

SITE NUMBER: CCL02514

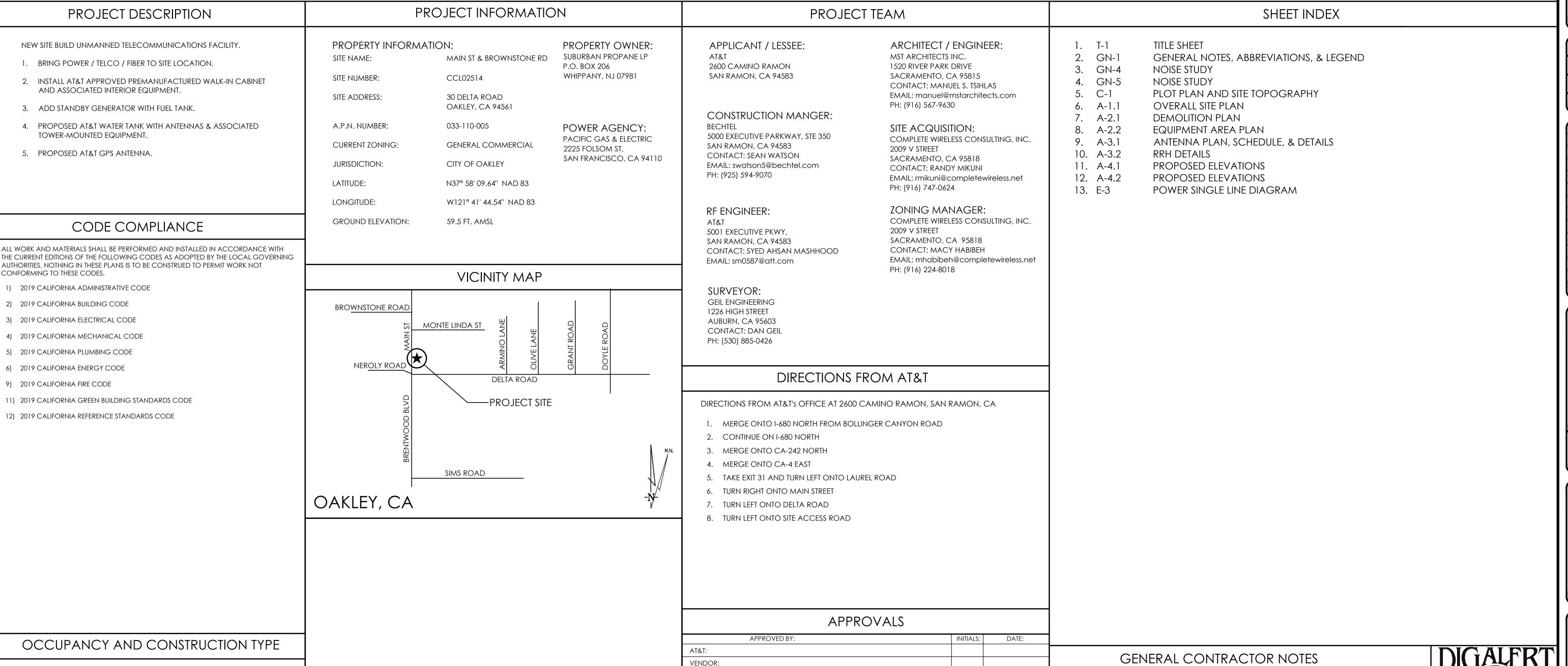
SITE NAME: MAIN ST & BROWNSTONE RD

**30 DELTA ROAD OAKLEY, CA 94561 JURISDICTION: CITY OF OAKLEY** APN: 033-110-005

# SITE TYPE: PREMANUFACTURED WALK-IN

### SHEET INDEX TITLE SHEET AT&T SITE NO: CCL02514 GENERAL NOTES, ABBREVIATIONS, & LEGEND PROJECT NO: 162.2788 **NOISE STUDY NOISE STUDY** DRAWN BY: TLS PLOT PLAN AND SITE TOPOGRAPHY CHECKED BY: SV OVERALL SITE PLAN DEMOLITION PLAN EQUIPMENT AREA PLAN ANTENNA PLAN, SCHEDULE, & DETAILS RRH DETAILS PROPOSED ELEVATIONS PROPOSED ELEVATIONS POWER SINGLE LINE DIAGRAM REV DATE Licensee:

## PACE#: MRSFR068030 CABINET / WATER TANK



LEASING / LANDLORD

CONSTRUCTION:

POWER / TELCO:

ZONING:

PG&E:

OCCUPANCY: U (UNOCCUPIED TELECOMMUNICATIONS FACILITY)

CONSTRUCTION TYPE: V-B

#### ACCESSIBILITY REQUIREMENTS

THIS IS AN UNOCCUPIED TELECOMMUNICATIONS FACILITY. ACCESSIBILITY FEATURES ARE NOT REQUIRED AS DESCRIBED BY 2019 CBC 11B-203.5, AND 11B-202.4 EXCEPTION 7.

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.



SHEET TITLE: TITLE SHEET

**MST** ARCHITECTS

Sacramento, California 95815

1520 River Park Drive

Issued For: CCL02514

MAIN ST &

BROWNSTONE

30 DELTA ROAD **OAKLEY, CA 94561** 

PREPARED FOR

San Ramon, California 94583

| 08/11/21| 100% ZD REV 2

07/13/21 100% ZD REV

| 04/20/21| 90% ZD REV 1

DESCRIPTION

05/20/21 100% ZD

04/05/21 90% ZD

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SHEET NUMBER:

#### **GENERAL CONSTRUCTION NOTES:**

- PLANS ARE INTENDED TO BE DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 227-2600, FOR UTILITY LOCATIONS, 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
- 4. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE, OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC / UBC'S REQUIREMENTS REGARDING EARTHQUAKE RESISTANCE, FOR, BUT NOT LIMITED TO, PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS, AND MECHANICAL EQUIPMENT. ALL WORK MUST COMPLY WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
- REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWINGS, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT / ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT / ENGINEER.
- 7. THE BUILDING DEPARTMENT ISSUING THE PERMITS SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK, OR AS OTHERWISE STIPULATED BY THE CODE ENFORCEMENT OFFICIAL HAVING JURISDICTION.
- DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.
- ALL EXISTING UTILITIES, FACILITIES, CONDITIONS, AND THEIR DIMENSIONS SHOWN ON THE PLAN HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ARCHITECT / ENGINEER AND THE OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR THE ACCURACY OF THE INFORMATION SHOWN ON THE PLANS, OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTORS SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION CONTRACTORS SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING EXISTING UTILITIES.
- 10. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, BOTH HORIZONTAL AND VERTICALLY, PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ARCHITECT / ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT / ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND **EXPENSE**
- 11. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK
- 12. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED / DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO IT'S ORIGINAL CONDITION PRIOR TO COMPLETION OF WORK. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON "AS-BUILT" DRAWINGS BY GENERAL CONTRACTOR, AND ISSUED TO THE ARCHITECT / ENGINEER AT COMPLETION OF PROJECT.
- 13. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS
- 14. INCLUDE MISC. ITEMS PER AT&T SPECIFICATIONS

#### **APPLICABLE CODES, REGULATIONS AND STANDARDS:**

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION.

THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARD FOR STRUCTURAL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRICAL EQUIPMENT.
- -IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")
- TIA 607 COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS TELCORDIA GR-63 NETWORK
- EQUIPMENT-BUILDING SYSTEM (NEBS): PHYSICAL PROTECTION TELCORDIA GR-347 CENTRAL OFFICE POWER WIRING
- TELCORDIA GR-1275 GENERAL INSTALLATION REQUIREMENTS
- TELCORDIA GR-1503 COAXIAL CABLE CONNECTIONS

ANY AND ALL OTHER LOCAL & STATE LAWS AND REGULATIONS

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT. THE SPECIFIC REQUIREMENT SHALL GOVERN

#### **ABBREVIATIONS** A.B. **ANCHOR BOLT** ABV. ANTENNA CABLE COVER ASSEMBLY ACCA ADD'L ADDITIONAL ABOVE FINISHED FLOOR **ABOVE FINISHED GRADE** ALUM. ALUMINUM ALTERNATE ANT. ANTENNA APPROXIMATE(LY) APPRX. ARCH. ARCHITECT(URAL) AMERICAN WIRE GAUGE AWG. BLDG. BUILDING BLOCK BLK. BLKG. BLOCKING B.N. **BOUNDARY NAILING** BTCW. BARE TINNED COPPER WIRE B.O.F. **BOTTOM OF FOOTING BACK-UP CABINET** B/U CAB. CANT. CANTILEVER(ED) C.I.P. **CAST IN PLACE** CLG. CEILING CLR. CLEAR COL. COLUMN CONC. CONCRETE CONN. CONNECTION(OR) CONST. CONSTRUCTION CONT. CONTINUOUS PENNY (NAILS) DOUBLE DBL. DEPT. DEPARTMENT DOUGLAS FIR DIA. DIAMETER DIAG. DIAGONAL DIM. **DIMENSION** DWG. DRAWING(S) DWL. DOWEL(S) **ELEVATION** ELEC. **ELECTRICAL ELEVATOR** ELECTRICAL METALLIC TUBING E.N. **EDGE NAIL** ENG. **ENGINEER** EQ. EQUAL **EXPANSION** EXST.(E) EXISTING **EXTERIOR** FAB. FABRICATION(OR) F.F. FINISH FLOOR F.G. FINISH GRADE FINISH(ED) FLR. FLOOR FDN. **FOUNDATION** F.O.C. FACE OF CONCRETE F.O.M. FACE OF MASONRY F.O.S. FACE OF STUD F.O.W. **FACE OF WALL** F.S. FINISH SURFACE FT.(') FOOT (FEET) FOOTING **GROWTH (CABINET** GAUGE GALVANIZE(D) GROUND FAULT CIRCUIT INTERRUPTER GLUE LAMINATED BEAM GLB. (GLU-LAM) GLOBAL POSITIONING SYSTEM GRND. **GROUND** HEADER HDR. HGR. **HANGER** ISOLATED COPPER GROUND BUS SYMBOLS LEGEND BLDG. SECTION **WALL SECTION ELEVATION** DOOR SYMBOL WINDOW SYMBOL TILT-UP PANEL MARK PROPERTY LINE ELEVATION DATUM GRID/COLUMN LINE

DIMENSION ITEM

WALL TYPE MARK

**ROOM NAME** 

**ROOM NUMBER** 

**CONSTRUCTION ITEM** 

KEYNOTE,

IN. (")

MAX.

M.B.

N.T.S.

O.C.

PCS

P.S.I.

PWR.

RAD.(R)

TEMP.

T.O.A.

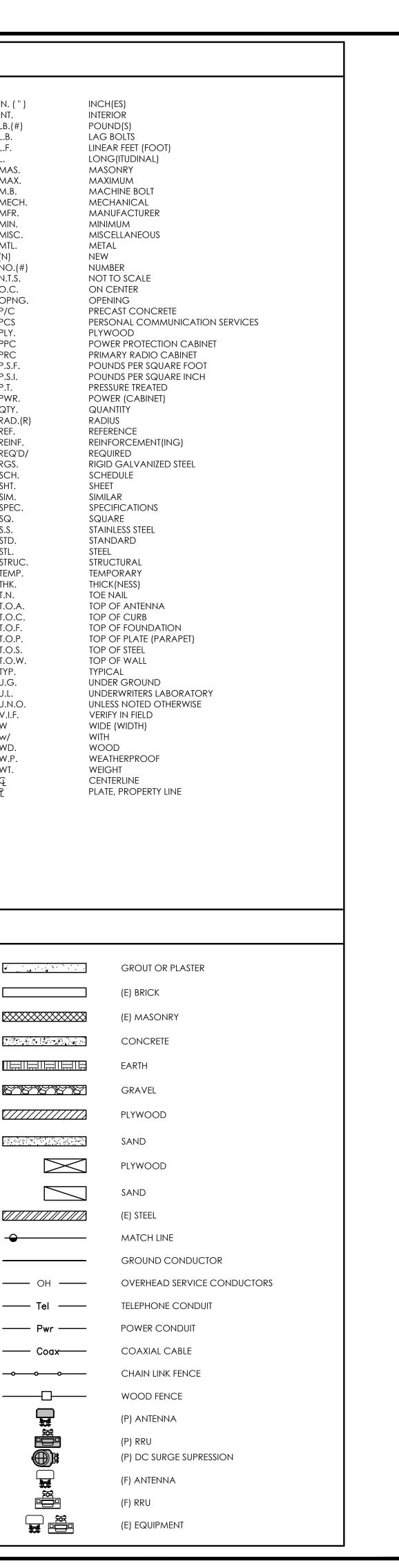
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OPNG.



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	07/13/21	100% ZD REV 1
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SHEET TITLE: GENERAL NOTES ABBREVIATIONS, & LEGEND

SHEET NUMBER:

GN-1

#### CCL02514 AT&T Cellular Facility

Oakley, California

BAC Job # 2021-116

Prepared For:

Complete Wireless Consulting

Attn: Steve Proo 2009 V Street Sacramento, CA 95818

Prepared By:

**Bollard Acoustical Consultants. Inc.** 

Dario Gotchet, Senior Consultant

June 30, 2021



Bollard Acoustical Consultants, Inc. • 3551 Bankhead Road, Loomis, CA 95650 • Phone: (916) 663-0500 • bacnoise.com

#### Introduction

The CCL02514 AT&T Wireless Unmanned Telecommunications Facility (project) proposes the installation of cellular equipment within a lease area located at 30 Delta Road in the City of Oakley, California (APN: 033-110-005). The externally mounted HVAC unit of a pre-manufactured concrete walk-in cabinet and an emergency diesel standby generator have been identified as the primary noise sources associated with the project. The proposed project site location is shown on Figure 1. The studied site design is dated May 20, 2021.

Bollard Acoustical Consultants, Inc. has been contracted by Complete Wireless Consulting, Inc. to complete an environmental noise assessment regarding the proposed project cellular equipment operations. Specifically, the following assessment addresses daily noise production and exposure associated with operation of the project emergency generator and HVAC

Please refer to Appendix A for definitions of acoustical terminology used in this report. Appendix B illustrates common noise levels associated with various sources.

#### Criteria for Acceptable Noise Exposure

#### City of Oakley General Plan

The Noise Element of the City of Oakley General Plan establishes noise standards for nontransportation (stationary) noise sources, such as those proposed by the project. The General Plan requires that the noise level standards, provided below in Table 1, be applied immediately within the property line of noise-sensitive land uses.

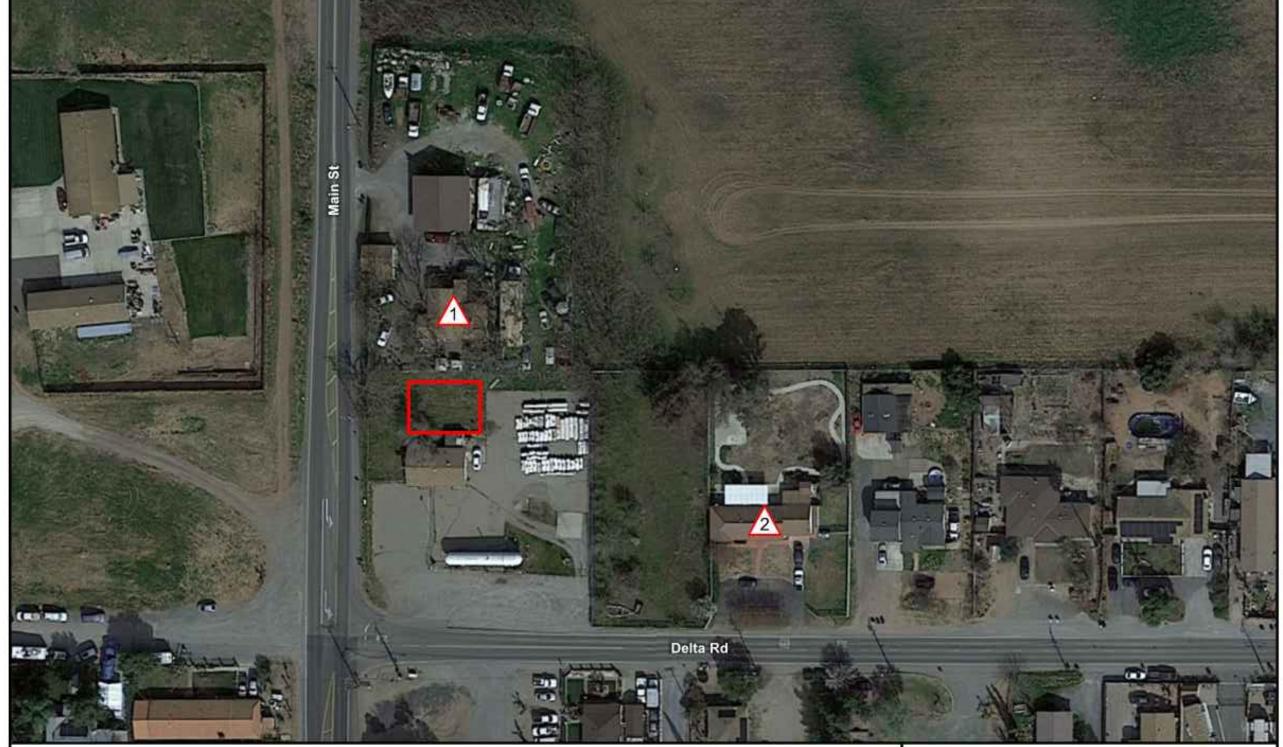
#### Noise Level Performance Standards for New Projects Affected by or Including Non-Transportation Noise Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Leq	55	45
primarily of speech or music, or for	recurring impulsive noises (e.g., humm not apply to residential units establi	r simple tone noises, noises consisting ning sounds, outdoor speaker systems). shed in conjunction with industrial or
Source: City of Oakley General Plan	Naine Classest Table O. d	

#### Project Noise Generation

As discussed previously, there are two project noise sources which are considered in this evaluation: the externally mounted HVAC unit of the pre-manufactured concrete walk-in cabinet and the emergency diesel generator. The evaluation of potential noise impacts associated with the operation of each noise source is evaluated separately as follows:

> Environmental Noise Assessment CCL02514 AT&T Cellular Facility - Oakley, California



Proposed AT&T Cellular Equipment Lease Area (Approximate)

Noise-Sensitive Receivers (Residences)

Scale (Feet)

CCL02514 AT&T Cellular Facility City of Oakley, California

Proposed Cellular Facility Lease Area & Nearest Noise-Sensitive Receivers

Figure 1

Bollard Acoustical Consultants, Inc.

#### **HVAC Equipment Noise Source and Reference Noise Level**

The project proposes the installation of a pre-manufactured concrete walk-in cabinet equipped with one (1) externally mounted HVAC unit within the equipment lease area illustrated on Figure 1. According to the project site plans, the HVAC unit assumed for installation at this site is a Marvair Airxcel, Inc. Model ECUA18ACA. Based on reference noise level data obtained from the manufacturer (Marvair Airxcel, Inc.), this specific HVAC unit model has a reference noise level of 62 dB at a distance of 5 feet. The manufacturer's noise level data specification sheet for the proposed HVAC equipment is provided as Appendix C.

#### Generator Noise Source and Reference Noise Level

The project also proposes the installation of an emergency standby diesel generator within the lease area to maintain cellular service during emergency power outages. Based on the project site plans, the generator assumed for installation at this site is a Generac Industrial Power Systems Model SD030. It is further assumed that the proposed generator will be equipped with the Level 2 Acoustic Enclosure resulting in a reference noise level of 68 dB at a distance of 23 feet. The manufacturer's noise level data specification sheet for the proposed generator and acoustical enclosure is provided as Appendix D.

The generator which is proposed at this site would only operate during emergencies (power outages) and brief daytime periods for periodic maintenance/lubrication. According to the project applicant, testing of the generator would occur twice per month, during daytime hours only, for a duration of approximately 15 minutes. The emergency generator would not operate at night, except during power outages.

#### Predicted Facility Equipment Noise Levels at Nearest Noise-Sensitive Uses

The nearest noise-sensitive uses have been identified as residences to the north and east of the project, identified as receivers 1 and 2 on Figure 1. The proposed project equipment maintains various distances from the property lines of receivers 1 and 2. Those distances were scaled using the provided site plans. Assuming standard spherical spreading loss (-6 dB per doubling of distance), project-equipment noise exposure at the property lines of the nearest noise-sensitive receivers (residences) was calculated and the results of those calculations are presented below in Table 2.

#### Summary of Project-Related Noise Exposure at the Nearest Noise-Sensitive Uses

	Distance from	Equipment (ft) <sup>2</sup>	1000 30	ment Noise Levels (dBA)
Receiver <sup>1</sup>	HVAC	Generator	HVAC	Generator
1	30	15	41	72
2	135	125	28	53

Distances scaled from equipment to receiver property lines using the provided site plans.

Source: Bollard Acoustical Consultants, Inc. (2021)

Bollard Acoustical Consultants, Inc.

Bollard Acoustical Consultants, Inc.

Because the proposed HVAC unit could potentially be in operation during nighttime hours, the operation of the HVAC unit would be subject to the City of Oakley General Plan nighttime noise level standard of 45 dB Leq (Table 1). As indicated in Table 2, the predicted HVAC equipment noise levels of 28 to 41 dB Leq at the property lines of the nearest residential receivers would satisfy the General Plan 45 dB Leq nighttime noise level limit. As a result, no further consideration of HVAC equipment noise mitigation measures would be warranted for the project.

Project representatives have indicated that the proposed generator would be in operation for routine testing and maintenance twice a month during daytime hours for no more than 15 minutes and would only operate at night during emergencies. Because the project generator would only operate during daytime hours for brief periods required for testing and maintenance, the operation of the generator would be subject to the City of Oakley General Plan daytime noise level standard of 55 dB Leq. As shown in Table 2, project generator noise level exposure is predicted to exceed the General Plan 55 dB Leg daytime noise level standard at the property line of the residential receiver 1. As a result, additional consideration of emergency generator noise mitigation measures would be warranted for the project.

#### Mitigation Measures

Project generator noise levels are predicted to exceed the City of Oakley General Plan 55 dB Leq daytime noise level standard at the property line of the residential receiver 1 by 17 dB. To mitigate the identified exceedance to a state of compliance with the City's noise level standard, the combination of a custom acoustic enclosure for the project generator and construction of a solid noise barrier along the perimeter of the facility lease area would be required. The location of the noise barrier is illustrated on Figure 2. The calculated mitigated generator noise levels resulting from the implementation of a custom enclosure and lease area noise barrier at the property line of receiver 1 are provided below in Table 3.

#### Summary of Generator Noise Exposure at Receiver 1 Property Line - Mitigated1

Barrier	Transmission Loss from Custom Enclosure (dB)													
Height (ft)	24	23	22	21	20	19	18	17						
6	55	56	57	58	59	60	61	62						
7	53	54	55	56	57	58	59	60						
8	51	52	53	54	55	56	57	58						
9	49	50	51	52	53	54	55	56						
10	48	49	50	51	52	53	54	55						

The data presented in Table 3 indicate the resulting (mitigated) generator noise levels at the property line of receiver 1 associated with the construction of a noise barrier around the facility lease area and the implementation of a custom engineered generator enclosure. The required barrier height is ultimately dependent upon the degree of exterior to interior transmission loss provided by the recommended custom engineered generator enclosure. In addition, the

> Environmental Noise Assessment CCL02514 AT&T Cellular Facility - Oakley, California

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Environmental Noise Assessment

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enclosure design should include sound absorbing panels on the interior wall and ceiling surfaces of the equipment shelter and should include a suitable engine exhaust muffler.

The noise barrier could consist of a dog-ear wood (or wood composite) fence with overlapping slat construction. The purpose of overlapping slats (and using screws rather than nails) is to ensure that prolonged exposure to the elements does not result in visible gaps through the slats which would result in reduced noise barrier effectiveness. Alternatively, lining the inside of a (height dependant) chain link fence with acoustic curtains at the location shown on Figure 2 would also serve as a sufficient noise barrier. If suspended acoustic curtains are installed on said chain link fence, an acoustical vinyl product with a minimum STC (Sound Transmission Class) rating of 28 should be considered. An example of such a product can be found at http://www.acoustiblok.com/acoustical\_fence.php. Appendix E illustrates the use of an acoustical vinyl curtain at a photovoltaic inverter facility.

CCL02514 MAIN ST & BROWNSTONE

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San Ramon, California 94583



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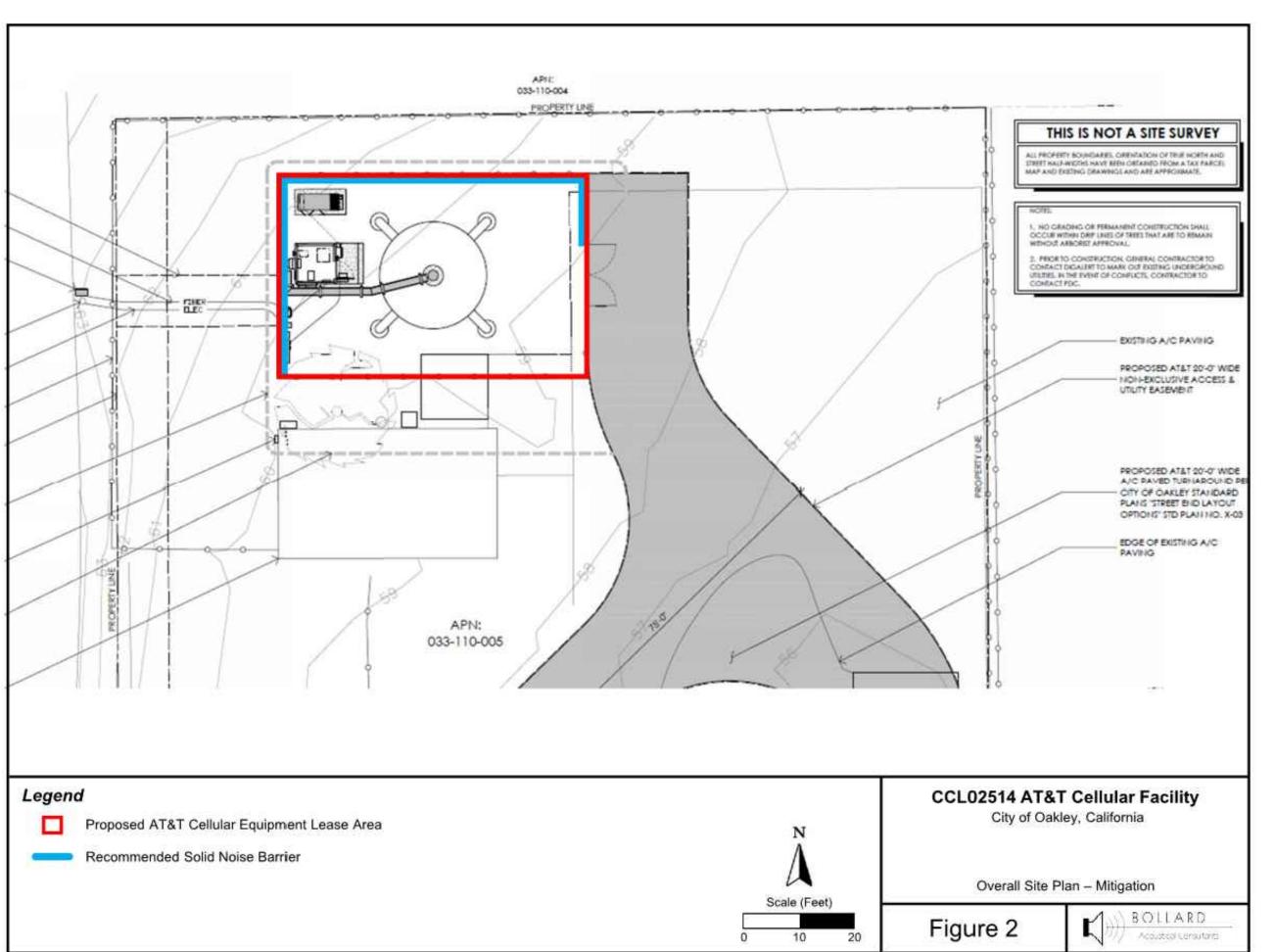
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SHEET TITLE:

NOISE STUDY

SHEET NUMBER:

Environmental Noise Assessment CCL02514 AT&T Cellular Facility - Oakley, California



Bollard Acoustical Consultants, Inc.

Environmental Noise Assessment

#### Conclusions & Recommendations

Project-related equipment noise exposure is expected to satisfy the applicable City of Oakley General Plan noise level criteria at the property lines of the nearest noise-sensitive uses provided that the following specific equipment noise mitigation measures are implemented:

1. A custom generator enclosure and the construction of a noise barrier along the facility lease area perimeter should be implemented. Figure 2 shows the location of the barrier. The barrier heights and associated interior to exterior transmission loss required of a custom acoustic enclosure for the generator are presented in Table 3.

Barrier material and construction details for the noise barrier are provided in this report. The generator enclosure design should include sound absorbing panels on the interior wall and ceiling surfaces of the generator equipment shelter and should include a suitable engine exhaust muffler.

This concludes our environmental noise assessment for the proposed CCL02514 AT&T Cellular Facility in Oakley, California. Please contact BAC at (916) 663-0500 or <a href="mailto:dariog@bacnoise.com">dariog@bacnoise.com</a> with any questions or requests for additional information.

#### Appendix A Acoustical Terminology

The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources

audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

**A-Weighting** A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and

nighttime hours weighted by a factor of 10 prior to averaging. The measure of the rapidity of alterations of a periodic signal, expressed in cycles per

second or hertz. Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's

impact generated noise insulation performance. The field-measured version of this

number is the FIIC.

Equivalent or energy-averaged sound level.

The highest root-mean-square (RMS) sound level measured over a given period of time.

A subjective term for the sensation of the magnitude of sound. Loudness

Masking The amount (or the process) by which the threshold of audibility is for one sound is

raised by the presence of another (masking) sound.

Unwanted sound.

The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

The time it takes reverberant sound to decay by 60 dB once the source has been

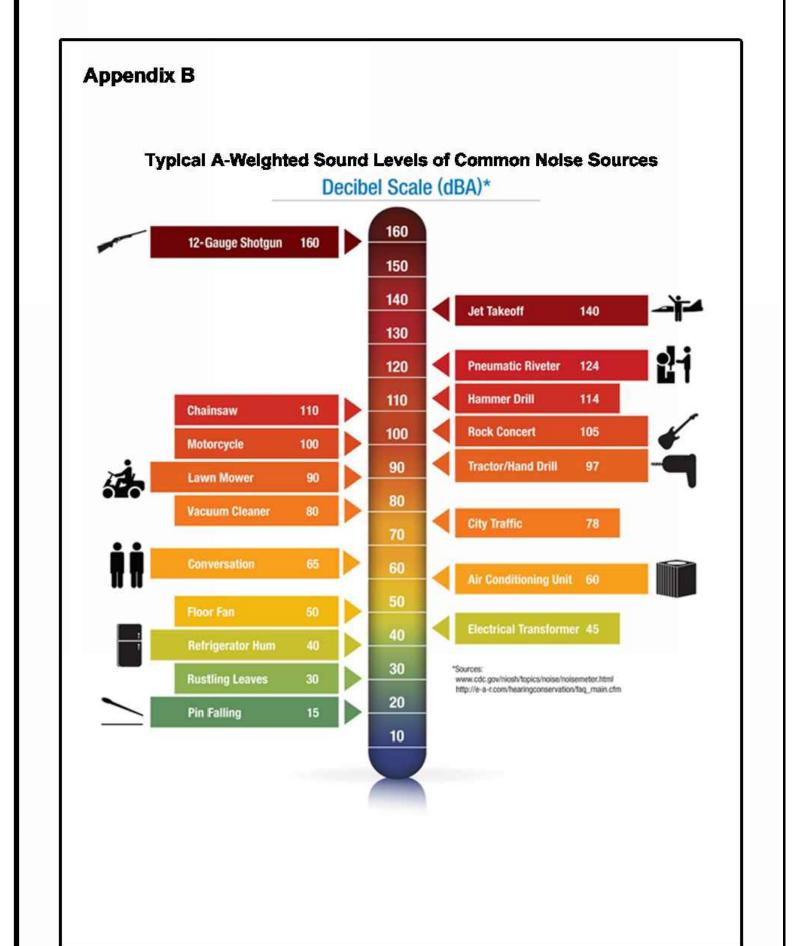
Sound Transmission Class (STC): A single-number representation of a partition's noise

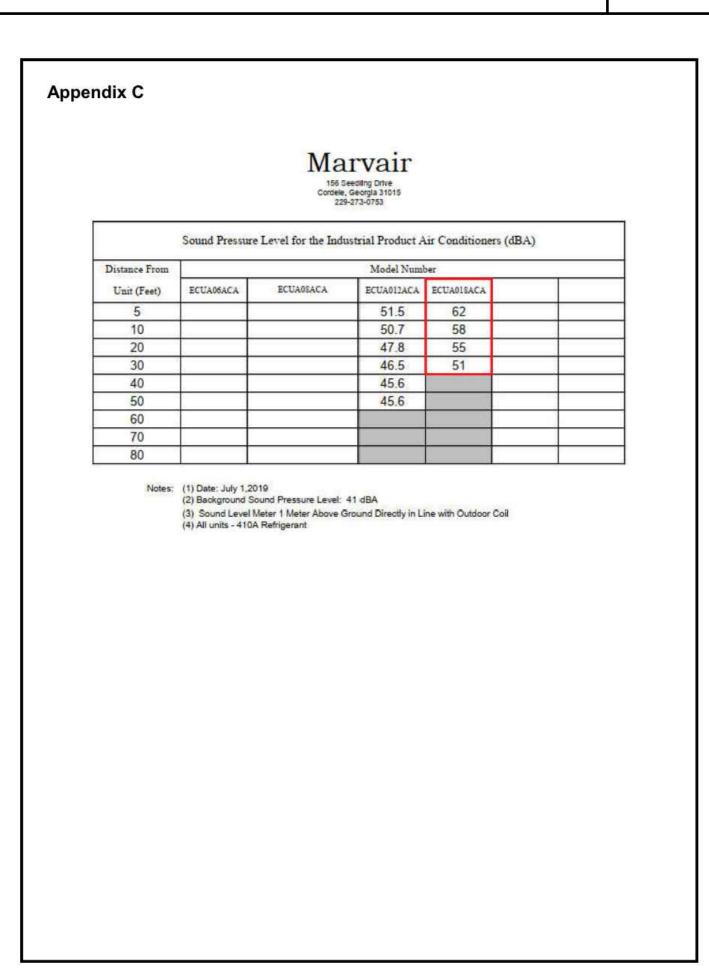
insulation performance. This number is based on laboratory-measured, 16-band (1/3-

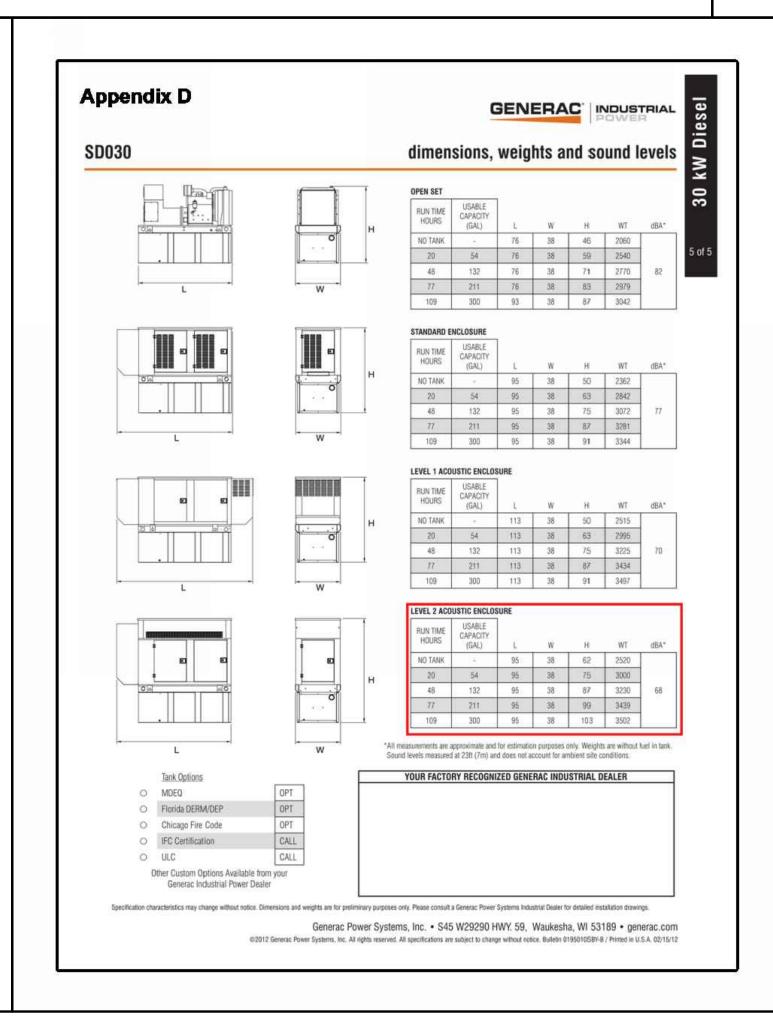
octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.



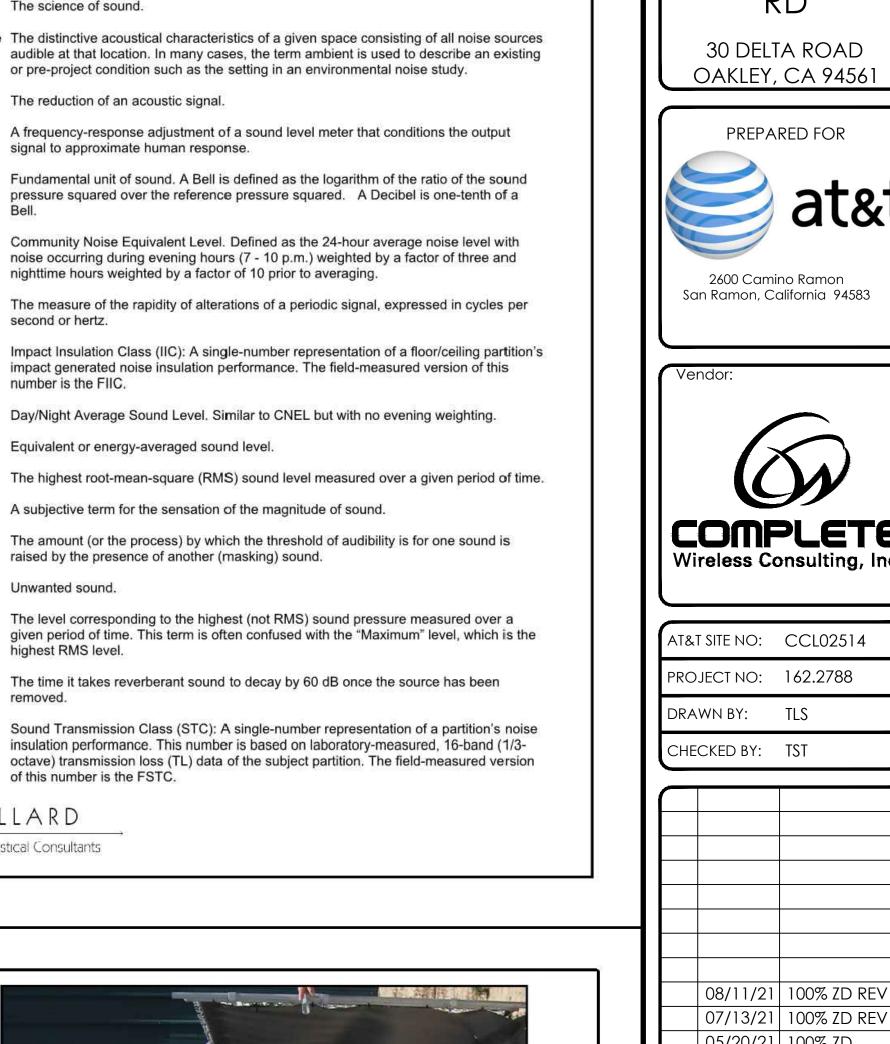
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2600 Camino Ramon

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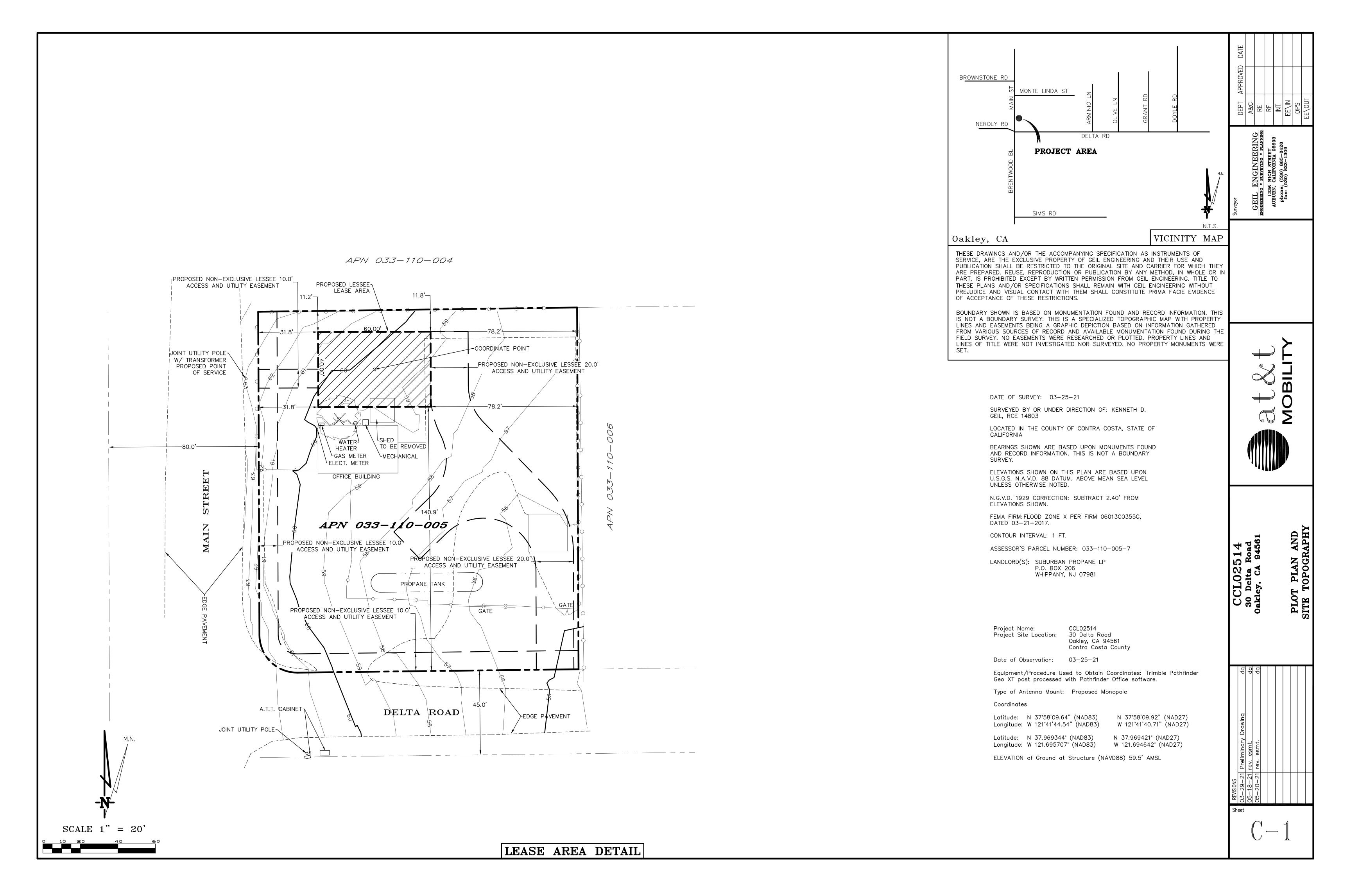


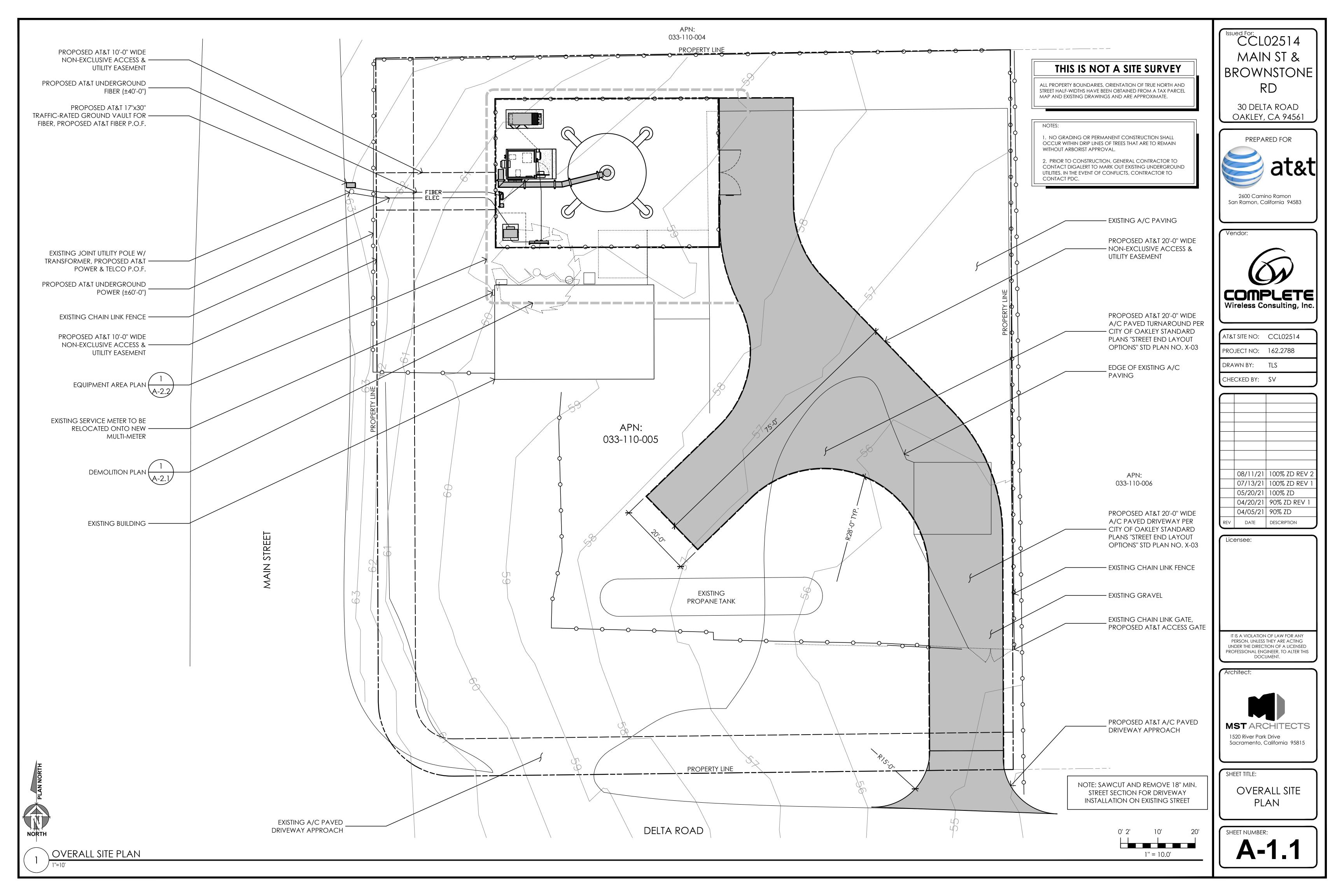
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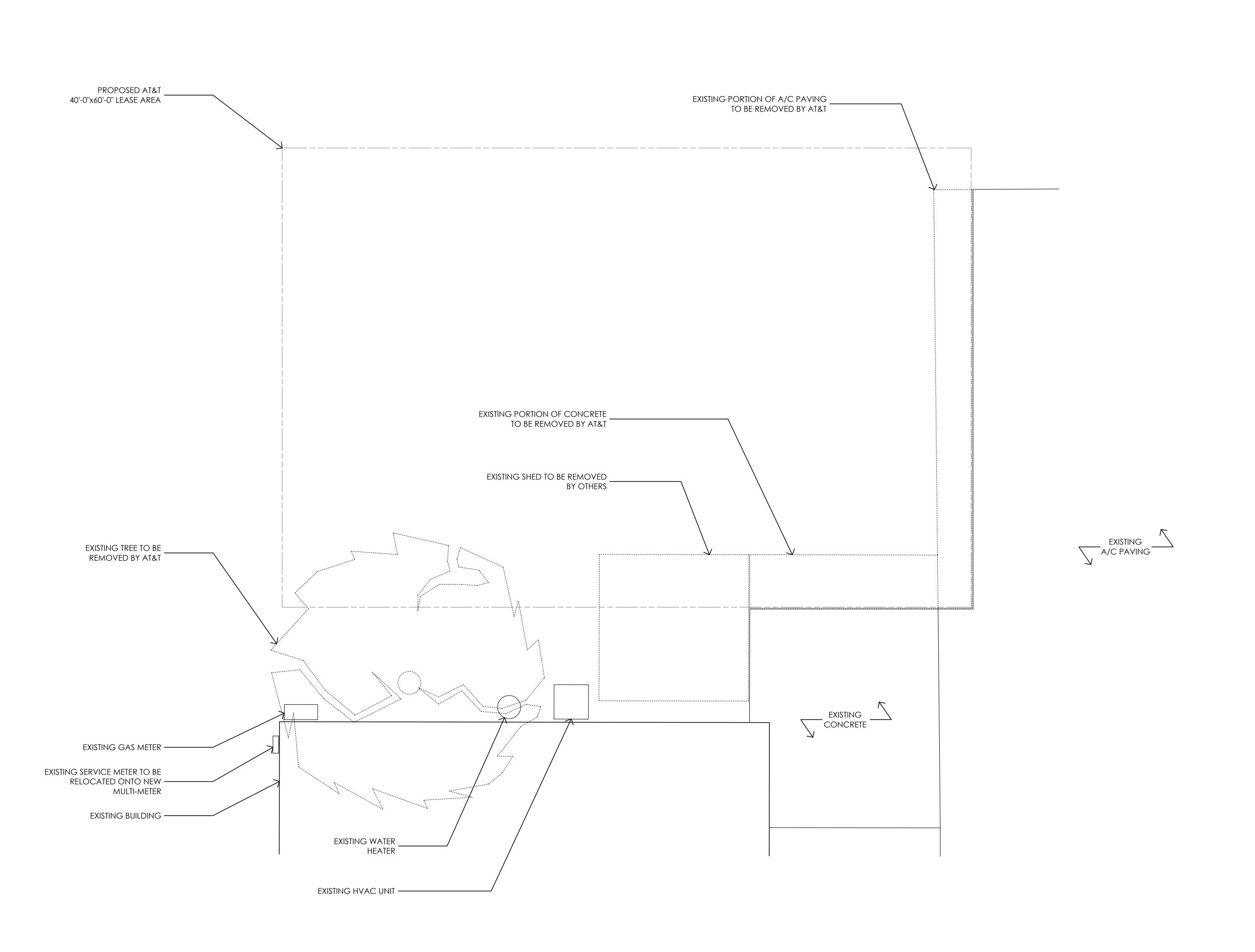
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AT&T SITE NO: CCL02514 PROJECT NO: 162.2788 DRAWN BY: TLS

CHECKED BY: SV

08/11/21 100% ZD REV 2 07/13/21 100% ZD REV 05/20/21 100% ZD 04/20/21 90% ZD REV 1

04/05/21 90% ZD

REV DATE DESCRIPTION

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



MST ARCHITECTS 1520 River Park Drive Sacramento, California 95815

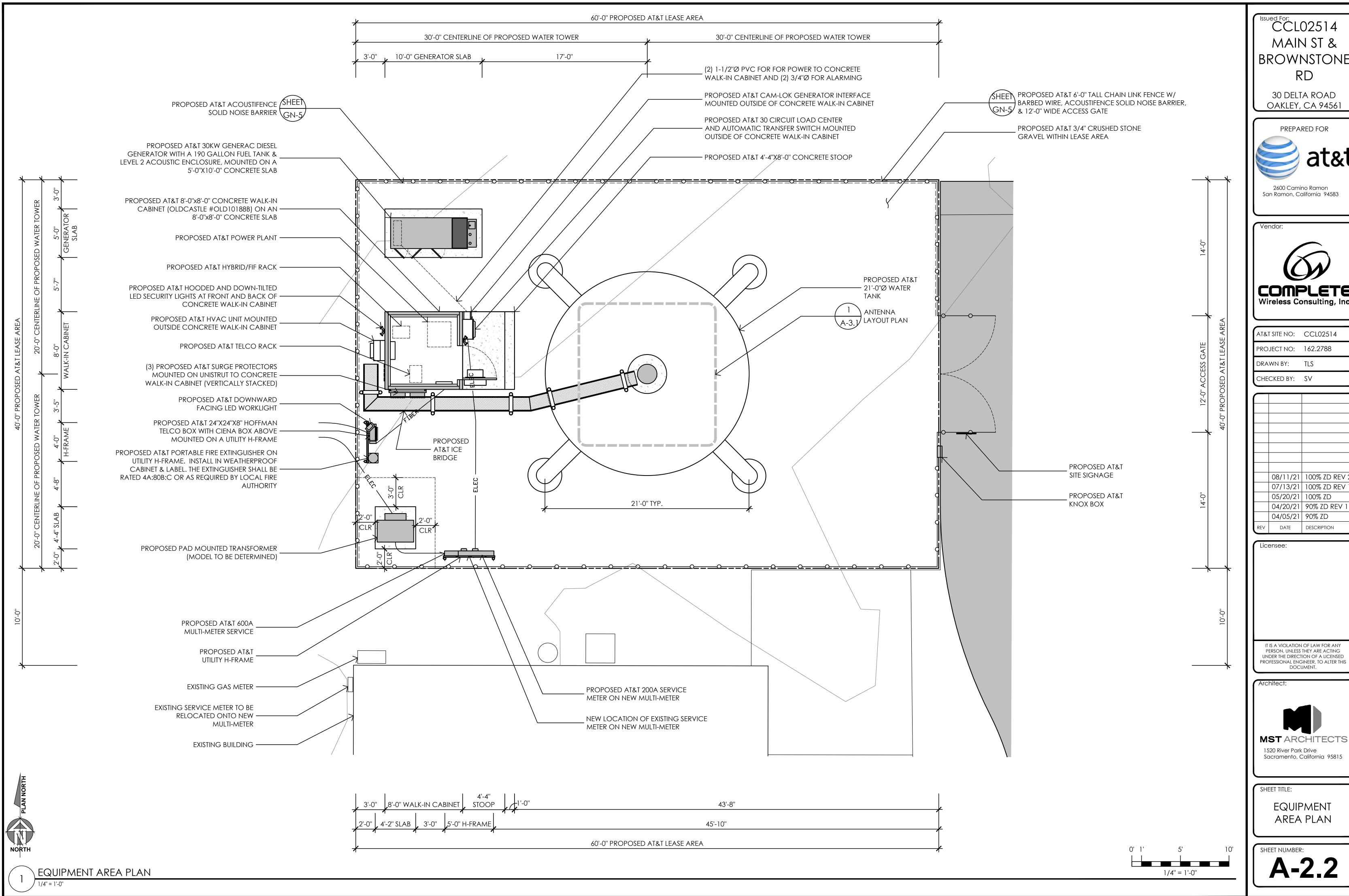
SHEET TITLE:

DEMOLITION PLAN

SHEET NUMBER:

1/4'' = 1'-0''

DEMOLITION PLAN



MAIN ST & BROWNSTONE

OAKLEY, CA 94561





AT&T SITE NO: CCL02514

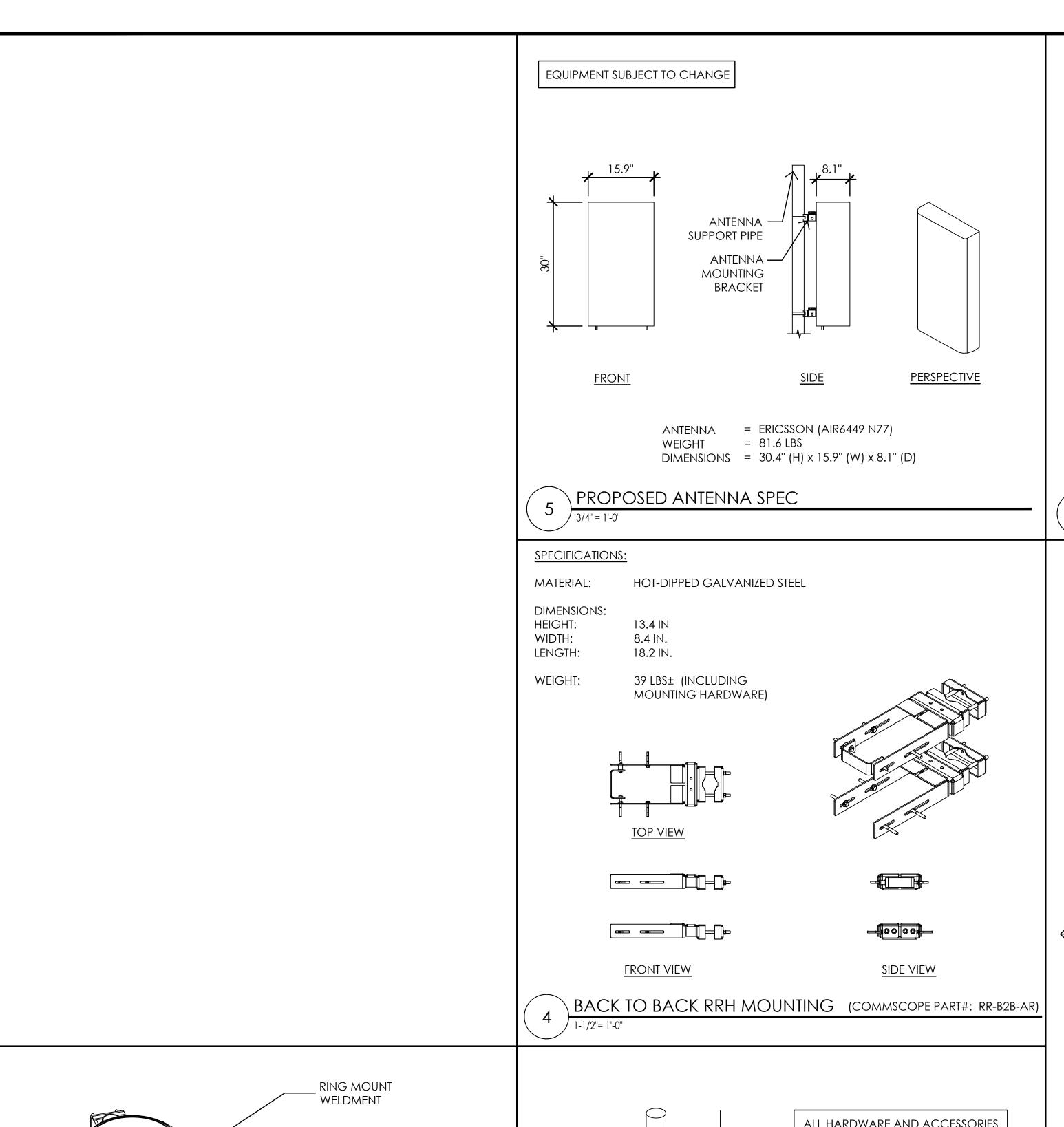
08/11/21 100% ZD REV 2 07/13/21 100% ZD REV 05/20/21 100% ZD 04/20/21 90% ZD REV 1

> IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING



AREA PLAN

**A-2.2** 



4-1/2"x72" SCH. 40

MODEL NO. = SITEPRO1 (MSFAA)

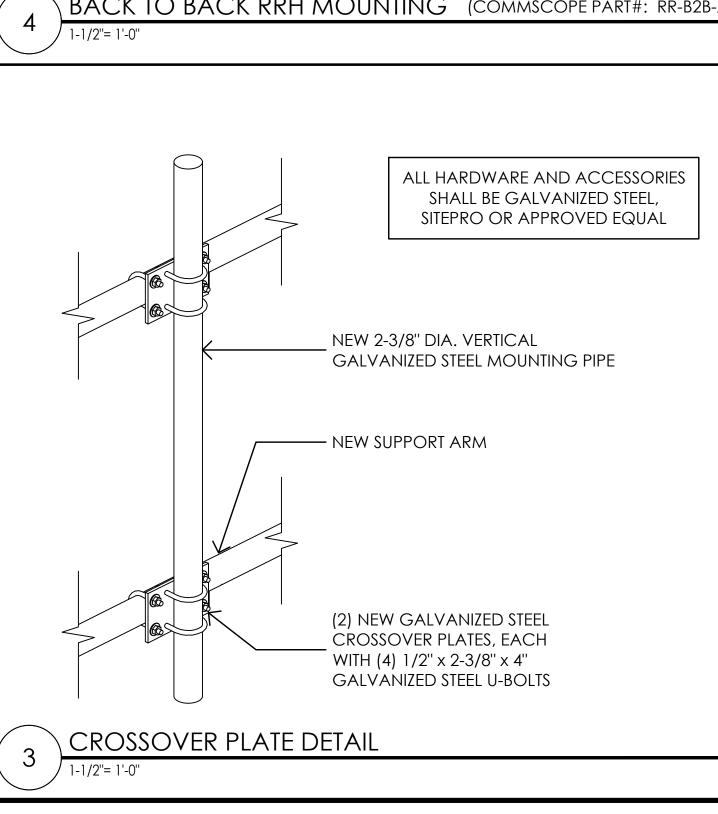
POLE DIA. = 12" - 45"

PROPOSED MONOPOLE SECTOR FRAME ATTACHMENT

3/4" = 1'-0"

= 788.53 LBS

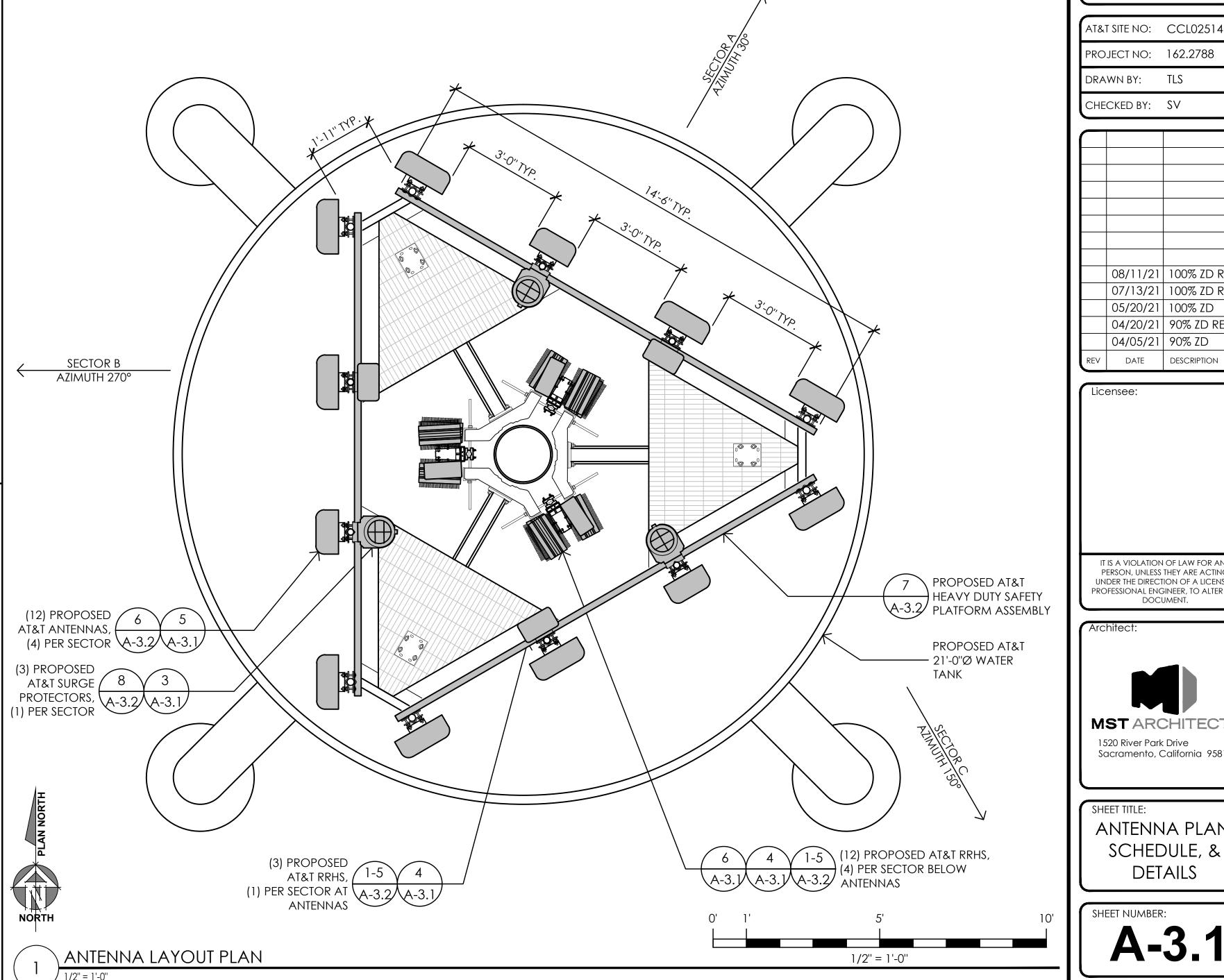
GALV. STL PIPE



					RF SCHEDULE					
SE	CTOR	ANTENNA MODEL NO.	AZIMUTH	CENTERLINE	RRH	TMA	FIBER LENGTH	COAX LENGTH	JUMPER TYPE	RRU NO.
Α	A1	COMMSCOPE - NNHH-65C-R4	30°	± 85'-0"	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 120'-0"	-	LDF4	(2)
Ĺ	A2	COMMSCOPE - NNHH-65C-R4	30°	± 85'-0''	(1) 4478 B14	-	± 120'-0''	-	LDF4	(1)
Н	A3	ERICSSON - AIR6449 N77	30°	± 85'-0''	-	-	± 120'-0"	-	LDF4	-
Α	A4	COMMSCOPE - NNHH-65C-R4	30°	± 85'-0''	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 120'-0''	-	LDF4	(2)
	B1	COMMSCOPE - NNHH-65C-R4	270°	± 85'-0''	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 120'-0"	-	LDF4	(2)
B E	B2	COMMSCOPE - NNHH-65C-R4	270°	± 85'-0''	(1) 4478 B14	-	± 120'-0"	-	LDF4	(1)
T A	В3	ERICSSON - AIR6449 N77	270°	± 85'-0''	-	-	± 120'-0"	-	LDF4	-
	B4	COMMSCOPE - NNHH-65C-R4	270°	± 85'-0''	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 120'-0''	-	LDF4	(2)
G	C1	COMMSCOPE - NNHH-65C-R4	150°	± 85'-0''	(1) 4449 B5/B12 / (1) 8843 B2/B66A	-	± 120'-0"	-	LDF4	(2)
Α	C2	COMMSCOPE - NNHH-65C-R4	150°	± 85'-0''	(1) 4478 B14	-	± 120'-0"	-	LDF4	(1)
M	C3	ERICSSON - AIR6449 N77	150°	± 85'-0''	-	-	± 120'-0"	-	LDF4	-
Α	C4	COMMSCOPE - NNHH-65C-R4	150°	± 85'-0''	(1) RRUS-E2 B29 / (1) 4415 B30	-	± 120'-0"	-	LDF4	(2)

RF DATA SHEET v2.00 DATED 04/16/2021 NOTE: ANTENNA POSITIONS ARE LEFT TO RIGHT FROM FRONT OF ANTENNA EQUIPMENT IS PRELIMINARY AND SUBJECT TO CHANGE.

RF SCHEDULE NO SCALE



Issued For: CCL02514 MAIN ST & BROWNSTONE RD

30 DELTA ROAD OAKLEY, CA 94561



2600 Camino Ramon San Ramon, California 94583



AT&T SITE NO: CCL02514 PROJECT NO: 162.2788

DRAWN BY: TLS CHECKED BY: SV

> 08/11/21 100% ZD REV 2 07/13/21 100% ZD REV 05/20/21 100% ZD 04/20/21 90% ZD REV 1 04/05/21 90% ZD

Licensee:

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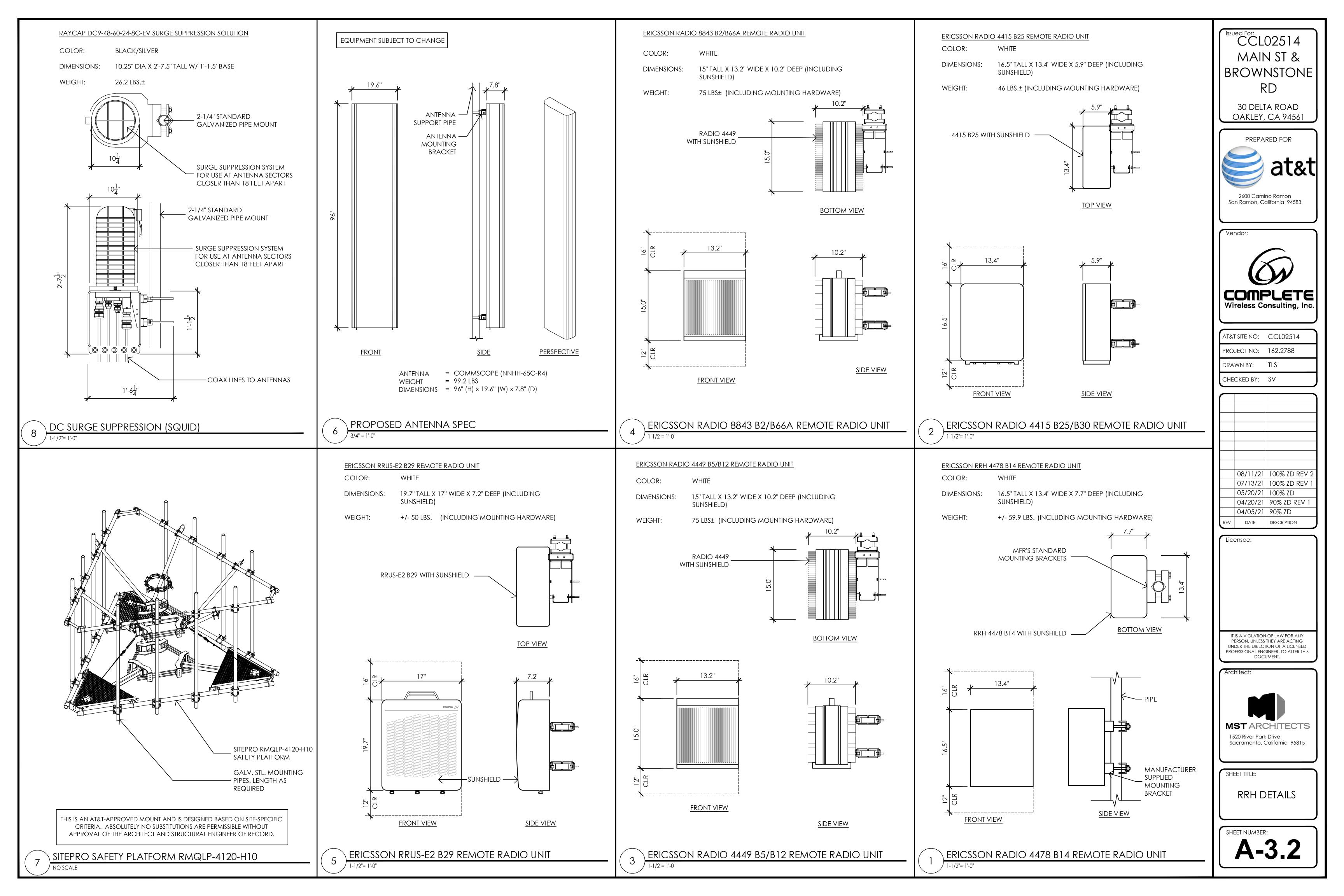


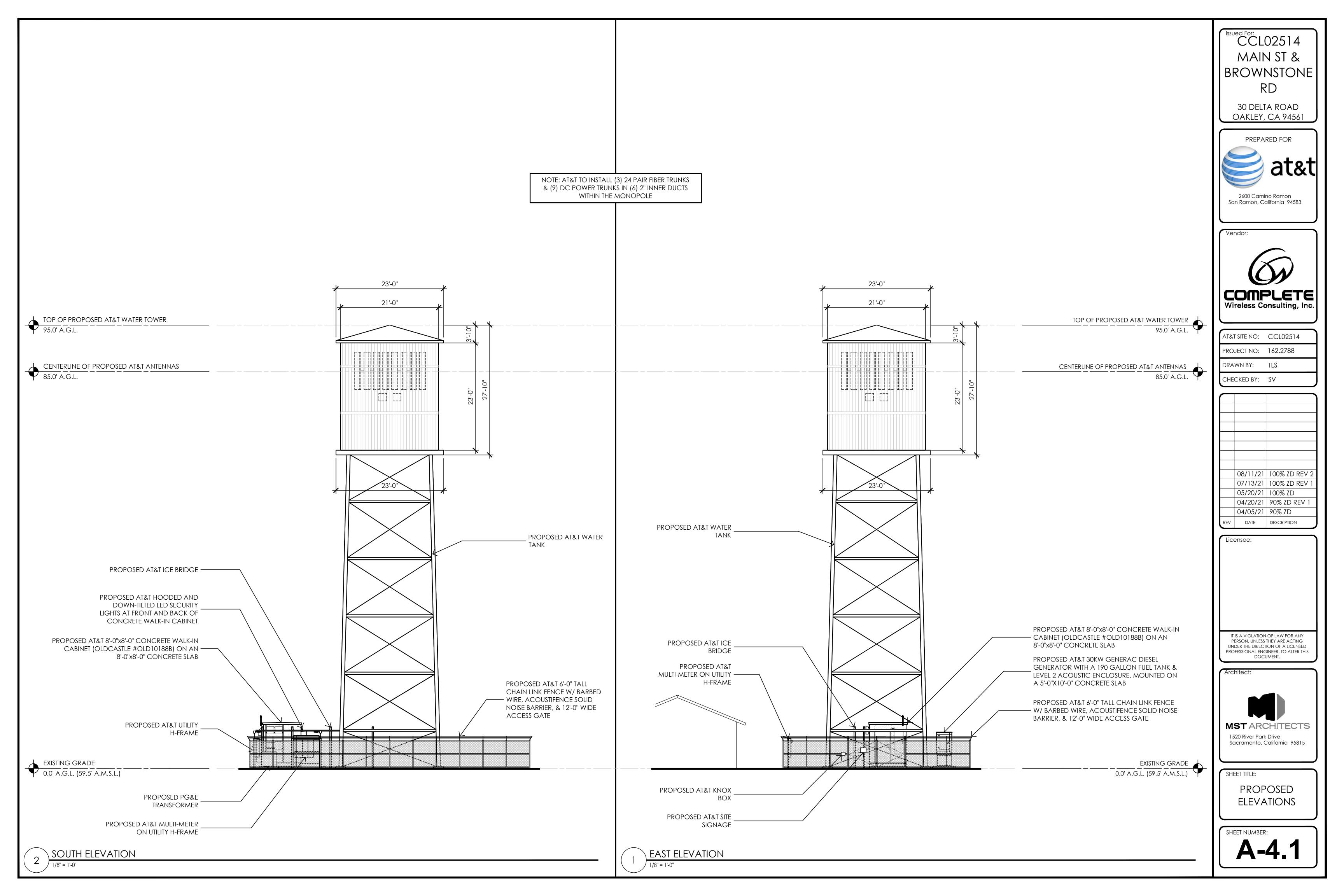
**MST** ARCHITECTS 1520 River Park Drive Sacramento, California 95815

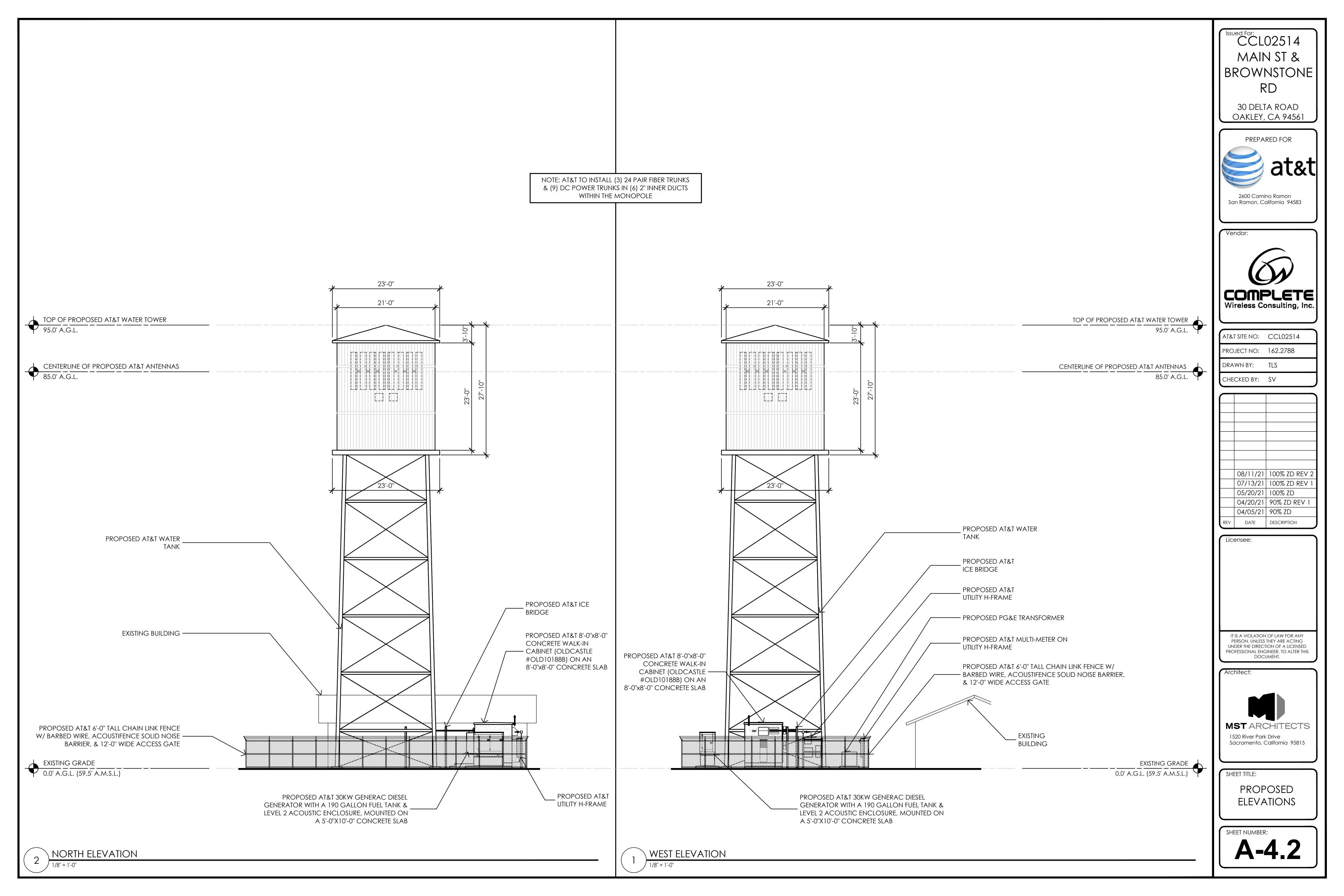
SHEET TITLE: ANTENNA PLAN, SCHEDULE, & DETAILS

SHEET NUMBER:

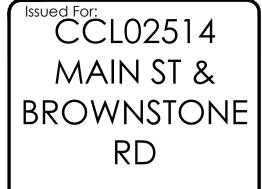
A-3.1







	PANEL	CIRCL	JIT AND I	LOAD SCH	IEDULE								DE	SIGNATIO	N: PANE	:L " <i>P</i>	AT&T"						
IOAD					PHASE (VA) ASE	TRIP	POLES	WIRE		WIRE	POLES	TRIP	The second secon	PHASE (VA) ASE			LOAD						
	DESCRIPTION	QTY	UNITVA	A	В	Ħ	PO	0 >		≥	<u>8</u> 8	O I	Æ	Α	В	UNIT VA	QTY	TY DESCRIPTION					
1 RECTIFIER 1		1	480	480		- 30	2	10					480		480	1	RECTIFIER 7	2					
3	RECTIFIER	1	480		480	30	2	10	,					480	480	1		4					
5	RECTIFIER 2	1	480	480		30	2	10					480		480	1	RECTIFIER 8	6					
7	RECTIFIER 2	1	480		480	30		2	0 2	10	10	2 10	2 10	10						480	480	1	RECTIFIEND
9	RECTIFIER 3	1	480	480		30	-	10					0		0	1	DECTIFIED O (ODTIONAL)	10					
1	RECTIFIERS	1	480		480	30	2	10						0	0	1	RECTIFIER 9 (OPTIONAL)	12					
.3	DECTIFIED A	1	480	480		30	2	2 10					0		0	1	RECTIFIER 10 (OPTIONAL)	14					
.5	RECTIFIER 4	1	480		480									0	0	1		16					
.7	DECTIFIED 5	1	480	480		20	2	40					0		0	1	DECEMENT AND CONTROLLAR	18					
.9	RECTIFIER 5	1	480		480	30			2 10						0	0	1	RECTIFIER 11 (OPTIONAL)	20				
21	DESTINIED S	1	480	480									0		0	1	DESTELED AS (ODTIONAL)	22					
23	RECTIFIER 6	1	480		480	30	2	10						0	0	1	RECTIFIER 12 (OPTIONAL)	24					
25		1	2850	2850		25							212		212	1	LIGHTS, RECEPTACLE	26					
27	HVAC#1	1	2850		2850	25	2	10	10						240	240	1	GEN BATTERY CHARGER	28				
29	GFCI RECEPTACLE	1	180	180									800		800	1	GEN BATTERY HEATER	30					
			Subtotal	5910	5730								1972	1200	Subtotal			•					
	Voltage	: 120/2	240 1 ph 3w			AIC:	@MET	ER MA	N: 22,0	000				TOTAL PHASE A (KVA)			7.88						
	Bus	: 200 a	mps			Main:	BREAK	ER						TOTAL	PHASE B (	KVA)	6.93						
	Enclosure	: NEM	A 3R Outdo	or	l l	Vlount:	Surfac	e							TOTAL K	VA =	14.81						
		8.					,						ž.	Tot	al Ampera	age =	61.72						



30 DELTA ROAD OAKLEY, CA 94561



2600 Camino Ramon San Ramon, California 94583

Vendor:



AT&T SITE NO: CCL02514

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08/11/21 100% ZD REV 2 07/13/21 100% ZD REV 1

05/20/21 100% ZD

04/05/21 90% ZD

04/20/21 90% ZD REV 1

REV DATE DESCRIPTION

Licensee:

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DOCUMENT.



MST ARCHITECTS

1520 River Park Drive
Sacramento, California 95815

SHEET TITLE:

POWER SINGLE LINE DIAGRAM

SHEET NUMBER:

E-3



NO SCALE

