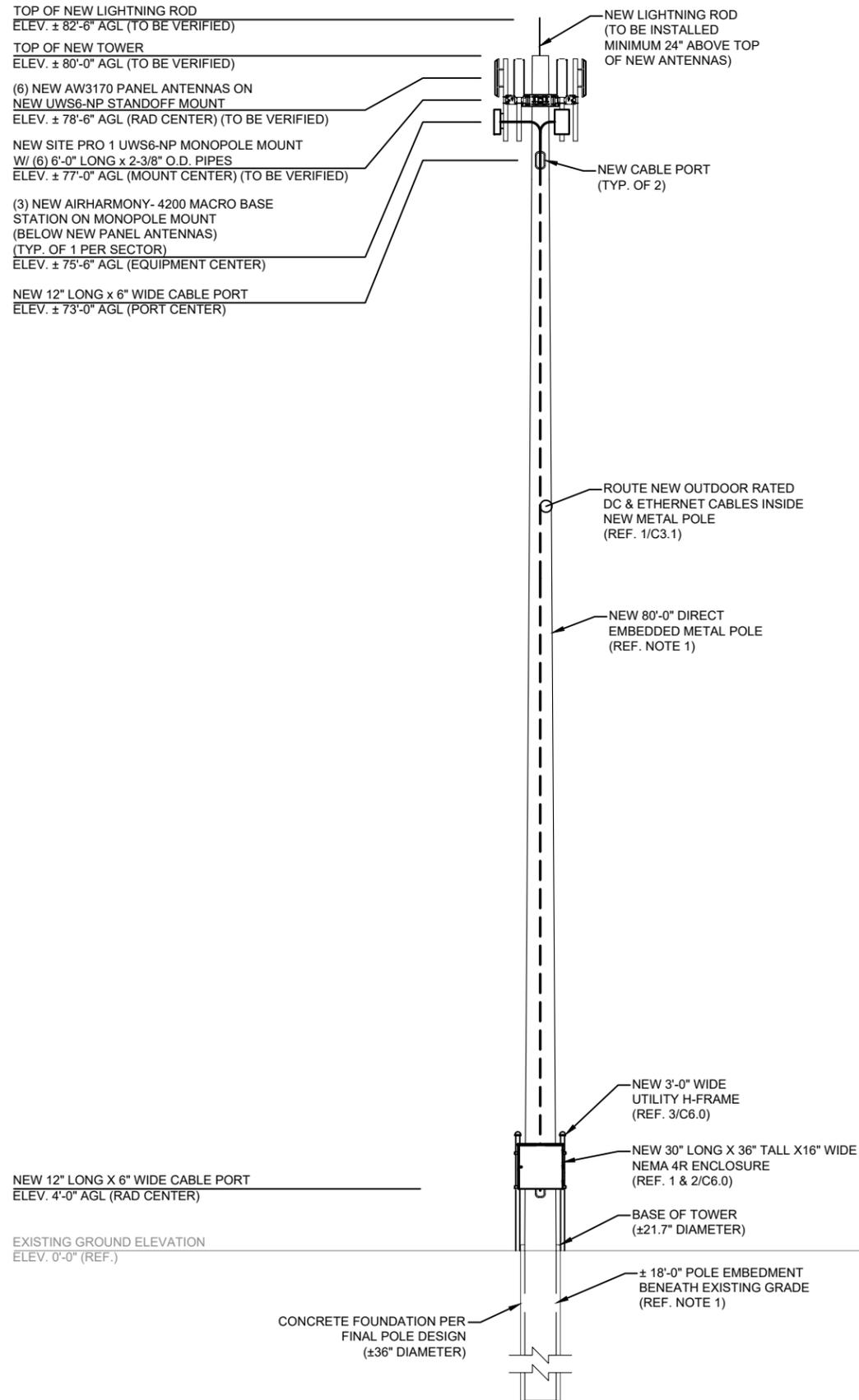
**NEW EQUIPMENT PLAN**

**C2.2**



**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.
3. UNDER NO CIRCUMSTANCES SHALL THE NEW INSTALLATION CAUSE DAMAGE TO OR INTERFERE WITH THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB IF PRESENT AND ANY OTHER LINES OR EQUIPMENT ATTACHED TO THE STRUCTURE.
4. ANTENNA COAX SHALL BE ATTACHED TO THE TOWER IN ACCORDANCE WITH R56 STANDARDS.



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**TOWER  
ELEVATION**

**C3.0**

**NOTES:**

1. REFER TO ATTACHMENTS FOR ANTENNA AND ANTENNA MOUNT SPECIFICATIONS.
2. ALL TRANSMISSION LINES SHALL BE MARKED WITH APPROPRIATE COLOR TAPE BANDS (ONE INCH WIDE COLOR TAPE) FOR IDENTIFICATION NEAR ANTENNA, JUST BEFORE ENTERING THE SHELTER/BUILDING/WATER TANK AS WELL AS INSIDE THE SHELTER/BUILDING/WATER TANK, WITHIN 24" OF THE ENTRY PORT. TAPE SHALL BE FADE-RESISTANT, WEATHER-RESISTANT, UV-RESISTANT AND CHEMICAL RESISTANT.
3. CONTRACTOR SHALL DOCUMENT CABLE LENGTHS AND PROVIDE ANTENNA SERIAL NUMBERS, ANTENNA ID NUMBERS, AND ANTENNA MODEL NUMBERS ON RED-LINED DRAWINGS.

NEW ANTENNA & EQUIPMENT SCHEDULE										
ANTENNA OR EQUIPMENT	APPURTENANCE				MOUNT		FEED LINES			
	TYPE	MAKE/MODEL	AZIMUTH (DEG)	ELEVATION (AGL)	TYPE	MAKE/MODEL	COLOR CODING	CABLE SIZE	CABLE MANUF./TYPE	APPROX. LENGTH
LTE1	PANEL ANTENNA	ALPHA WIRELESS AW3170	0°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 RED	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 RED	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE2	PANEL ANTENNA	ALPHA WIRELESS AW3170	60°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 ORANGE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 ORANGE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE3	PANEL ANTENNA	ALPHA WIRELESS AW3170	120°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 YELLOW	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 YELLOW	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE4	PANEL ANTENNA	ALPHA WIRELESS AW3170	180°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 GREEN	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 GREEN	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE5	PANEL ANTENNA	ALPHA WIRELESS AW3170	240°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 BLUE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 BLUE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE6	PANEL ANTENNA	ALPHA WIRELESS AW3170	300°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG x 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 PURPLE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 PURPLE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
RRU1	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"
RRU2	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"
RRU3	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"

**FOR INFORMATION ONLY**

**KING ELEMENTARY**

**MOTOROLA SOLUTIONS**

**ENERTECH**

TEXAS FIRM F-15232

SET ISSUED FOR REVIEW DATE 01/27/2022

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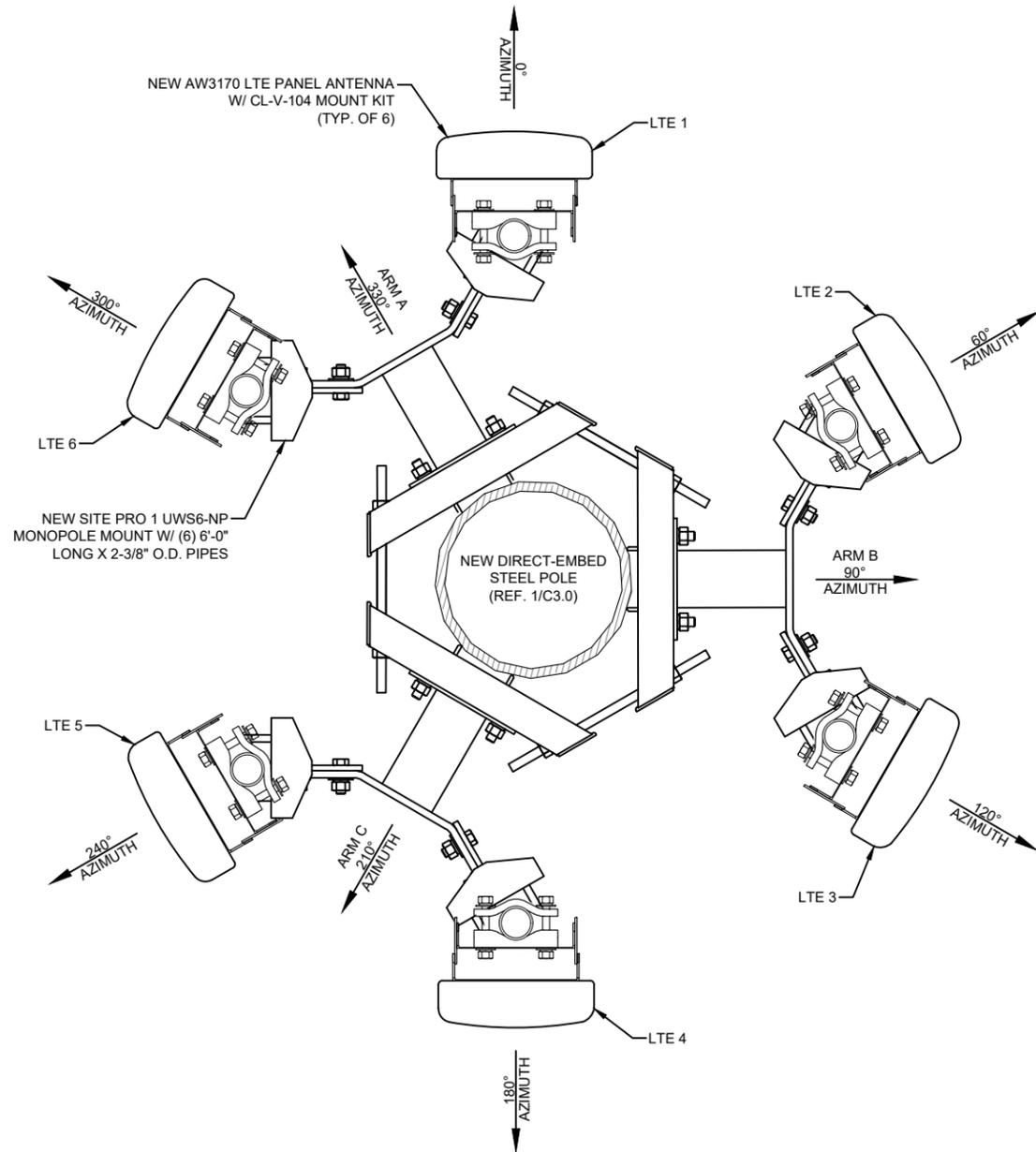
DRAWN BY KJG REVIEWED BY DBS

**ANTENNA & EQUIPMENT SCHEDULE**

**C3.1**

**NOTES:**

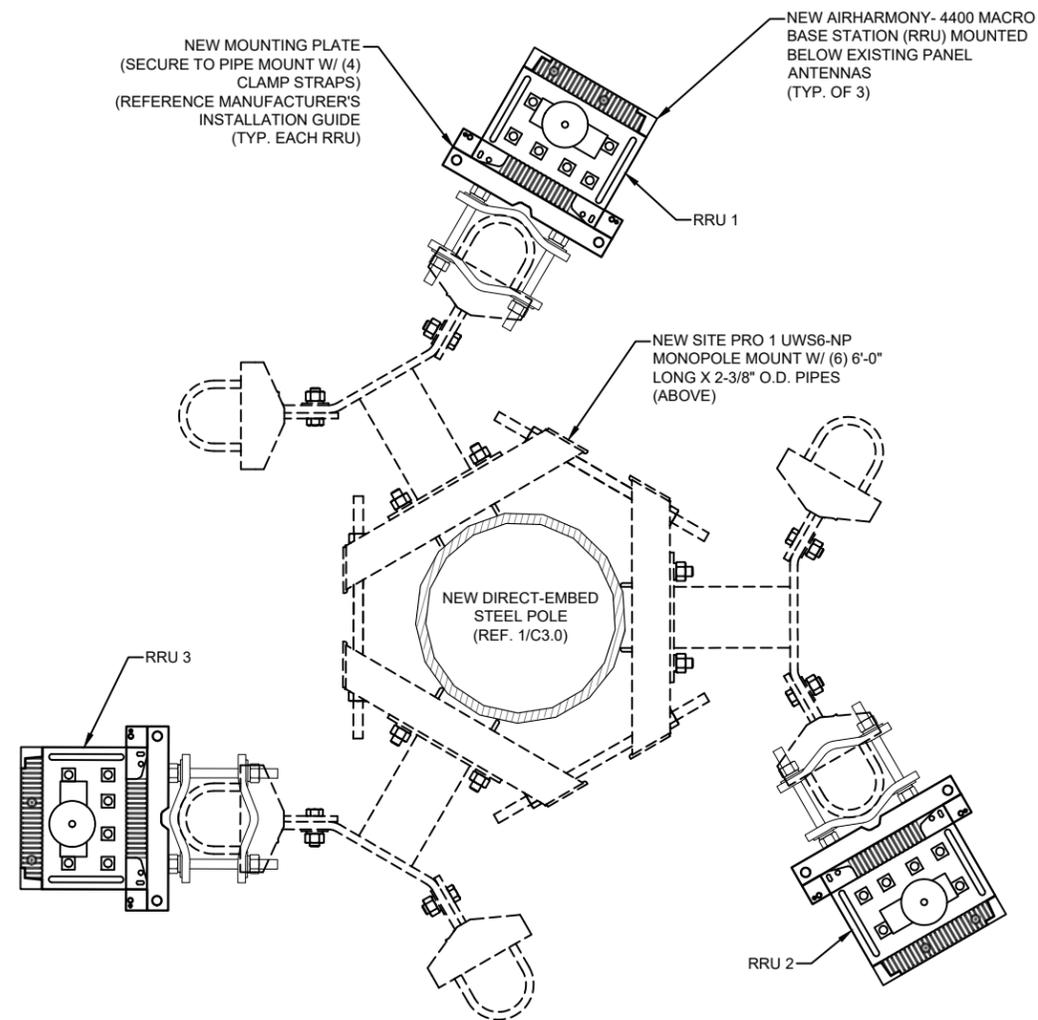
1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. ANTENNA CONFIGURATION IS SUBJECT TO CHANGE. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



**1** NEW ANTENNA PLAN AT 58'-6" AGL  
SCALE: N.T.S.

**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. ANTENNA CONFIGURATION IS SUBJECT TO CHANGE. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



55 **2** NEW ANTENNA PLAN AT 55'-6" AGL  
SCALE: N.T.S.

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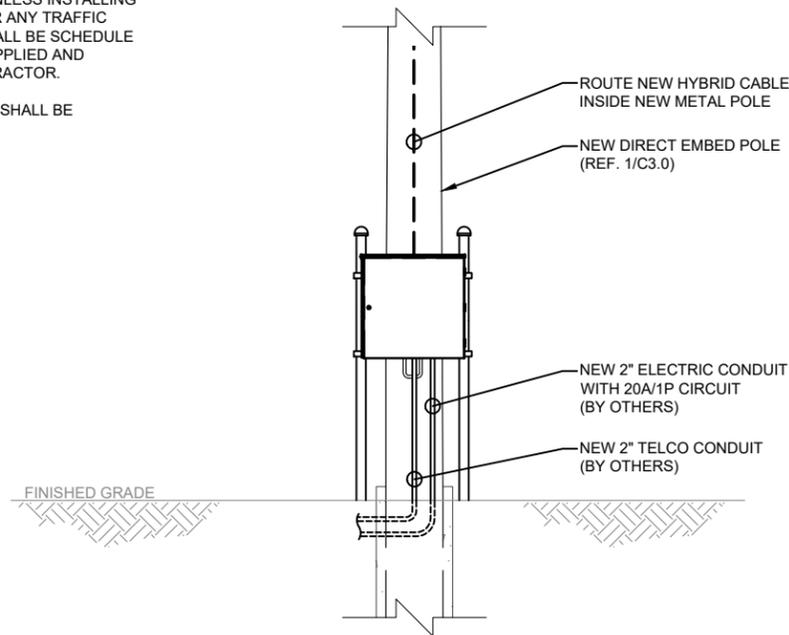
DRAWN BY KJG	REVIEWED BY DBS
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**ANTENNA  
PLANS**

**C3.2**

**NOTES:**

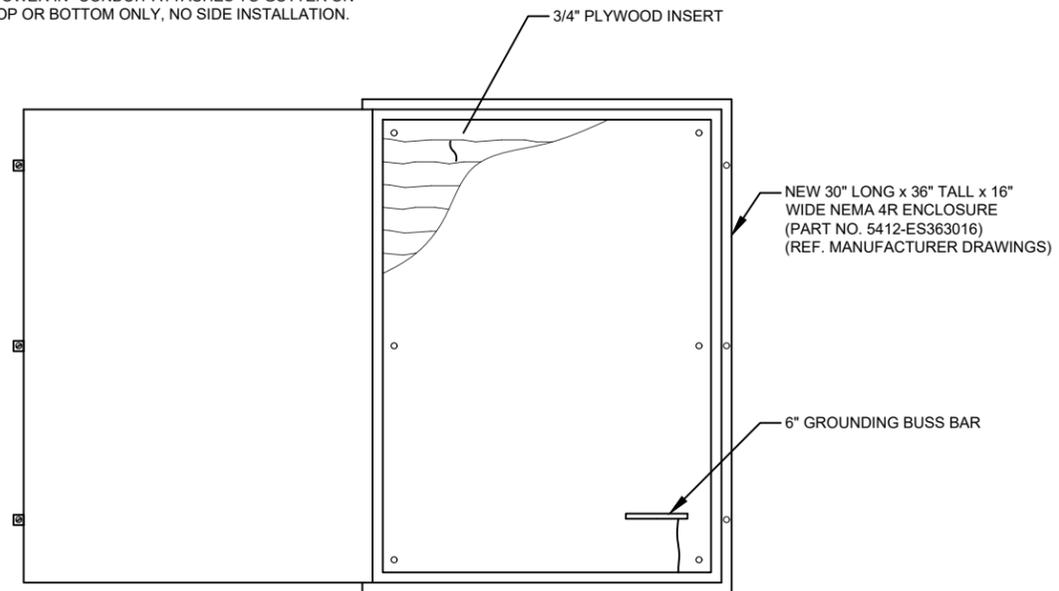
1. ALL HORIZONTAL RUNS OF UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC UNLESS INSTALLING UNDER ROAD BED OR ANY TRAFFIC AREAS WHERE IT SHALL BE SCHEDULE 80 PVC. CONDUIT SUPPLIED AND INSTALLED BY CONTRACTOR.
2. ALL CONDUIT BENDS SHALL BE LONG-SWEEP TYPE.



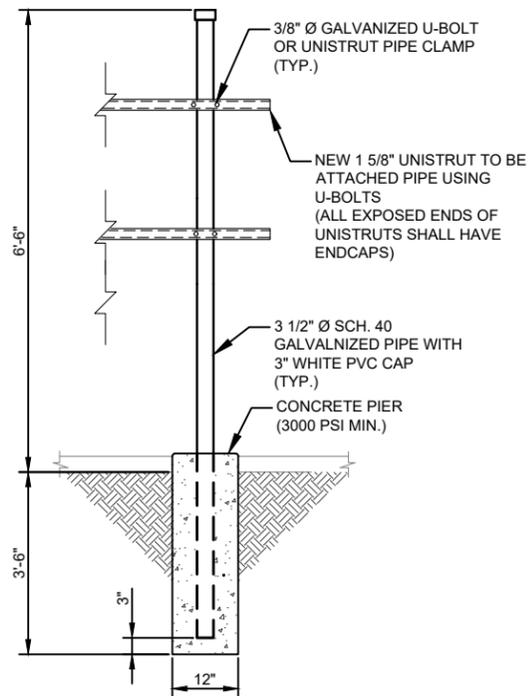
**1** TYPICAL UTILITY RISER  
SCALE: N.T.S.

**NOTES:**

1. ALL METAL COMPONENTS ON TELCO BOARD MUST BE GROUNDED TO GROUNDING BUSS BAR.
2. PHOTOCELL TO POINT NORTH.
3. "POWER IN" CONDUIT ATTACHES TO GUTTER ON TOP OR BOTTOM ONLY, NO SIDE INSTALLATION.



**2** TYPICAL NEMA 4R ENCLOSURE  
DETAIL  
SCALE: N.T.S.



**3** TYPICAL H-FRAME DETAIL  
SCALE: N.T.S.

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**EQUIPMENT  
DETAILS**

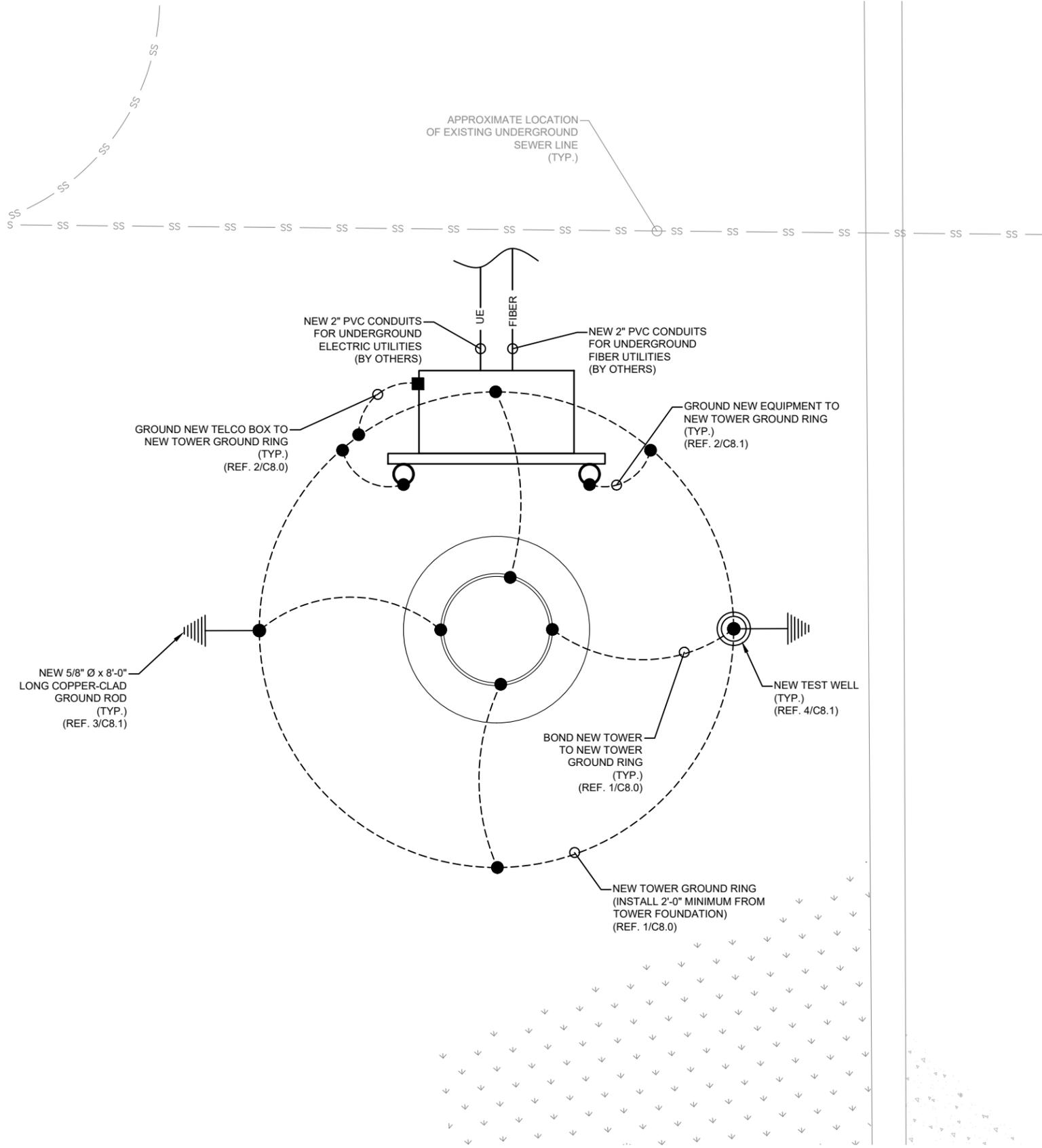
**C6.0**

**NOTES:**

1. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.
2. CONTRACTOR TO INSTALL NEW GROUND RODS PER MOTOROLA R56 WITH A MAXIMUM SPACING OF 15'-0" O.C.
3. CONTRACTOR TO VERIFY LOCATION OF EXISTING GROUND LOOP PRIOR TO INSTALLATION OF NEW GROUNDING SYSTEM COMPONENTS.
4. (1) 20A, 1P CIRCUIT AND FIBER TO BE ROUTED FROM NEMA ENCLOSURE BY OTHERS.

**TESTING NOTE:**

1. GROUNDING SYSTEM TO BE TESTED AFTER INSTALLATION AND WILL CONSIST OF THE THREE POINT, FALL-OFF-POTENTIAL MEGGER TEST METHOD AND SHOULD REGISTER 10 OHMS OR LESS. SUBMIT WRITTEN TEST RESULTS TO OWNER.



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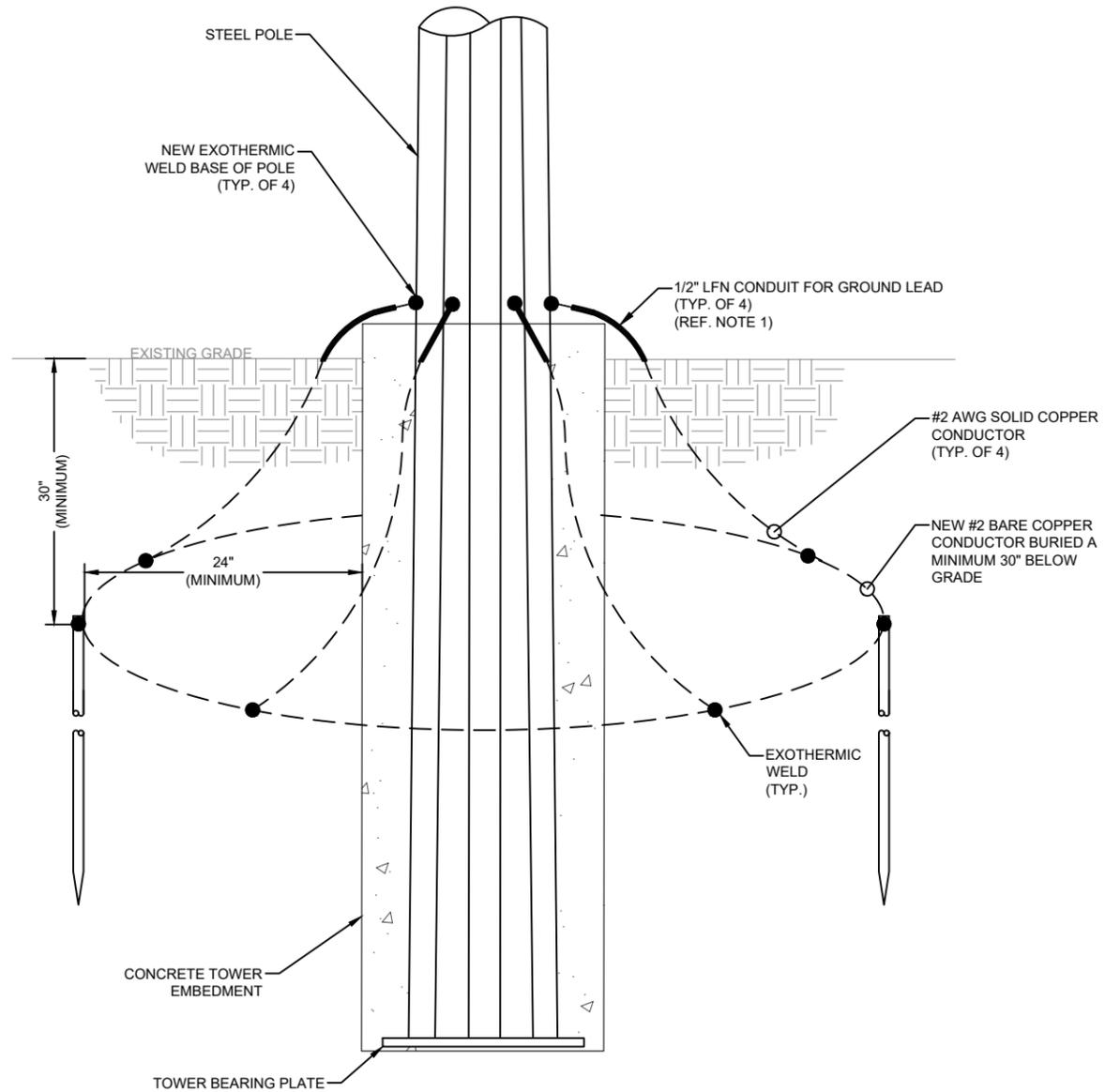
**UTILITY &  
GROUNDING  
PLAN**

**C7.0**

**UTILITY & GROUNDING PLAN**  
SCALE: N.T.S.

**NOTES:**

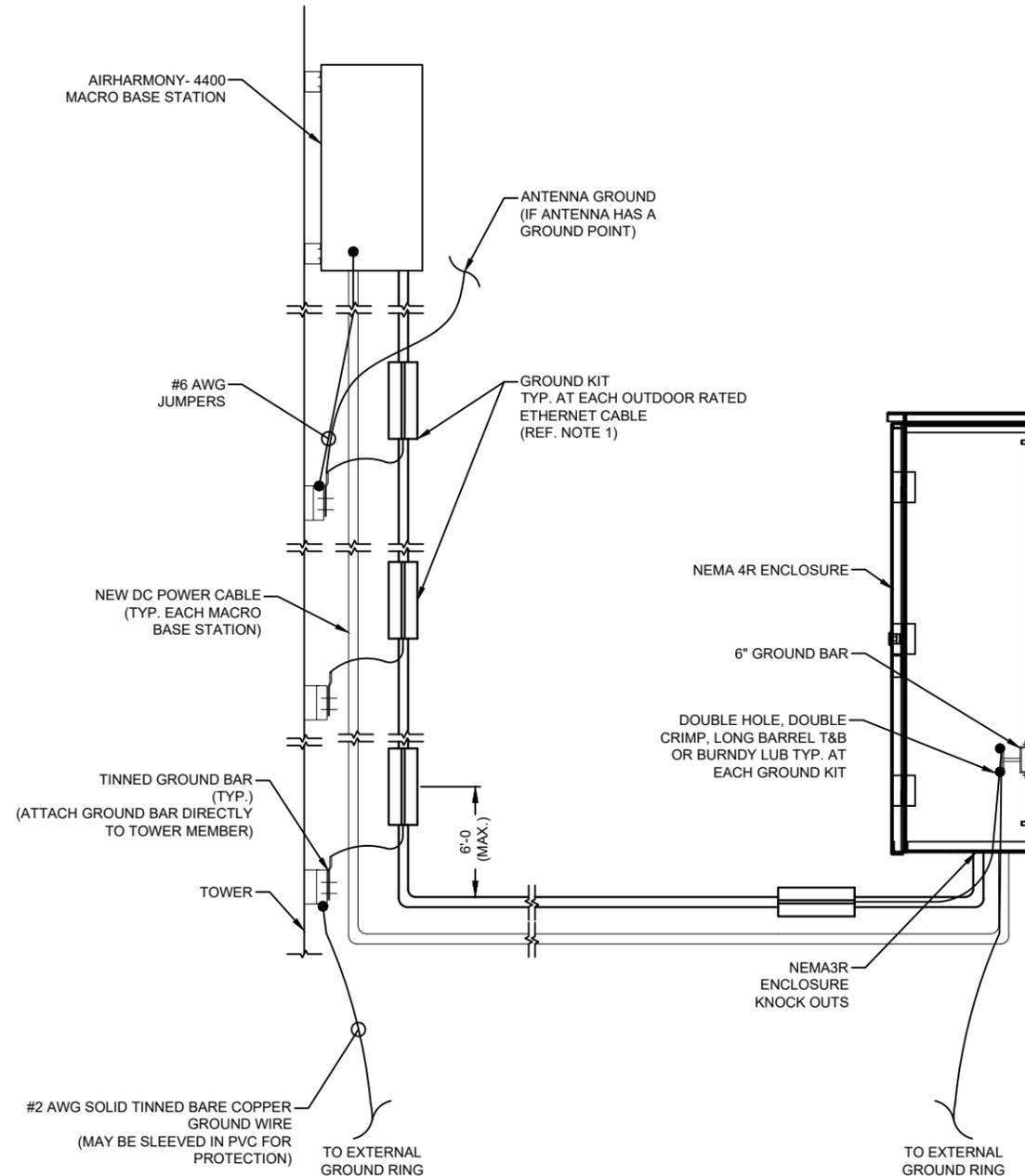
1. LFN CONDUIT SHALL BE PROPERLY CAPPED AND SEALED AT ENDS.
2. GRIND GALVANIZATION OR OTHER SURFACE FINISH FROM TOWER BASE PLATE PRIOR TO INSTALLING GROUND LEADS TO TOWER.
3. APPLY ANTIOXIDANT COATING TO ALL BARE METAL AFTER ATTACHING GROUND LEADS TO TOWER.
4. REPAIR EXISTING GRADE AS REQUIRED AFTER GROUNDING TOWER AND TOWER COMPONENTS.



**1** STEEL POLE GROUNDING DIAGRAM  
SCALE: N.T.S.

**NOTES:**

1. BUS BARS AND CABLE GROUNDING SHALL BE REQUIRED AT MINIMUM INTERVALS OF 75' AS WELL AS AT THE TOP AND BASE OF THE TOWER.
2. INSTALL SURGE ARRESTOR ONTO ETHERNET CABLE RUN. NEW SURGE PROTECTION DEVICES AND DC POWER SUPPLIES SHALL BE INSTALLED IN NEMA 4R ENCLOSURE. VERIFY SURGE ARRESTOR TYPE. (BY MSI)



**TOWER**

**EQUIPMENT**

**2** COAX GROUNDING DIAGRAM  
SCALE: N.T.S.

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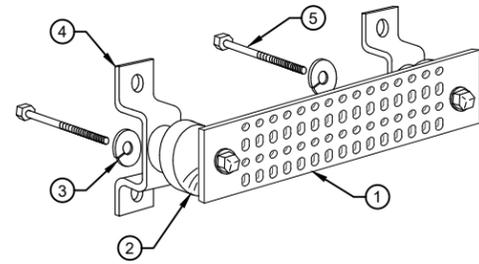
DRAWN BY KJG	REVIEWED BY DBS
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**GROUNDING DETAILS**

**C8.0**

**NOTE:**

1. TOWER MOUNTED GROUND BARS ARE TO BE TIN-PLATED AND INSTALLED USING ANGLE ADAPTORS WITHOUT INSULATORS



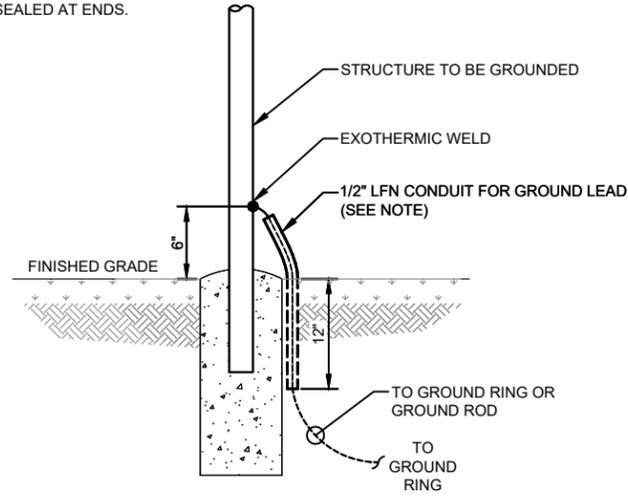
**KEYED NOTES LEGEND**

- 1 COPPER GROUND BAR, (HARGER TGB14424M OR EQUIVALENT) 1/4" x 4" x 24" WITH "M" HOLE PATTERN TO ACCOMMODATE NEMA DOUBLE LUG CONFIGURATIONS "B" AND "C"
- 2 INSULATORS
- 3 5/8" LOCK WASHERS
- 4 MOUNTING BRACKET
- 5 5/8-11 x 1" H.H.C.S. BOLTS

**1** GROUND BAR MOUNTING DETAIL  
SCALE: N.T.S.

**NOTE:**

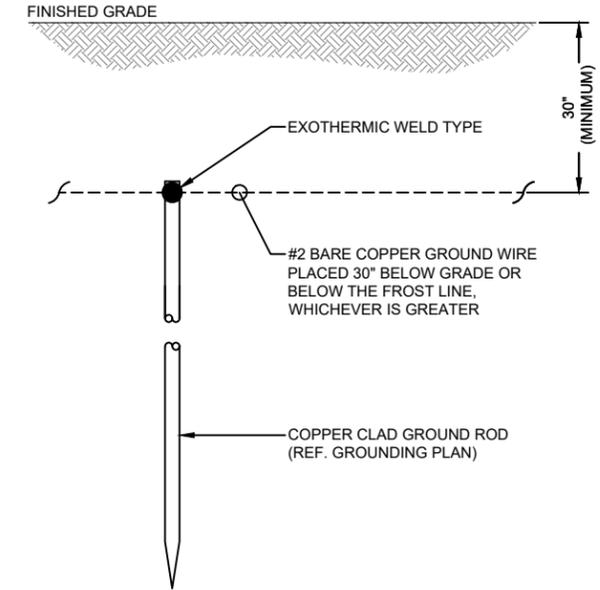
1. LFN CONDUIT SHALL BE PROPERLY CAPPED AND SEALED AT ENDS.



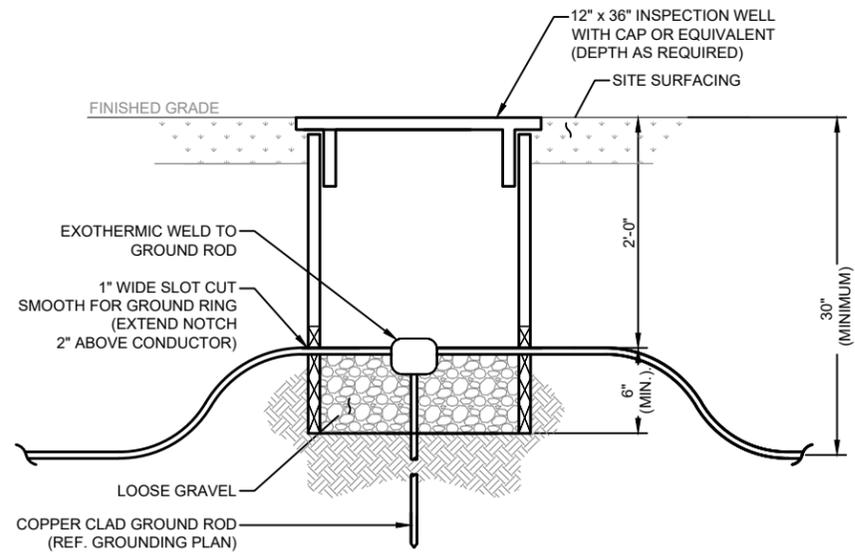
**2** GROUND WIRE PROTECTION DETAIL  
SCALE: N.T.S.

**NOTE:**

1. IF ROCK IS ENCOUNTERED & DEPTH CANNOT BE ACHIEVED, CONTRACTOR SHALL NOTIFY PROJECT CM.



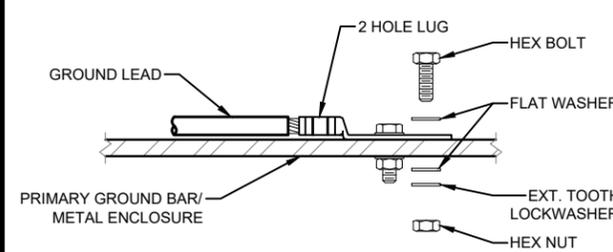
**3** GROUND ROD DETAIL  
SCALE: N.T.S.



**4** TEST WELL DETAIL  
SCALE: N.T.S.

**NOTES:**

1. SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS.
2. BURNISH MOUNTING SURFACE TO REMOVE POINT IN THE AREA OF LUG CONTACT.
3. COPPER ENHANCED ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN COPPER, BRASS, BRONZE AND TIN-PLATED BONDING SURFACES.
4. ZINC ENHANCED ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN TIN-PALED CONNECTION DEVICES AND STEEL, GALVANIZED STEEL, ZINC-CHROMATE STEEL, ALUMINUM AND TIN-PLATED COPPER BUS BAR BONDING SURFACES
5. ONLY ONE LUG PER SET OF BOLTS.



LUG CONFIGURATION CHART		
WIRE SIZE	LUG # (BURNDY OR EQUIVALENT)	BOLT DIA.
#6	YA6C2TC14E2	1/4"
#2 (STRANDED)	YA2CL-2TC14	1/4"
#2 (SOLID)	YA3C2TC38	3/8"
1/0	YA252LN	1/2"
2/0	YA262LN	1/2"
3/0	YA27L2TC38	3/8"
4/0	YA282LN	1/2"

**5** GROUND LUG CONNECTION DETAIL  
SCALE: N.T.S.

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**ENERTECH**  
TEXAS FIRM F-15232

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**GROUNDING DETAILS**

**C8.1**



**CITY OF SAN ANTONIO  
NITRO- DATA SOLUTIONS**

SITE NAME

**OGDEN ELEMENTARY**

SITE ADDRESS

**2215 LEAL STREET  
SAN ANTONIO, TEXAS 78207**

**PROJECT TEAM**

LAND & TOWER OWNER

SAN ANTONIO INDEPENDENT  
SCHOOL DISTRICT  
514 WEST QUINCY STREET  
SAN ANTONIO, TEXAS 78212  
PHONE: (210) 554.2200

APPLICANT

SAN ANTONIO ISD  
CARE OF ENERTECH  
RESOURCES, LLC  
5920 WEST WILLIAM CANNON  
DRIVE  
BUILDING 1, SUITE 102  
AUSTIN, TEXAS 78749  
CONTACT: SLADE PETTIFIELD  
PHONE: (337) 302.4655  
EMAIL: CHRISTOPHER.PETTIFIELD  
@ENERTECHRESOURCES.COM

MOTOROLA PROJECT  
MANAGER

MOTOROLA SOLUTIONS  
CONTACT: NEIL CLATWORTHY  
PHONE: (313) 956.7529  
EMAIL: NEIL.CLATWORTHY  
@MOTOROLASOLUTIONS.COM

ENGINEER

ENERTECH RESOURCES, LLC  
5920 WEST WILLIAM CANNON  
DRIVE  
BUILDING 1, SUITE 102  
AUSTIN, TEXAS 78749  
CONTACT:  
DALE SHUMAKER, P.E.  
PHONE: (830) 387.4502 EXT. 2451  
EMAIL: DALE.SHUMAKER  
@ENERTECHRESOURCES.COM

ENERTECH PROJECT  
MANAGER

CONTACT: MIKE GROSSMAN  
PHONE: (830) 387-2491  
EMAIL: MIKE.GROSSMAN  
@ENERTECHRESOURCES.COM

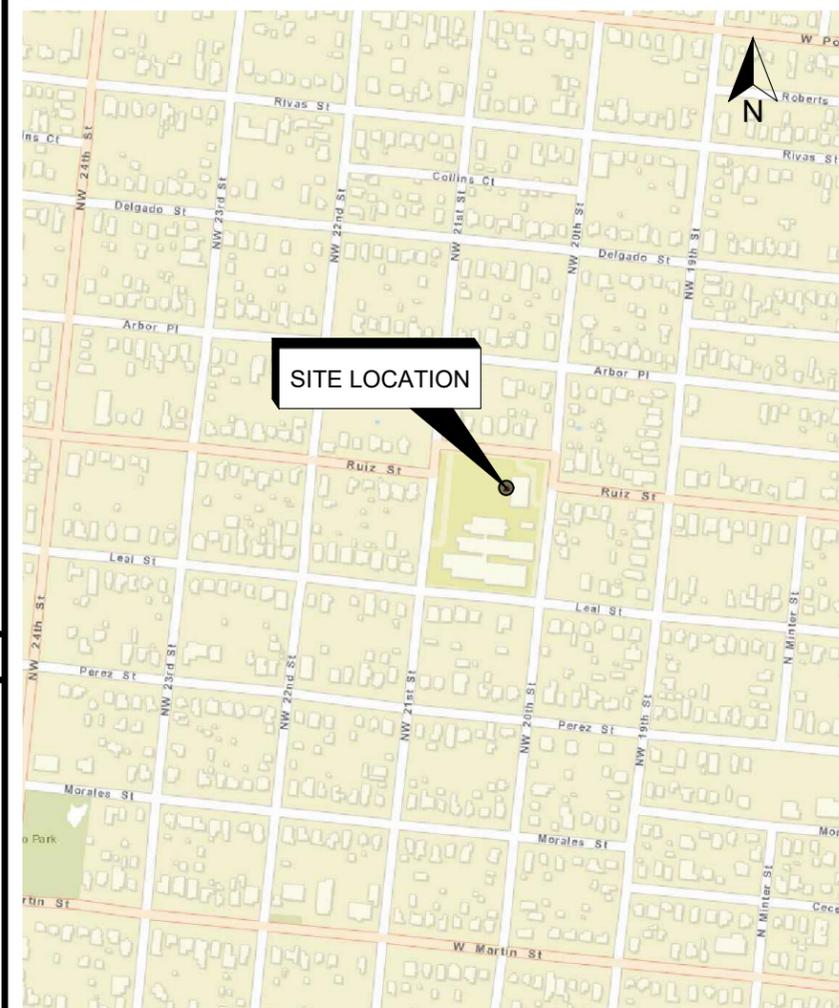
CONSTRUCTION  
MANAGER

ENERTECH RESOURCES, LLC  
1820 WATSON LANE EAST  
NEW BRAUNFELS, TEXAS 78130  
CONTACT: JEFF JONES  
PHONE: (830) 491-1124  
EMAIL: JEFF.JONES  
@ENERTECHRESOURCES.COM

CONTRACTOR

ENERTECH RESOURCES, LLC  
1820 WATSON LANE EAST  
NEW BRAUNFELS, TEXAS 78130  
PHONE: (830) 387.4502

**VICINITY MAP**



**FOR  
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**OGDEN  
ELEMENTARY**

**MOTOROLA SOLUTIONS**



**ENERTECH**

TEXAS FIRM F-15232

**EXHIBIT A-2 SHEET INDEX**

SHEET NO.	DESCRIPTION	REV. NO.
T1	TITLE SHEET	-
GN1	GENERAL NOTES	-
C1.0	CIVIL NOTES	-
C1.1	GROUNDING NOTES	-
C2.0	SITE PLAN	-
C2.1	DETAILED SITE PLAN	-
C2.2	NEW EQUIPMENT PLAN	-
C3.0	TOWER ELEVATION	-
C3.1	ANTENNA & EQUIPMENT SCHEDULE	-
C3.2	ANTENNA PLANS	-
C6.0	EQUIPMENT DETAILS	-
C7.0	UTILITY & GROUNDING PLAN	-
C8.0	GROUNDING DETAILS	-
C8.1	GROUNDING DETAILS	-

**PROJECT INFORMATION**

SITE LOCATION

LAT: 29° 26' 14.3" N (NAD 83)  
LONG: 98° 32' 12.5" W (NAD 83)  
ELEV: 718.5' AMSL (NAVD 88)

UTILITIES

ELECTRIC PROVIDER:  
CPS ENERGY  
PHONE: 1 (210) 353.2222

ONE-CALL TEXAS

CONTRACTOR TO CALL BEFORE  
DIGGING!!!  
PHONE: 811 OR 1.800.545.6000

PERMITTING

COUNTY: BEXAR  
JURISDICTION:  
CITY OF SAN ANTONIO  
ZONING:  
R-4 (RESIDENTIAL SINGLE-FAMILY)  
OCCUPANCY: NONE  
BUILDING CODE: 2018 IBC  
USE: UN-MANNED  
TELECOMMUNICATIONS FACILITY



**SCOPE OF WORK**

INSTALLATION OF NEW ANTENNAS AND NEW COMMUNICATION EQUIPMENT ON A NEW 60'-0" DIRECT EMBED METAL POLE . INSTALLATION OF NEW NEMA 4R ENCLOSURE, UTILITY H-FRAME AND OTHER MISCELLANEOUS UPGRADES TO BE COMPLETED WITHIN DESIGNATED CONSTRUCTION AREA. NO ELECTRICAL WORK SHALL BE INCLUDED WITHIN THIS SCOPE OF WORK.

**ACCESS INFORMATION**

CONSTRUCTION MANAGER MUST CONTACT SITE OWNER TO COORDINATE ACCESS 48-HOURS IN ADVANCE OF ALL CONSTRUCTION ACTIVITIES

**ATTACHMENTS**

REFERENCE DRAWINGS

- ANTENNA SPECIFICATIONS  
ALPHA WIRELESS AW3170
- ANTENNA MOUNT SPECIFICATIONS  
SITE PRO 1 UWS6-NP
- EQUIPMENT SPECIFICATIONS
- MACRO BASE STATION SPECIFICATION  
AIRSPAN AIRHARMONY 4200
- UNITY NEMA 4R ENCLOSURE  
MODEL NO. 4RSDCT363616LTHPW
- POLE MANUFACTURER STAMPED DRAWING BY VALMONT; PENDING FINAL DESIGN
- EMBEDDED FOUNDATION STAMPED DRAWING BY VALMONT; PENDING FINAL DESIGN

**APPROVALS**

CUSTOMER REPRESENTATIVE	DATE
MOTOROLA RF ENGINEER	DATE
MOTOROLA PROJECT MANAGER	DATE
CONTRACTOR	DATE

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KJG	DBS

**TITLE SHEET**

**T1**

**DIVISION 1 STANDARD PROVISIONS  
PART 1 GENERAL**

**1.1 INTENT**

- A. THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR THE CONSTRUCTION OF THIS PROJECT.
- B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
- C. THE INTENTION OF THESE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
- D. THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- E. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED WITHOUT ISSUING A CHANGE ORDER.

**1.2 CONFLICTS**

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSIONS, WHICH MAY BE FOUND, SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.

**1.3 STORAGE**

- A. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER.

**1.4 CLEAN UP**

- A. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK, HE SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA, INCLUDING ALL HIS TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS AND SHALL LEAVE HIS WORK CLEAN AND READY FOR USE.
- B. EXTERIOR: VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
- C. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
- D. IF NECESSARY TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.

**1.5 QUALITY ASSURANCE**

- A. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE BUT NOT BE LIMITED TO THE LATEST VERSION OF THE FOLLOWING:  
  
ANSI/TIA - 222 - H-2017  
INTERNATIONAL BUILDING CODE (IBC) 2018  
BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA) 1990  
NATIONAL ELECTRICAL CODE (NEC) WITH LOCAL AMENDMENTS 2020  
UNDERWRITER LABORATORIES APPROVED ELECTRICAL PRODUCTS  
AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)  
  
ANSI/NFPA - LIFE SAFETY CODE NFPA - 101 - 2018
- B. ALL WORK SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES.

**1.6 ADMINISTRATION**

- A. BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THE PROJECT. THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO MOTOROLA PRIOR TO THE COMMENCEMENT OF ANY WORK.
- B. SUBMIT A BAR CHART TYPE PROGRESS SCHEDULE NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE. INDICATE A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK. SHOW COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.

- C. PRIOR TO COMMENCING CONSTRUCTION, THE CONSTRUCTION MANAGER SHALL SCHEDULE AN "ON-SITE" MEETING WITH ALL MAJOR PARTIES. THIS SHALL INCLUDE (THOUGH NOT LIMITED TO) THE PROPERTY OWNER, POWER COMPANY, RF ENGINEER AND THE CONTRACTOR.
- D. CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE CONSTRUCTION MANAGER NOR WILL CELLULAR SERVICE BE ARRANGED.
- E. DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AND SAFETY GLASSES AT ALL TIMES. THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS.
- F. PROVIDE DAILY UPDATES ON SITE PROGRESS, EITHER VERBAL OR WRITTEN.
- G. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
- H. THE CONSTRUCTION MANAGER SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND SHELTER PLACEMENTS.

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TEXAS FIRM F-15232

<b>SET ISSUED FOR</b>	<b>DATE</b>
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KJG	DBS

**GENERAL  
NOTES**

**GN1**

**DIVISION 2 - SITE WORK  
CIVIL WORK AND DRAINAGE**

**PART 1 GENERAL**

**2.1 WORK INCLUDED**

- A. SITE WORK AND DRAINAGE DETAILS ARE WRITTEN TO COVER A VARIETY OF POSSIBLE SITE CONFIGURATIONS. SPECIFIC SERVICES WILL BE PERFORMED AS INDICATED IN THE SITE PLAN AND AGREED UPON BY CUSTOMER AND THE CONSTRUCTION MANAGER.
- B. REFER TO COMPLETE DRAWING SET AND REFERENCED SPECIFICATIONS / STANDARDS FOR WORK INCLUDED.

**2.2 RELATED WORK**

- A. CONSTRUCTION FOR TOWER FOUNDATION.
- B. PLACEMENT OF TOWER AND EQUIPMENT RACK.
- C. INSTALLATION OF GROUNDING.
- D. INSTALLATION OF ANTENNA SYSTEM.

**2.3 DESCRIPTIONS**

- A. ACCESS ROAD, TURNAROUND AREAS, AND COMPOUND AREAS SHALL BE CONSTRUCTED TO PROVIDE A WELL-DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

**2.4 QUALITY ASSURANCE**

- A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION (USE AS NEEDED).
- B. VEGETATION AND LANDSCAPING, IF REQUIRED WITHIN THE CONTRACT, WILL BE PLACED AND MAINTAINED AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

**2.5 SEQUENCING**

- A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION. PLACE SILT FENCE OR OTHER REQUIRED EROSION CONTROLS DOWN GRADIENT OF CONSTRUCTION AREA.
- B. THE COMPLETED ROAD AND SITE AREA WILL BE CLEARED OF HEAVY GROWTH OF GRASS, TREES, SHRUBS, AND TOPSOIL PRIOR TO FOUNDATION CONSTRUCTION OR PLACEMENT OF BACKFILL OR SUB-BASE MATERIAL.
- C. CONSTRUCT TEMPORARY CONSTRUCTION ZONE ALONG ACCESS DRIVE WHEN REQUIRED FOR NEW TOWERS.
- D. APPLY SOIL HERBICIDE PRIOR TO PLACING BASE MATERIALS.
- E. IF REQUIRED, GRADE, SEED, FERTILIZE, AND MULCH DISTURBED AREA IMMEDIATELY AFTER BRINGING THE SITE AND ACCESS ROAD TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
- F. REMOVE GRAVEL FROM TEMPORARY CONSTRUCTION ZONE.
- G. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL HERBICIDE TO THE STONE SURFACE.

**PART 2 PRODUCTS**

**2.8 MATERIALS**

- A. ROAD AND SITE MATERIALS: FILL MATERIAL - ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- B. SOIL HERBICIDE SHALL BE EPA REGISTERED OF LIQUID COMPOSITION AND OF PRE-EMERGENCE DESIGN.
- C. SOIL STABILIZER FABRIC SHALL BE MIRAFI - 500X.

**2.9 EQUIPMENT**

- A. COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS.
- B. ALL LARGER AREAS SHALL BE COMPACTED BY SHEEPSFOOT VIBRATORY OR RUBBER TIERED ROLLERS WEIGHING AT LEAST FIVE TONS.
- C. SMALLER AREAS SHALL BE COMPACTED BY POWER- DRIVER HAND HELD TAMPERS.

**PART 3 EXECUTION**

**2.10 INSPECTIONS**

- A. LOCAL BUILDING INSPECTION SHALL RECEIVE ADEQUATE NOTIFICATION IN ADVANCE OF CONCRETE POURS WHEN REQUIRED.

**2.11 PREPARATION**

- A. CLEAR TREES, BRUSH AND DEBRIS FROM SITE AREA AND ACCESS ROAD

RIGHT OF WAY (IF REQUIRED).

- B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION EFFORTS CLEAR SITE OF ORGANIC MATERIAL TO MINIMUM OF SIX INCHES BELOW ORIGINAL GROUND LEVEL.
- C. DO NOT REMOVE TREES, BRUSH, OR DEBRIS FROM THE PROPERTY WITHOUT CONSTRUCTION MANAGER APPROVAL.
- D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, PROOF ROLL THE SOIL.
- E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, COVER CLEARED AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

**2.12 INSTALLATION**

- A. THE COMPOUND AND TURNAROUND AREAS SHALL BE AT THE SUB-BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS. GRADE OR FILL THE SITE AND ACCESS ROAD AS REQUIRED IN ORDER THAT THERE IS EVEN DISTRIBUTION OF SPOILS RESULTING FROM FOUNDATION EXCAVATIONS. THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE, ELEVATIONS ARE TO BE CALCULATED FROM FINISHED GRADES OR SLOPES, AS INDICATED.
- B. IF ANY, EXCESS SPOILS WILL BE CLEARED FROM JOB SITE AND NOT SPREAD BEYOND THE LIMITS OF OWNER/LEASED PROPERTY UNLESS AUTHORIZED BY PROJECT MANAGER.
- C. THE ACCESS ROAD SHALL BE BROUGHT TO BASE COURSE ELEVATION PRIOR TO FOUNDATION CONSTRUCTION TO PERMIT USE. COMPACTION SHALL BE DONE DURING CONSTRUCTION OF THE SITE.
- D. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
- E. WHEN IMPROVING AN EXISTING ACCESS ROAD, GRADE THE EXISTING ROAD TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.
- F. THE FINISH GRADE, INCLUDING TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF ONE FOOT BEYOND THE SITE FENCE AND SHALL COVER THE AREA AS INDICATED.
- G. RIPRAP SHALL BE APPLIED TO THE SIDES OF DITCHES OR DRAINAGE SWALES.
- H. RIPRAP SHALL BE APPLIED TO THE SIDE SLOPES OF ALL FENCED SITE AREAS, PARKING AREAS AND TO ALL OTHER SLOPES GREATER THAN 2:1.
- I. RIPRAP ENTIRE DITCH FOR SIX FEET IN ALL DIRECTIONS AT CULVERT OPENINGS OR AS INDICATED IN THE DRAWINGS.
- J. SEED, FERTILIZER AND STRAW COVER SHALL BE APPLIED TO ALL OTHER DISTURBED AREAS AND DITCHES, DRAINAGE, SWALES NOT OTHERWISE RIPRAPPED.
- K. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES NOR CULVERTS BE PLACED SO THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SITE. IF DESIGN OR ELEVATIONS CONFLICT WITH THIS GUIDANCE, THE CONSTRUCTION MANAGER SHOULD BE ADVISED IMMEDIATELY.
- L. IF DITCH LIES WITH SLOPES GREATER THAN TEN PERCENT, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES 45 DEGREES OFF THE DITCH LINE. RIPRAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX FEET ABOVE THE CULVERT ENTRANCE.
- M. SEED AND FERTILIZER SHALL BE APPLIED TO SURFACE CONDITIONS, WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
- N. PLACE SEED AS DIRECTED BY THE SEED PRODUCER.
- O. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO RE-WORK BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

**2.13 FIELD QUALITY CONTROL**

- A. COMPACTION SHALL BE AT LEAST 95% OF MAXIMUM DENSITY AND WITHIN 4% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
- B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT WILL BE WRAPPED, TIED WITH HOSE-PROTECTED WIRE AND SECURED.
- C. ALL EXPOSED AREAS SHALL BE PROTECTED AGAINST WASHOUTS AND SOIL EROSION. STRAW BALES WILL BE PLACED AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS.

**DIVISION 4 - ANTENNA SYSTEM**

**PART 1 GENERAL**

**4.1 WORK INCLUDED**

- A. INSTALL NEW COAX, ANTENNAS, AND MOUNTS AS INDICATED ON DRAWINGS AND VERIFIED BY RF ENGINEER.
- B. SUPPLY AND INSTALL GROUND BARS AND GROUNDING SUPPLIES AS INDICATED IN THE DRAWINGS.
- C. LABEL CABLES.

**4.2 RELATED WORK**

- A. FURNISH THE FOLLOWING WORK AS SPECIFIED UNDER CONSTRUCTION DOCUMENTS, BUT COORDINATE WITH OTHER TRADES PRIOR TO BID.
  - 1. FLASHING OPENING INTO OUTSIDE WALLS.
  - 2. SEALING AND CAULKING ALL OPENINGS.
  - 3. PAINTING.
  - 4. CUTTING AND PATCHING.
  - 5. ENTRY PORT/PORT HOLE CUSHIONS.
  - 6. ANTENNA/CABLE GROUNDING.

**4.3 REQUIREMENTS OF REGULATORY AGENCIES**

- A. FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE AND INSTALL IN CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.
- B. INSTALL ANTENNA CABLES AND GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- C. EIA-ELECTRICAL INDUSTRIES ASSOCIATION RS-222, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- D. FAA-FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-IH, OBSTRUCTION MARKING AND LIGHTING.
- E. AISC-AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
- F. NEC-NATIONAL ELECTRICAL CODE-ON TOWER LIGHTING KITS.
- G. UL-UNDERWRITERS' LABORATORIES APPROVED.
- H. IN ALL CASES, PART 77 OF THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OF SPECIFICATIONS.

**4.4 MATERIALS**

- A. ALL MATERIALS/HARDWARE SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

**4.5 COAX LABELING**

- CONTRACTOR SHALL PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING PER THE FOLLOWING INSTRUCTIONS:
- A. ALL TRANSMISSION LINES SHALL BE MARKED WITH APPROPRIATE COLOR TAPE BANDS (ONE INCH WIDE COLOR TAPE) FOR IDENTIFICATION NEAR ANTENNA, JUST BEFORE ENTERING THE SHELTER/BUILDING/WATER TANK AS WELL AS INSIDE THE SHELTER/BUILDING/WATER TANK, WITHIN 24" OF THE ENTRY PORT. TAPE SHALL BE FADE-RESISTANT, WEATHER-RESISTANT, UV-RESISTANT AND CHEMICAL RESISTANT. REFERENCE HH-I-595C.
  - B. WHERE VISIBILITY END TO END IS NOT POSSIBLE, ADDITIONAL BANDING SHALL BE INSTALLED.

**4.6 GROUNDING**

- B. ANTENNA AND CABLE GROUNDING SHALL BE INSTALLED CONTEMPORANEOUSLY WITH INSTALLATION. NO UNGROUNDED COAX SHALL BE ROUTED INTO THE SHELTER OR CONNECTED TO EQUIPMENT.
- C. REFERENCE SEPARATE GROUNDING NOTES SHEET E1 FOR ADDITIONAL NOTES.

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**CIVIL  
NOTES**

**C1.0**

**GROUNDING SPECIFICATIONS**

**PART 1 GENERAL**

A. GROUNDING SHALL BE INSTALLED PER MOTOROLA R56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES.

**CONNECTIONS**

A. ALL EXTERNAL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS, BY IRREVERSIBLE HIGH COMPRESSION, AND/OR BY 2-HOLE LONG BARREL LUGS, NO SINGLE-HOLE, CRIMP-ON, OR SOLDER CONNECTIONS SHALL BE USED. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE SPLICE. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

B. ALL INTERIOR GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE-TYPE (COMPRESSION) CONNECTIONS. MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED.

**GROUND RODS**

A. ALL GROUND RODS SHALL BE COPPER-CLAD STEEL 5/8" DIAMETER X 8'-0" LONG AND OF THE NUMBER AND AT LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICALLY IN UNDISTURBED EARTH.

B. GROUND RODS SHALL BE LOCATED SO AS TO AVOID THE TOWER FOUNDATION.

C. IF ROCK IS ENCOUNTERED, GROUND RODS MAY BE DRIVEN AT AN OBLIQUE ANGLE OF NOT GREATER THAN 45 DEGREES FROM VERTICAL OR MAY BE BURIED HORIZONTALLY AND PERPENDICULAR TO THE BUILDING, IN A TRENCH AT LEAST 36" DEEP.

D. GROUND RODS SHALL BE BURIED TO A MINIMUM DEPTH OF 30 INCHES BELOW FINISHED GRADE, WHERE POSSIBLE, OR BURIED BELOW THE FREEZE LINE, WHICHEVER DEPTH IS GREATER.

E. GROUND RODS SHALL NOT BE INSTALLED MORE THAN 15 FEET APART (OR TWICE THE LENGTH OF THE ROD) AND NOT LESS THAN 6 FEET (PER NFPA 70, ARTICLE 250-56).

**GROUND BARS**

A. ALL GROUND BARS SHALL BE 1/4" THICK BARE COPPER PLATES AND OF SUFFICIENT SIZE TO GROUND ATTACHMENTS INDICATED IN THE DRAWINGS (MIN. 2" X 12"). HOLES SHALL BE 7/16" DIAMETER ON 3/4" CENTERS TO PERMIT THE CONVENIENT USE OF TWO-HOLE LUGS.

B. THE METHOD OF ATTACHMENT OF THE GROUNDING ELECTRODE CONDUCTOR TO EXTERIOR AND TOWER GROUND BARS SHALL BE EXOTHERMIC OR IRREVERSIBLE HIGH COMPRESSION.

**CABLES**

A. ALL EXTERIOR GROUNDING CABLES SHALL BE #2 STRANDED GREEN JACKETED COPPER WIRE UNLESS INDICATED OTHERWISE ON DRAWINGS.

B. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. ALL BENDS SHALL BE MADE WITH THE GREATEST PRACTICAL RADIUS AND SHALL NOT BE LESS THAN 8".

C. ALL CONDUITS SHALL BE MECHANICALLY SUPPORTED.

D. ALL METALLIC CONDUIT SHALL USE GROUND-BUSHING CONNECTIONS.

E. ALL CONDUITS USED AS RACEWAYS FOR GROUNDING CONDUCTORS SHALL BE BONDED AT BOTH ENDS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).

F. PROVIDE WIRE PROTECTION PIPES AT ALL GROUND WIRES AT GRADE LEVEL PER GROUND WIRE PROTECTION DETAIL.

**GROUNDING RING**

A. THE GROUND RING ENCIRCLING THE BUILDING SHALL BE A MINIMUM SIZE OF NO. 2 AWG BARE TINNED SOLID COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT A MINIMUM DEPTH OF 36 INCHES. CONDUCTOR BENDS SHALL HAVE A MINIMUM RADIUS OF 8 INCHES.

B. ALL EXTERNAL GROUND RINGS ARE TO BE JOINED TOGETHER AND ALL CONNECTIONS SHALL BE EXOTHERMIC OR IRREVERSIBLE HIGH COMPRESSION. NO LUGS OR CLAMPS WILL BE ACCEPTED.

**FENCE/GATE**

A. GROUND ALL SECTIONS OF FENCE AND GATE AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. ALL CONNECTIONS FOR THE FENCE GROUND SYSTEM SHALL BE EXOTHERMIC WELD AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.

**DISSIMILAR METALS**

A. BONDING OF TWO DISSIMILAR METALS MAY RESULT IN GALVANIC CORROSION, A REACTION THAT OCCURS AT THE JUNCTION OF DISSIMILAR METALS WHEN THEY ARE EXPOSED TO MOISTURE. THE DEGREE AND RATE OF CORROSION DEPENDS ON THE RELATIVE POSITION OF THE METALS IN THE ELECTROCHEMICAL SERIES. TO DETERMINE THE LIKELIHOOD OF TWO METALS REACTING REFERENCE SECTION 6.5.2 IN THE R56 SPECIFICATIONS.

1. THE SAME METAL SHALL BE USED THROUGHOUT THE SYSTEM WHEN POSSIBLE.

2. EXOTHERMICALLY WELD CONNECTIONS OF DIFFERENT METALS WHEN WELD MATERIAL IS AVAILABLE FOR THE METALS BEING BONDED.

3. COPPER CONDUCTORS SHALL NOT BE INSTALLED ON ALUMINUM ROOFING OR SIDING.

4. ALUMINUM AND COPPER SHALL NOT BE DIRECTLY CONNECTED TO EACH OTHER UNLESS USING EXOTHERMIC WELDING MATERIALS SPECIFICALLY INTENDED FOR THESE TWO METALS TO MAKE THE CONNECTION. ALUMINUM AND COPPER MAY BE JOINED WITH THE USE OF A LISTED BIMETALLIC TRANSITION CONNECTOR OF STAINLESS STEEL. THESE CONNECTORS SHALL BE LISTED FOR THE SIZE AND NUMBER OF CONDUCTORS AND MARKED WITH AL/CU. THESE CONNECTIONS SHALL BE LIBERALLY COATED WITH A CONDUCTIVE ANTIOXIDANT AT THE POINT OF INSERTION INTO THE CONNECTOR.

5. COPPER SHALL NOT COME IN CONTACT WITH GALVANIZED STEEL.

6. TINNED COPPER SHALL BE USED WHEN CONNECTING TO A GALVANIZED STEEL STRUCTURE.

**ANTI-OXIDANT**

A. ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN ALL EXTERNAL MECHANICAL CONNECTIONS. CARE SHALL BE TAKEN TO USE THE APPROPRIATE ANTI-OXIDANT TYPE. ZINC ANTI-OXIDANT (GRAY COLOR) SHALL BE USED WHEN CONNECTING TO GALVANIZED AND ALUMINUM OBJECTS AND COPPER ANTI-OXIDANT (COPPER COLOR) SHALL BE USED WHEN CONNECTING TO COPPER OBJECTS.

**TEST PROCEDURE**

A. THE GROUND SYSTEM RESISTANCE SHALL NOT EXCEED 10 OHMS. A DESIGN GOAL OF 5 OHMS IS RECOMMENDED. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARD RESISTANCE TESTING.

B. GROUND TEST MUST BE PERFORMED PRIOR TO UTILITY CONNECTION AND GROUND CONNECTION TO ANY EXISTING SITE COMMON GROUNDING ELECTRODE SYSTEM.

**GROUNDING SYMBOLS**



GROUND ROD



GROUND ROD & INSPECTION WELL



GROUND BAR



EXOTHERMIC WELD



IRREVERSIBLE HIGH COMPRESSION CONNECTION



MECHANICAL CONNECTION (2-HOLE LUG, CONDUIT GROUND CLAMP, ETC.)



GROUND CONDUCTOR

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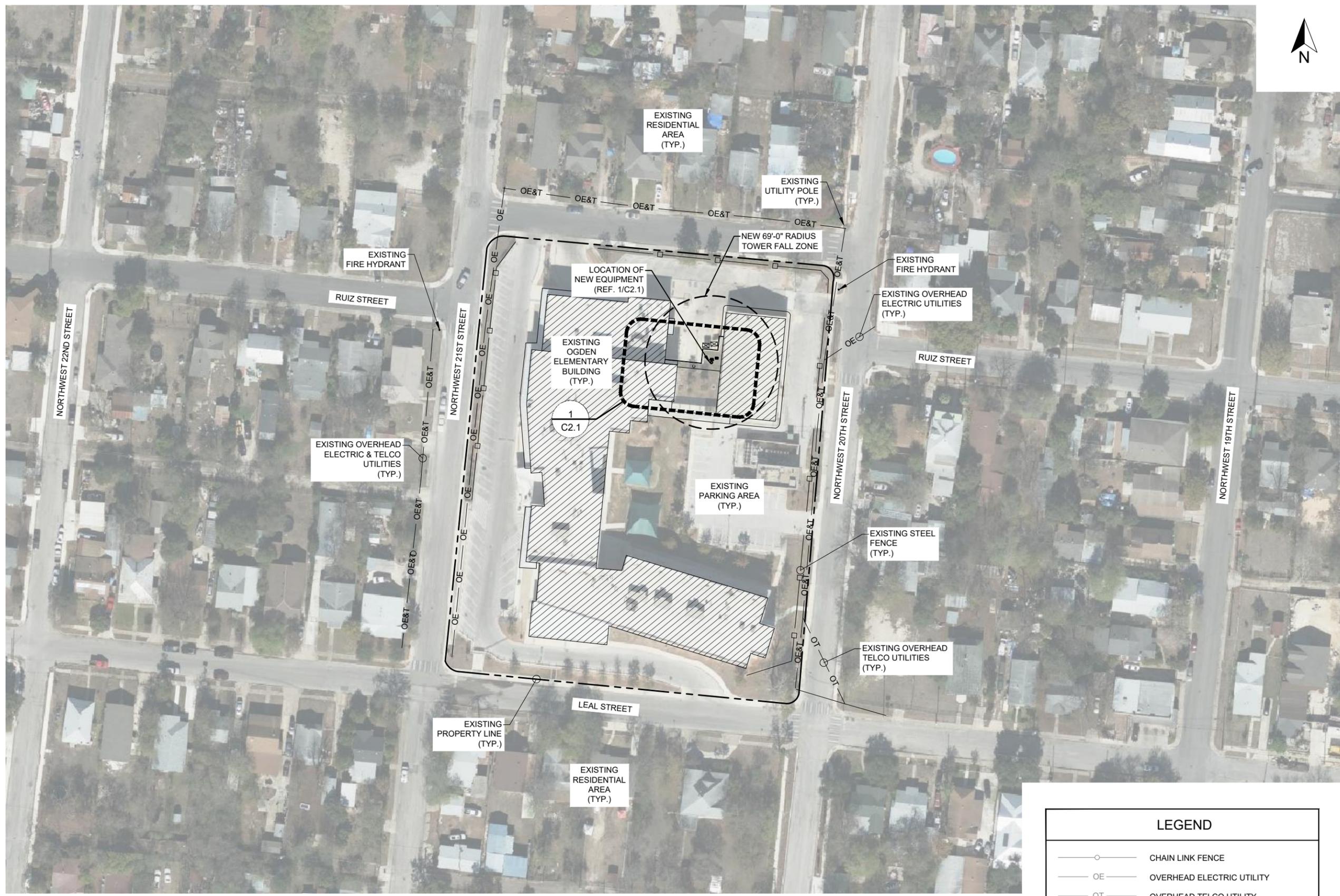
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**GROUNDING NOTES**

**C1.1**



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**SITE PLAN**

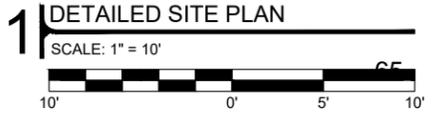
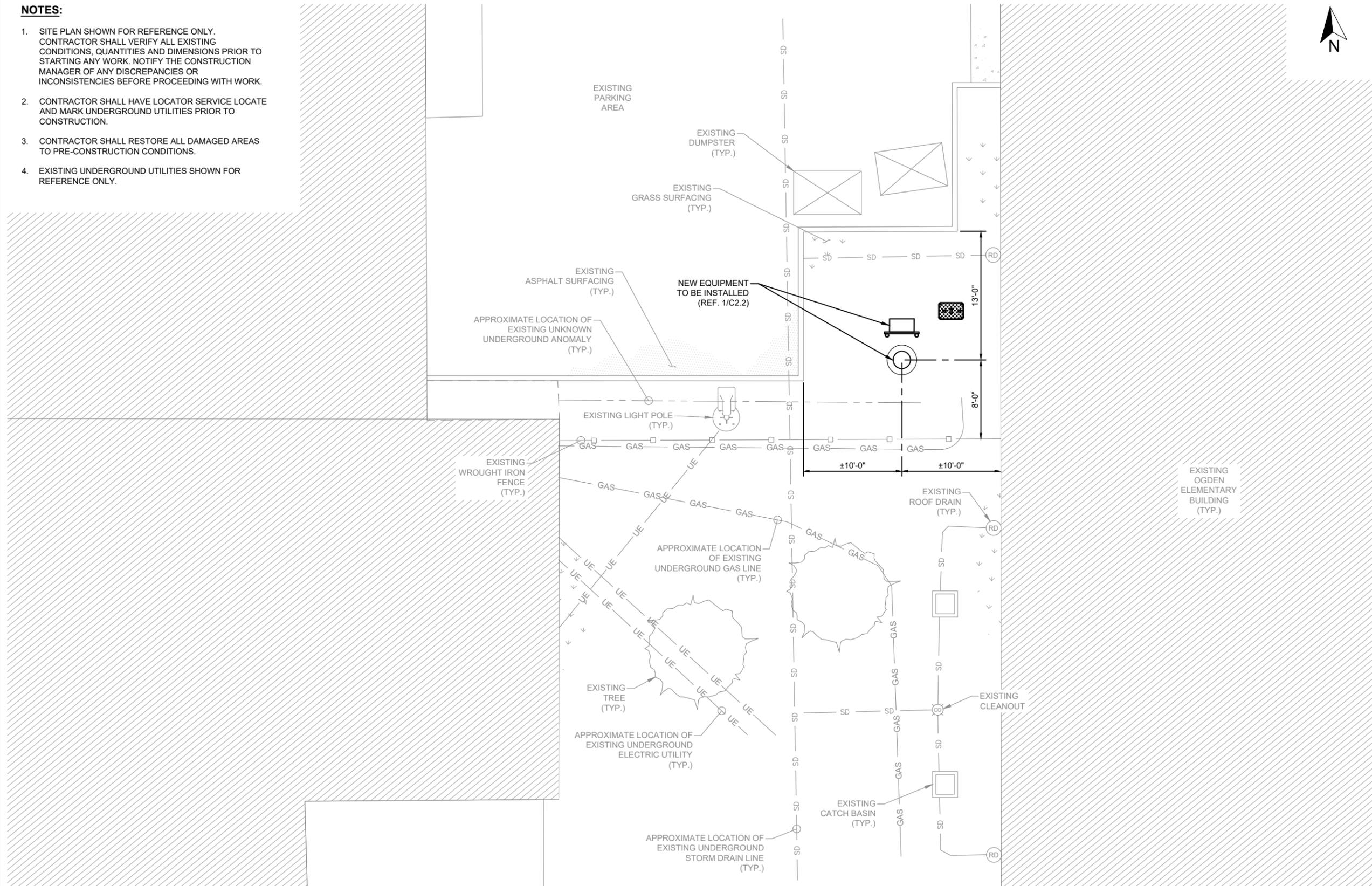
**C2.0**



LEGEND	
	CHAIN LINK FENCE
	OVERHEAD ELECTRIC UTILITY
	OVERHEAD TELCO UTILITY
	OVERHEAD ELECTRIC & TELCO UTILITIES
	STEEL FENCE
	PROPERTY LINE

**NOTES:**

1. SITE PLAN SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO STARTING ANY WORK. NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH WORK.
2. CONTRACTOR SHALL HAVE LOCATOR SERVICE LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.
4. EXISTING UNDERGROUND UTILITIES SHOWN FOR REFERENCE ONLY.



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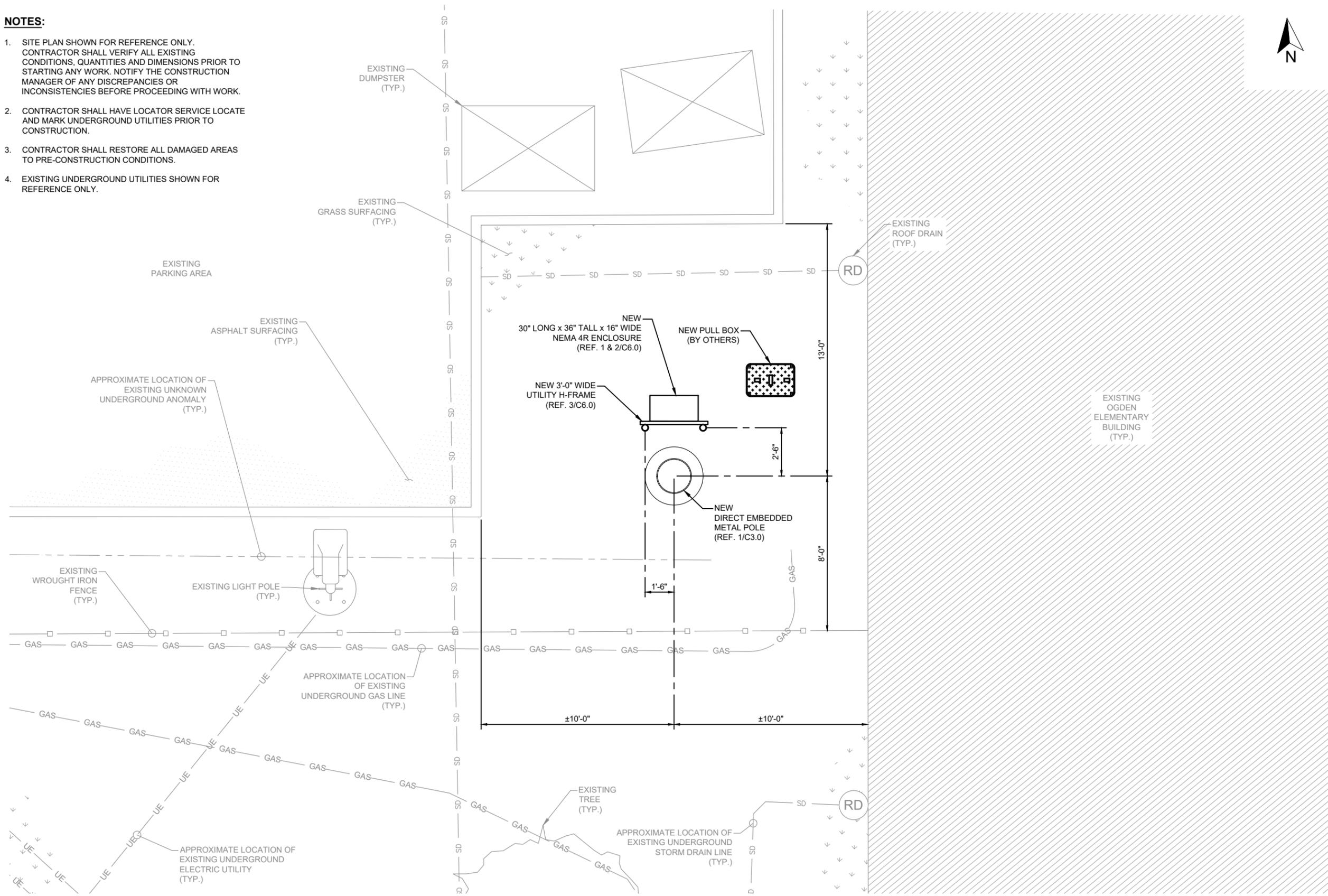
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**DETAILED SITE PLAN**

**C2.1**

**NOTES:**

1. SITE PLAN SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, QUANTITIES AND DIMENSIONS PRIOR TO STARTING ANY WORK. NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES OR INCONSISTENCIES BEFORE PROCEEDING WITH WORK.
2. CONTRACTOR SHALL HAVE LOCATOR SERVICE LOCATE AND MARK UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.
4. EXISTING UNDERGROUND UTILITIES SHOWN FOR REFERENCE ONLY.



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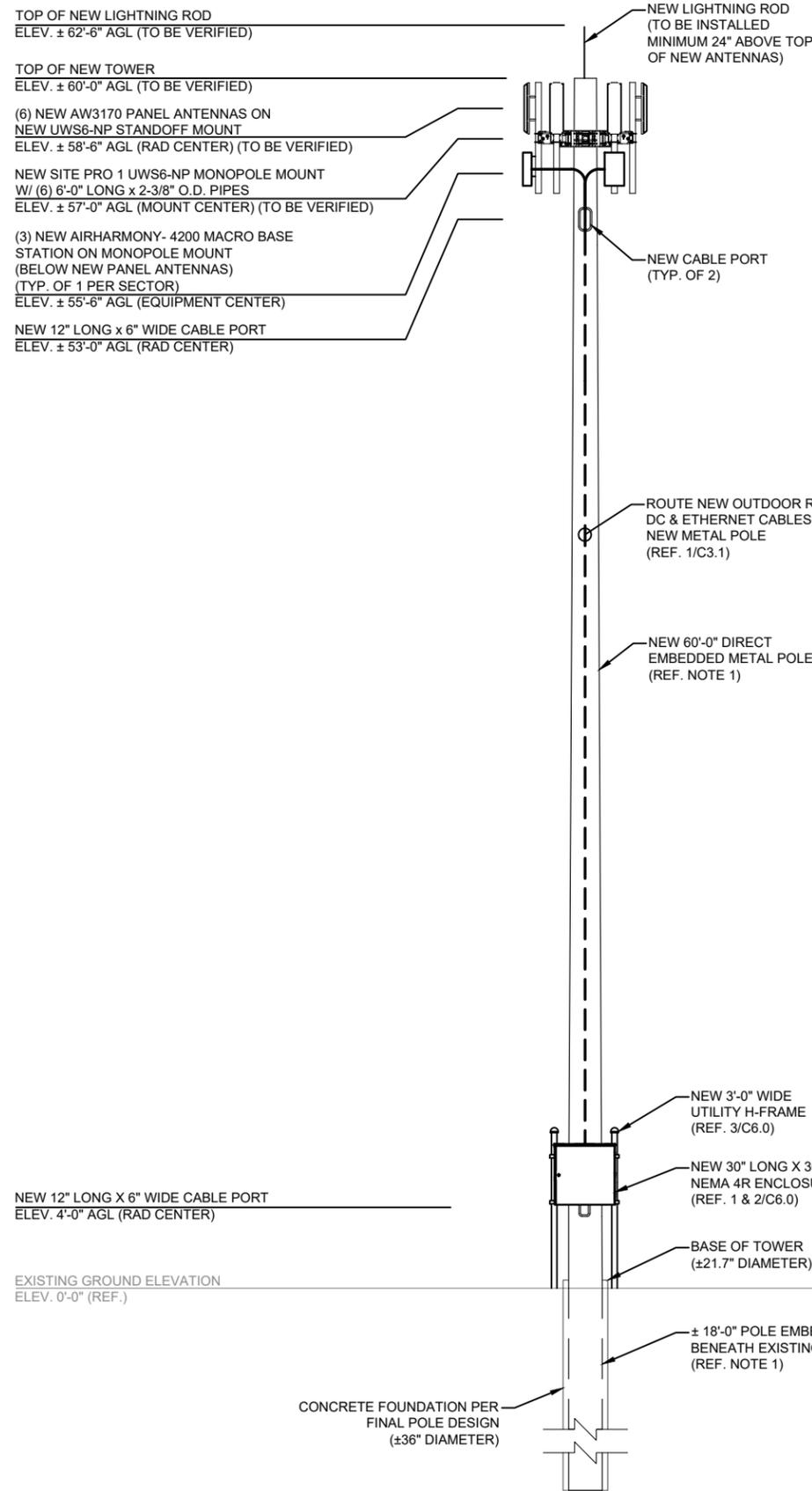
**NEW EQUIPMENT PLAN**

**C2.2**



**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.
3. UNDER NO CIRCUMSTANCES SHALL THE NEW INSTALLATION CAUSE DAMAGE TO OR INTERFERE WITH THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB IF PRESENT AND ANY OTHER LINES OR EQUIPMENT ATTACHED TO THE STRUCTURE.
4. ANTENNA COAX SHALL BE ATTACHED TO THE TOWER IN ACCORDANCE WITH R56 STANDARDS.



**1** TOWER ELEVATION 67  
SCALE: N.T.S.

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**TOWER ELEVATION**

**C3.0**

**NOTES:**

1. REFER TO ATTACHMENTS FOR ANTENNA AND ANTENNA MOUNT SPECIFICATIONS.
2. ALL TRANSMISSION LINES SHALL BE MARKED WITH APPROPRIATE COLOR TAPE BANDS (ONE INCH WIDE COLOR TAPE) FOR IDENTIFICATION NEAR ANTENNA, JUST BEFORE ENTERING THE SHELTER/BUILDING/WATER TANK AS WELL AS INSIDE THE SHELTER/BUILDING/WATER TANK, WITHIN 24" OF THE ENTRY PORT. TAPE SHALL BE FADE-RESISTANT, WEATHER-RESISTANT, UV-RESISTANT AND CHEMICAL RESISTANT.
3. CONTRACTOR SHALL DOCUMENT CABLE LENGTHS AND PROVIDE ANTENNA SERIAL NUMBERS, ANTENNA ID NUMBERS, AND ANTENNA MODEL NUMBERS ON RED-LINED DRAWINGS.

NEW ANTENNA & EQUIPMENT SCHEDULE										
ANTENNA OR EQUIPMENT	APPURTENANCE				MOUNT		FEED LINES			
	TYPE	MAKE/MODEL	AZIMUTH (DEG)	ELEVATION (AGL)	TYPE	MAKE/MODEL	COLOR CODING	CABLE SIZE	CABLE MANUF./TYPE	APPROX. LENGTH
LTE1	PANEL ANTENNA	ALPHA WIRELESS AW3170	0°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 RED	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 RED	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE2	PANEL ANTENNA	ALPHA WIRELESS AW3170	60°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 ORANGE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 ORANGE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE3	PANEL ANTENNA	ALPHA WIRELESS AW3170	120°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 YELLOW	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 YELLOW	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE4	PANEL ANTENNA	ALPHA WIRELESS AW3170	180°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 GREEN	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 GREEN	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE5	PANEL ANTENNA	ALPHA WIRELESS AW3170	240°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 BLUE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 BLUE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
LTE6	PANEL ANTENNA	ALPHA WIRELESS AW3170	300°	58'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP W/ 6'-0" LONG X 2-3/8" O.D. PIPE W/ CL-V-104 PANEL MOUNT KIT	1 PURPLE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
							2 PURPLE	1/2" LDF4-50A W/ NM-LCF12-D01 CONNECTOR	COAX JUMPER	±10'-0"
RRU1	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"
RRU2	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"
RRU3	MACRO BASE STATION	AIRSPAN AIRHARMONY 4200	N/A	55'-6"	MONOPOLE MOUNT	SITE PRO 1 UWS6-NP MONOPOLE MOUNT W/ 6'-0" LONG X 2-3/8" O.D. PIPE & RRU MOUNTING PLATE (REF. MANUFACTURER INSTALLATION GUIDE)	N/A	OUTDOOR RATED FIBER CABLE	N/A	±70'-0"
								OUTDOOR RATED DC CABLE	N/A	±70'-0"

**FOR INFORMATION ONLY**

**OGDEN ELEMENTARY**

**MOTOROLA SOLUTIONS**

**ENERTECH**  
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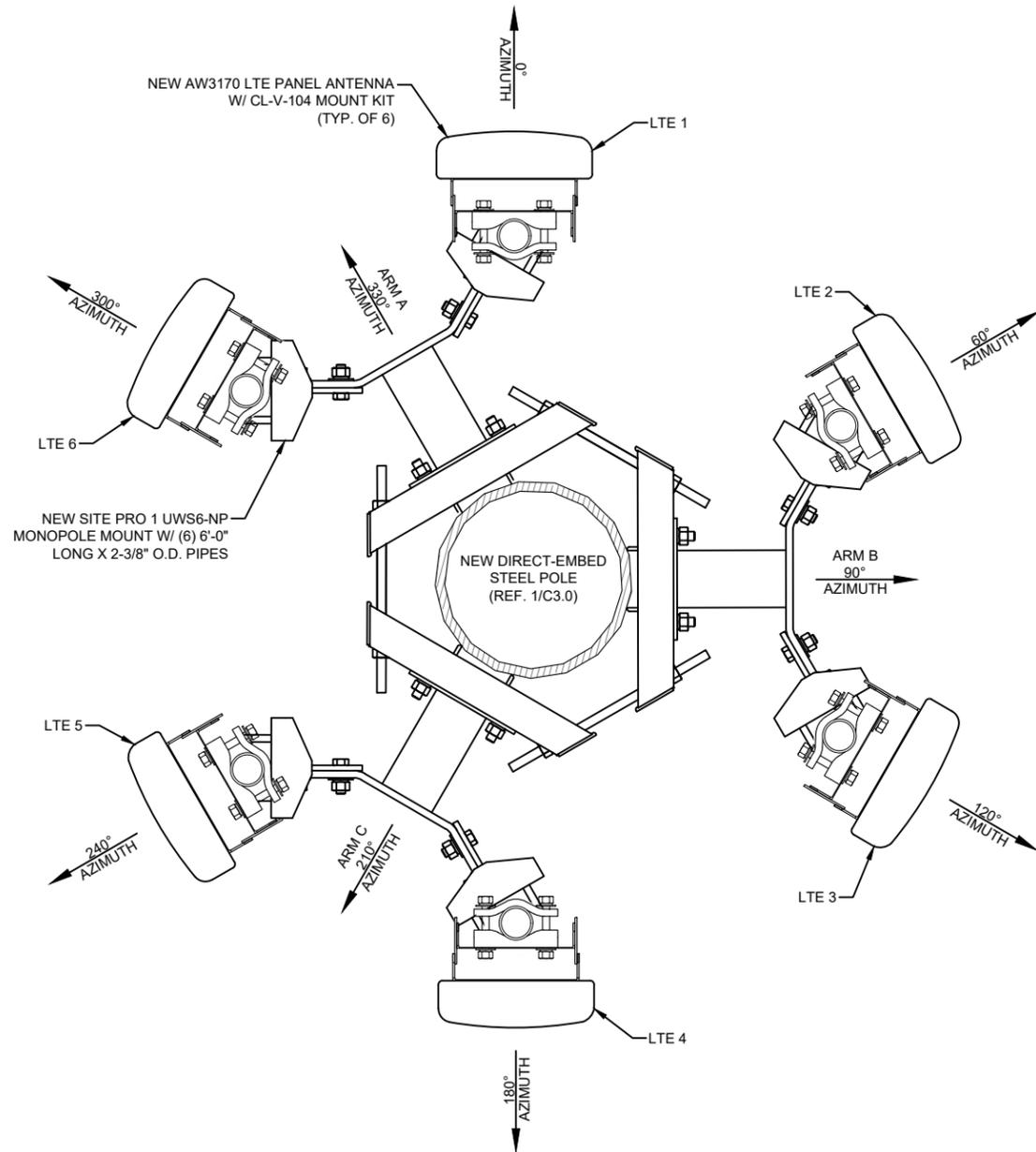
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**ANTENNA & EQUIPMENT SCHEDULE**

**C3.1**

**NOTES:**

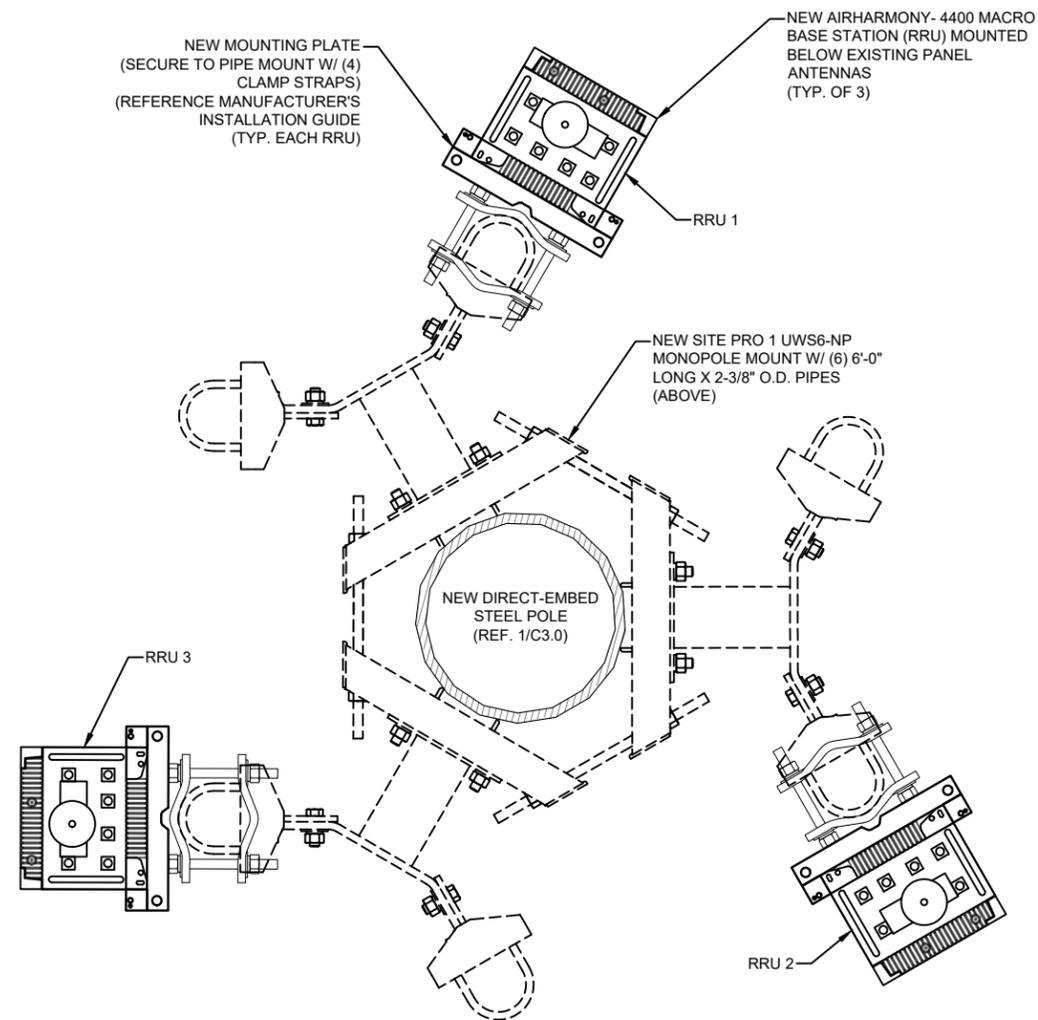
1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. ANTENNA CONFIGURATION IS SUBJECT TO CHANGE. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



**1** NEW ANTENNA PLAN AT 58'-6" AGL  
SCALE: N.T.S.

**NOTES:**

1. THE ANTENNA STRUCTURE IS SHOWN FOR GENERAL CONFIGURATION PURPOSES ONLY. POLE DESIGN TO BE PROVIDED BY POLE MANUFACTURER STRUCTURAL ANALYSIS REQUIRED TO VERIFY STRUCTURAL INTEGRITY OF POLE.
2. ANTENNA CONFIGURATION IS SUBJECT TO CHANGE. VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH MOTOROLA RF ENGINEER PRIOR TO INSTALLATION.



69 **2** NEW ANTENNA PLAN AT 55'-6" AGL  
SCALE: N.T.S.

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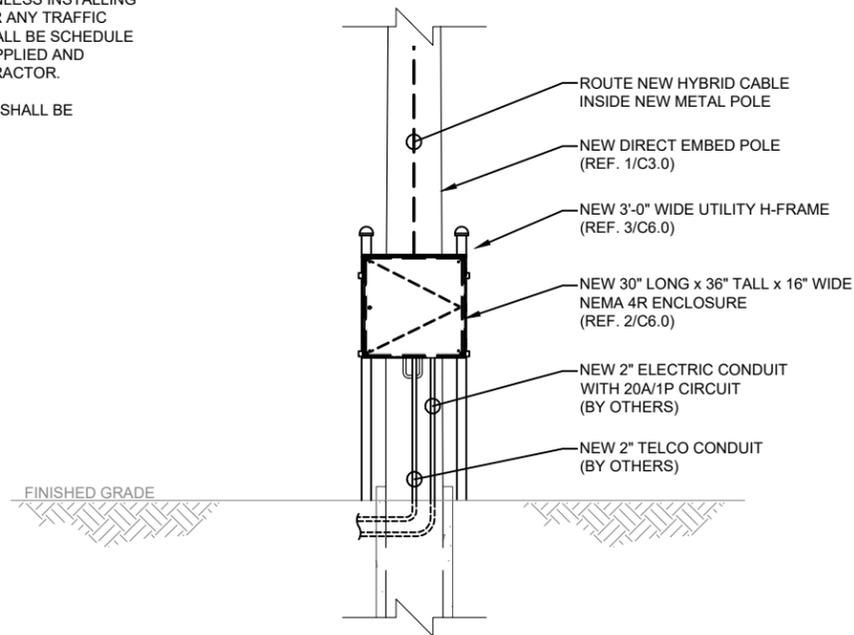
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**ANTENNA  
PLANS**

**C3.2**

**NOTES:**

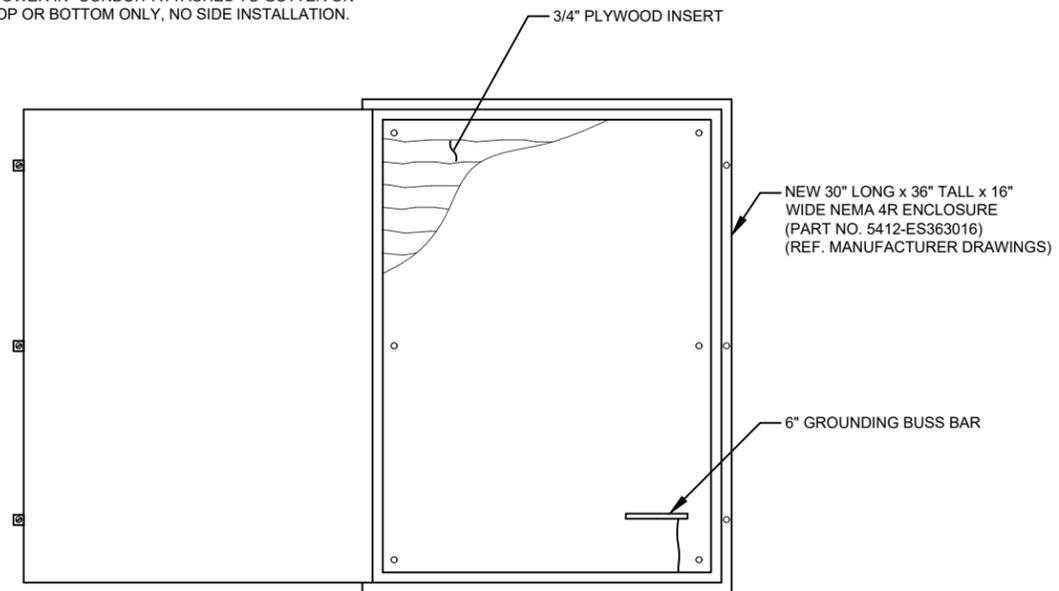
1. ALL HORIZONTAL RUNS OF UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC UNLESS INSTALLING UNDER ROAD BED OR ANY TRAFFIC AREAS WHERE IT SHALL BE SCHEDULE 80 PVC. CONDUIT SUPPLIED AND INSTALLED BY CONTRACTOR.
2. ALL CONDUIT BENDS SHALL BE LONG-SWEEP TYPE.



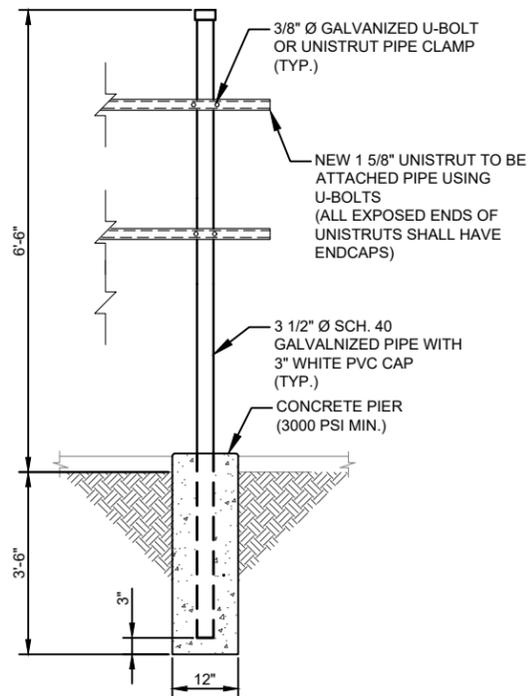
**1** TYPICAL UTILITY RISER  
SCALE: N.T.S.

**NOTES:**

1. ALL METAL COMPONENTS ON TELCO BOARD MUST BE GROUNDED TO GROUNDING BUSS BAR.
2. PHOTOCCELL TO POINT NORTH.
3. "POWER IN" CONDUIT ATTACHES TO GUTTER ON TOP OR BOTTOM ONLY, NO SIDE INSTALLATION.



**2** TYPICAL NEMA 4R ENCLOSURE  
DETAIL  
SCALE: N.T.S.



**3** TYPICAL H-FRAME DETAIL  
SCALE: N.T.S.

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**EQUIPMENT  
DETAILS**

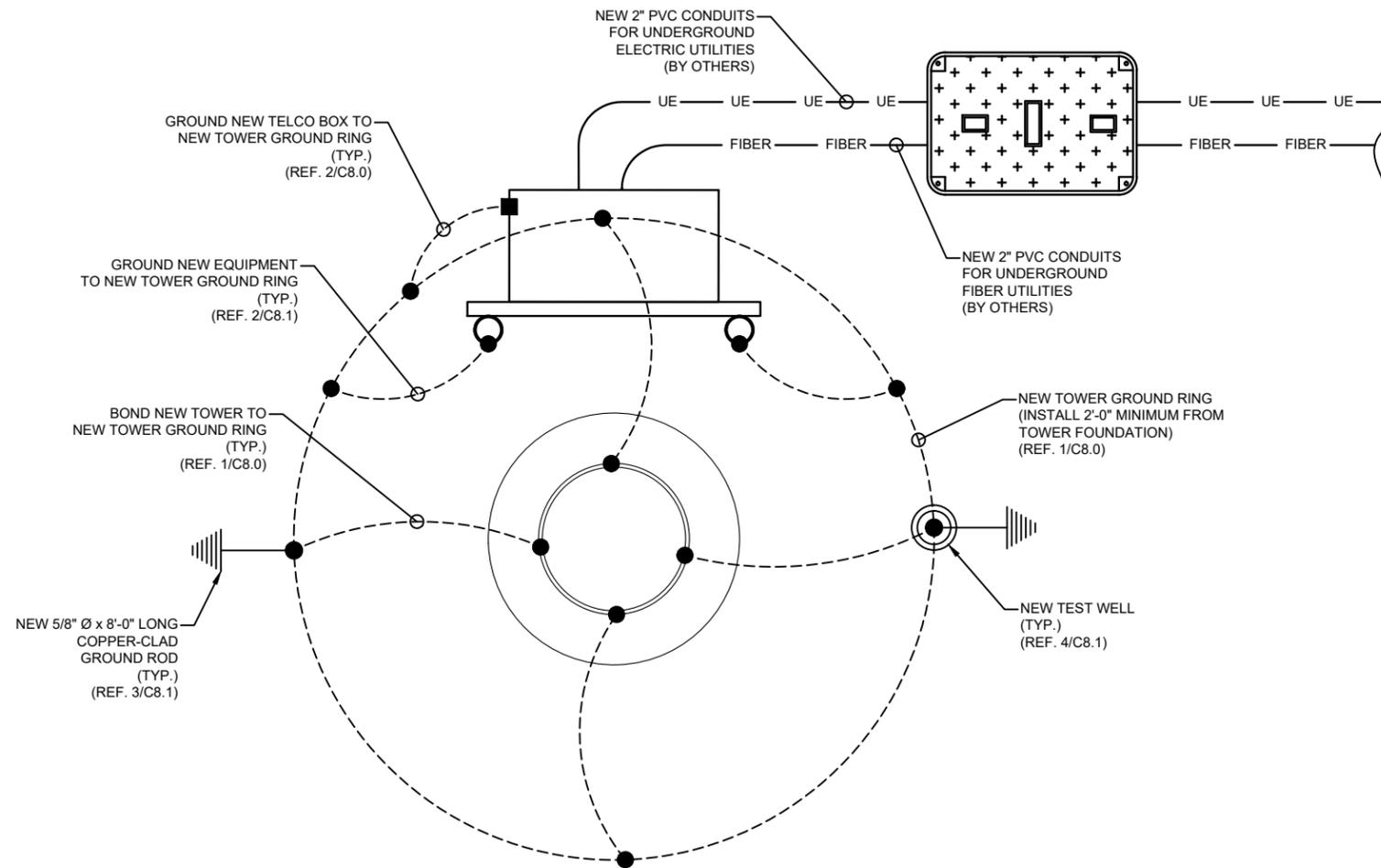
**C6.0**

**NOTES:**

1. CONTRACTOR SHALL RESTORE ALL DAMAGED AREAS TO PRE-CONSTRUCTION CONDITIONS.
2. CONTRACTOR TO INSTALL NEW GROUND RODS PER MOTOROLA R56 WITH A MAXIMUM SPACING OF 15'-0" O.C.
3. CONTRACTOR TO VERIFY LOCATION OF EXISTING GROUND LOOP PRIOR TO INSTALLATION OF NEW GROUNDING SYSTEM COMPONENTS.
4. (1) 20A, 1P CIRCUIT AND FIBER TO BE ROUTED FROM NEMA ENCLOSURE BY OTHERS.

**TESTING NOTE:**

1. GROUNDING SYSTEM TO BE TESTED AFTER INSTALLATION AND WILL CONSIST OF THE THREE POINT, FALL-OFF-POTENTIAL MEGGER TEST METHOD AND SHOULD REGISTER 10 OHMS OR LESS. SUBMIT WRITTEN TEST RESULTS TO OWNER.



**1** UTILITY & GROUNDING PLAN  
SCALE: N.T.S.

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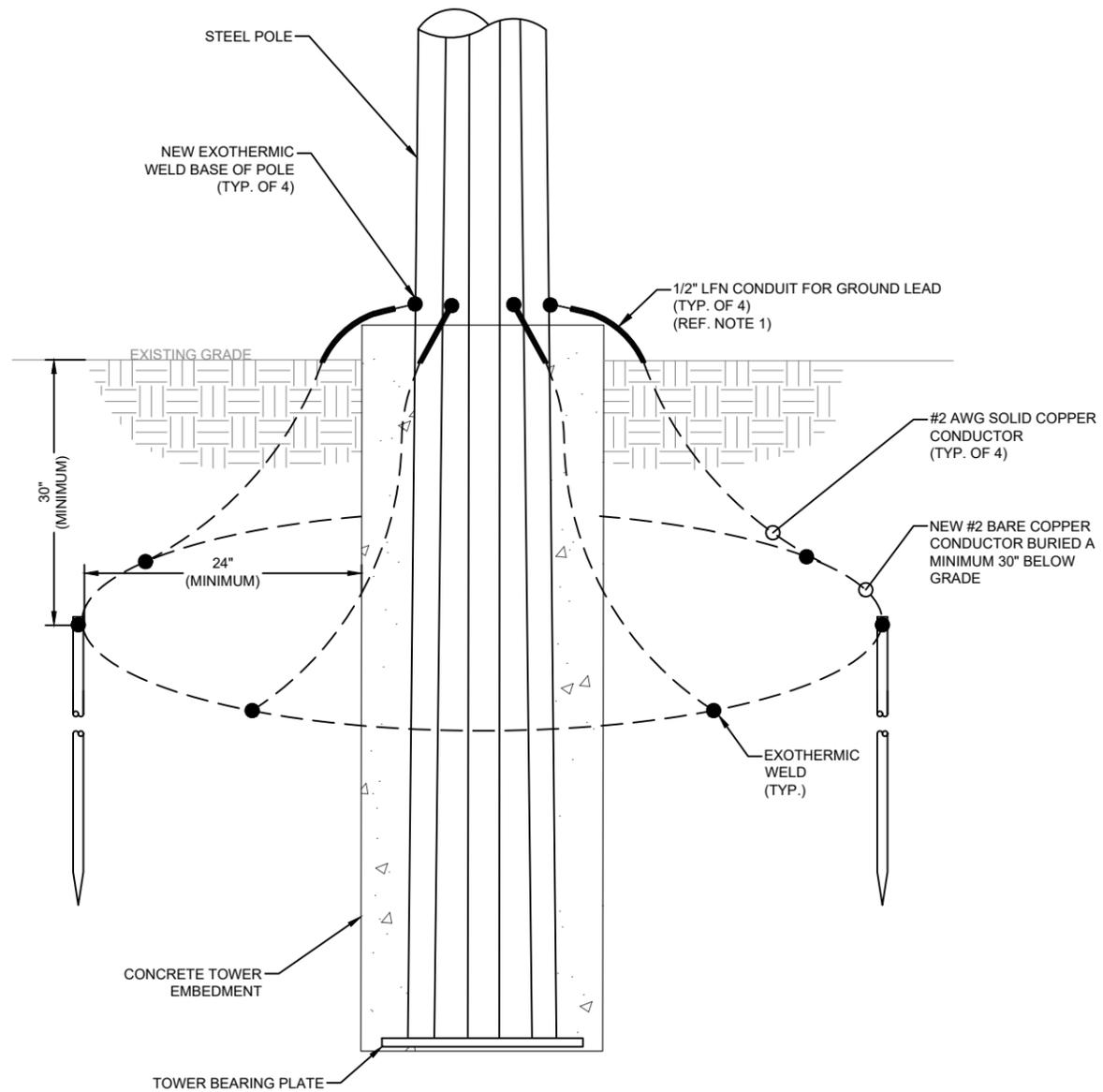
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**UTILITY &  
GROUNDING  
PLAN**

**C7.0**

**NOTES:**

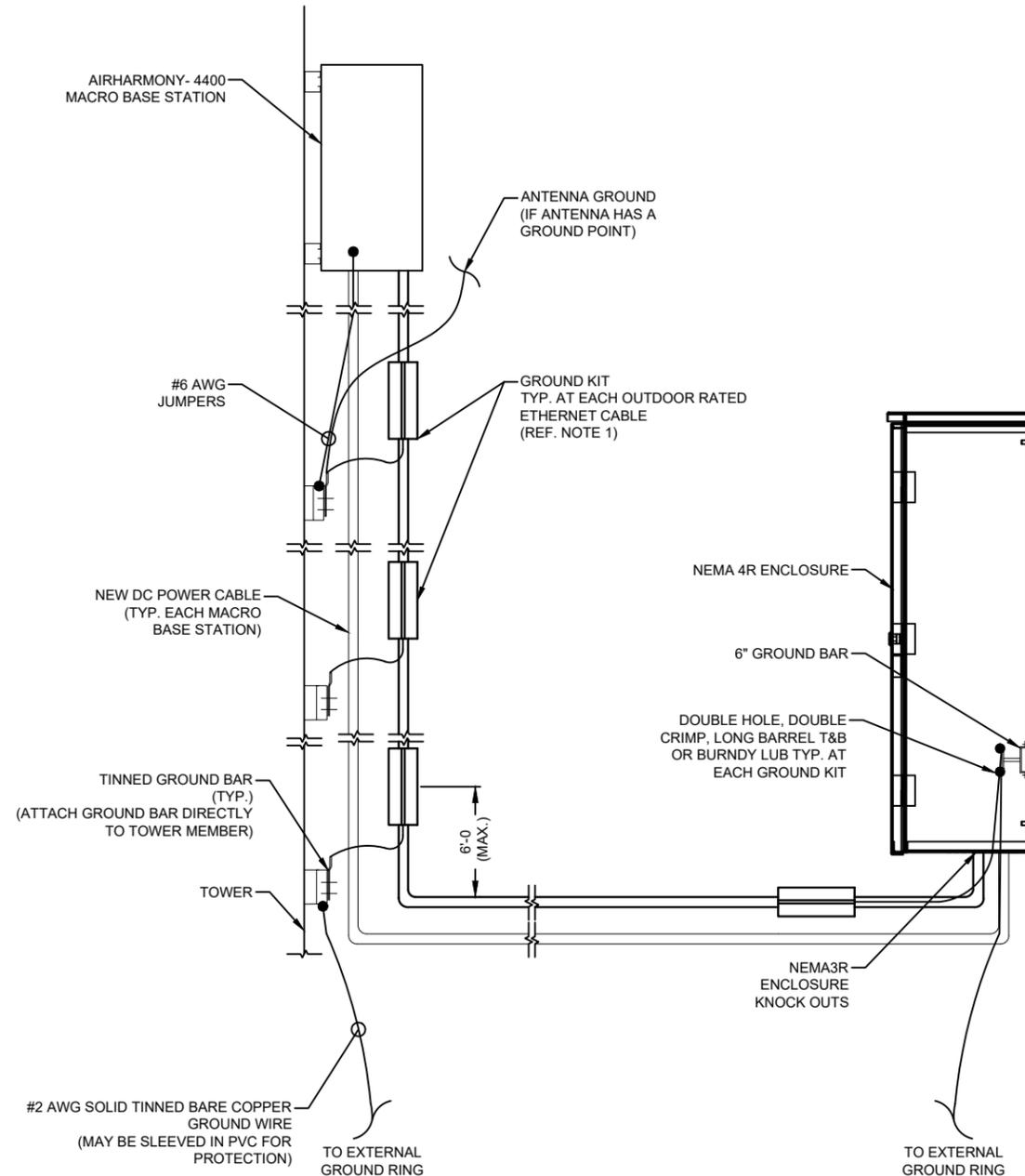
1. LFN CONDUIT SHALL BE PROPERLY CAPPED AND SEALED AT ENDS.
2. GRIND GALVANIZATION OR OTHER SURFACE FINISH FROM TOWER BASE PLATE PRIOR TO INSTALLING GROUND LEADS TO TOWER.
3. APPLY ANTIOXIDANT COATING TO ALL BARE METAL AFTER ATTACHING GROUND LEADS TO TOWER.
4. REPAIR EXISTING GRADE AS REQUIRED AFTER GROUNDING TOWER AND TOWER COMPONENTS.



**1** STEEL POLE GROUNDING DIAGRAM  
SCALE: N.T.S.

**NOTES:**

1. BUS BARS AND CABLE GROUNDING SHALL BE REQUIRED AT MINIMUM INTERVALS OF 75' AS WELL AS AT THE TOP AND BASE OF THE TOWER.
2. INSTALL SURGE ARRESTOR ONTO ETHERNET CABLE RUN. NEW SURGE PROTECTION DEVICES AND DC POWER SUPPLIES SHALL BE INSTALLED IN NEMA 4R ENCLOSURE. VERIFY SURGE ARRESTOR TYPE. (BY MSI)



**TOWER**

**EQUIPMENT**

**2** COAX GROUNDING DIAGRAM  
SCALE: N.T.S.

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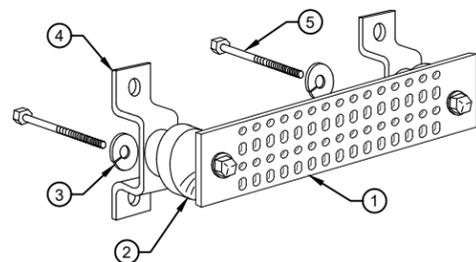
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**GROUNDING DETAILS**

**C8.0**

**NOTE:**

1. TOWER MOUNTED GROUND BARS ARE TO BE TIN-PLATED AND INSTALLED USING ANGLE ADAPTORS WITHOUT INSULATORS



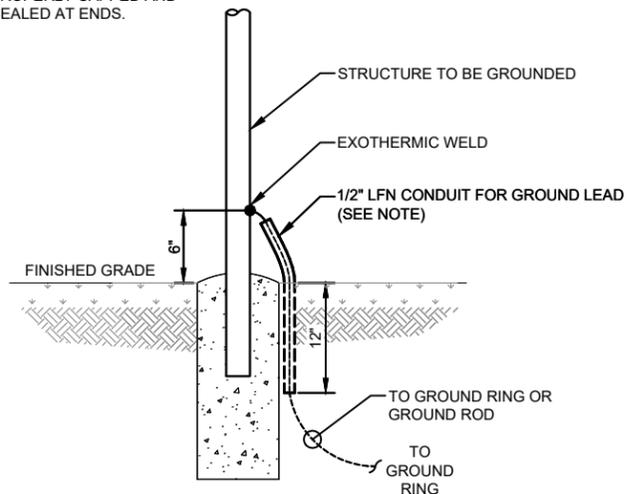
**KEYED NOTES LEGEND**

- 1 COPPER GROUND BAR, (HARGER TGB14424M OR EQUIVALENT) 1/4" x 4" x 24" WITH "M" HOLE PATTERN TO ACCOMMODATE NEMA DOUBLE LUG CONFIGURATIONS "B" AND "C"
- 2 INSULATORS
- 3 5/8" LOCK WASHERS
- 4 MOUNTING BRACKET
- 5 5/8-11 x 1" H.H.C.S. BOLTS

**1** GROUND BAR MOUNTING DETAIL  
SCALE: N.T.S.

**NOTE:**

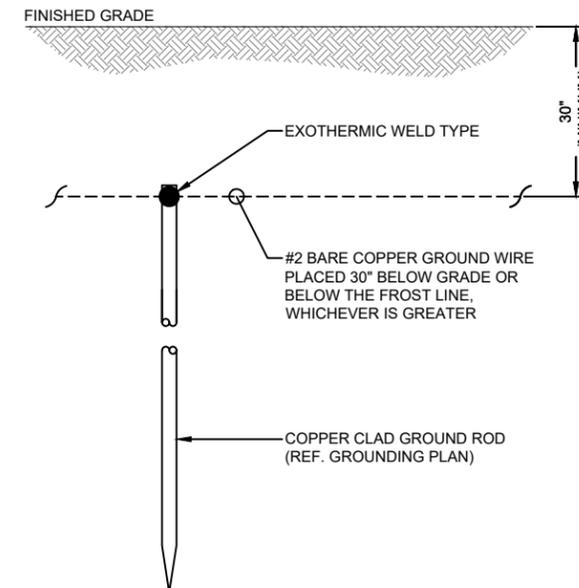
1. LFN CONDUIT SHALL BE PROPERLY CAPPED AND SEALED AT ENDS.



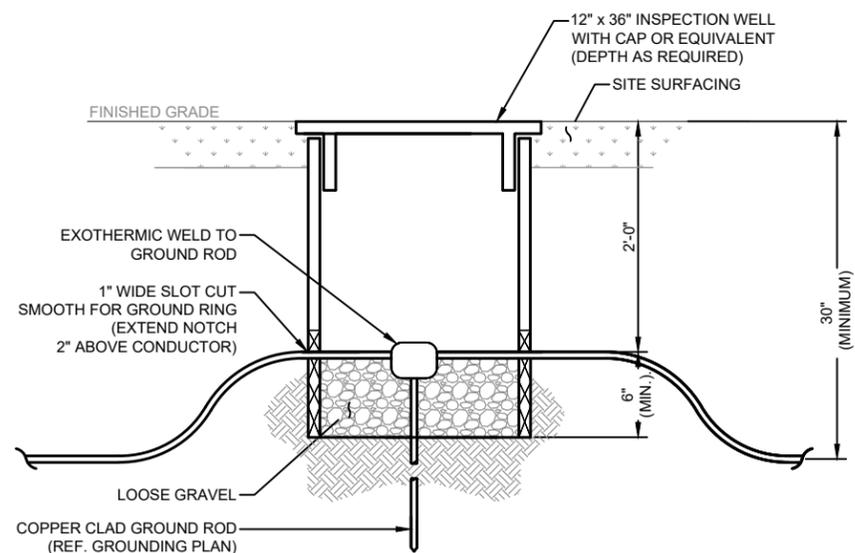
**2** GROUND WIRE PROTECTION DETAIL  
SCALE: N.T.S.

**NOTE:**

1. IF ROCK IS ENCOUNTERED & DEPTH CANNOT BE ACHIEVED, CONTRACTOR SHALL NOTIFY PROJECT CM.



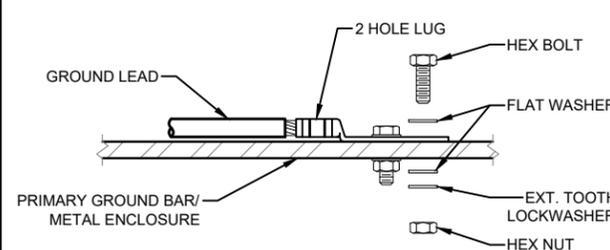
**3** GROUND ROD DETAIL  
SCALE: N.T.S.



**4** TEST WELL DETAIL  
SCALE: N.T.S.

**NOTES:**

1. SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS.
2. BURNISH MOUNTING SURFACE TO REMOVE POINT IN THE AREA OF LUG CONTACT.
3. COPPER ENHANCED ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN COPPER, BRASS, BRONZE AND TIN-PLATED BONDING SURFACES.
4. ZINC ENHANCED ANTI-OXIDANT COMPOUND SHALL BE USED BETWEEN TIN-PALED CONNECTION DEVICES AND STEEL, GALVANIZED STEEL, ZINC-CHROMATE STEEL, ALUMINUM AND TIN-PLATED COPPER BUS BAR BONDING SURFACES
5. ONLY ONE LUG PER SET OF BOLTS.



LUG CONFIGURATION CHART		
WIRE SIZE	LUG # (BURNDY OR EQUIVALENT)	BOLT DIA.
#6	YA6C2TC14E2	1/4"
#2 (STRANDED)	YA2CL-2TC14	1/4"
#2 (SOLID)	YA3C2TC38	3/8"
1/0	YA252LN	1/2"
2/0	YA262LN	1/2"
3/0	YA27L2TC38	3/8"
4/0	YA282LN	1/2"

**5** GROUND LUG CONNECTION DETAIL  
SCALE: N.T.S.

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**GROUNDING DETAILS**

**C8.1**

**Exhibit B**

**Subscriber License Costs**

	<b>Support Services (CBRS Backhaul)</b>	<b>Subscriber Licenses</b>	<b>Extended Warranty</b>	<b>Total Annual Costs</b>
<b>Year 0</b>	All construction/implementation/equipment expenses covered by COSA			
<b>Year 1</b>	\$103,950	\$0	\$0	<b>\$103,950</b>
<b>Year 2</b>	\$103,950	\$141,750	\$0	<b>\$245,700</b>
<b>Year 3</b>	\$103,950	\$141,750	\$0	<b>\$245,700</b>
<b>Year 4</b>	\$103,950	\$141,750	\$113,400	<b>\$359,100</b>

## SAISD BOARD AGENDA SUMMARY FORM

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**AGENDA TITLE:**     **Approval of Change Order Number One for Additional Professional Services to Architects for the 2020 Bond Program for Leadership in Energy and Environmental Design**

**PURPOSE:**               **PRESENTATION/DISCUSSION**  
                                **DISCUSSION/ACTION**

**REQUESTED BY:**     Willie T. Burroughs, Chief Operations Officer

**PRESENTER:**         Kedrick Wright, Deputy Chief Operations Officer

**MEETING DATE:**    April 18, 2022

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### **I.         DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve Change Order Number One for Additional Professional Services for 25 of the 36 2020 Bond Projects. This change order request involves additional design services needed to complete the Leadership in Energy and Environmental Design (LEED) process for the 2020 bond projects in accordance with the United States Green Building Council.

### **II.        RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

Resolved that the Board approve change order for Architects’ additional professional services for LEED design on the 2020 bond projects and authorize the Superintendent or designee to execute related contracts.

### **III.      BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

To be funded through bond funds.

### **IV.      2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
- SAISD will facilitate a successful Bond initiative and its implementation.
- SAISD will become a national model urban school district where every child graduates and is educated so that he or she is prepared to be a contributing member of the community.

Exhibit A  
Summary of LEED Additional Services

Campus	Architect	Original Contract	Additional Services	Revised Contract
Brackenridge High School	Stantec	\$1,619,390.18	\$135,500.00	\$1,754,890.18
Burbank High School	Garza Bomberger	\$889,339.12	\$89,200.00	\$978,539.12
Edison High School	PBK	\$1,434,290.65	\$131,038.72	\$1,565,329.37
Fox Tech Campus	Alta	\$3,493,895.75	\$116,000.00	\$3,609,895.75
Houston High School	KAI	\$1,693,514.59	\$140,100.00	\$1,833,614.59
Highlands High School	Perkins + Will	\$1,773,815.31	\$62,900.00	\$1,836,715.31
Young Women's Leadership Academy	Kirksey	\$2,323,800.25	\$102,000.00	\$2,425,800.25
Longfellow Middle School	LPA	\$1,925,733.95	\$128,000.00	\$2,053,733.95
Rhodes Middle School	DLR	\$2,093,152.92	\$127,050.00	\$2,220,202.92
Rogers Middle School	Pflugger	\$1,067,664.26	\$143,688.00	\$1,211,352.26
Tafolla Middle School	Garza Bomberger	\$799,110.60	\$89,200.00	\$888,310.60
ML King Academy	Moody Nolan	\$2,224,747.83	\$53,540.00	\$2,278,287.83
Steele Montessori	Stantec	\$1,026,357.41	\$135,500.00	\$1,161,857.41
Carvajal Elementary School	DLR	\$1,506,383.26	\$121,450.00	\$1,627,833.26
Collins Garden Elementary School	Kirksey	\$1,676,275.63	\$75,000.00	\$1,751,275.63
Gates Elementary School	HarrisonKornberg	\$1,587,407.49	\$145,399.00	\$1,732,806.49
Highland Hills Elementary School	Huckabee	\$1,630,246.82	\$122,914.00	\$1,753,160.82
Highland Park Elementary School	PBK	\$1,649,787.18	\$129,360.25	\$1,779,147.43
Huppertz Elementary School	Huckabee	\$1,335,841.57	\$109,516.00	\$1,445,357.57
Lamar Elementary School	Pflugger	\$1,130,343.97	\$140,900.00	\$1,271,243.97
Madison Elementary School	HarrisonKornberg	\$1,431,526.24	\$146,067.00	\$1,577,593.24
Neal Elementary School	Perkins + Will	\$1,359,394.80	\$82,900.00	\$1,442,294.80
Smith Elementary School	LPA	\$1,570,125.75	\$148,000.00	\$1,718,125.75
Storm Elementary School	O'Connell Robertson	\$1,485,768.32	\$88,450.00	\$1,574,218.32
Carroll Early Childhood Education Center	Pflugger	\$1,764,636.65	\$145,400.00	\$1,910,036.65

## SAISD BOARD AGENDA SUMMARY FORM

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**AGENDA TITLE:** Approval of Change Order Number Four for Additional Scope on the Brackenridge High School 2016 Bond Project

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Willie Burroughs, Chief Operations Officer

**PRESENTER:**        Kedrick Wright, Deputy Chief Operations Officer

**MEETING DATE:** April 18, 2022

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### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve the Change Order Number Four for additional scope on the Brackenridge High School 2016 bond project. This change is to accommodate new code requirements from the City of San Antonio as it pertains to Low-Impact Development (LID) and existing mechanical equipment repairs at the central plant in order to complete commissioning of the 2016 bond project.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

Resolved that the Board approve the change order to Joeris General Contractors for the 2016 bond project at Brackenridge High School and authorize the Superintendent or designee to execute related contracts.

### **III. BUDGET CODE NUMBER, DESCRIPTION AND MOUNT**

To be funded through bond funds.

### **IV. 2021-2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
- SAISD will facilitate a successful Bond initiative and its implementation.
- SAISD will become a national model urban school district where every child graduates and is educated so that he or she is prepared to be a contributing member of the community.

Exhibit A  
Summary of Contract Amount

Original Contract Sum	\$ 97,000.95
Change Order No. 1 – GMP #1	\$ 2,637,629.00
Change Order No. 2 – GMP #2	\$ 35,116,240.00
Change Order No. 3 – North Wall Re-design	\$800,000.00
Change Order No. 4 – City of San Antonio Code Revisions	\$515,000.00
<hr/>	
TOTAL	\$39,165,869.95

**SAISD BOARD AGENDA SUMMARY FORM**

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**AGENDA TITLE:** Report on the Annual SAISD School Board Member Training

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Christina Martinez, Board President

**PRESENTER:** Theresa Mendoza, Board Coordinator of Special Projects

**MEETING DATE:** April 18, 2022

---

**I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board will receive a report on the annual SAISD School Board Member Training for the period of May 2021 – April 2022. State law requires that the continuing education credits be reported at the last regular Board meeting prior to an Election of Trustees. The SAISD Board Member Training Report is presented each year during the last April Board meeting for transparency and accountability.

The SAISD Board Member Training Report will be provided during the meeting. In accordance with the Texas State Board of Education rule, completing the required continuing education is a basic obligation and expectation of any sitting board member. The Board President must announce the completion of required training credits of each sitting board member during the meeting. The Board meeting minutes will also reflect the announcement of the completed credits. This is a discussion-only item. No action is required.

**II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

N/A

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

**IV. 2021-2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
- SAISD will facilitate a successful Bond initiative and its implementation.
- SAISD will become a national model urban school district where every child graduates and is educated so that he or she is prepared to be a contributing member of the community.

## SAISD BOARD AGENDA SUMMARY FORM

---

**AGENDA TITLE:** Approval of Request for Waiver of Penalty and Interest

**PURPOSE:**         PRESENTATION/DISCUSSION  
 DISCUSSION/ACTION

**REQUESTED BY:** Larry A. Garza, Chief Financial Officer and Associate Superintendent,  
 Financial Services and Business Operations

**PRESENTER:**        Larry A. Garza

**MEETING DATE:** April 18, 2022

---

**I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve the waiver of penalty and interest for the real property accounts.

**II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

The San Antonio Independent School District received the attached letters from Albert Uresti, Tax Assessor Collector for Bexar County, recommending SAISD Board approval to waive penalty and interest for the real property Tax Accounts 00776-005-0081, Diane Wachs Trustee for Decedents Trust; 11870-002-0140, Laura Fernandez Representative for Hometek LLC; 01720-000-0230, Monica & Jose Antonio Alfaro II, and 03201-026-0220, San Antonio Properties LLC. Texas Property Tax Code-Section 33.011 provides for the governing body to waive penalty and interest due to “an act or omission by an employee of the tax office or the Appraisal District”. The Bexar County Tax Assessor Collector has confirmed that such an error did occur on these accounts.

	<b>00776-005-0081, Diane Wachs Trustee for Decedents Trust</b>	<b>11870-002-0140, Laura Fernandez Representative for Hometek LLC</b>	<b>01720-000-0230, Monica &amp; Jose Antonio Alfaro II</b>	<b>03201-026-0220, San Antonio Properties LLC</b>
Penalty	\$ 1,096.33	\$ 231.57	\$ 125.05	\$ 14.33
Interest	\$ 182.72	\$ 38.60	\$ 20.84	\$ 2.39
33.07 Penalty	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
<b>Total</b>	<b>\$ 1,279.05</b>	<b>\$ 270.17</b>	<b>\$ 145.89</b>	<b>\$ 16.72</b>

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

N/A

**IV. 2021 – 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
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**Albert Uresti, MPA, PCC**  
**Office of the Tax Assessor - Collector**

March 21, 2022

San Antonio ISD  
Larry A. Garza  
Assoc. Supt. For Financial Svcs. & Business  
514 W. Quincy St.  
San Antonio, Texas 78212

Re: Waiver of Penalty and Interest on Tax account: 00776-005-0081  
Year(s): 2021  
Owner(s): Diane Wachs Trustee for Decedents Trust  
Amount of Penalty Paid: \$1,096.33  
Amount of Interest Paid: \$182.72  
Amount of 33.07 Penalty Paid: \$0.00

Dear Mr. Garza

The above referenced property owner has requested for the waiver of penalty and interest under Section 33.011 of the Texas Property Tax Code.

The governing body of a taxing unit shall waive penalties and may provide for the waiver of interest if an act or omission of an act by an employee of the Bexar Appraisal District resulted in the taxpayer's failure to pay the tax before delinquency.

The attached letter confirms such an error did occur. The taxes have been paid and the request for waiver was made within 180 days of the delinquency date. This office recommends penalty and interest to be refunded unless we receive notice otherwise from the governing body.

Please notify our office within fifteen days of the receipt of this letter if the governing body of the San Antonio ISD agrees with this recommendation. If you have any questions or concerns, please call our office at (210) 335-6623.

Sincerely,

Albert Uresti, MPA, PCC  
Tax Assessor-Collector  
Bexar County

AU:CG/sg/tk  
Attachment: a/s

FORM: TASL7  
REV 04/13



**Albert Uresti, MPA, PCC**  
**Office of the Tax Assessor - Collector**

March 10, 2022

San Antonio ISD  
Sean Mullen  
Director, Cash & Treasury Management  
514 W Quincy St.  
San Antonio, TX 78212

Re: Waiver of Penalty and Interest on Tax account: 11870-002-0140  
Year(s): 2021  
Owner(s): Laura Fernandez representative for Hometek LLC  
Amount of Penalty Paid: \$231.57  
Amount of Interest Paid: \$38.60  
Amount of 33.07 Penalty Paid: \$0.00

Dear M. Mullen:

The above referenced property owner has requested for the waiver of penalty and interest under Section 33.011 of the Texas Property Tax Code.

The governing body of a taxing unit shall waive penalties and may provide for the waiver of interest if an act or omission of an act by an employee of the Bexar Appraisal District resulted in the taxpayer's failure to pay the tax before delinquency.

The attached letter confirms such an error did occur. The taxes have been paid and the request for waiver was made within 180 days of the delinquency date. This office recommends penalty and interest to be refunded unless we receive notice otherwise from the governing body.

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Sincerely,

Albert Uresti, MPA, PCC  
Tax Assessor-Collector  
Bexar County

AU:CG/srk  
Attachment: a/s

FORM: TASL7  
REV 04/13



**Albert Uresti, MPA, PCC**  
**Office of the Tax Assessor - Collector**

March 8, 2022

San Antonio ISD  
Larry Garza  
Chief Financial Officer  
514 W. Quincy St.  
San Antonio, Texas 78212

Re: Waiver of Penalty and Interest on Tax account: 01720-000-0230  
Year(s): 2021  
Owner(s): Moncia and Jose Antonio Alfaro II  
Amount of Penalty Paid: \$125.05  
Amount of Interest Paid: \$20.84  
Amount of 33.07 Penalty Paid: \$0.00

Dear Mr. Garza

The above referenced property owner has requested for the waiver of penalty and interest under Section 33.011 of the Texas Property Tax Code.

The governing body of a taxing unit shall waive penalties and may provide for the waiver of interest if an act or omission of an act by an employee of the Bexar Appraisal District resulted in the taxpayer's failure to pay the tax before delinquency.

The attached letter confirms such an error did occur. The taxes have been paid and the request for waiver was made within 180 days of the delinquency date. This office recommends penalty and interest to be refunded unless we receive notice otherwise from the governing body.

Please notify our office within fifteen days of the receipt of this letter if the governing body of the San Antonio ISD agrees with this recommendation. If you have any questions or concerns, please call our office at (210) 335-6623.

Sincerely,

Albert Uresti, MPA, PCC  
Tax Assessor-Collector  
Bexar County

CG AU:CG/srk  
Attachment: a/s

FORM: TASL7  
REV 04/13



**Albert Uresti, MPA, PCC**  
**Office of the Tax Assessor - Collector**

March 10, 2022

San Antonio ISD  
Larry A. Garza  
Assoc. Supt. For Financial Svcs. & Business  
141 Lavaca St.  
San Antonio, Texas 78210

Re: Waiver of Penalty and Interest on Tax account: 03201-026-0220  
Year(s): 2021  
Owner(s): San Antonio Properties LLC  
Amount of Penalty Paid: \$14.33  
Amount of Interest Paid: \$2.39  
Amount of 33.07 Penalty Paid: \$0.00

Dear Mr. Garza

The above referenced property owner has requested for the waiver of penalty and interest under Section 33.011 of the Texas Property Tax Code.

The governing body of a taxing unit shall waive penalties and may provide for the waiver of interest if an act or omission of an act by an employee of the Bexar Appraisal District resulted in the taxpayer's failure to pay the tax before delinquency.

The attached letter confirms such an error did occur. The taxes have been paid and the request for waiver was made within 180 days of the delinquency date. This office recommends penalty and interest to be refunded unless we receive notice otherwise from the governing body.

Please notify our office within fifteen days of the receipt of this letter if the governing body of the San Antonio ISD agrees with this recommendation. If you have any questions or concerns, please call our office at (210) 335-6623.

Sincerely,

Albert Uresti, MPA, PCC  
Tax Assessor-Collector  
Bexar County

AU:CG/srk  
Attachment: a/s

FORM: TASL7  
REV 04/13

## SAISD BOARD AGENDA SUMMARY FORM

---

**AGENDA TITLE:** Approval of General Contractor for Minor Classroom Renovations at Young Women’s Leadership Academy (YWLA) Primary at Page

**PURPOSE:**         PRESENTATION/DISCUSSION  
                          DISCUSSION/ACTION

**REQUESTED BY:** Willie Burroughs, Chief Operations Officer

**PRESENTER:**        Kedrick Wright, Deputy Chief Operations Officer

**MEETING DATE:** April 18, 2022

---

### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve staff’s recommendation to award 2022 minor classroom renovations at Young Womens Leadership Academy (YWLA) Primary at Page to Waterman Construction, LLC.

SAISD Board Policy CV (LOCAL) delegates to the Superintendent or designee the authority to determine the appropriate project delivery and contract award method for construction that provides the best value to the District. Request for competitive quotes through participating Cooperative Agreements was the procurement method for this project. SAISD received two responses from qualified firms.

Waterman Construction, LLC has provided the lowest qualified quote within available budget and is a member of Interlocal Purchasing System (Buyboard) Contract #660-21.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

Resolved that the Board approve the recommended proposal for 2022 minor classroom renovations at Young Womens Leadership Academy (YWLA) Primary at Page to Waterman Construction, LLC and authorize the Superintendent to execute related contracts.

### **III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

To be funded through bond funds.

<b>Waterman Construction, LLC</b>	
Base Bid	\$ 176,641.30
Owner’s Contingency	\$ 10,000.00
Total Award	\$ 186,641.30

**IV. 2021-2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership, or public service activities.
- SAISD will engage families and the community to be active partners in the education of our children.
- SAISD will recognize the outstanding achievements of our students, staff, and community members.
- SAISD will have strong District-wide leadership and will recruit and retain quality staff.
- SAISD will ensure fiscal health.
- SAISD will facilitate a successful Bond initiative and its implementation.
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## SAISD BOARD AGENDA SUMMARY FORM

---

**AGENDA TITLE:** Approval of General Contractor for District-Wide Security Camera Replacements

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Willie Burroughs, Chief Operations Officer

**PRESENTER:** Kedrick Wright, Deputy Chief Operations Officer

**MEETING DATE:** April 18, 2022

---

### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve the General Contractor proposal amount to facilitate the installation of security camera replacements at 26 campuses. These three groups were previously Board approved on February 22, 2022 and awarded to South Texas Security Systems. Due to South Texas Security Systems pricing discrepancies and unable to reach an agreement, their award was cancelled.

SAISD Board Policy CV (LOCAL) delegates to the Superintendent or designee the authority to determine the appropriate project delivery and contract award method for construction that provides the best value to the District. Request for Proposal (RFP) #21-060(RC) is the procurement method for this project. Best value recommendations are based on staff evaluations.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

Be it resolved that the Board approve the re-award Group B, D, and E to the next lowest vendor, Howard Technology Solutions.

Proposals at the following campuses:

Group “B”: Crockett, De Zavala, Douglass, Fenwick, Forbes, Foster, Franklin, Harris, and Hawthorne.

Group “D”: Margil, Maverick, Miller, Mission, Ogden, Pershing, Poe, Riverside Park, and Rodriguez.

Group “E”: W. Rogers, Travis, Twain, Whittier, Wilson, Woodlawn, Woodlawn Hills, and YMLA.

### **III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

To be funded through Bond 2020: 661-81-6629-00-ORG-99-SEC

<b>RFP No.</b>	<b>Project Grouping Name</b>	<b>Recommended General Contractor</b>	<b>Final Award</b>
21-060(RC)	Group “B”	Howard Technology Solutions	\$ 647,030.00
21-060(RC)	Group “D”	Howard Technology Solutions	\$ 623,980.00
21-060(RC)	Group “E”	Howard Technology Solutions	\$ 597,819.00
<b>Total</b>			<b>\$1,868,829.00</b>

**IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership, or public service activities.
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## SAISD BOARD AGENDA SUMMARY FORM

---

**AGENDA TITLE:** Approval of Construction Manager at Risk for Major Renovations and Upgrades under the 2020 Bond Program

**PURPOSE:**             PRESENTATION/DISCUSSION  
                               DISCUSSION/ACTION

**REQUESTED BY:** Willie Burroughs, Chief Operations Officer

**PRESENTER:**         Kedrick Wright, Deputy Chief Operations Officer

**MEETING DATE:** April 18, 2022

---

### **I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**

The Board is requested to approve the recommendation to award CMAR #21-061(RC) Package F (Graebner ES, Schenck ES and Sam Houston HS) to Gilbane Building Company. The Board approved the award of the following CMAR Packages on February 22, 2022: Package A (Brackenridge HS, Steele Montessori, Lanier HS, Longfellow MS, Burbank HS, Tafolla MS and ML King Academy) to Joeris General Contractors, Ltd., Package B (Edison HS, Highland Park ES, Fox Tech Campus, Advanced Learning Academy-Euclid, Storm ES and Irving DLA) to Bartlett Cocke General Contractors, LLC., Package C (Gates ES, Madison ES, Highland Hills ES, Huppertz ES, Highlands HS and Neal ES) to Satterfield & Pontikes Construction, Inc., Package D (Jefferson HS, Young Women’s Leadership Academy, Collins Garden ES, Smith ES and Lamar ES) to Rogers O’Brien Construction, Package E (Rhodes MS, Carvajal ES, Rogers MS and Carroll ECEC) to Flintco, LLC., and Package F (Graebner ES, Schenck ES and Sam Houston HS) to Skanska USA Building Inc.

Five of the six CMAR contracts have been executed. Negotiations with Skanska USA for Package F have been terminated.

32 of the 36 2020 bond projects have Board approved Schematic Designs and will soon be completing the design development phase. SAISD Board Policy CV (Local) delegates to the Superintendent or designee the authority to determine the appropriate project delivery/contract award method for construction that provides the best value to the District. Construction Manager-at-Risk is the procurement method for these projects. SAISD Construction Services has developed a plan to complete the Major Renovations and Additions for these schools using this procurement method.

### **II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

Be it resolved that the Board approve the attached recommendations of construction manager at risk for the specified 2020 bond projects and authorize the Superintendent or designee to negotiate and execute contracts with these firms at a fair and reasonable fee.

- Graebner ES, Schenck ES and Sam Houston HS’ Major Renovations and Upgrades in Package F as listed below to Gilbane Building Company.

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**

To be funded through bond 2020 funds.

Gilbane Building Company – Graebner ES, Schenck ES and Sam Houston HS	Package F
Preconstruction Costs	\$60,000
Construction Costs	\$82,049,042

Program Start Date: February 22, 2022

End Date: August 1, 2025

Total Construction Cost Not to Exceed \$82,049,042

**IV. 2021-2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

- SAISD students will demonstrate respectful behavior and perform at or above grade level. All secondary students will be encouraged to participate in extracurricular, leadership or public service activities.
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**SAISD BOARD AGENDA SUMMARY FORM**

---

**AGENDA TITLE:** Approval of Procurement Services' Recommendations for Bids, Proposals, and Awards

**PURPOSE:**             PRESENTATION/DISCUSSION  
                              DISCUSSION/ACTION

**REQUESTED BY:** Willie Burroughs, Chief Operations & Building Security Officer

**PRESENTER:** Willie Burroughs

**MEETING DATE:** April 18, 2022

---

**I. DESCRIPTION OF ITEM FOR DISCUSSION AND/OR APPROVAL**  
Procurement Services' Recommendations to Board of Trustees for April 18, 2022.

**II. RECOMMENDATION AND/OR ALTERNATIVES CONSIDERED**

1. The Board is requested to approve the purchase of a Library, Textbook and Asset Inventory Management System to manage asset collections, tracks inventory item checkouts and physical locations. This purchase will be utilized by campuses District-wide to locate resources, provide loaner information and facilitate transfers across the district. Resolved that the Board approve the contract and, further, that the Board authorize the Superintendent or his designee to exercise any renewals or extensions of the contract term pursuant to the contract's provisions.
- Recommended by: Technology & Instructional Materials Allotment Department
  - Submitted by: Dr. Carol Bielke
  - Selection Method: Request for Proposal – RFP #22-002(VC)
  - Contract Term: Period covering July 1, 2022 through June 30, 2025 with the option to renew for two (2) additional one (1) year periods
  - Funding Source: TIMA – 410-11-6321-65-999-0-00

**VENDOR**  
Insignia

**AWARD AMOUNT**  
\$389,000 (approximately)  
For 5 years

**III. BUDGET CODE NUMBER, DESCRIPTION AND AMOUNT**  
N/A

**IV. 2021 - 2022 DISTRICT GOAL/PRIORITIES (CHECK ALL THAT APPLY)**

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### PROCUREMENT SERVICES CONSENT AGENDA FORM

1. Description of goods, services and/or contract recommended for purchase: A Library, Textbook, and Asset Management system to manage asset collections, track of inventory, item checkouts and physical locations.

2. How will goods and/or services be used? (List Campus/Grades impacted): The Inventory Management system will be utilized by campuses and district level to locate resources, provide loaner information, and facilitate transfers across the district. Assets inventoried will include textbooks, library books, technology devices, and musical instruments.

3. Submitted by: Dr. Carol Bielke TIMA 03/22/2022  
Printed Name Department Date

4. Recommended Vendor(s): Company Name: Insignia  
Address: 201 2544 Ellwood Dr. SW  
City/State/Zip: Edmonton, AB T6X 0A9M Canada  
Phone No: 86-428-3997 Ext 241  
Point of Contact: Paige Stewart  
E-mail Address: Paige@insigniasoftware.com  
*(Use a separate sheet to identify multiple vendors)*

5. Selection Method Used: (check one)  
 Competitive Purchase (RFP, RFQ, IFB), Contract # RFP #22-002(VC)  
 Purchasing Coop (i.e. ESC 20, DIR, BuyBoard), Coop Name / Contract #: \_\_\_\_\_  
 Interlocal (i.e. NISD, Judson ISD, NEISD), Contract #: \_\_\_\_\_  
 Professional Services  
 Sole Source Contract Expiration Date: 06/30/2025  
 Other

6. Purchase valid from: 07/01/2022 through: 06/30/2025

7. For Competitive Purchases Only: Renewals: Yes  No   
No. of Renewals: 2

8. Type of Request: (check one)  
 One-Time Purchase  
 Purchase throughout the school year or on an "as needed" basis  
 Expenditure

9. Total Cost for Goods and/or Services to be Purchased: \$ 389,000 for 5 yrs.  
*Approximately*

10. Funding Source(s) – check all that apply: Federal  State  Local  Bond

Provide Budget Codes & Descriptions: \_\_\_\_\_  
410-11-6321-65-999-0-00 (TIMA) Total Cost of Contract - 5 years - \$389,000  
Year 1 - \$115,000; Year 2 - \$67,000; Year 3 - \$67,000;  
Year 4 - \$70,000; Year 5 - \$70,000

11. Provide a copy of General Ledger Inquiry showing corresponding balances.



12. Additional Impact:

A. Other Estimated Financial Impact (other costs that will be needed as a result of this purchase):

1) C & I (Goods, Materials, Services)	\$ 0
2) Facilities (Additional Space, Infrastructure, Utilities)	\$ 0
3) Transportation (Additional Routes)	\$ 0
4) HR (Additional Staff)	\$ 0
5) Technology (Cabling/Equipment, etc.)	\$ 0
6) Vehicle Insurance ( <i>Director, Employee Benefits signs below</i> )	\$ 0

<u>Dr. Carol Bielke</u>	Dr. Carol Bielke	3/25/2022
Requestor Signature	Type Name	Date
<u>Becky Landa</u>	Becky Landa	3/25/2022
Sr. Executive Director/Executive Director Signature	Type Name	Date
_____ Associate Superintendent/Assistant Superintendent Signature	Type Name	Date
<u>Patti Salzman</u>	Patti Salzman	3/25/2022
Deputy Superintendent Signature	Type Name	Date
<u>Edward Romero</u>	Edward M. Romero	3/28/2022
Executive Director of Operations, Business Services Signature	Type Name	Date

**COORDINATION CONDUCTED WITH (if required):**

<u>Willie J. Burroughs</u>	Willie Burroughs	3/28/2022
Chief Operations & Building Security Officer, Operations Services Division Signature	Type Name	Date
<u>Larry Garza</u>	Larry Garza	3/30/2022
Chief Financial Officer, Financial Services Signature	Type Name	Date
<u>Dr. Kenneth Thompson</u>	Dr. Kenneth Thompson	3/25/2022
Chief Information Technology & Accountability Officer, Information Technology & MIS Signature	Type Name	Date
_____ Associate Superintendent, Human Capital Management Signature	Toni Thompson Type Name	Date
_____ Deputy Chief Operations Officer, Construction Services Signature	Kedrick Wright Type Name	Date
_____ Director, Employee Benefits, Risk Management & Safety Signature	Lorena Rios Type Name	Date

Revised: January 19, 2022

Reviewed By: RC

**Minutes of Internal Audit Subcommittee Meeting  
San Antonio Independent School District Board of Trustees  
Wednesday, March 16, 2022**

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Internal Audit Subcommittee Meeting of the Board of Trustees of the San Antonio ISD was held on Wednesday, March 16, 2022, beginning at 12:05 p.m., Room 3501, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- a. Mr. Ed Garza, Board Member and Subcommittee Chair
- b. Ms. Alicia Sebastian, Board Vice President - left at 1:03 p.m.
- c. Ms. Leticia Ozuna, Board Member
- d. Dr. Robert Jaklich, Interim Superintendent - absent
- e. Mr. Pablo Escamilla, Legal Counsel, Escamilla & Poneck
- f. Mrs. Nicole Franco, Chief of Staff - absent
- g. Mrs. Lourdes Martinez, Chief Internal Auditor
- h. Ms. Rosalia Vielma, Manager, Internal Audit
- i. Mrs. Theresa Mendoza, Board Coordinator
- j. Ms. Olivia Jimenez, Board Services Manager

**2. Internal Audit Update**

Staff provided an Internal Audit update during the subcommittee meeting. This was a discussion-only item. No action was required.

**3. Adjournment**

Mr. Garza adjourned the meeting at 1:15 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Internal Audit Subcommittee Meeting of the Board of Education of the San Antonio Independent School District held on Wednesday, March 16, 2022 were duly approved at a meeting held on April 18, 2022.

**ATTEST:**

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**Christina Martinez**  
President, Board of Education  
San Antonio Independent School District

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**Arthur Valdez**  
Secretary, Board of Education  
San Antonio Independent School District

**Minutes of Special Board Meeting  
San Antonio Independent School District Board of Trustees  
Saturday, March 19, 2022**

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NOTE: These minutes reflect all agenda items in the order as originally posted and do not necessarily reflect the order in which the items were discussed and/or voted on.

Special Board Meeting of the Board of Trustees of the San Antonio ISD was held on Saturday, March 19, 2022, beginning at 8:44 a.m., Board Room, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- A. Roll Call of Board Members Present and Declaration of Quorum Present 7 Absent 0
1. Mrs. Christina Martinez
  2. Ms. Alicia Sebastian – arrived at 10:22 a.m.
  3. Mr. Arthur Valdez – arrived at 9:57 a.m.
  4. Mr. Ed Garza – arrived 9:07 a.m.
  5. Ms. Leticia Ozuna
  6. Mrs. Patti Radle – left at 1:55 p.m.
  7. Mrs. Sarah Sorensen
- B. Pledge of Allegiance to the U. S. Flag
- C. Salute to the Texas Flag - "Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible."

**2. Closed Session**

- A. Mrs. Martinez convened the Board in Closed Session at 8:45 a.m. as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071 and TGC 551.074) to discuss and/or receive information about the item under this section listed as 2B1.
- B. Mrs. Martinez reconvened the Board in Open Session at 1:56 p.m. and took appropriate action on the item discussed in Closed Session.
1. Consultation with legal counsel regarding legal issues related to Superintendent Search and related matters. (TGC 551.071 and TGC 551.074)  
No action taken.

**3. Adjournment**

- A. Mrs. Martinez adjourned the meeting at 1:56 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Special Board Meeting of the Board of Education of the San Antonio Independent School District held on Saturday, March 19, 2022 were duly approved at a meeting held on April 18, 2022 .

**ATTEST:**

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**Christina Martinez**  
President, Board of Education  
San Antonio Independent School District

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**Arthur Valdez**  
Secretary, Board of Education  
San Antonio Independent School District

**Minutes of Board Business Meeting  
San Antonio Independent School District Board of Trustees  
Monday, March 21, 2022**

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NOTE: These minutes reflect all agenda items in the order as originally posted and do not necessarily reflect the order in which the items were discussed and/or voted on.

Board Business Meeting of the Board of Trustees of the San Antonio ISD was held on Monday, March 21, 2022, beginning at 5:32 p.m., Board Room, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- A. Roll Call of Board Members Present and Declaration of Quorum Present 7 Absent 0
  - 1. Mrs. Christina Martinez
  - 2. Ms. Alicia Sebastian – arrived at 6:00 p.m.
  - 3. Mr. Arthur Valdez
  - 4. Mr. Ed Garza
  - 5. Ms. Leticia Ozuna
  - 6. Mrs. Patti Radle
  - 7. Mrs. Sarah Sorensen
- B. Recording of Interim Superintendent Present
  - 1. Dr. Robert Jaklich
- C. Pledge of Allegiance to the U. S. Flag
- D. Salute to the Texas Flag - "Honor the Texas Flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible."
- E. Citizens' Presentations - 60-minute total time limit for this item
  - For details regarding their comments, please refer to the video recording for this meeting located at [www.saisd.net](http://www.saisd.net) on the SAISD Board Page.**
  - 1. Alejandra Lopez, SA Alliance

**2. Recognitions**

- A. Recognition of Judy Geelhoed as an SAISD friend of Education  
This was a discussion-only item. No action was required.
- B. Approval of the Resolution in Recognition of the 26th Annual Cesar E. Chavez March for Justice on March 26, 2022  
Motion by Mrs. Radle; second by Mr. Valdez; approved by a vote of 6-0 with Ms. Sebastian not present at this time.

**3. Governance**

- A. Update on SAISD's Response to the Ongoing COVID-19 Crisis and Associated Expenditures This was a discussion-only item. No action was required.
- B. Approval of the Agreement Between SAISD and the International Alliance Group, LLC (IAG) Motion by Mrs. Radle; second by Ms. Sebastian; approved by a vote of 7-0 with all Board members present.
- C. SAISD's Annual Call for Quality Schools  
This was a discussion-only item. No action was required.

- D. Approval of the Amendment to the Partnership Agreement with University of Texas at San Antonio (UTSA) and Charter Application and Performance Contract for Graebner Elementary School Motion by Mrs. Radle; second by Ms. Sebastian; approved by a vote of 7-0 with all Board members present.
- E. Approval of the Revised 2021-2022 Audit Plan  
Motion by Ms. Sebastian; second by Mrs. Sorensen; approved by a vote of 7-0 with all Board members present.
- F. Approval of Exchange of an Approximate 2.290 acres of Lot 38, N.C.B. 132, San Antonio, Bexar County, Texas (Fox Tech Baseball Field) for an approximate 2.235 acres to serve the interest of the District  
Motion by Mrs. Radle; second by Ms. Sebastian; approved by a vote of 7-0 with all Board members present.

**4. Consent Agenda**

Motion by Ms. Sebastian; second by Mr. Valdez; approved by a vote of 7-0 with all Board members present. Consent items included 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J and 4K.

- A. Approval of the Agreement Between SAISD and Texas A&M University (TAMU) Department of Educational Psychology
- B. Approval of Contract for Annual Audit Services for Fiscal Year Ending June 30, 2022
- C. Approval of Monthly Budget Reports and Amendments for March 2022
- D. Approval of the Review of Investment Policy and Strategies CDA (LOCAL) and CDA(LEGAL)
- E. Approval of the Quarterly Investment Report from July 2021 to September 2021
- F. Approval of the Quarterly Investment Report from October 2021 to December 2021
- G. Approval of the Purchase of Intrado e911 Emergency Routing Service
- H. Approval for the Surplus of Curotto Can Equipment Valued at Approximately \$10,000
- I. Approval of General Contractors for Mechanical Upgrades at Four Campuses
- J. Approval of Procurement Services' Recommendations for Bids, Proposals, and Awards
- K. Approval of Minutes for the following meetings:
  - 1. February 10, 2022 Special Board Meeting
  - 2. February 15, 2022 Board Business Meeting A
  - 3. February 22, 2022 Board Business Meeting B
  - 4. February 26, 2022 Special Board Meeting

**5. Closed Session**

- A. Mrs. Martinez convened the Board in Closed Session at 8:00 p.m. as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071, TGC 551.072 and TGC 551.074) to discuss and/or receive information about the items under this section listed as 5A1, 5A2, 5A3, 5A4, and 5A5.
- B. Mrs. Martinez reconvened the Board in Open Session at 11:27 p.m. and took appropriate action on items discussed in Closed Session. Items 5A1 through 5A5 are listed as follows:
  - 1. Deliberation regarding the purchase, exchange, lease or value of real estate, including legal issues on the acquisition process. (TGC 551.071 and TGC551.072)  
No action taken.
  - 2. Deliberation regarding personnel matters, including but not limited to employment, duties, discipline, reassignment, resignation, retirement, reclassification, and dismissal of an employee. (TGC 551.071 and TGC 551.074)  
No action taken.
  - 3. Consultation with legal counsel regarding pending litigation related to face covering and vaccination requirements. (TGC 551.071)  
No action taken.
  - 4. Consultation with legal counsel regarding legal issues related to the COVID 19 and to receive recommendations related to the issues presented. (TGC 551.071)  
Motion by Mr. Valdez; second by Ms. Sebastian; approved by a vote of 5-1 with Mrs. Sorensen voting no and Mrs. Radle not present.

5. Deliberation regarding the appointment and employment of the next superintendent of schools and consultation with legal counsel regarding legal issues related to the superintendent search, if necessary. (TGC 551.074 and TGC 551.071)  
No action taken.

**6. Adjournment**

- A. Mrs. Martinez adjourned the meeting at 11:30 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Board Business Meeting of the Board of Education of the San Antonio Independent School District held on Monday, March 21, 2022 were duly approved at a meeting held on April 18, 2022 .

**ATTEST:**

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**Christina Martinez**  
**President, Board of Education**  
**Independent School District**

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**Arthur Valdez**  
**Secretary, Board of Education San Antonio**  
**San Antonio Independent School District**

**Minutes of Special Board Meeting  
San Antonio Independent School District Board of Trustees  
Monday, March 28, 2022**

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NOTE: These minutes reflect all agenda items in the order as originally posted and do not necessarily reflect the order in which the items were discussed and/or voted on.

Special Board Meeting of the Board of Trustees of the San Antonio ISD was held on Monday, March 28, 2022, beginning at 5:30 p.m., Board Room, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- A. Roll Call of Board Members Present and Declaration of Quorum Present 7 Absent 0
1. Mrs. Christina Martinez
  2. Ms. Alicia Sebastian - arrived at 5:32 p.m.
  3. Mr. Arthur Valdez
  4. Mr. Ed Garza - arrived at 5:35 p.m.
  5. Ms. Leticia Ozuna - arrived at 5:31 p.m.
  6. Mrs. Patti Radle
  7. Mrs. Sarah Sorensen

**2. Closed Session**

- A. Mrs. Martinez convened the Board in Closed Session at 5:31 p.m. as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071 and TGC 551.074) to discuss and/or receive information about the item under this section listed as 2B1.
- B. Mrs. Martinez reconvened the Board in Open Session at 10:19 p.m. and took appropriate action on the item discussed in Closed Session.
1. Deliberation regarding the appointment and employment of the next superintendent of schools and consultation with legal counsel regarding legal issues related to the superintendent search, if necessary. (TGC 551.071 and TGC 551.074)  
No action taken.

**3. Adjournment**

- A. Mrs. Martinez adjourned the meeting at 10:19 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Special Board Meeting of the Board of Education of the San Antonio Independent School District held on Monday, March 28, 2022 were duly approved at a meeting held on April 18, 2022.

**ATTEST:**

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**Christina Martinez**  
President, Board of Education  
San Antonio Independent School District

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**Arthur Valdez**  
Secretary, Board of Education  
San Antonio Independent School District

**Minutes of Special Board Meeting  
San Antonio Independent School District Board of Trustees  
Tuesday, March 29, 2022**

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NOTE: These minutes reflect all agenda items in the order as originally posted and do not necessarily reflect the order in which the items were discussed and/or voted on.

Special Board Meeting of the Board of Trustees of the San Antonio ISD was held on Tuesday, March 29, 2022, beginning at 5:30 p.m., Board Room, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- A. Roll Call of Board Members Present and Declaration of Quorum Present 7 Absent 0
1. Mrs. Christina Martinez – arrived at 5:40 p.m.
  2. Ms. Alicia Sebastian
  3. Mr. Arthur Valdez
  4. Mr. Ed Garza
  5. Ms. Leticia Ozuna
  6. Mrs. Patti Radle
  7. Mrs. Sarah Sorensen

**2. Closed Session**

- A. Mrs. Sebastian convened the Board in Closed Session at 5:31 p.m. as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071 and TGC 551.074) to discuss and/or receive information about the item under this section listed as 2B1.
- B. Mrs. Martinez reconvened the Board in Open Session at 9:36 p.m. and took appropriate action on the item discussed in Closed Session.
1. Deliberation regarding the appointment and employment of the next superintendent of schools and consultation with legal counsel regarding legal issues related to the superintendent search, if necessary. (TGC 551.074 and TGC 551.071)  
No action taken.

**3. Adjournment**

- A. Mrs. Martinez adjourned the meeting at 9:36 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Special Board Meeting of the Board of Education of the San Antonio Independent School District held on Tuesday, March 29, 2022 were duly approved at a meeting held on April 18, 2022.

**ATTEST:**

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**Christina Martinez**  
President, Board of Education  
San Antonio Independent School District

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**Arthur Valdez**  
Secretary, Board of Education  
San Antonio Independent School District

**Minutes of Special Board Meeting  
San Antonio Independent School District Board of Trustees  
Wednesday, March 30, 2022**

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NOTE: These minutes reflect all agenda items in the order as originally posted and do not necessarily reflect the order in which the items were discussed and/or voted on.

Special Board Meeting of the Board of Trustees of the San Antonio ISD was held on Wednesday, March 30, 2022, beginning at 5:30 p.m., Board Room, 514 W. Quincy Street, San Antonio, TX 78212.

**1. Meeting Called to Order**

- A. Roll Call of Board Members Present and Declaration of Quorum Present 7 Absent 0
1. Mrs. Christina Martinez
  2. Ms. Alicia Sebastian - arrived at 6:38 p.m.
  3. Mr. Arthur Valdez
  4. Mr. Ed Garza
  5. Ms. Leticia Ozuna
  6. Mrs. Patti Radle
  7. Mrs. Sarah Sorensen

**2. Closed Session**

- A. Mrs. Martinez convened the Board in Closed Session at 5:31 p.m. as authorized by the Texas Government Code Chapter 551, et. Seq. (TGC 551.071 and TGC 551.074) to discuss and/or receive information about the item under this section listed as 2B1.
- B. Mrs. Martinez reconvened the Board in Open Session at 11:26 p.m. and took appropriate action on the item discussed in Closed Session.
1. Deliberation regarding the appointment and employment of the next superintendent of schools and consultation with legal counsel regarding legal issues related to the superintendent search, if necessary. (TGC 551.071 and TGC 551.074)  
No action taken.

**3. Adjournment**

- A. Mrs. Martinez adjourned the meeting at 11:26 p.m.

**MINUTES APPROVED**

The foregoing minutes of the Special Board Meeting of the Board of Education of the San Antonio Independent School District held on Wednesday, March 30, 2022 were duly approved at a meeting held on April 18, 2022.

**ATTEST:**

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**Christina Martinez**  
President, Board of Education  
San Antonio Independent School District

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**Arthur Valdez**  
Secretary, Board of Education  
San Antonio Independent School District