

RESOLUTION NO. 3002

A RESOLUTION OF THE CITY OF WILSONVILLE AUTHORIZING THE CITY MANAGER TO ENTER INTO THE FIRST AMENDMENT TO COMMUNICATIONS FACILITY GROUND LEASE WITH CLACKAMAS 800 RADIO GROUP FOR THE USE OF CITY-OWNED PROPERTY ON LEVEL C RESERVOIR PARCEL AS A WIRELESS COMMUNICATION FACILITY TOWER SITE.

WHEREAS, on August 5, 2019 the City of Wilsonville adopt Resolution No. 2665 authorizing a Lease Agreement with Clackamas 800 Radio Group (C800 Group) for the use of City-owned property; and

WHEREAS, after execution of the Ground Lease it was determined that Lessee placed an electrical transformer and associated power cables in an unauthorized location in the middle of the property, in violation of the Ground Lease; and

WHEREAS, C800 Group desired to cure the violation of the Ground Lease; and

WHEREAS, the City drafted the First Amendment to the Communication Facility Ground Lease with requirements for C800 Group to mitigate the violation of the Ground Lease; and

WHEREAS, C800 Group Board has approved and signed the First Amendment agreement; and

WHEREAS, C800 Group has now completed the requirements set out in the First Amendment agreement.

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

Section 1. Authorizes the City Manager to sign the First Amendment to the Communication Facility Ground Lease.

Section 2. Said agreement is attached to this Resolution as "Exhibit A".

Section 3. Effective Date. This Resolution is effective upon adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 17 day of October 2022, and filed with the Wilsonville City Recorder this date.

DocuSigned by:
Kristin Akervall
3CFF015570AB425...

Kristin Akervall, Council President

ATTEST:

DocuSigned by:
Kimberly Veliz
E781DE10276B498...

Kimberly Veliz, City Recorder

SUMMARY OF VOTES:

Mayor Fitzgerald	Excused
Council President Akervall	Yes
Councilor Lehan	Yes
Councilor West	Yes
Councilor Linville	Excused

EXHIBIT:

A. First Amendment to Communications Facility Ground Lease

First Amendment to Communications Facility Ground Lease

This **First Amendment** to the above-entitled **Ground Lease** is entered into on April 20, 2022 (“Effective Date”), by and between the **City of Wilsonville**, a municipal corporation (“Lessor”), and **Clackamas 800 Radio Group** (“C800”), an intergovernmental entity formed pursuant to ORS Chapter 190, Milwaukie, Oregon (“Lessee”)[collectively, “the Parties”].

WHEREAS, Lessor is the owner of certain real property located in Clackamas County, State of Oregon, at Tax lot 502, Section 1, T3S, R1W, W.M., Oregon (“the Property”), which is more particularly shown on **Exhibit A** attached to the Ground Lease, and incorporated by reference herein; and

WHEREAS, Lessee leased an approximate three thousand square-foot (3,000 SF) portion of the Property (“Ground Space”) for placement of the Lessee’s equipment shelter, generator, propane tank, and communications tower. The Ground Space is more particularly shown and described on **Exhibit B** attached to the Ground Lease, and incorporated by reference herein. (**Exhibit B** also includes Access Area and Utility Easement area.) The Ground Space was leased for the purpose of erecting, constructing, installing, and operating thereon: an equipment shelter; communications tower for antennas and microwave dish(es); an emergency power generator and propane tank; fencing; and all other necessary associated equipment and facilities (collectively, “the Communications Facility,” as more particularly described in **Exhibit C** attached to the Ground Lease, and incorporated by reference herein); and

WHEREAS, after execution of the Ground Lease it was determined that Lessee placed an electrical transformer and associated power cables (collectively, “Transformer/Cables”) in an unauthorized location in the middle of Lessor’s Property, in violation of the Ground Lease; and

WHEREAS, Lessee desires to immediately cure any violation of the Ground Lease as set forth below;

NOW, THEREFORE, in consideration of the mutual promises contained herein, and incorporating the above Recitals as if fully set forth below, the Parties agree as follows:

1. **Ground Space.** At Lessee’s option, Lessee shall either immediately remove or relocate the Transformer/Cables to a location agreeable to the Lessor or, in the alternative, Lessor will allow the Transformer/Cables to remain where currently placed, but only if Lessee agrees to the requirements of the First Amendment and completes all of the following within forty five (45) days of the Effective Date of this Amendment:
 - Retain a licensed and bonded surveyor to create a certified and stamped survey of the actual location of the Transformer/Cables, to be titled “Transformer/Cables Area,” attached to this First Amendment as part of **Exhibit D**, and incorporated herein by this reference.

- Require the surveyor to revise **Exhibit B** - descriptions and map to incorporate the actual location of the Transformer/Cables, which revised descriptions and map shall be titled “Revised Exhibit Map”, “Description of Ground Lease”, “Revised Description of Access Area” and “Revised Description of Utility Easement attached to this First Amendment as **Exhibit E**, and incorporated herein by this reference.
 - Require a licensed engineer to update the “as-built” survey , showing the exact location of the Transformer/Cables and any other needed modifications, which updated plans shall be titled “As-Built Survey C800 – Wilsonville Water Tank Tower ,” attached to this First Amendment as **Exhibit F**, and incorporated herein by this reference.
 - Revise Exhibit C – Proposed Communication Facility including final construction drawings for C-4 Wilsonville Tank, last updated 7/23/19 with C-4 Wilsonville Tank “As-Built” Drawings dated 1/4/2021 and updated 5/16/21, labeled as **Exhibit G**, and incorporated herein by this reference.
 - Install fiberglass rods in the ground at the beginning, end, and any significant transition points of the associated power cables.
 - Install two additional bollards on back side of transformer (per construction punch-list dated 7/28/2020)
 - Install warning signs on gate into cell tower area (per construction punch-list dated 7/28/2020)
 - Either provide 24 purple beach trees to the adjoining property owner or provide Lessor with confirmation from the property owner stating the owner no longer want the trees, as provided in the Ground Lease.
2. Future Relocation. If Lessee otherwise complies with all of the requirements of this First Amendment but opts not to cause the Transformer/Cables to be removed or relocated, and for any reason Lessor later deems that the Transformer/Cables must be moved to a different location within the Property, Lessee expressly agrees to move the Transformer/Cables at Lessee’s expense to a location acceptable to Lessor within 120 days of written notice from Lessor to Lessee.
 3. No Other Equipment or Improvements. No other equipment of any nature, may be placed on the Property, and no additional work or improvements may be performed on the Property or within the Ground Space, without the express prior written approval of Lessor’s Public Works Director.
 4. Fencing and Rods. All existing fence lines on the Property shall remain in place and may not be moved or altered in any way by Lessee. No additional fences may be added to the Property by Lessee.

- 5. Right to Occupancy Suspended. Lessee’s right to access the Property shall be suspended pending the completion of all requirements listed in Section 1. Lessee’s right of access shall be fully restored upon Lessee’s receipt of written acceptance of such requirements from Lessor’s Public Works Director.

Except as provided herein, all other provisions of the Ground Lease shall remain, as written, and in full force and effect. In the event of any inconsistency or ambiguity when read with this First Amendment, this First Amendment will control

IN WITNESS WHEREOF, the Parties hereto have executed this First Amendment on the Effective Date above written.

LESSOR:

City of Wilsonville
 29799 SW Town Center Loop E
 Wilsonville, OR 97070

By: _____

Print Name: _____

Title: _____

APPROVED AS TO FORM:

 Ryan Adams
 Wilsonville Assistant City Attorney

LESSEE:

Clackamas 800 Radio Group
 11300 SE Fuller Rd
 Milwaukie, OR 97222

By: _____

Print Name: _____

Title: _____

APPROVED AS TO FORM:

 Eileen G. Eakins
 Attorney for C800

5. Right to Occupancy Suspended. Lessee's right to access the Property shall be suspended pending completion of all requirements listed in Section 1 . Lessee's right of access shall be fully restored upon Lessee's receipt of written acceptance of such requirements from Lessor's Public Works Director.

Except as provided herein, all other provisions of the Ground Lease shall remain, as written, and in full force and effect. In the event of any inconsistency or ambiguity when read with this First Amendment, this First Amendment will control

IN WITNESS WHEREOF, the Parties hereto have executed this First Amendment on the Effective Date above written.

LESSOR:

City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

By: _____

Print Name: _____

Title: _____

APPROVED AS TO FORM:

Ryan Adams
Wilsonville Assistant City Attorney

LESSEE:

Clackamas 800 Radio Group
11300 SE Fuller Rd
Milwaukie, OR 97222

By: _____

Print Name: Jorge Tro

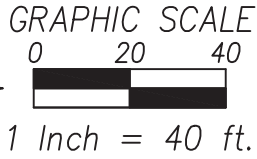
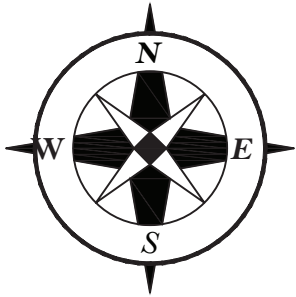
Title: C800 Board Chair

APPROVED AS TO FORM:

Eileen G. Eakins
Attorney for C800

EXHIBIT "D"

C800 WILSONVILLE
TRANSFORMER / CABLES AREA

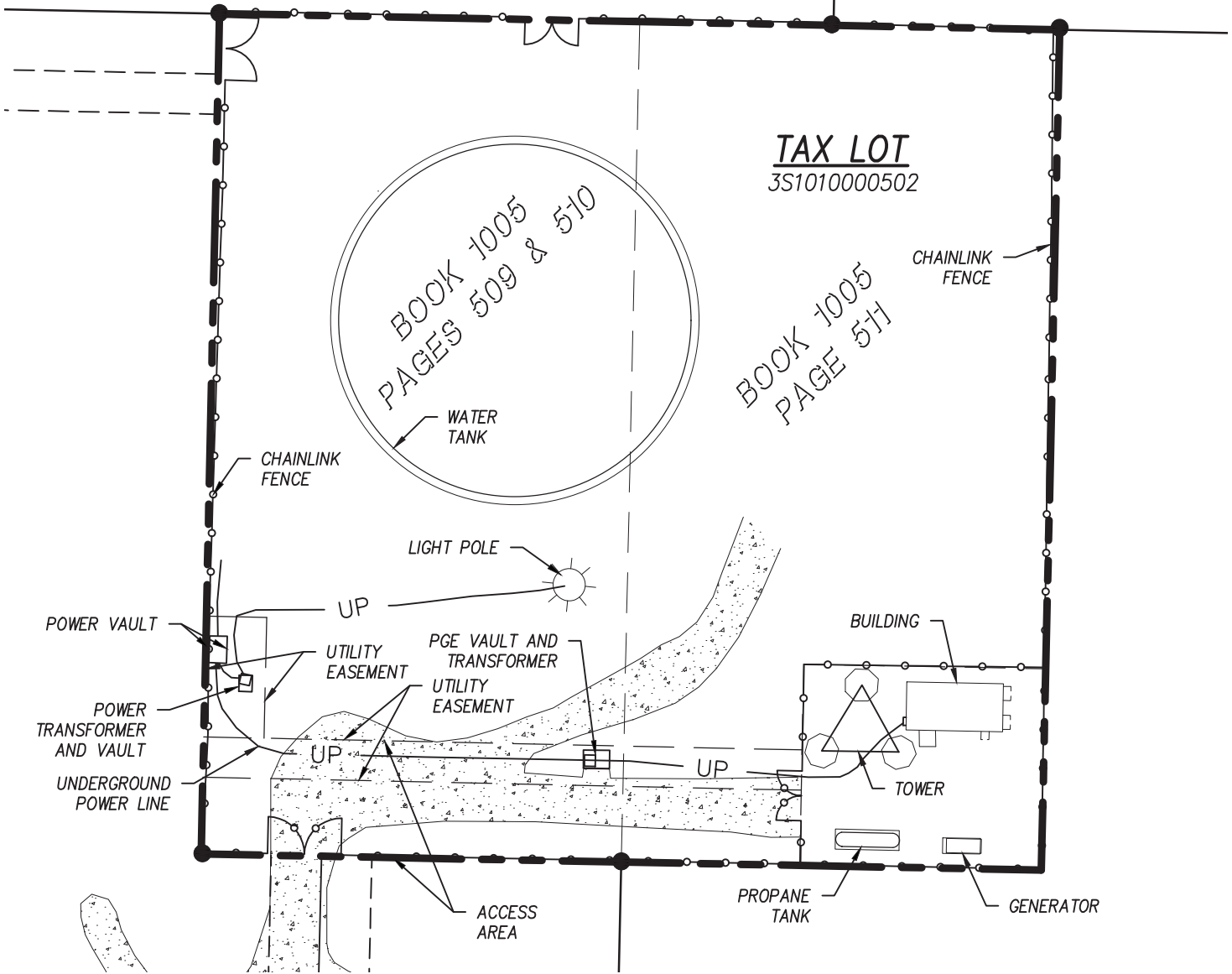


REGISTERED
PROFESSIONAL
LAND SURVEYOR

Kaid E. McKay

OREGON
NOVEMBER 10, 2009
KAID EDWARD McKAY
59859

RENEWS: 12-31-2022



TAX LOT
3S1010000502

McKay Consulting, LLC
Planning - Engineering - Surveying
205 SE 3rd Avenue, Suite 600 (503) 648-6475
Hillsboro, Oregon, 97123 contact@mckayconsultingllc.com

AS-BUILT SURVEY WAS COMPLETED
ON AUGUST 31, 2020.

DRAWN BY: KAID E. McKAY CHECKED BY: KAID E. McKAY

DATE: MARCH 1, 2022 SHEET

EXHIBIT "E"

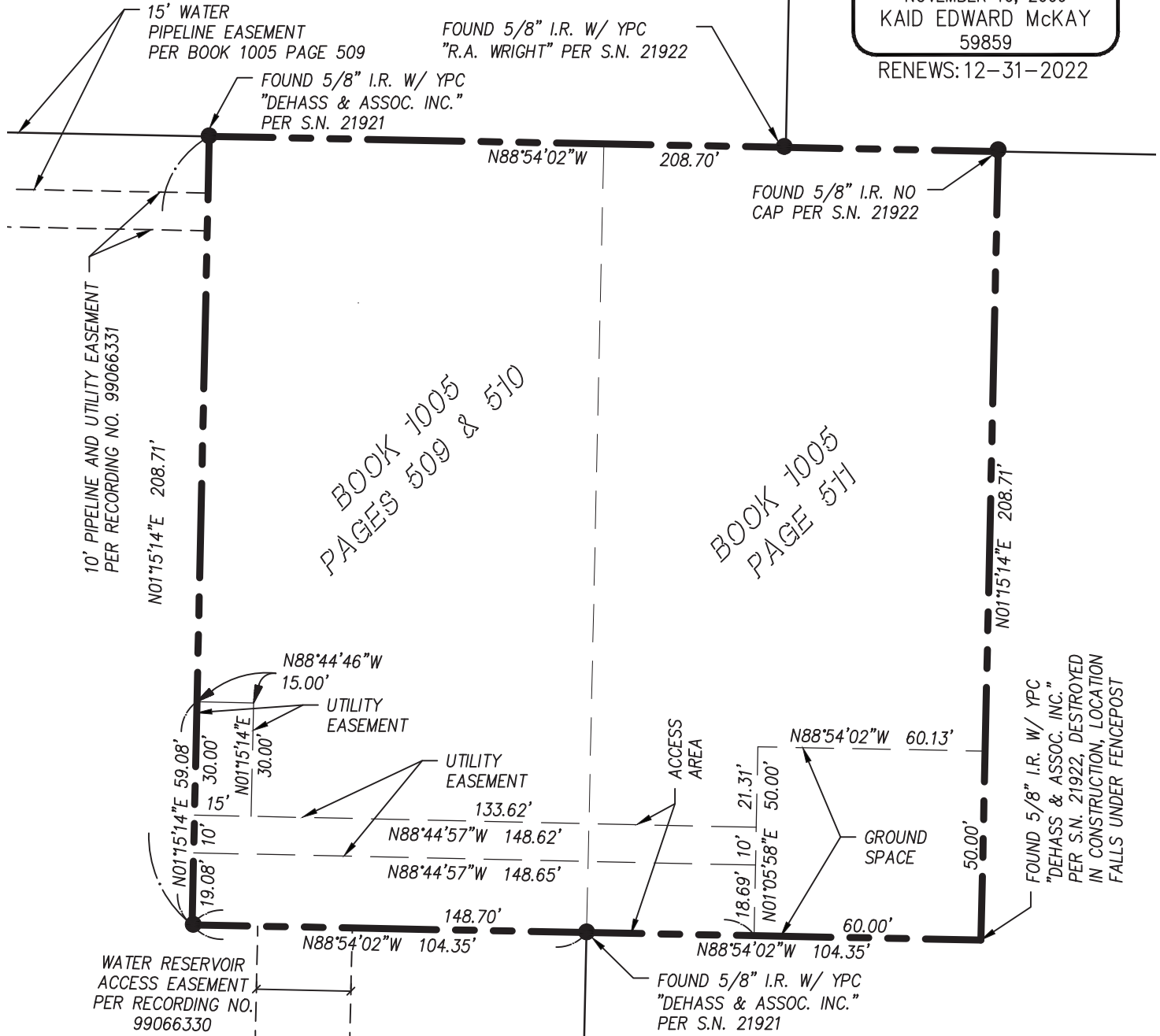
C800 WILSONVILLE

REVISED EXHIBIT MAP

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Kaid E. McKay

OREGON
NOVEMBER 10, 2009
KAID EDWARD MCKAY
59859
RENEWS: 12-31-2022



McKay Consulting, LLC

Planning - Engineering - Surveying
205 SE 3rd Avenue, Suite 600
Hillsboro, Oregon, 97123

(503) 648-6475
contact@mckayconsultingllc.com

DRAWN BY: KAID E. MCKAY	CHECKED BY: KAID E. MCKAY
DATE: MARCH 1, 2022	SHEET

Planning – Engineering - Surveying
205 SE 3rd Avenue, Suite 600
Hillsboro, OR 97123

contact@mckayconsultingllc.com

EXHIBIT “E”

DESCRIPTION OF GROUND SPACE

MARCH 1, 2022

A PORTION OF THAT PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THE DEED RECORDED IN BOOK 1005 PAGES 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8” IRON ROD WITH A YELLOW PLASTIC CAP MARKED “DE HAAS & ASSOC. INC.” SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORD IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY, FROM WHICH A 5/8” IRON ROD WITH A YELLOW PLASTIC CAP MARKED “DE HAAS & ASSOC. INC.” SET IN SAID SURVEY FOR THE SOUTHEAST CORNER OF SAID PROPERTY, BEARS SOUTH 88°54’02” EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°54’02” EAST 148.70 FEET TO THE **TRUE POINT OF BEGINNING**; THENCE NORTH 01°05’58” EAST 50.00 FEET; THENCE SOUTH 88°54’02” EAST 60.13 FEET TO THE EAST LINE OF SAID BOOK 1005 PAGE 511; THENCE SOUTH 01°15’14” WEST 50.00 FEET TO THE SOUTHEAST CORNER OF SAID BOOK 1005 PAGE 511; THENCE ALONG SAID SOUTH LINE NORTH 88°54’02” WEST 60.00 FEET TO THE **TRUE POINT OF BEGINNING**.

CONTAINS 3003 SQUARE FEET MORE OR LESS

REGISTERED
PROFESSIONAL
LAND SURVEYOR



OREGON
NOVEMBER 10, 2009
KAID EDWARD MCKAY
59859

RENEWS: 12-31-2022

Planning – Engineering - Surveying
205 SE 3rd Avenue, Suite 600
Hillsboro, OR 97123

contact@mckayconsultingllc.com

EXHIBIT “E”

REVISED DESCRIPTION OF ACCESS AREA

MARCH 1, 2022

A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8” IRON ROD WITH A YELLOW PLASTIC CAP MARKED “DE HAAS & ASSOC. INC.” SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORD IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°54'02" EAST 148.70 FEET; THENCE NORTH 01°05'58" EAST 28.69 FEET; THENCE NORTH 88°44'57" WEST 148.62 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE ALONG SAID WEST LINE SOUTH 01°15'14" WEST 29.08 FEET TO THE **POINT OF BEGINNING**.

CONTAINS 4294 SQUARE FEET MORE OR LESS



Planning – Engineering - Surveying
205 SE 3rd Avenue, Suite 600
Hillsboro, OR 97123

contact@mckayconsultingllc.com

EXHIBIT “E”

REVISED DESCRIPTION OF UTILITY EASEMENT

MARCH 1, 2022

A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8” IRON ROD WITH A YELLOW PLASTIC CAP MARKED “DE HAAS & ASSOC. INC.” SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORD IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM WHICH A 5/8” IRON ROD WITH A YELLOW PLASTIC CAP MARKED “DE HAAS & ASSOC. INC.” SET IN SAID SURVEY FOR THE SOUTHEAST CORNER OF SAID BOOK 1005 PAGE 509 OF SAID PROPERTY, BEARS SOUTH 88°54’02” EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°54’02” EAST 148.70 FEET; THENCE NORTH 01°05’58” EAST 18.69 FEET TO THE **TRUE POINT OF BEGINNING**; THENCE NORTH 88°44’57” WEST 148.65 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE NORTH 01°15’14” EAST 40.00 FEET ALONG SAID WEST LINE; THENCE SOUTH 88°44’46” EAST 15.00 FEET; THENCE SOUTH 01°15’14” WEST 30.00 FEET; THENCE SOUTH 88°44’57” EAST 133.62 FEET; THENCE SOUTH 01°05’58” WEST 10.00 FEET TO THE **TRUE POINT OF BEGINNING**.

CONTAINS 1936 SQUARE FEET MORE OR LESS

REGISTERED
PROFESSIONAL
LAND SURVEYOR
Kaid E. McKay
OREGON
NOVEMBER 10, 2009
KAID EDWARD MCKAY
59859
RENEWS: 12-31-2022

NOTES

1. THE BOUNDARY SHOWN ON THIS SURVEY IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING DIRECTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. PROPERTY LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED EXCEPT AS SHOWN ON THIS PLAN. NO PROPERTY MONUMENTS WERE SET.

2. PROPERTY LINES SHOWN ON THIS SURVEY ARE BASED ON SURVEYS 21921 AND 21922 ON FILE WITH WASHINGTON COUNTY, OREGON.

UTILITY CAUTION UNDERGROUND UTILITIES SHOWN ON THIS SURVEY WERE LOCATED BASED ON UTILITY MARK OUTS PAINTED FOLLOWING A CALL FOR A PRELIMINARY UTILITY LOCATE. NOT ALL UTILITIES MAY BE SHOWN. CALL FOR UTILITY LOCATES BEFORE DIGGING.

BENCH MARK THE DATUM FOR THIS SURVEY IS NAVD 83. AN ELEVATION WAS ESTABLISHED FOR THE PROJECT BENCHMARK USING GPS METHODS AND GEODROID.

LOCAL DATUM PLANE COORDINATES AN AVERAGE COMBINED SCALE FACTOR OF 1.000120090 WAS USED TO CONVERT GRID COORDINATES TO GROUND COORDINATES SO CALCULATED GRID DISTANCES AND GROUND DISTANCES WOULD MATCH (i.e. - GRID COORDINATES TIMES SCALE FACTOR EQUALS GROUND COORDINATES).

PROPERTY LEGAL DESCRIPTIONS (PER VESTING DEEDS) BOOK 1005 PAGES 509 & 510 BEGINNING AT THE WEST QUARTER SECTION CORNER OF SECTION 1, TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN; THENCE NORTH ON THE BEST LINE OF SAID SECTION 120.8 FEET TO AN IRON PIPE SURVEY AT THE NORTHWEST CORNER OF THE SOUTHQUARTER QUARTER OF THE NORTHWEST QUARTER, THENCE NORTH 89°1' EAST ALONG THE NORTH LINE OF SAID QUARTER SECTION 34.5 FEET TO THE NORTHEAST CORNER OF THE TRACT OF LAND CONVEYED TO WALTER W. WHITAKER AND WIFE BY DEED RECORDED DECEMBER 18, 1940 IN BOOK 194, PAGE 650, DEED RECORDS, WHICH IS THE TRUE PLACE OF BEGINNING; THENCE SOUTH 0°46' EAST ALONG THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET; THENCE SOUTH 89°1' WEST PARALLEL WITH THE NORTH LINE OF THE WHITAKER TRACT 104.35 FEET; THENCE NORTH 0°46' WEST PARALLEL WITH THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET TO THE NORTH LINE OF THE WHITAKER TRACT; THENCE NORTH 89°1' EAST A DISTANCE OF 104.35 FEET TO THE TRUE PLACE OF BEGINNING.

BOOK 1005 PAGE 511 BEGINNING AT THE SOUTHWEST CORNER OF GOVERNMENT LOT 1, SECTION 1, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN; THENCE SOUTH 89°1' WEST ALONG THE SOUTH LINE OF SAID LOT 1 AND A PROLONGATION THEREOF ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 182.7 FEET TO THE NORTHWEST CORNER OF THAT TRACT CONVEYED TO ARTHUR W. WHITAKER, ET UX, BY DEED RECORDED IN BOOK 194, PAGE 650, DEED RECORDS, WHICH IS THE TRUE PLACE OF BEGINNING; THENCE SOUTH 0°46' EAST ALONG THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET; THENCE NORTH 89°1' WEST PARALLEL WITH THE NORTH LINE OF THE WHITAKER TRACT 104.35 FEET; THENCE NORTH 0°46' WEST PARALLEL WITH THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET TO THE NORTH LINE OF THE PAULINE BASER LAND TRACT; THENCE SOUTH 89°1' WEST 104.35 FEET TO THE TRUE PLACE OF BEGINNING.

LEGAL DESCRIPTION FOR GROUND SPACE A PORTION OF THAT PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THE DEED RECORDED IN BOOK 1005 PAGES 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID PROPERTY; BEARS SOUTH 89°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 89°45'27" EAST 148.70 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 01°05'58" EAST 50.00 FEET; THENCE SOUTH 89°45'27" EAST 60.33 FEET TO THE EAST LINE OF SAID BOOK 1005 PAGE 511; THENCE SOUTH 01°05'58" WEST 50.00 FEET TO THE SOUTHWEST CORNER OF SAID BOOK 1005 PAGE 511; THENCE ALONG SAID SOUTH LINE NORTH 89°45'27" WEST 60.00 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINS 2003 SQUARE FEET MORE OR LESS

LEGAL DESCRIPTION FOR ACCESS AREA A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID PROPERTY; BEARS SOUTH 89°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 89°45'27" EAST 148.70 FEET; THENCE NORTH 01°05'58" EAST 28.68 FEET; THENCE NORTH 89°45'27" WEST 148.62 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE ALONG SAID WEST LINE SOUTH 01°05'58" WEST 29.08 FEET TO THE POINT OF BEGINNING.

CONTAINS 4094 SQUARE FEET MORE OR LESS

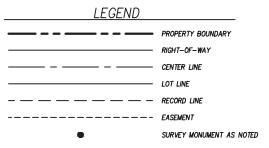
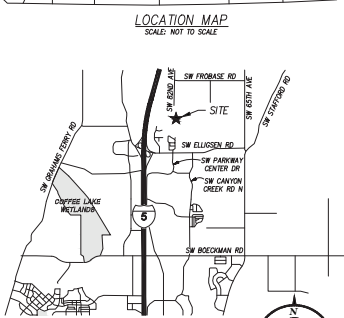
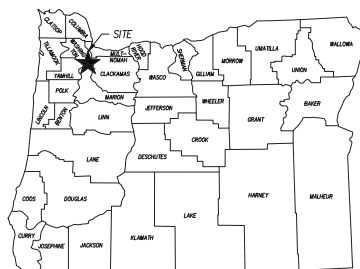
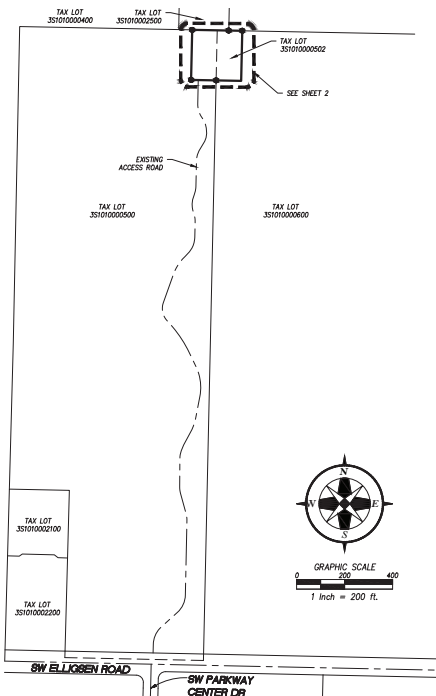
LEGAL DESCRIPTION FOR UTILITY EASEMENT A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID PROPERTY; BEARS SOUTH 89°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 89°45'27" EAST 148.70 FEET; THENCE NORTH 01°05'58" EAST 18.69 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°45'27" WEST 18.69 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE NORTH 01°05'58" EAST 40.00 FEET ALONG SAID WEST LINE; THENCE SOUTH 89°44'46" EAST 15.00 FEET; THENCE SOUTH 01°05'58" WEST 30.00 FEET; THENCE SOUTH 89°45'27" EAST 133.62 FEET; THENCE SOUTH 01°05'58" WEST 15.00 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINS 1928 SQUARE FEET MORE OR LESS

EXHIBIT F AS-BUILT SURVEY C800- WILSONVILLE WATER TANK TOWER

A TRACT OF LAND IN SECTION 1 TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN IN WASHINGTON COUNTY, OREGON SURVEYED AUGUST 31, 2020



Professional surveyor information including name (Kad E. McKay), registration number, and contact details for McKay Consulting, LLC.



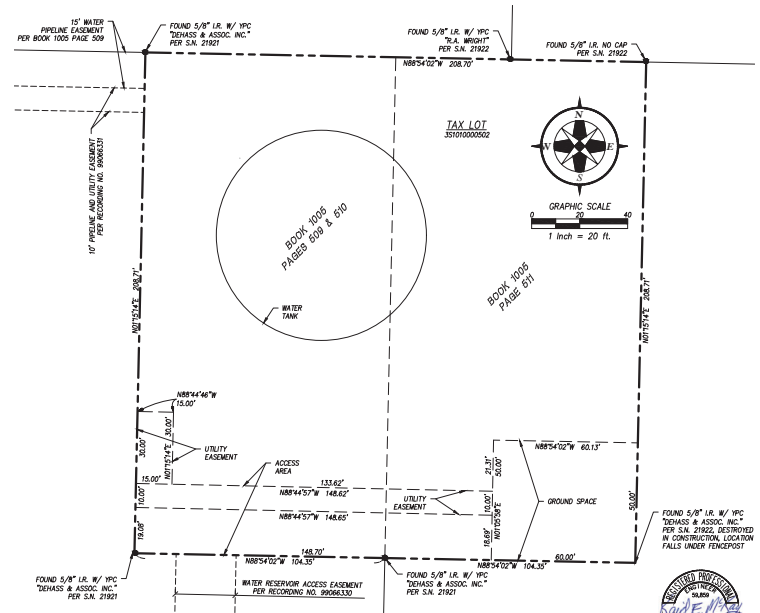
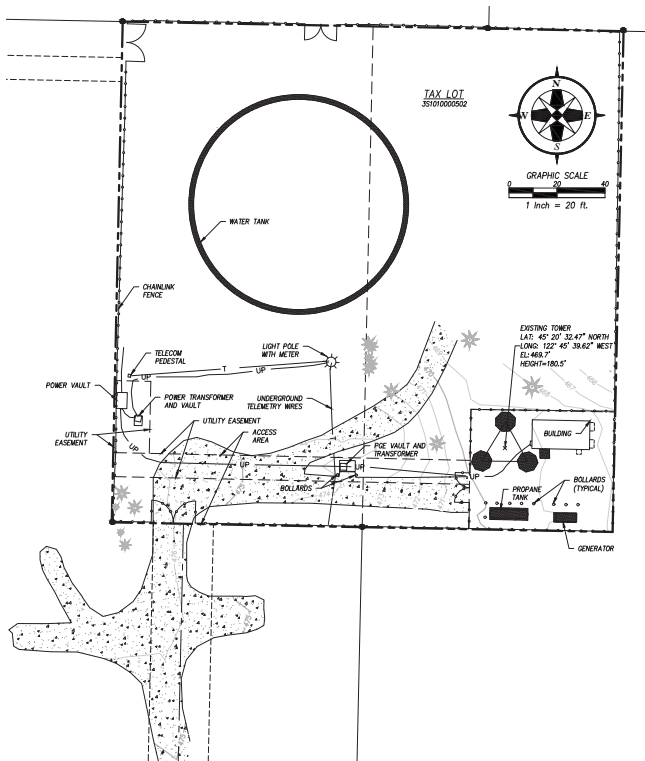
EXHIBIT F

AS-BUILT SURVEY C800- WILSONVILLE WATER TANK TOWER

A TRACT OF LAND IN SECTION 1
TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN
IN WASHINGTON COUNTY, OREGON
SURVEYED AUGUST 31, 2020

LEGEND

	PROPERTY BOUNDARY
	RIGHT-OF-WAY
	CENTER LINE
	LOT LINE
	RECORD LINE
	EASEMENT
	CONTOUR LINE
	CHAINLINK FENCE
	UNDERGROUND POWER
	CONCRETE PAVEMENT
	GRAVEL
	FOUND MONUMENT AS NOTED
	YELLOW PLASTIC CAP
	IRON ROD
	TREE STUMP



AS-BUILT SURVEY
C800 - WILSONVILLE WATER TANK TOWER
MCKAY & ASSOC. INC.
TAX LOT 35101000502

COMMUNICATIONS SYSTEM UPGRADE PROJECT
CZACHARAS 300 ROAD GROUP
11309 SE VOLEY RD., WILSONVILLE, OR 97122

BY: [Signature]
DATE: [Date]

DISCREPANCY:
7 - 2020/08/31/2020
AND TOLERANCE TABLES

REV. DATE: 03/03/2020
REV. BY: [Signature]

McKay Consulting, LLC
1000 NE Oregon Street, Suite 100
Portland, Oregon 97232
Phone: 503.255.1111
Fax: 503.255.1112
www.mckayconsulting.com

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
NUMBER 10,208
KAD EDWARD MCKAY
1988

REVISIONS:
REVISION 12-31-2022
DRAWN BY: KAD E. MCKAY
CHECKED BY: KAD E. MCKAY
DATE: SEPTEMBER 3, 2020
REVISED ON: MARCH 1, 2022
JOB NUMBER: C800 - WILSONVILLE
JOB # 1028

2 OF 2

BUILDING SET

Exhibit G



SITE NAME:
WILSONVILLE TANK
LOCATION:
8323 SW ELLIGSEN ROAD, TUALATIN, OR 97062

"AS-BUILT"
THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.

 SIGNED: _____ 1/4/2021
 DATE: _____

Updated 5/16/2022



PROJECT INFORMATION:

C-4
WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
12/21/17	PRELIM CONSTRUCTION SUBMITTAL
6/19/17	FINAL CONSTRUCTION SUBMITTAL
9/21/17	UPDATED GEN. & PROP. TANK SHT
1/22/18	FINAL CONSTRUCTION SUBMITTAL
2/22/18	FINAL CONSTRUCTION SUBMITTAL
6/22/19	FINAL CONSTRUCTION SUBMITTAL
7/9/19	FINAL CONSTRUCTION SUBMITTAL
7/19/19	FINAL CONSTRUCTION SUBMITTAL
7/22/19	FINAL CONSTRUCTION SUBMITTAL
8/13/19	PLAN CHECK #1
1/4/21	AS-BUILT
1/4/21	AS-BUILT (CLIENT REV.)

DRAWING INFORMATION:
 THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PRODUCED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER. PLANS PREPARED BY:



RENEWAL DATE 12/31/21

SHEET TITLE:
COVER SHEET
 SHEET NUMBER:
T-1

SHEET INDEX

T-1	COVER SHEET
	SURVEY I
	SURVEY II
	SURVEY III
G-1	GENERAL NOTES
G-2	SPECIAL INSPECTIONS I
G-3	SPECIAL INSPECTIONS II
C-1	EXISTING SITE CONDITIONS PLAN
C-1.1	PROPOSED DEVELOPMENT SITE PLAN
C-2	ENLARGED SITE PLAN
C-3	ELEVATIONS
C-4	NOT IN USE
C-5	RF PLAN & SCHEDULE
C-6	RF DETAILS
C-7	NOT IN USE
C-8	TOWER RELATED EQUIPMENT DETAILS I
C-9	COMPOUND DETAILS I
C-10	COMPOUND DETAILS II
C-11	EQUIPMENT SHELTER FOUNDATION PLAN
C-12	GENERATOR & PROPANE TANK DETAILS
C-13	NOT IN USE
C-14	NOT IN USE
E-1	ELECTRICAL SITE PLAN
E-2	SITE GROUNDING PLAN AND DETAILS
E-3	GROUNDING DETAILS I
E-4	GROUNDING DETAILS II
E-5	GROUNDING DETAILS III

PROJECT INFORMATION	PROJECT INFORMATION CONTINUED
<p>PROPERTY OWNER: CITY OF WILSONVILLE 2075 SW TOWN CENTER LOOP EAST WILSONVILLE, OR 97070 CONTACT: DELDORA KEBER 503-682-4092 keber@wilsonville.or.us</p> <p>JURISDICTION: WASHINGTON COUNTY</p> <p>COUNTY: WASHINGTON</p> <p>ZONING: EFU (EXCLUSIVE FARM USE)</p> <p>PARCEL NUMBER(S) & AREA: TAX LOT# 3510100 0502, PARCEL # R584111 43,820 SQ. FT. ± 1 ACRES ±</p> <p>PROJECT AREA: NEW IMPROVED AREA: 0.50 FEET ± COMPOUND AREA - 3,000 SQ FEET ±</p> <p>PROJECT AREA: LAT: N 45° 20' 32.52" (45.342367) LONG: W 122° 49' 36.88" (122.827694) SOURCE: 1A SURVEY DATED 12/11/16 DATUM: NAD 83</p> <p>UTILITY PROVIDERS: TELCO PROVIDER: MICROWAVE POWER PROVIDER: PGE</p> <p>GENERAL INFORMATION: 1. TRAFFIC IS UNIMPACTED 2. SITE IS UNMANNED AND HANDICAP ACCESS IS NOT REQUIRED 3. TECHNICIAN PARKING IS PROVIDED</p> <p>CODE INFORMATION: 1. IRC-2015, INTERNATIONAL BUILDING CODE 2. NEC-2014 NATIONAL ELECTRIC CODE 3. 2014 OREGON STRUCTURAL SPECIALTY CODE 4. 2017 NFPA 991 CODE 5. OCCUPANCY GROUP: U 6. CONSTRUCTION TYPE: II-B</p> <p>OREGON APPROVED PREFABRICATED STRUCTURE OREGON PLAN # M231-17-8686</p>	<p>APPLICANT: CLACKAMAS SOU RADIO GROUP (CSRG) 1120 SE FULLER RD MILWAUKIE, OR 97222 CONTACT: JOHN HARTSOCK 503-780-4806</p> <p>PROJECT MANAGER: BJORN MORFIN 503-781-9762</p> <p>ZONING CONTACT: SKIP GREENE SECURASITE LLC 8233 SW ORCHID DR PORTLAND, OR 97219 503-866-5111 skip.green@comcast.net</p> <p>SITE ACQUISITION: BJORN MORFIN SECURASITE LLC 1631 NE BROADWAY, PMB 100 PORTLAND, OR 97232 503-781-9762 bmorfin@securasite.net</p> <p>PROJECT DESCRIPTION: CLACKAMAS COUNTY SOU RADIO GROUP PROPOSES TO CONSTRUCT A NEW UNSTAFFED ESSENTIAL PUBLIC COMMUNICATIONS SERVICE FACILITY CONSISTING OF A NEW 18' TALL SELF-SUPPORTING LATTICE TOWER, A PRE-FABRICATED EQUIPMENT SHELTER, A GENERATOR AND A PROPANE TANK BOTH ON CONCRETE PADS ALL WITHIN A NEW 60' X 50' ALARMED 6' TALL SECURITY FENCED LEASE AREA. ACCESS TO SITE IS VIA EXISTING ACCESS ROAD FROM ELLIGSEN ROAD.</p>

DRIVING DIRECTIONS	DOCUMENT REVIEW
<p>FROM CSRG OFFICE: HEAD SOUTHWEST ON SE FULLER TOWARD SE MICHAEL DR 0.2 MI TURN LEFT ONTO SE MONTEREY AVE 0.2 MI TURN RIGHT ONTO OR-213 1.6 MI MERGE ONTO I-205 S/STATE HWY 213 SWAR VETERANS MEMORIAL FWY (SIGNS FOR STATE HWY 224) 12.2 MI USE THE LEFT 2 LANES TO TAKE THE INTERSTATE 5 EXIT TOWARD SALEM 1.0 MI MERGE ONTO I-5 S 1.5 MI TAKE EXIT 286 FOR ELLIGSEN ROAD/BOONES FERRY ROAD 0.2 MI USE THE LEFT 2 LANES TO TURN LEFT ONTO SW ELLIGSEN RD (SIGNS FOR ELLIGSEN RD) 0.5 MI TURN LEFT AT SW PARKWAY CENTER DR 0.2 MI FOLLOW ROAD NORTH ONTO DIRT ACCESS ROAD FOR 1/4 MILE TO THE SITE EST. TIME: 23 MINS EST. MILEAGE: 17.7 MI</p>	<p style="text-align: center;">SIGNATURE DATE</p> <p>SITE ACQ: BJORN MORFIN (503) 781-9762</p> <p>ZONING: SKIP GREENE (503) 866-5111</p> <p>APPLICANT: JOHN HARTSOCK (503) 780-4806</p> <p>PROJECT MGR: BJORN MORFIN (503) 781-9762</p>

LOCATOR MAP
<p style="text-align: right;">SCALE: NTS</p>

AS-BUILT SURVEY C800- WILSONVILLE WATER TANK TOWER

A TRACT OF LAND IN SECTION 1
TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN
IN WASHINGTON COUNTY, OREGON
SURVEYED AUGUST 31, 2020

NOTES

1. THE BOUNDARY SHOWN ON THIS SURVEY IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING GRAPHIC REPRESENTATION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. PROPERTY LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED EXCEPT AS SHOWN ON THIS PLAN. NO PROPERTY MONUMENTS WERE SET.
2. PROPERTY LINES SHOWN ON THIS SURVEY ARE BASED ON SURVEYS 21921 AND 21922 ON FILE WITH WASHINGTON COUNTY, OREGON.

UTILITY CAUTION

UNDERGROUND UTILITIES SHOWN ON THIS SURVEY WERE LOCATED BASED ON UTILITY MARK OUTS PAINTED FOLLOWING A CALL FOR A FREE UTILITY LOCATE. NOT ALL UTILITIES MAY BE SHOWN. CALL FOR UTILITY LOCATES BEFORE DIGGING.

BENCHMARK

THE DATUM FOR THIS SURVEY IS NAVD 88. AN ELEVATION WAS ESTABLISHED FOR THE PROJECT BENCHMARK USING GPS METHODS AND GEOTRIP.

BASIS OF BEARING/LOCAL DATUM PLANE COORDINATES

THE BASIS OF BEARING FOR THIS SURVEY IS THE OREGON STATE PLANE COORDINATE SYSTEM OF 1983, NORTH ZONE (S106) WITH COORDINATES ESTABLISHED USING GPS AND THE OREGON DEPARTMENT OF TRANSPORTATION'S ORGN SERVICE.

LOCAL DATUM PLANE COORDINATES: AN AVERAGE COMBINED SCALE FACTOR OF 1.000120900 WAS USED TO CONVERT GRID COORDINATES TO GROUND COORDINATES SO CALCULATED GRID DISTANCES AND GROUND DISTANCES WOULD MATCH (i.e. - GRID COORDINATES TIMES SCALE FACTOR EQUALS GROUND COORDINATES).

PROPERTY LEGAL DESCRIPTIONS (PER VESTING DEEDS)

BOOK 1005 PAGES 509 & 510

BEGINNING AT THE WEST QUARTER SECTION CORNER OF SECTION 1, TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN; THENCE NORTH ON THE WEST LINE OF SAID SECTION 120.8 FEET TO AN IRON PIPE SURVEY AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER, THENCE NORTH 89°1' EAST ALONG THE NORTH LINE OF SAID QUARTER SECTION 34.5 FEET TO THE NORTHEAST CORNER OF THE TRACT OF LAND CONVEYED TO MERRIL R. WHITAKER AND WIFE BY DEED RECORDED DECEMBER 18, 1940 IN BOOK 194, PAGE 650, DEED RECORDS, WHICH IS THE TRUE PLACE OF BEGINNING; THENCE SOUTH 0°46' EAST ALONG THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET; THENCE SOUTH 89°1' WEST PARALLEL WITH THE NORTH LINE OF THE WHITAKER TRACT 104.35 FEET; THENCE NORTH 0°46' WEST PARALLEL WITH THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET TO THE NORTH LINE OF THE WHITAKER TRACT; THENCE NORTH 89°1' EAST A DISTANCE OF 104.35 FEET TO THE TRUE PLACE OF BEGINNING.

BOOK 1005 PAGE 511

BEGINNING AT THE SOUTHWEST CORNER OF GOVERNMENT LOT 1, SECTION 1, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN; THENCE SOUTH 89°1' WEST ALONG THE SOUTH LINE OF SAID LOT 1 AND A PROLONGATION THEREOF ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 182.7 FEET TO THE NORTHWEST CORNER OF THAT TRACT CONVEYED TO MERRIL R. WHITAKER, ET UX, BY DEED RECORDED IN BOOK 194, PAGE 650, DEED RECORDS, WHICH IS THE TRUE PLACE OF BEGINNING; THENCE SOUTH 0°46' EAST ALONG THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET; THENCE NORTH 89°1' EAST 104.35 FEET; THENCE NORTH 0°46' WEST ON A LINE DRAWN PARALLEL WITH THE EAST LINE OF THE WHITAKER TRACT 208.7 FEET TO THE NORTH LINE OF THE PAULINE BASER LAND TRACT; THENCE SOUTH 89°1' WEST 104.35 FEET TO THE TRUE PLACE OF BEGINNING.

LEGAL DESCRIPTION FOR GROUND SPACE

A PORTION OF THAT PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THE DEED RECORDED IN BOOK 1005 PAGES 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID PROPERTY; BEARS SOUTH 88°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°45'27" EAST 148.70 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 01°05'58" EAST 50.00 FEET; THENCE SOUTH 88°45'27" EAST 60.33 FEET TO THE EAST LINE OF SAID BOOK 1005 PAGE 511; THENCE SOUTH 01°05'58" WEST 50.00 FEET TO THE SOUTHWEST CORNER OF SAID BOOK 1005 PAGE 511; THENCE ALONG SAID SOUTH LINE NORTH 88°45'27" WEST 60.00 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINS 2003 SQUARE FEET MORE OR LESS

LEGAL DESCRIPTION FOR ACCESS AREA

A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID PROPERTY; BEARS SOUTH 88°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°45'27" EAST 148.70 FEET; THENCE NORTH 01°05'58" EAST 28.68 FEET; THENCE NORTH 88°45'27" WEST 148.62 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE ALONG SAID WEST LINE SOUTH 01°05'58" WEST 29.08 FEET TO THE POINT OF BEGINNING.

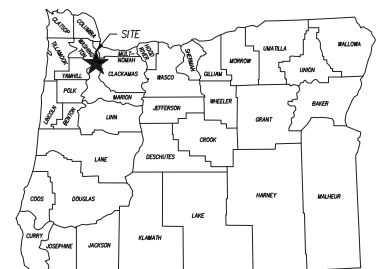
CONTAINS 4294 SQUARE FEET MORE OR LESS

LEGAL DESCRIPTION FOR UTILITY EASEMENT

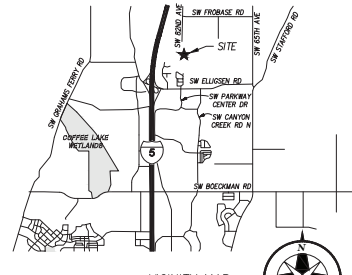
A PORTION OF THOSE PROPERTIES CONVEYED TO THE CITY OF WILSONVILLE BY THE DEEDS RECORDED IN BOOK 1005 PAGES 509, 510 & 511 OF THE DEED RECORDS OF WASHINGTON COUNTY, OREGON, LOCATED IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 1 OF TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SURVEY NO. 21,921 FILED IN THE OFFICE OF THE COUNTY SURVEYOR OF SAID COUNTY TO MARK THE SOUTHWEST CORNER OF THE PROPERTY CONVEYED TO THE CITY OF WILSONVILLE BY THAT DEED RECORDED IN BOOK 1005 PAGE 509 OF THE DEED RECORDS OF SAID COUNTY; FROM THENCE A 5/8" IRON ROD WITH A YELLOW PLASTIC CAP MARKED DE HAAS & ASSOC., INC. SET IN SAID SURVEY FOR THE SOUTHWEST CORNER OF SAID BOOK 1005 PAGE 509 AND SAID PROPERTY; BEARS SOUTH 88°45'27" EAST 104.35 FEET; THENCE ALONG THE SOUTH LINES OF SAID BOOK 1005 PAGE 509 AND BOOK 1005 PAGE 511 SOUTH 88°45'27" EAST 148.70 FEET; THENCE NORTH 01°05'58" EAST 18.69 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 88°45'27" WEST 18.68 FEET TO A POINT ON THE WEST LINE OF SAID BOOK 1005 PAGE 509; THENCE NORTH 01°05'58" EAST 40.00 FEET ALONG SAID WEST LINE; THENCE SOUTH 88°44'46" EAST 15.00 FEET; THENCE SOUTH 01°05'58" WEST 30.00 FEET; THENCE SOUTH 88°45'27" EAST 133.62 FEET; THENCE SOUTH 01°05'58" WEST 15.00 FEET TO THE TRUE POINT OF BEGINNING.

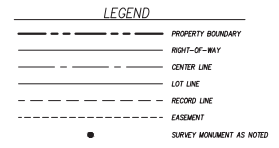
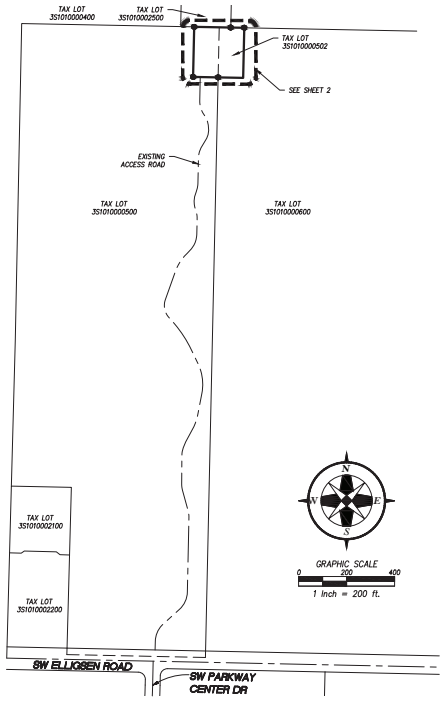
CONTAINS 1828 SQUARE FEET MORE OR LESS



LOCATION MAP
SCALE: NOT TO SCALE



VICINITY MAP
SCALE: NOT TO SCALE



AS-BUILT SURVEY
C800- WILSONVILLE WATER TANK TOWER
MUNICIPAL CORP. OF WILSONVILLE
TAX LOT 33101000002

COMMUNICATIONS SYSTEM UPGRADE PROJECT
CLACKAMAS 3RD ROAD GROUP
11309 SE VALLEY RD., WILSONVILLE, OR 97122

REV.	DATE	DESCRIPTION	BY
1	08/31/2020	AS-BUILT SURVEY	KADE
2	09/01/2020	REVISIONS	KADE

0103-048-0473
McKoy Consulting, LLC
1000 NE Oregon Street, Suite 100
Portland, Oregon 97232
www.mckoyconsulting.com

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
NUMBER 10,208
KAD EDWARD MCKAY
RENEWED 12-31-2022

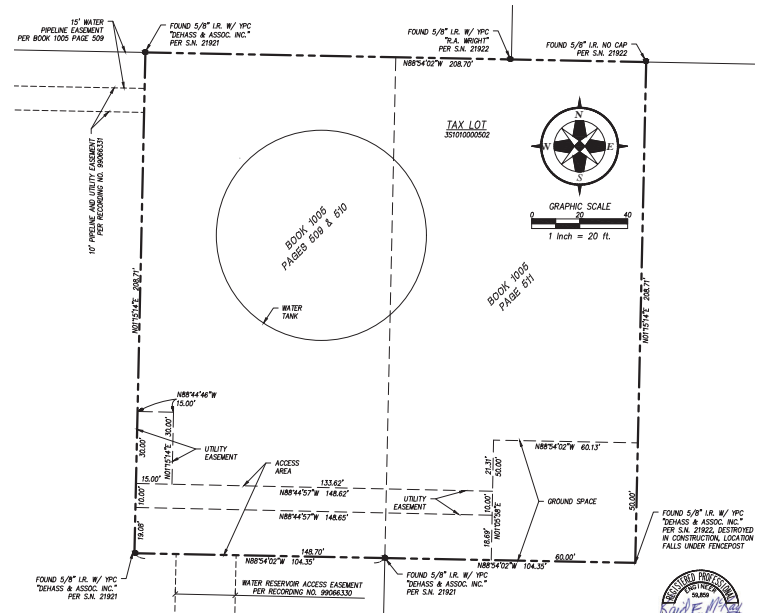
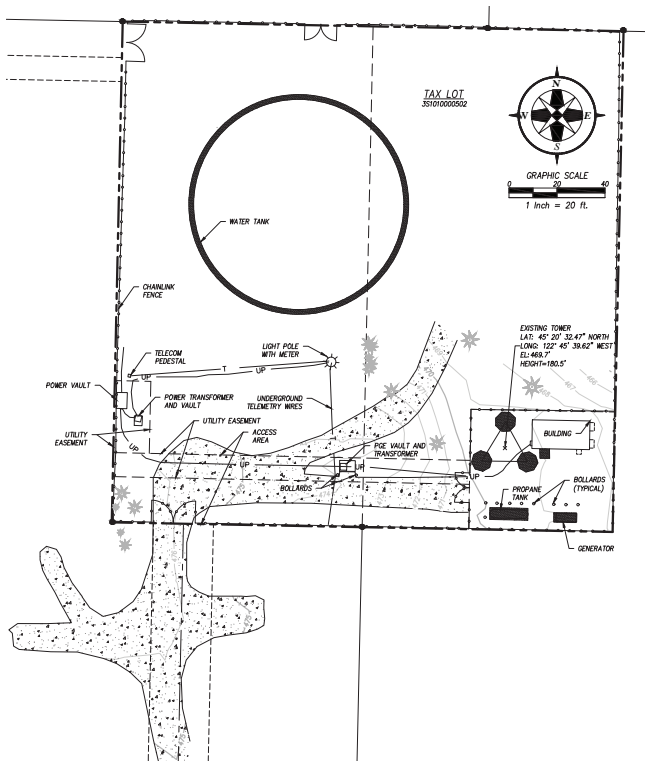
RENEWED 12-31-2022

1 OF 2

AS-BUILT SURVEY C800- WILSONVILLE WATER TANK TOWER

A TRACT OF LAND IN SECTION 1
TOWNSHIP 3 SOUTH, RANGE 1 WEST OF THE WILLAMETTE MERIDIAN
IN WASHINGTON COUNTY, OREGON
SURVEYED AUGUST 31, 2020

LEGEND	
	PROPERTY BOUNDARY
	RIGHT-OF-WAY
	CENTER LINE
	LOT LINE
	RECORD LINE
	EASEMENT
	CONTOUR LINE
	CHAINLINK FENCE
	UNDERGROUND POWER
	CONCRETE PAVEMENT
	GRAVEL
	FOUND MONUMENT AS NOTED
	YELLOW PLASTIC CAP
	IRON ROD
	TREE STUMP



AS-BUILT SURVEY
C800- WILSONVILLE WATER TANK TOWER
MCKAY & ASSOC. INC.
TAX LOT 35101000502

COMMUNICATIONS SYSTEM UPGRADE PROJECT
CZACHARAS 300 ROAD GROUP
11309 SE VOLEY RD., WILSONVILLE, OR 97122

REV.	DATE	DESCRIPTION
1	08/31/2020	AS-BUILT SURVEY AND TOWER PLACEMENT

McKay Consulting, LLC
00334848-0275
REGISTERED PROFESSIONAL LAND SURVEYOR
KAD EDWARD MCKAY
SEP 10 2020
RENEWED 12-31-2022

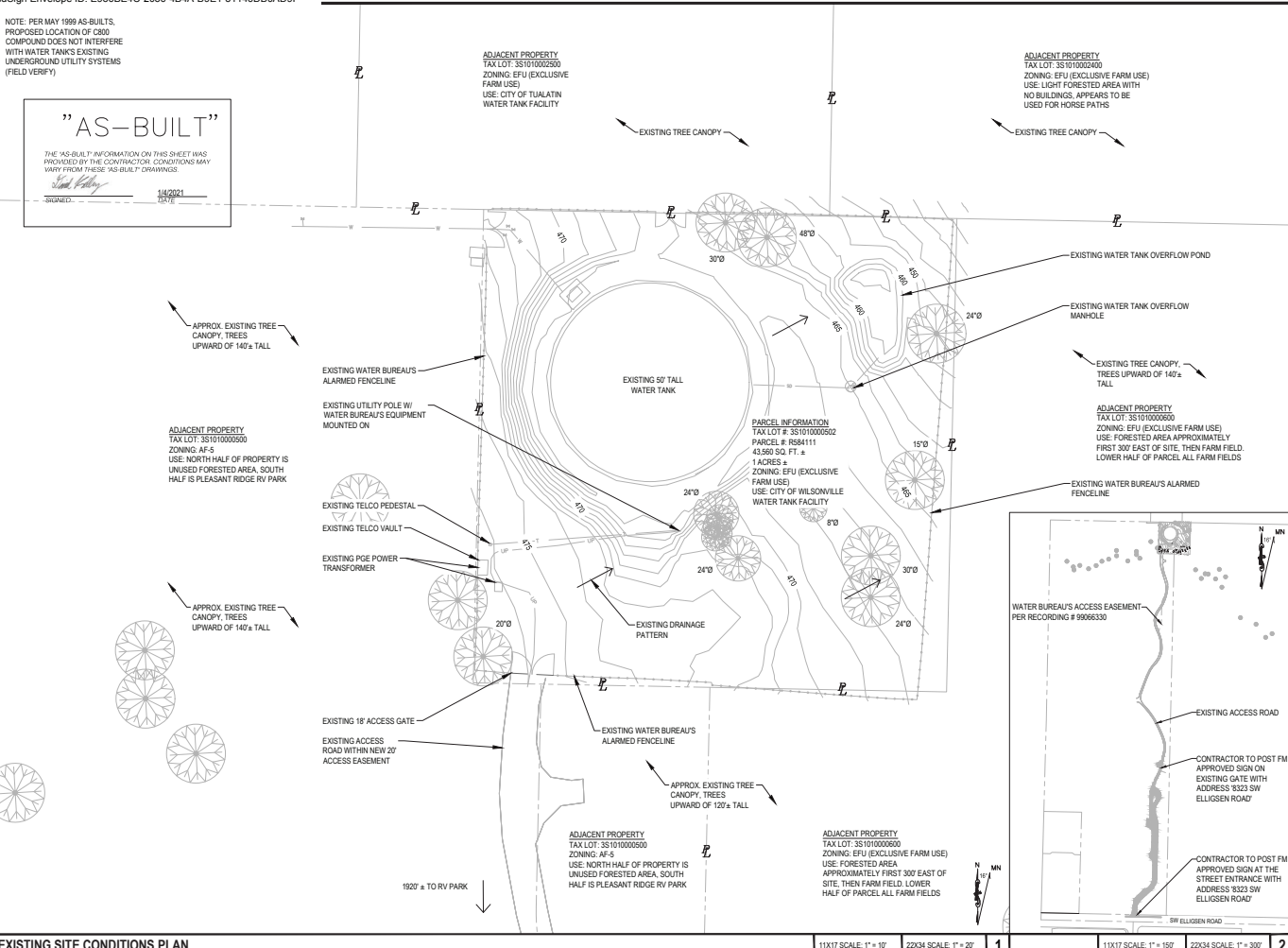
REGISTERED PROFESSIONAL LAND SURVEYOR
KAD EDWARD MCKAY
SEP 10 2020
RENEWED 12-31-2022

RENEWED 12-31-2022

2 OF 2

NOTE: PER MAY 1999 AS-BUILTS, PROPOSED LOCATION OF C800 COMPOUND DOES NOT INTERFERE WITH WATER TANKS EXISTING UNDERGROUND UTILITY SYSTEMS (FIELD VERIFY)

"AS-BUILT"
 THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.
 [Signature]
 14/02/21



PROJECT INFORMATION:
C-4 WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
12/11/17	PRELIM CONSTRUCTION SUBMITTAL
01/18/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHEET
01/18/16	FINAL CONSTRUCTION SUBMITTAL
02/01/16	FINAL CONSTRUCTION SUBMITTAL
02/01/15	FINAL CONSTRUCTION SUBMITTAL
07/19/15	FINAL CONSTRUCTION SUBMITTAL
01/16/15	FINAL CONSTRUCTION SUBMITTAL
02/20/15	FINAL CONSTRUCTION SUBMITTAL
01/12/15	PLAN CHECK#1
11/01/14	AS-BUILTS
01/14/02	AS-BUILTS ELEMENT REV'S

DRAWING INFORMATION:
 THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:



Don Cushing Associates
 Civil Engineers
 107 SE WASHINGTON STREET
 SUITE 200
 PORTLAND, OR 97214
 (503) 287-5231
www.cushing-engineers.com



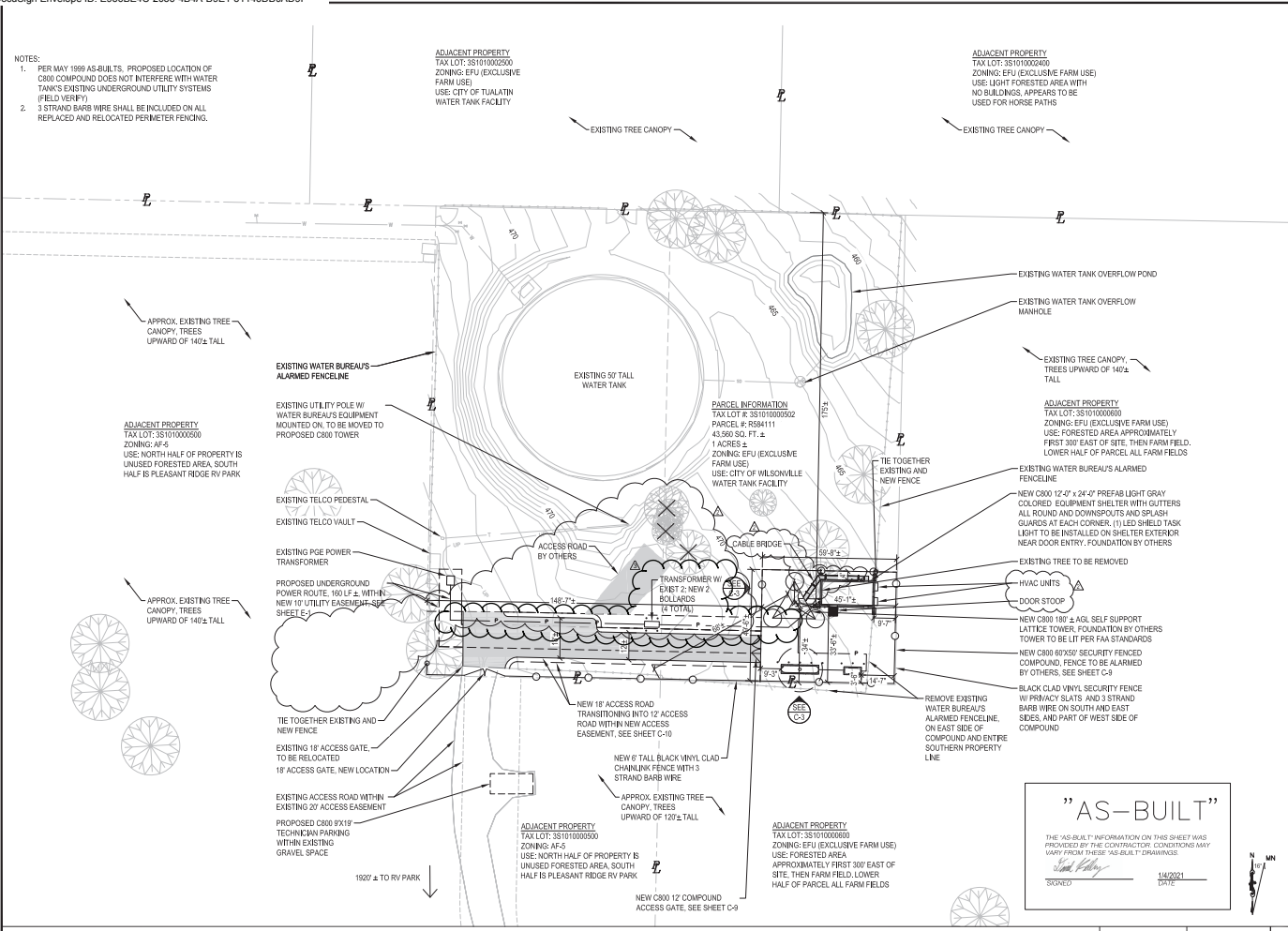
RENEWAL DATE 12/31/21

SHEET TITLE:

EXISTING SITE CONDITIONS PLAN

SHEET NUMBER:
C-1

- NOTES:
- PER MAY 1999 AS-BUILTS, PROPOSED LOCATION OF C800 COMPOUND DOES NOT INTERFERE WITH WATER TANK'S EXISTING UNDERGROUND UTILITY SYSTEMS (FIELD 62874)
 - 3 STRAND BARR WIRE SHALL BE INCLUDED ON ALL REPLACED AND RELOCATED PERIMETER FENCING.



"AS-BUILT"

THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.

1/4/2021
DATE



PROJECT INFORMATION:

**C-4
WILSONVILLE TANK**

8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
01/17/17	PANEL CONSTRUCTION SUBMITTAL
02/17/17	UPDATED GEN'L & PROP. TANK SHIT
07/19/16	PANEL CONSTRUCTION SUBMITTAL
02/20/16	PANEL CONSTRUCTION SUBMITTAL
03/05/16	PANEL CONSTRUCTION SUBMITTAL
07/19/16	PANEL CONSTRUCTION SUBMITTAL
07/20/16	PANEL CONSTRUCTION SUBMITTAL
08/12/16	PLAN CHECK
11/01/16	APPROVAL
01/12/17	APPROVAL (CLIENT REVIEW)

DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PRODUCED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

cushing
ENGINEERS, INC.

Don Cushing Associates
CMI Engineers

107 SE WASHINGTON STREET
SUITE 200
PORTLAND, OR 97214
(503) 264-4331
www.cushinginc.com

REGISTERED PROFESSIONAL ENGINEER
14682
Don Cushing
OREGON
DEC. 07, 1989
DON CUSHING

RENEWAL DATE 12/31/21

SHEET TITLE:
PROPOSED SITE DEVELOPMENT PLAN

SHEET NUMBER:
C-1.1

DocuSign Envelope ID: E936BE4C-2036-4B4A-B9E1-31146DB0AD9F

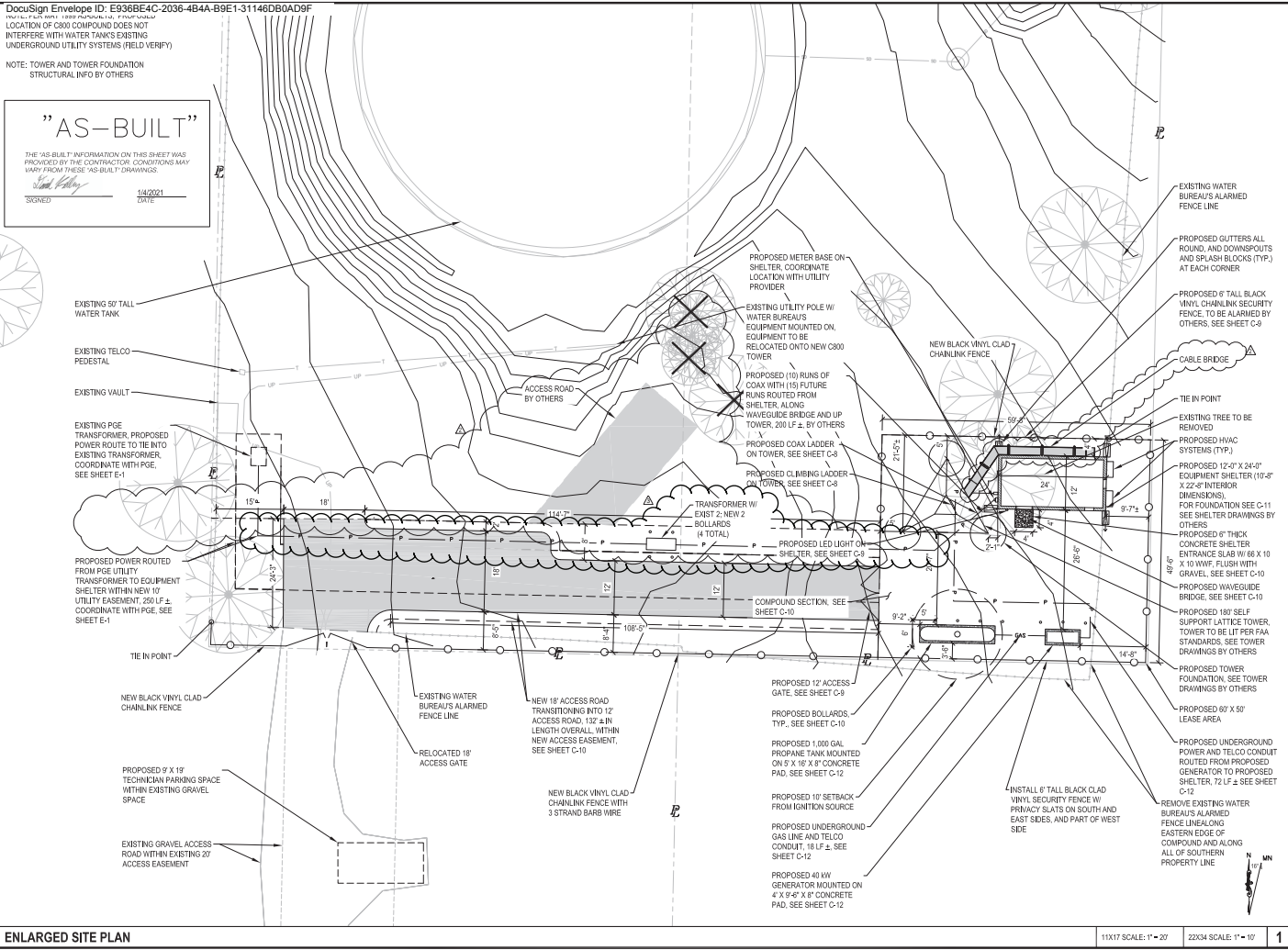
LOCATION OF C800 COMPOUND DOES NOT INTERFERE WITH WATER TANKS EXISTING UNDERGROUND UTILITY SYSTEMS (FIELD VERIFY)

NOTE: TOWER AND TOWER FOUNDATION STRUCTURAL INFO BY OTHERS

"AS-BUILT"

THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.

S. J. Kelly
SIGNED _____ DATE 1/4/2021



PROJECT INFORMATION:

C-4 WILSONVILLE TANK

8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
7/20/17	PRELIM CONSTRUCTION SUBMITTAL
8/18/17	FINAL CONSTRUCTION SUBMITTAL
3/20/17	OPERATED GEN & PROPS. TANK SHIT
1/12/18	FINAL CONSTRUCTION SUBMITTAL
2/20/18	FINAL CONSTRUCTION SUBMITTAL
6/20/18	FINAL CONSTRUCTION SUBMITTAL
7/20/18	FINAL CONSTRUCTION SUBMITTAL
7/20/19	FINAL CONSTRUCTION SUBMITTAL
10/2/19	FINAL CONSTRUCTION SUBMITTAL
11/2/19	PLANNED II
1/4/20	FINAL II
1/12/20	FINAL II (CONTRACT REVIEW)

DRAWING INFORMATION:

THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PRODUCED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

cushing
ASSOCIATES, INC.

Don Cushing Associates
Civil Engineers

107 SE WASHINGTON STREET
SUITE 300
PORTLAND, OR 97214
(503) 347-5331
www.cushing-inc.com

LICENSURE:

REGISTERED PROFESSIONAL
ENGINEER
14692
Don Cushing
OREGON
DEC. 07, 1989
DON CUSHING

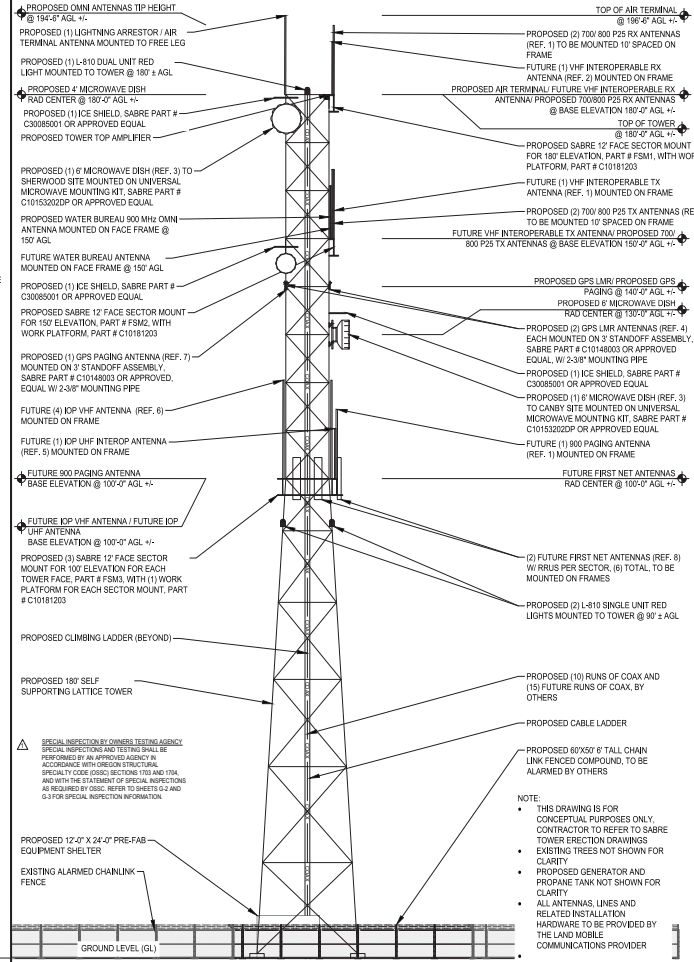
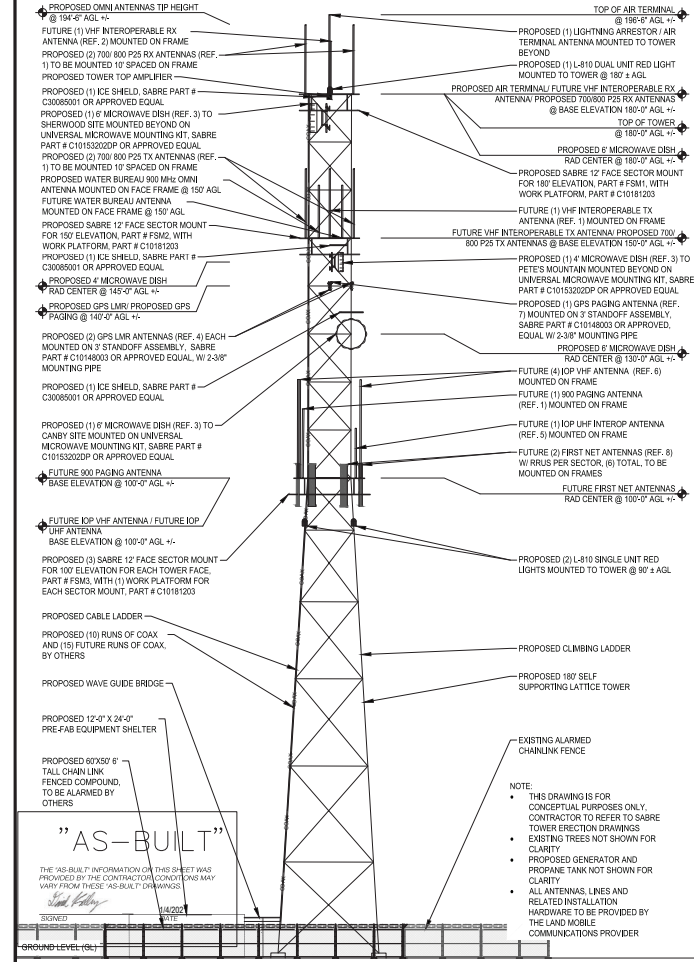
RENEWAL DATE 12/31/21

SHEET TITLE:
ENLARGED SITE PLAN

SHEET NUMBER:
C-2

ENLARGED SITE PLAN

11X17 SCALE: 1" = 20'
22X34 SCALE: 1" = 10'
1



PROPOSED SOUTH ELEVATION 11X17 SCALE: 1" = 20' 22X34 SCALE: 1" = 10' 1

PROPOSED WEST ELEVATION 11X17 SCALE: 1" = 20' 22X34 SCALE: 1" = 10' 2



PROJECT INFORMATION:
C-4
WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
11/17/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHIT
01/18/16	FINAL CONSTRUCTION SUBMITTAL
02/20/16	FINAL CONSTRUCTION SUBMITTAL
02/05/15	FINAL CONSTRUCTION SUBMITTAL
09/19/14	FINAL CONSTRUCTION SUBMITTAL
04/16/14	FINAL CONSTRUCTION SUBMITTAL
02/25/14	FINAL CONSTRUCTION SUBMITTAL
01/12/13	PLAN CHECK/
04/01/13	AS-BUILT
04/10/12	AS-BUILT (CLIENT REV'S)

DRAWING INFORMATION:
 THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:

 Don Cushing Associates
 Civil Engineers
 101 SE WASHINGTON STREET
 SUITE 200
 PORTLAND, OR 97214
 (503) 287-5231
 www.cushing-engineers.com



RENEWAL DATE 12/31/21
 SHEET TITLE:
ELEVATIONS
 SHEET NUMBER:
C-3

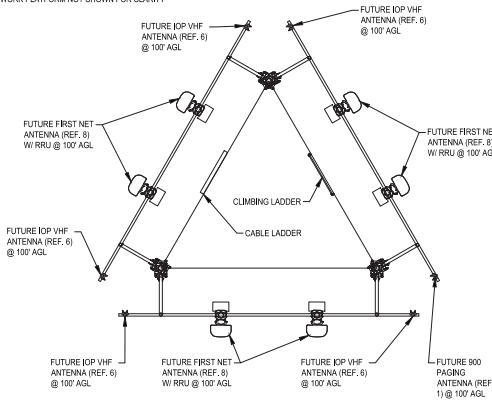
"AS-BUILT"
 THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.
 11/20/17
 SIGNED: [Signature]
 TITLE: [Title]

NOTE:
 THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO REFER TO SABRE TOWER ERECTION DRAWINGS FOR CLARITY.
 • EXISTING TREES NOT SHOWN FOR CLARITY.
 • PROPOSED GENERATOR AND PROPANE TANK NOT SHOWN FOR CLARITY.
 • ALL ANTENNAS, LINES AND RELATED INSTALLATION HARDWARE TO BE PROVIDED BY THE LAND MOBILE COMMUNICATIONS PROVIDER

SPECIAL INSPECTION BY OWNER TESTING AGENCY:
 SPECIAL INSPECTION AND TESTING SHALL BE PERFORMED BY AN APPROVED AGENCY IN ACCORDANCE WITH OREGON STRUCTURAL SPECIALTY CODE (OSCC) SECTIONS 170 AND 170A, AND WITH THE ESTIMATE OF SPECIAL INSPECTIONS AS REQUIRED BY OSCC. REFER TO SHEETS G-2 AND G-3 FOR SPECIAL INSPECTION INFORMATION.

NOTE:
 THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO REFER TO SABRE TOWER ERECTION DRAWINGS FOR CLARITY.
 • EXISTING TREES NOT SHOWN FOR CLARITY.
 • PROPOSED GENERATOR AND PROPANE TANK NOT SHOWN FOR CLARITY.
 • ALL ANTENNAS, LINES AND RELATED INSTALLATION HARDWARE TO BE PROVIDED BY THE LAND MOBILE COMMUNICATIONS PROVIDER

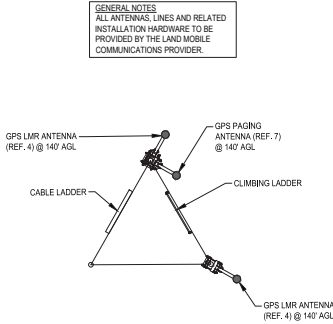
WORK PLATFORM NOT SHOWN FOR CLARITY



1 AZIMUTH DIAGRAM (100' ELEVATION)

SCALE: N.T.S.

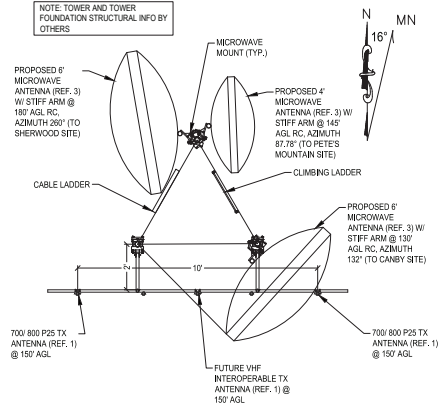
GENERAL NOTES
ALL ANTENNAS, LINES AND RELATED INSTALLATION HARDWARE TO BE PROVIDED BY THE LAND MOBILE COMMUNICATIONS PROVIDER.



2 AZIMUTH DIAGRAM (140' ELEVATION)

SCALE: N.T.S.

NOTE: TOWER AND TOWER FOUNDATION STRUCTURAL INFO BY OTHERS



3 AZIMUTH DIAGRAM (TX ELEVATION)

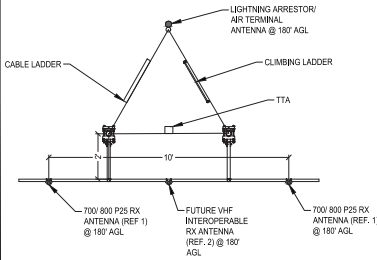
SCALE: N.T.S.

MICROWAVE ICE SHIELDS NOT SHOWN FOR CLARITY. SEE SHEET C-3

WORK PLATFORM NOT SHOWN FOR CLARITY

“AS-BUILT”
THE “AS-BUILT” INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE “AS-BUILT” DRAWINGS.
SIGNED: _____ DATE: 11/2/2021

WORK PLATFORM NOT SHOWN FOR CLARITY



4 AZIMUTH DIAGRAM (RX ELEVATION)

SCALE: N.T.S.

REF. #	ITEM TYPE	BASE ELEVATION	QUANTITY	MFGR.	MODEL #	DIMENSIONS	WEIGHT	FEED TYPE	QUANTITY OF FEEDS	LENGTH PER RUN	FEED LINE SIZE	FEED LINE WEIGHT
1	700/ 800 P25 RX ANTENNA	180'	2	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	AV45-50	2	200'	7/8" Ø	0.30 lb/ft
2	VHF INTEROPERABLE RX ANTENNA	180'	1 FUTURE	SINCLAIR	SD310210D-SF2P28NM	132"x42.5"x4.5"	19 lbs	AV45-50A / LDF4-60A	2 FUTURE	200'	7/8" Ø / 1/2" Ø	0.30 lb/ft / 0.15 lb/ft
-	LIGHTNING ARRESTOR	180'	1	SABRE	UNKNOWN	6' x 3/4" O.D.	318 lbs	AV45-50	1	200'	7/8" Ø	0.30 lb/ft
3	MICROWAVE	180'	1	RFS	PADIX6-W98B	72" Ø	141 lbs	EUPEN EU90	1	175'	1.25" x 0.78"	0.34 lb/ft
-	TOWER TOP AMPLIFIER	177'	1	BIRD	437-831-81-T	11.3"x7"x10.2"	25 lbs	LDF4-60A	1	220'	1/2"	0.15 lb/ft
1	VHF INTEROPERABLE TX ANTENNA	150'	1 FUTURE	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	LDF4-60A	1 FUTURE	170'	1/2" Ø	0.15 lb/ft
1	700/ 800 P25 TX ANTENNA	150'	2	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	AV45-50	2	170'	7/8" Ø	0.30 lb/ft
1	WATER BUREAU 900 MHz OMNI	150'	1	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	AV45-50	1	170'	7/8" Ø	0.30 lb/ft
1	WATER BUREAU OMNI	150'	1 FUTURE	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	AV45-50	1 FUTURE	170'	7/8" Ø	0.30 lb/ft
3	MICROWAVE	145'	1	RFS	PADIX6-W98B	72" Ø	141 lbs	EUPEN EU90	1	140'	1.25" x 0.78"	0.34 lb/ft
4	GPS LMR ANTENNA	140'	2	TRIMBLE	BULLET III	3.05"x2.81"	7.0 oz	LDF4-60A	2	160'	1/2" Ø	0.15 lb/ft
7	GPS PAGING ANTENNA	140'	1	TRIMBLE	ACCUTIME	3.74"x2.85"	5.4 oz	LDF4-60A	1	160'	1/2" Ø	0.15 lb/ft
3	MICROWAVE	130'	1	RFS	PADIX6-W98B	72" Ø	141 lbs	EUPEN EU90	1	140'	1.25" x 0.78"	0.34 lb/ft
6	IOP VHF ANTENNA	100'	5 FUTURE	COMPRO	884-70HDB	246"x31"	78 lbs	LDF4-60A	4 FUTURE	120'	1/2" Ø	0.15 lb/ft
1	900 PAGING ANTENNA	100'	1 FUTURE	SINCLAIR	SC479-HL	173.4"x3.5" O.D.	34 lbs	AV45-50	1 FUTURE	120'	7/8" Ø	0.30 lb/ft
5	IOP UHF ANTENNA	100'	1 FUTURE	COMPRO	784-70HDB	126"x12.75"	38 lbs	LDF4-60A	1 FUTURE	120'	1/2" Ø	0.15 lb/ft
8	FRST NET ANTENNA	100'	6 FUTURE	KATHREIN	80010992	105.2"x20"x6.5"	133.4 lbs	HB114-L6S12	6 FUTURE	120'	1.54" Ø	1.7 lb/ft
1	FRST NET RRUS	100'	6 FUTURE	TBD	TBD	22"x13"x6.7"	60 lbs	N/A	N/A	N/A	N/A	

5 TOWER MOUNTED EQUIPMENT SPECIFICATION CHART

SCALE: N.T.S.



PROJECT INFORMATION:
C-4 WILSONVILLE TANK
8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
11/11/21	PRELIM CONSTRUCTION SUBMITTAL
12/11/21	FINAL CONSTRUCTION SUBMITTAL
02/11/22	UPDATED GEN. & PROP. TANK SHED
03/18/22	FINAL CONSTRUCTION SUBMITTAL
05/05/22	FINAL CONSTRUCTION SUBMITTAL
07/19/22	FINAL CONSTRUCTION SUBMITTAL
08/18/22	FINAL CONSTRUCTION SUBMITTAL
10/26/22	FINAL CONSTRUCTION SUBMITTAL
12/12/22	PLAN CHECK
01/12/23	AS-BUILTS
02/15/23	AS-BUILTS (ELECTRICAL)

DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:



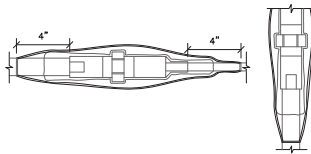
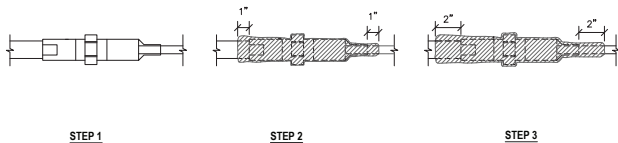
RENEWAL DATE 12/31/21

SHEET TITLE:

RF PLAN & SCHEDULE

SHEET NUMBER:

C-5

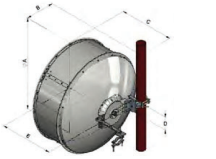


STEP 4

1 COAX CABLE WEATHERPROOFING
SCALE: N.T.S.

* NOTE: ALL ANTENNAS, LINES AND RELATED INSTALLATION HARDWARE TO BE PROVIDED BY THE LAND MOBILE COMMUNICATIONS PROVIDER.

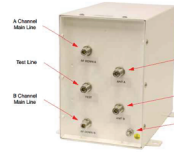
IMAGE MAY DIFFER FROM ACTUAL MICROWAVE DISH



DIMENSIONS IN INCHES					
ANTENNA SIZE, FT	A	B	C	D	E
4	50.8	16	30.2	7.2	28.5

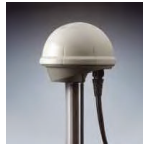
REF. # 3	MODEL NUMBER	WEIGHT	MANUFACTURER	DIAMETER
	WHPN-11W-6WPHB	71 lbs	ANDREW	50.8"

5 4' MICROWAVE DISH DETAIL
SCALE: N.T.S.



MODEL NUMBER	WEIGHT	MANUFACTURER	DIAMETER
437-831-01-T	25 lbs	BIRD TECHNOLOGIES	11.3"X7"X10.2"

2 TOWER TOP AMPLIFIER DETAIL
SCALE: N.T.S.



REF. # 7	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	ACOUTIME	5.4 oz	TRIMBLE	3.74"X2.85"

REF. # 4	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	BULLET III	7 oz	TRIMBLE	3.00"X2.81"

3 GPS ANTENNA DETAILS
SCALE: N.T.S.



4 LIGHTNING ARRESTOR/ AIR TERMINAL DETAILS
SCALE: N.T.S.

FIRST NET ANTENNAS

REF. # 1	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	SC479-PL	24 lbs	SINCLAIR	173.4"X3.0"

REF. # 2	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	S0310210D	19 lbs	SINCLAIR	132"X42.5"X4.5"

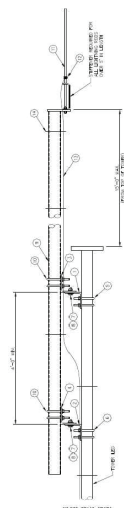
REF. # 6	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	886-70HDB	76 lbs	COMPROD	246"X31"

REF. # 5	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	784-70HDB	38 lbs	COMPROD	126"X12.75"

REF. # 8	MODEL NUMBER	WEIGHT	MANUFACTURER	DIMENSIONS
	80010992	133.4 lbs	KATHREIN	105.2"X20"X6.9"

6 ANTENNA DETAILS
SCALE: N.T.S.

"AS-BUILT"
THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THOSE "AS-BUILT" DRAWINGS.
Signed: *Paul Kelly*
DATE: 11/20/21



PROJECT INFORMATION:
C-4 WILSONVILLE TANK
8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
11/11/21	PRELIM. CONSTRUCTION SUBMITTAL
11/18/21	FINAL CONSTRUCTION SUBMITTAL
12/11/21	UPDATED GEN. & PROP. TANK SHIT
1/12/22	FINAL CONSTRUCTION SUBMITTAL
2/22/22	FINAL CONSTRUCTION SUBMITTAL
3/22/22	FINAL CONSTRUCTION SUBMITTAL
4/22/22	FINAL CONSTRUCTION SUBMITTAL
5/22/22	FINAL CONSTRUCTION SUBMITTAL
6/22/22	FINAL CONSTRUCTION SUBMITTAL
7/22/22	FINAL CONSTRUCTION SUBMITTAL
8/22/22	FINAL CONSTRUCTION SUBMITTAL
9/22/22	FINAL CONSTRUCTION SUBMITTAL
10/22/22	FINAL CONSTRUCTION SUBMITTAL
11/22/22	FINAL CONSTRUCTION SUBMITTAL
12/22/22	FINAL CONSTRUCTION SUBMITTAL
1/23/23	FINAL CONSTRUCTION SUBMITTAL
2/23/23	FINAL CONSTRUCTION SUBMITTAL
3/23/23	FINAL CONSTRUCTION SUBMITTAL
4/23/23	FINAL CONSTRUCTION SUBMITTAL
5/23/23	FINAL CONSTRUCTION SUBMITTAL
6/23/23	FINAL CONSTRUCTION SUBMITTAL
7/23/23	FINAL CONSTRUCTION SUBMITTAL
8/23/23	FINAL CONSTRUCTION SUBMITTAL
9/23/23	FINAL CONSTRUCTION SUBMITTAL
10/23/23	FINAL CONSTRUCTION SUBMITTAL
11/23/23	FINAL CONSTRUCTION SUBMITTAL
12/23/23	FINAL CONSTRUCTION SUBMITTAL

DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:



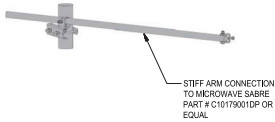
RENEWAL DATE 12/31/21

SHEET TITLE:

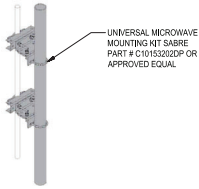
RF DETAILS

SHEET NUMBER:

NOTE:
ALL MICROWAVE MOUNTING AND ICE SHIELD INSTALLATIONS BY OTHERS

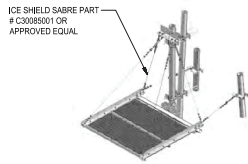


1 MICROWAVE STIFF ARM DETAIL
SCALE: N.T.S.



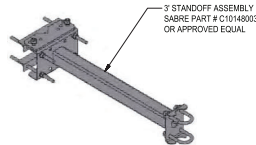
5 MICROWAVE MOUNTING DETAILS
SCALE: N.T.S.

2 NOT IN USE
SCALE: N.T.S.

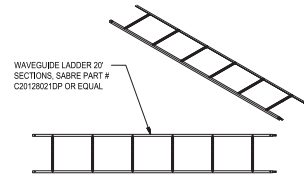


6 MICROWAVE DISH ICE SHIELD DETAIL
SCALE: N.T.S.

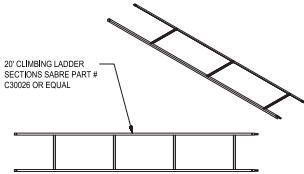
3 NOT IN USE
SCALE: N.T.S.



7 GPS ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



4 WAVEGUIDE LADDER DETAIL
SCALE: N.T.S.



8 SAFETY CLIMBING LADDER DETAIL
SCALE: N.T.S.

"AS-BUILT"
THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.
Don Cushing
SIGNED _____ DATE 11/20/21



PROJECT INFORMATION:
C-4
WILSONVILLE TANK
8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
12/11/17	PRELIM. CONSTRUCTION SUBMITTAL
01/18/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHEET
01/24/16	FINAL CONSTRUCTION SUBMITTAL
12/22/16	FINAL CONSTRUCTION SUBMITTAL
02/25/16	FINAL CONSTRUCTION SUBMITTAL
07/19/16	FINAL CONSTRUCTION SUBMITTAL
01/16/16	FINAL CONSTRUCTION SUBMITTAL
12/23/15	FINAL CONSTRUCTION SUBMITTAL
01/21/15	PLAN CHECKER
11/20/15	AS BUILTS
11/19/15	AS BUILTS (SILENT REV'S)

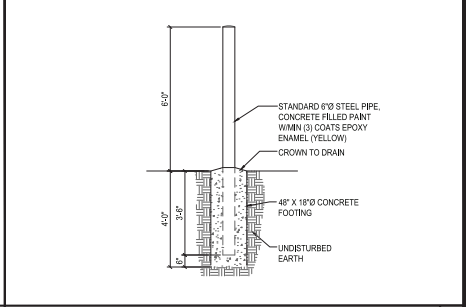
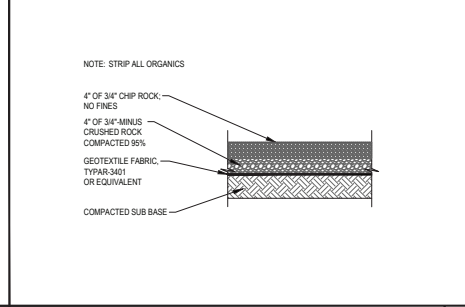
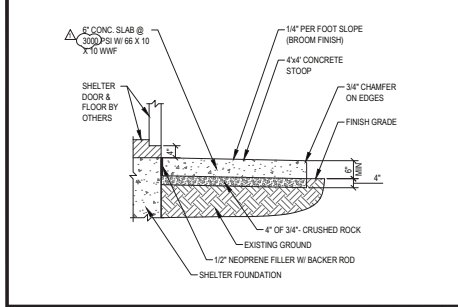
DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:

cushing
Civil Engineers
Don Cushing Associates
Civil Engineers
107 SE WASHINGTON STREET
SUITE 200
PORTLAND, OR 97214
(503) 287-8231
www.cushing-inc.com

LICENSED:

RENEWAL DATE 12/31/21

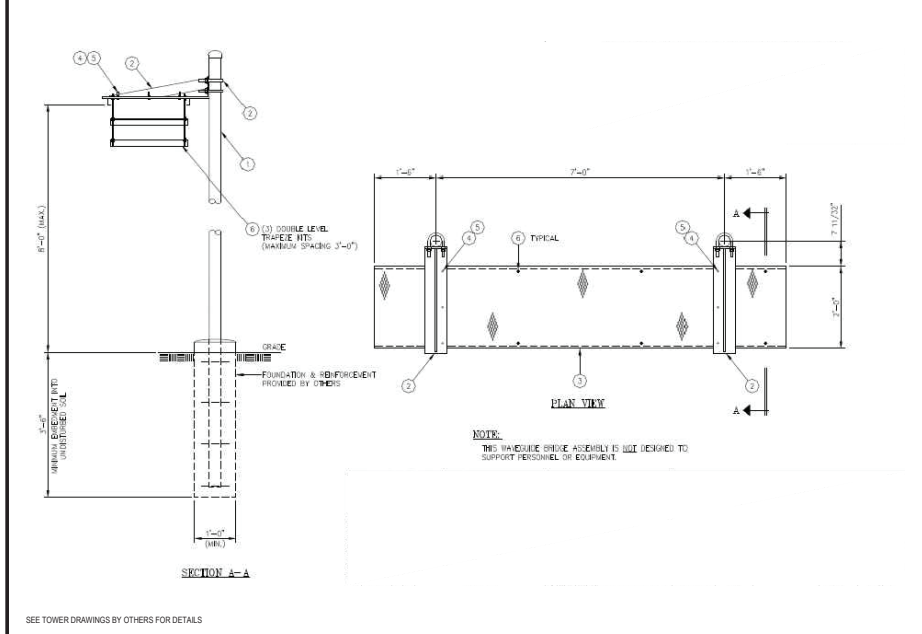
SHEET TITLE:
TOWER RELATED EQUIPMENT DETAILS I
SHEET NUMBER:
C-8



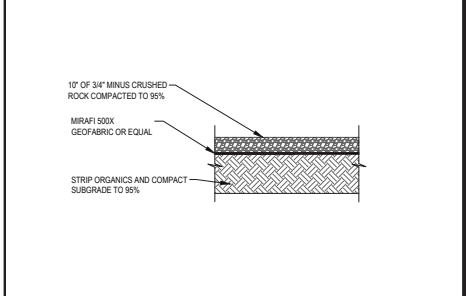
CONCRETE SHELTER ENTRANCE SECTION DETAIL SCALE: NTS 1

COMPOUND SECTION DETAIL SCALE: NTS 2

BOLLARD DETAIL SCALE: NTS 3



WAVE GUIDE DETAIL SCALE: NTS 4



TYPICAL GRAVEL ROAD SECTION SCALE: NTS 5

“AS-BUILT”

THE “AS-BUILT” INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE “AS-BUILT” DRAWINGS.

SIGNED: *Don Cushing* DATE: 1/4/2021

NOT IN USE SCALE: NTS 6

CELESTAS
WILKINS
CORP.

11111 NE Flanders Rd
Hillsboro, Oregon 97123
(503) 236-4042

PROJECT INFORMATION:

C-4
WILSONVILLE
TANK
8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
01/11/17	PRELIM CONSTRUCTION SUBMITTAL
01/18/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHEET
01/12/18	FINAL CONSTRUCTION SUBMITTAL
02/23/18	FINAL CONSTRUCTION SUBMITTAL
02/26/18	FINAL CONSTRUCTION SUBMITTAL
02/28/18	FINAL CONSTRUCTION SUBMITTAL
03/01/18	FINAL CONSTRUCTION SUBMITTAL
03/02/18	FINAL CONSTRUCTION SUBMITTAL
03/03/18	FINAL CONSTRUCTION SUBMITTAL
03/05/18	FINAL CONSTRUCTION SUBMITTAL
03/06/18	FINAL CONSTRUCTION SUBMITTAL
03/07/18	FINAL CONSTRUCTION SUBMITTAL
03/08/18	FINAL CONSTRUCTION SUBMITTAL
03/09/18	FINAL CONSTRUCTION SUBMITTAL
03/12/18	PLAN CHECK#1
03/13/18	AS-BUILTS
03/14/18	AS-BUILTS (CLIENT REV'S)

DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:

cushing
Civil Engineering

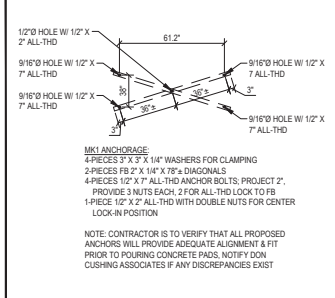
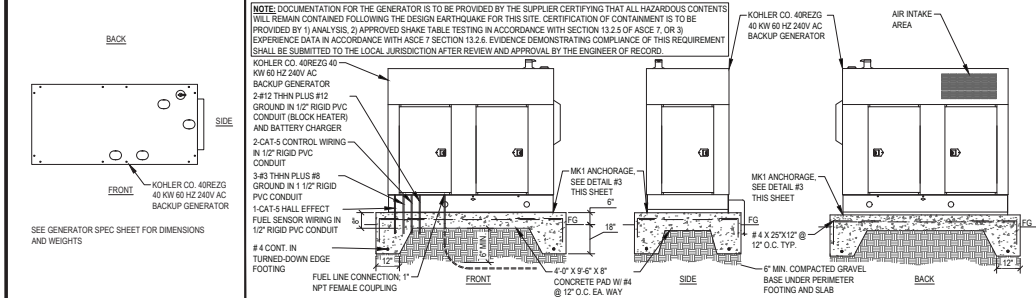
Don Cushing Associates
Civil Engineers
107 SE WASHINGTON STREET
SUITE 200
PORTLAND, OR 97214
(503) 287-8231
www.cushing-engineers.com

LICENSE NUMBER:

RENEWAL DATE 12/31/21

SHEET TITLE:
COMPOUND
DETAILS II

SHEET NUMBER:
C-10



CELESTAS 11111 NE Flanders Blvd. Hillsboro, Oregon 97123 (503) 236-4242

PROJECT INFORMATION:

C-4 WILSONVILLE TANK

8323 SW ELLIGSEN ROAD TUALATIN, OR 97062

DATE	RELEASE
01/11/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHIT
03/16/18	FINAL CONSTRUCTION SUBMITTAL
02/20/18	FINAL CONSTRUCTION SUBMITTAL
02/20/18	FINAL CONSTRUCTION SUBMITTAL
07/19/18	FINAL CONSTRUCTION SUBMITTAL
01/18/18	FINAL CONSTRUCTION SUBMITTAL
02/20/18	FINAL CONSTRUCTION SUBMITTAL
01/12/18	PLAN CHECK
01/20/18	AS-BUILT
01/20/18	AS-BUILT (CLIENT REV)

DRAWING INFORMATION:

THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PRODUCED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER. PLANS PREPARED BY:

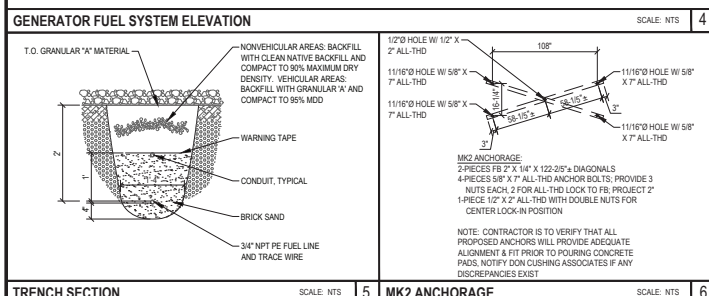
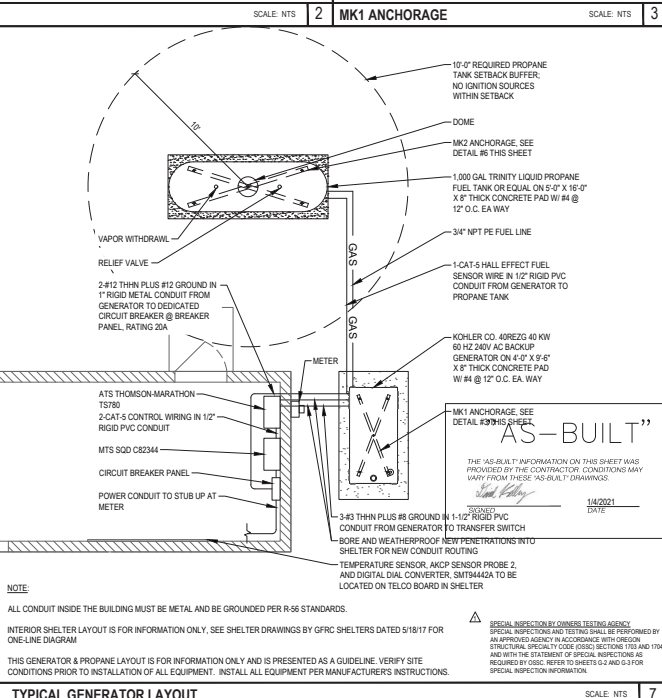
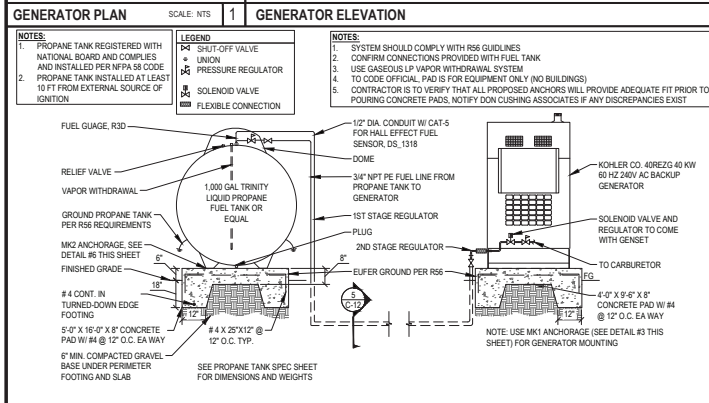
Don Cushing Associates
Civil Engineers
107 SE WASHINGTON STREET
SUITE 200
PORTLAND, OR 97214
(503) 287-5231
www.doncushing.com

REGISTERED PROFESSIONAL ENGINEER 14662
DON CUSHING
DEC. 07, 1989

RENEWAL DATE 12/31/21

SHEET TITLE: **GENERATOR & PROPANE TANK DETAILS**

SHEET NUMBER: **C-12**



REGISTERED PROFESSIONAL ENGINEER 14662
DON CUSHING
DEC. 07, 1989

RENEWAL DATE 12/31/21

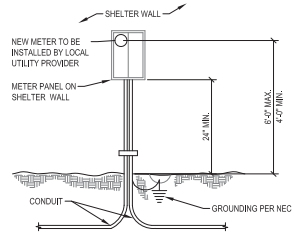
SHEET TITLE: **GENERATOR & PROPANE TANK DETAILS**

SHEET NUMBER: **C-12**

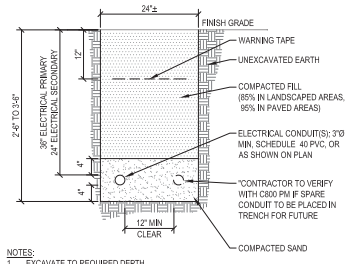
"AS-BUILT"

THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.

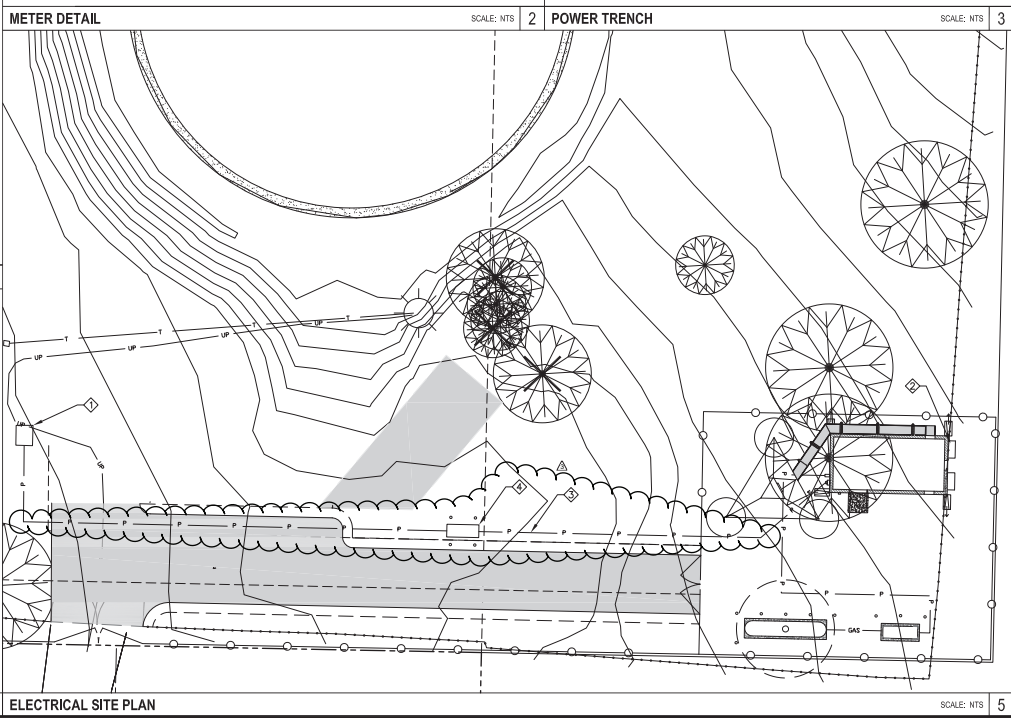
Scott Valley
 SIGNED: 11/10/21
 TITLE:



- NOTES:
1. ELECTRICAL LABEL OR PERMIT MUST BE DISPLAYED ON METER BASE.
 2. ALL GROUNDING DESIGN, SPECIFICATIONS, AND CONSTRUCTION METHODS SHALL COMPLY WITH THE MOTOROLA R56 "STANDARDS AND GUIDELINES FOR COMMUNICATION SITES".
 3. MOUNT METER PER LOCAL UTILITY REQUIREMENTS.
 4. LOCAL UTILITY WILL DETERMINE THE EXACT LOCATION OF METER BASE.



- NOTES:
1. EXCAVATE TO REQUIRED DEPTH.
 2. VERIFY ALL TRENCHING REQUIREMENTS PER LOCAL UTILITIES.
 3. CONTRACTOR TO PROVIDE (1) 300 POUND NYLON PULL CORD AND CONDUCTORS AS REQUIRED PER CONDUIT.



NOT IN USE SCALE: NTS 1

KEY NOTES

- EXISTING VAULT WITH TRANSFORMER
- NEW WALL MOUNTED METER BASE
- NEW TRANSFORMER
- NEW TRANSFORMER
- BURIED CONDUITS
- POWER

ATTENTION (OREGON SITES ONLY):
 CALL 1-800-332-2344 48 HOURS BEFORE YOU DIG. OREGON LAW REQUIRES YOU TO FOLLOW OAR 850-00700 THRU 850-007400. COPIES ARE AVAILABLE AT THE OREGON UTILITY NOTIFICATION CENTER 503-232-1897

LEGEND SCALE: NTS 4



PROJECT INFORMATION:

C-4 WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE: RELEASE:

7/20/17	PRELIM CONSTRUCTION SUBMITTAL
8/18/17	FINAL CONSTRUCTION SUBMITTAL
8/29/17	UPDATES TO PLAN AND PERMITS
9/20/18	FINAL CONSTRUCTION SUBMITTAL
2/20/19	FINAL CONSTRUCTION SUBMITTAL
6/20/19	FINAL CONSTRUCTION SUBMITTAL
7/20/19	FINAL CONSTRUCTION SUBMITTAL
7/20/19	FINAL CONSTRUCTION SUBMITTAL
7/20/19	FINAL CONSTRUCTION SUBMITTAL
8/12/19	PLANNED BY:
8/12/19	DATE:
8/12/19	APPROVED BY:

cushing

Don Cushing Associates
 Civil Engineers

107 SE WASHINGTON STREET
 SUITE 300
 PORTLAND, OR 97214
 (503) 347-6331
 www.cushing-engineers.com

LICENSURE:

RENEWAL DATE 12/31/21

SHEET TITLE:
ELECTRICAL SITE PLAN

SHEET NUMBER:
E-1

- GENERAL NOTES:**
1. ALL INSTALLATIONS ARE TO BE FIELD VERIFIED.
 2. GROUND CONDUCTORS ARE TO BE BURIED AT A MINIMUM 30" BELOW GRADE OR 6" BELOW FREEZE LINE, WHICHEVER IS GREATER.
 3. ALL BELOW GRADE GROUNDING CONDUCTORS ARE TO BE ENCOMPASSED IN A 2' X 4' BED OF TERRAFILL SOIL ENHANCEMENT MATERIAL.
 4. BONDS TO FENCE POSTS ARE TO BE MADE AT 12" ABOVE GRADE WHERE APPLICABLE.
 5. NO CONDUCTOR SHALL HAVE A BEND IN RADIUS OF LESS THAN 12" AND SHALL NOT EXCEED 90 DEGREES.
 6. TERRADYNE ELECTROLYTIC GROUND ELECTRODES ARE NOT TO SHARE THE SAME TRENCH AS GROUNDING CONDUCTOR, NOR RUN IN A PARALLEL PATH TO THE CONDUCTOR.
 7. ALL GROUND SYSTEMS ARE TO BE MADE COMMON.
 8. ALL BONDS ARE TO BE COATED WITH ANTI-OXIDATION COMPOUND.
 9. WHERE STANDARD GROUND ELECTRODES ARE UNABLE TO BE DRIVEN, 12" X 12" X 18" COPPER GROUND PLATES SHALL BE INSTALLED 30" BELOW FINISHED GRADE & ENCOMPASSED IN 50 LBS OF TERRAFILL SOIL ENHANCEMENT MATERIAL.

BASED ON PROVIDED SOIL RESISTIVITY TEST DATA DATED 11/4/2016: LEVELS AVG. 16,757 OHM-CM @ 5'

ØØ' APPROX.	CONDUCTOR, TINNED (2-T)
0	# OF TERRADYNE GROUND ROD, HORIZONTAL (TD-10-H36-2T-36-6F-P)
14	# OF 5/8" X 10' COPPER CLAD GROUND ELECTRODE (ØØ1)
51	BAGS OF TERRAFILL SOIL ENHANCEMENT (TF-50) WITH 4' X 2' BED

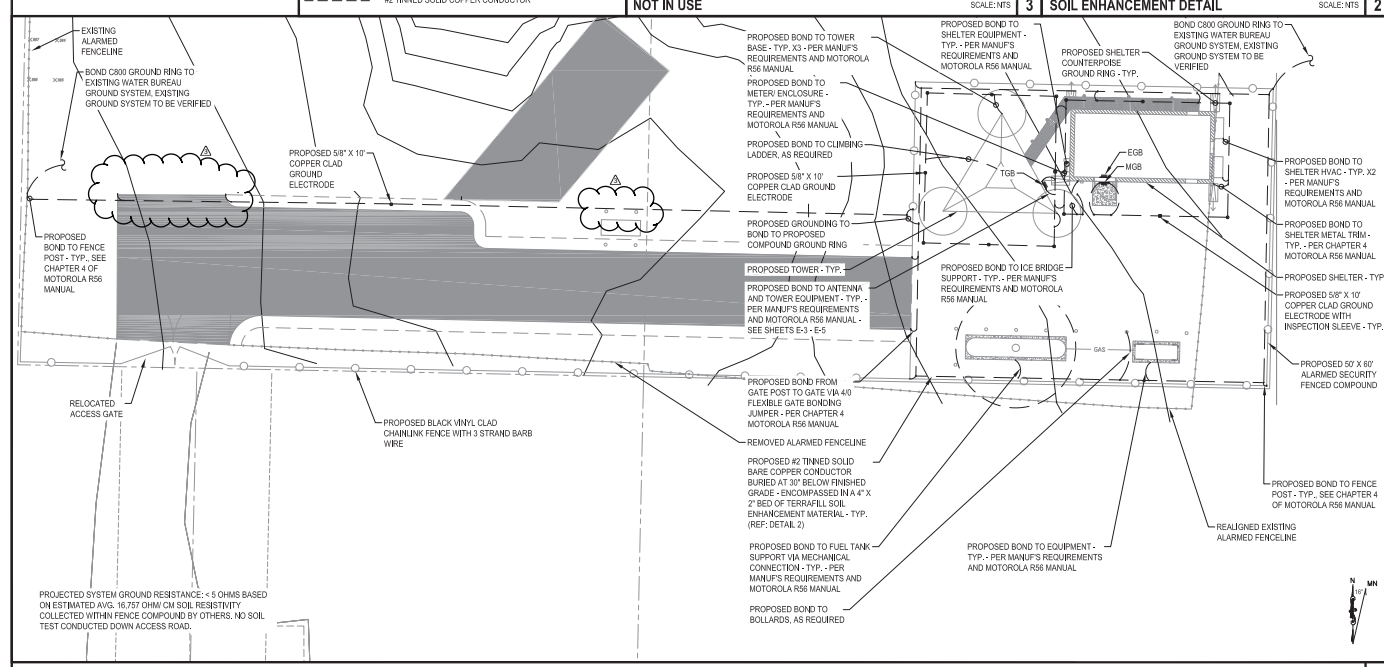
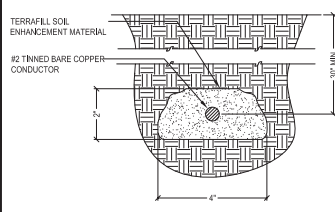
SOL RESISTANCE = < 5 OHMS RESISTANCE TO EARTH VALUE

- LEGEND:**
- TERRADYNE TD-10-H36-2T-36-6F-P SERIES ELECTRODE W/ INSPECTION WELL
 - EXOTHERMIC WELD
 - MECHANICAL CONNECTION
 - ⊗ 5/8" X 10' COPPER CLAD GROUND ELECTRODE
 - ⊗ 5/8" X 10' COPPER CLAD GROUND ELECTRODE WITH INSPECTION SLEEVE
 - #2 TINNED SOLID COPPER CONDUCTOR

"AS-BUILT"

THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.

SIGNED: *[Signature]* DATE: 11/4/2021



NOT IN USE

SCALE: NTS 3

SOIL ENHANCEMENT DETAIL SCALE: NTS 2



PROJECT INFORMATION:

C-4 WILSONVILLE TANK
8323 SW ELLIGSEN ROAD
TUALATIN, OR 97062

DATE	RELEASE
12/11/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED G&E, PROP. TANK SHIT
12/15/16	FINAL CONSTRUCTION SUBMITTAL
12/22/16	FINAL CONSTRUCTION SUBMITTAL
09/20/16	FINAL CONSTRUCTION SUBMITTAL
7/29/16	FINAL CONSTRUCTION SUBMITTAL
7/22/16	FINAL CONSTRUCTION SUBMITTAL
6/12/16	FINAL CONSTRUCTION SUBMITTAL
1/4/11	AS-BUILT
1/4/11	AS-BUILT
1/4/11	AS-BUILT

DRAWING INFORMATION:
THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.

PLANS PREPARED BY:

cushing
Don Cushing Associates
CMI Engineers
107 SE WASHINGTON STREET
SUITE 200
PORTLAND, OR 97214
(503) 264-0311
www.cushingassoc.com

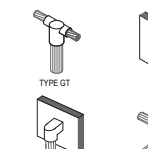
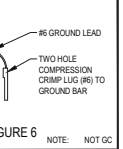
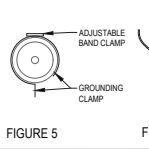
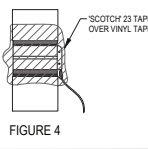
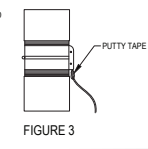
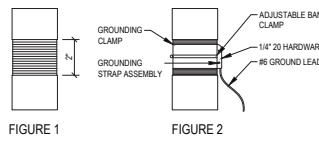


RENEWAL DATE 12/31/21

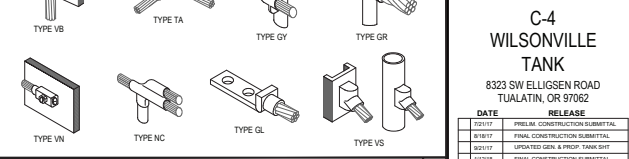
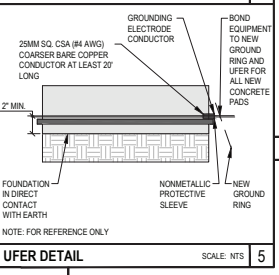
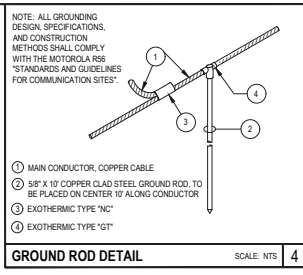
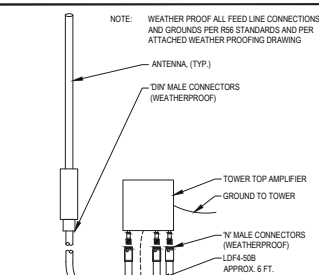
SHEET TITLE:
SITE GROUNDING PLAN & DETAILS

SHEET NUMBER:
E-2

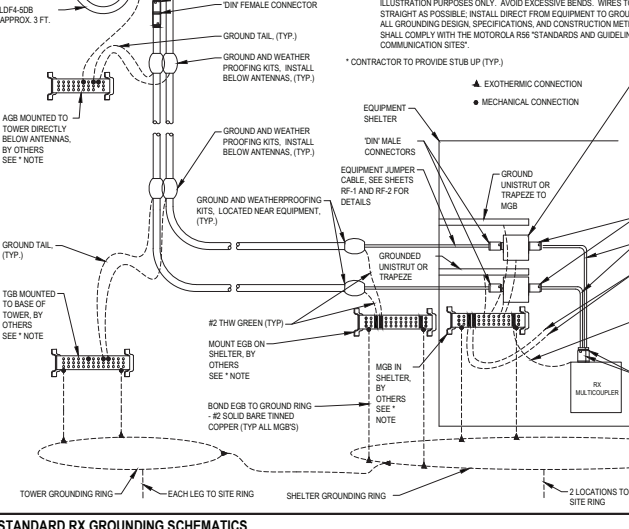
SITE COMPOUND GROUNDING PLAN



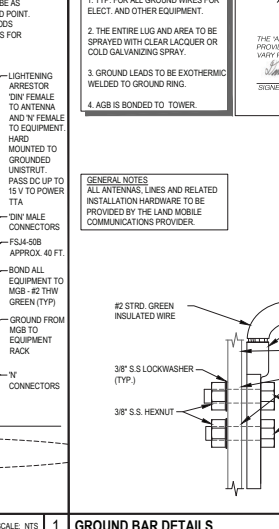
FEED LINE CABLE GROUNDING



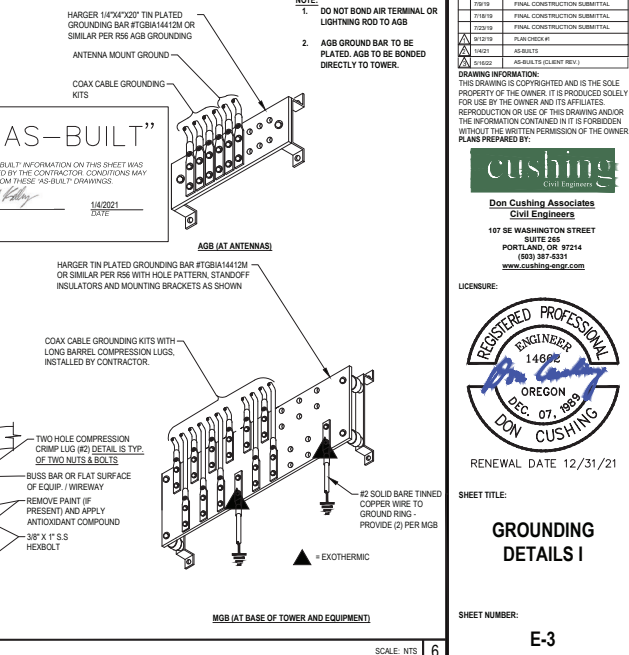
STANDARD RX GROUNDING SCHEMATICS



GROUND BAR DETAILS



TYPICAL EXOTHERMIC CONNECTION DETAILS



C-4 WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
12/11/17	PRELIM CONSTRUCTION SUBMITTAL
01/11/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHEET
03/17/18	FINAL CONSTRUCTION SUBMITTAL
02/28/18	FINAL CONSTRUCTION SUBMITTAL
02/28/18	FINAL CONSTRUCTION SUBMITTAL
02/28/18	FINAL CONSTRUCTION SUBMITTAL
07/19/18	FINAL CONSTRUCTION SUBMITTAL
01/18/18	FINAL CONSTRUCTION SUBMITTAL
02/28/18	FINAL CONSTRUCTION SUBMITTAL
01/23/18	PLAN CHECK
04/21	AS-BUILT
04/22/22	AS-BUILT (ELEMENT REV 1)

CUSHING ENGINEERS
 Don Cushing Associates
 Civil Engineers
 107 SE WASHINGTON STREET
 SUITE 200
 PORTLAND, OR 97214
 (503) 287-8231
 www.cushing-engineers.com



RENEWAL DATE 12/31/21

SHEET TITLE:
GROUNDING DETAILS I

SHEET NUMBER:
E-3

GENERAL NOTES
 ALL ANTENNAS, LINES AND RELATED
 INSTALLATION HARDWARE TO BE
 PROVIDED BY THE LAND MOBILE
 COMMUNICATIONS PROVIDER.

"AS-BUILT"
 THE "AS-BUILT" INFORMATION ON THIS SHEET WAS
 PROVIDED BY THE CONTRACTOR. CONDITIONS MAY
 VARY FROM THESE "AS-BUILT" DRAWINGS.
 SIGNED: *John Kelly* DATE: 11/20/21



PROJECT INFORMATION:
**C-4
 WILSONVILLE
 TANK**
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
10/11/21	PRELIM CONSTRUCTION SUBMITTAL
11/18/21	FINAL CONSTRUCTION SUBMITTAL
12/11/21	UPDATED GEN. & PROP. TANK SHD
1/12/22	FINAL CONSTRUCTION SUBMITTAL
2/23/22	FINAL CONSTRUCTION SUBMITTAL
3/22/22	FINAL CONSTRUCTION SUBMITTAL
7/19/22	FINAL CONSTRUCTION SUBMITTAL
8/18/22	FINAL CONSTRUCTION SUBMITTAL
10/27/22	FINAL CONSTRUCTION SUBMITTAL
11/12/22	PLAN CHECK
11/21/22	AS BUILT
11/22/22	AS BUILT (CLIENT REV'S)

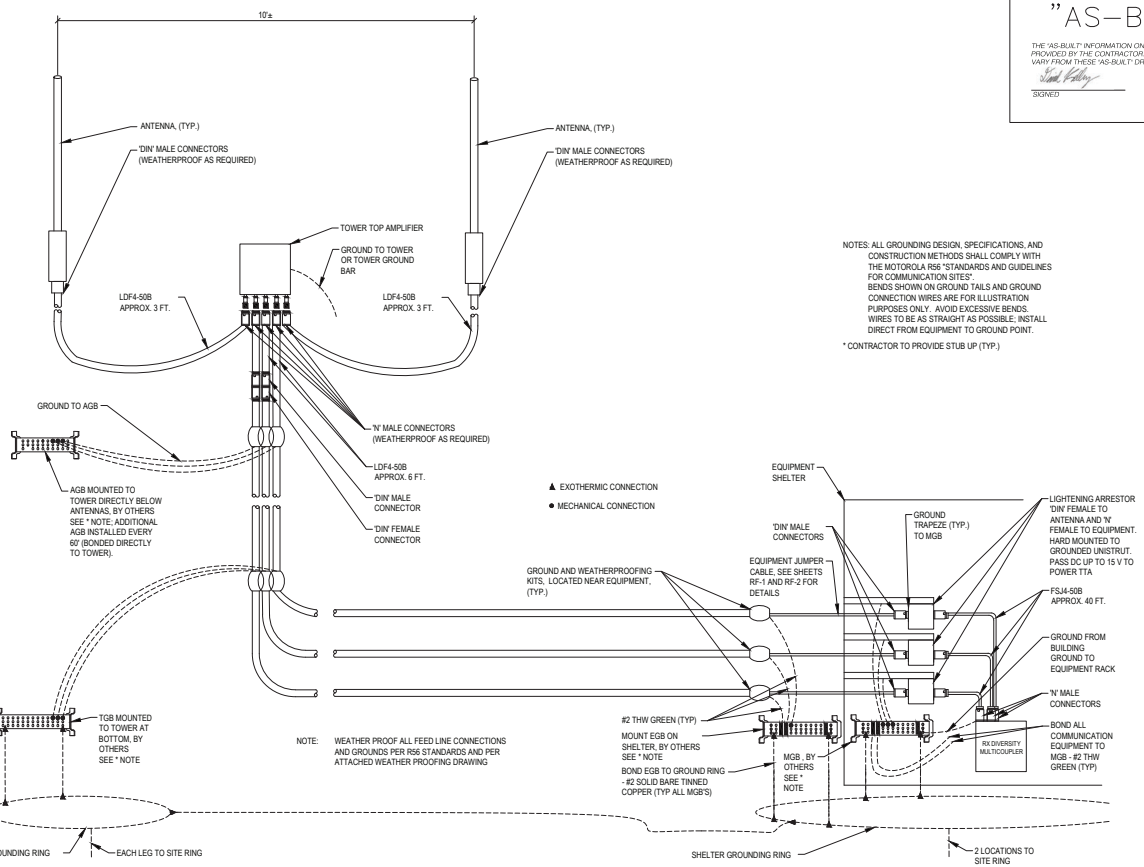
DRAWING INFORMATION:
 THIS DRAWING IS COPYRIGHTED AND IS THE SOLE
 PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY
 FOR USE BY THE OWNER AND ITS AFFILIATES.
 REPRODUCTION OR USE OF THIS DRAWING AND/OR
 THE INFORMATION CONTAINED IN IT IS FORBIDDEN
 WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:

Don Cushing Associates
 Civil Engineers
 107 SE WASHINGTON STREET
 SUITE 200
 PORTLAND, OR 97214
 (503) 287-8231
 www.cushing-engineers.com

LICENSED:

 RENEWAL DATE 12/31/21

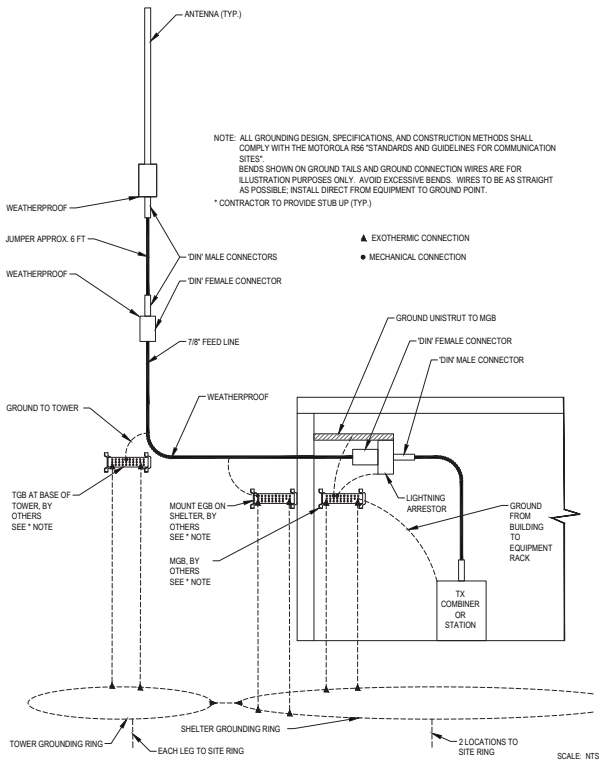
SHEET TITLE:
**GROUNDING
 DETAILS II**
 SHEET NUMBER:
E-4



NOTES: ALL GROUNDING DESIGN, SPECIFICATIONS, AND
 CONSTRUCTION METHODS SHALL COMPLY WITH
 THE MOTOROLA R56 STANDARDS AND GUIDELINES
 FOR COMMUNICATION SITES.
 BENDS SHOWN ON GROUND TAILS AND GROUND
 CONNECTION WIRES ARE FOR ILLUSTRATION
 PURPOSES ONLY. AVOID EXCESSIVE BENDS.
 WIRES TO BE AS STRAIGHT AS POSSIBLE, INSTALL
 DIRECT FROM EQUIPMENT TO GROUND POINT.
 * CONTRACTOR TO PROVIDE STUB UP (TYP.)

TYPICAL DIVERSITY RX GROUNDING SCHEMATICS

GENERAL NOTES
 ALL ANTENNAS, LINES AND RELATED
 INSTALLATION HARDWARE TO BE
 PROVIDED BY THE LAND MOBILE
 COMMUNICATIONS PROVIDER

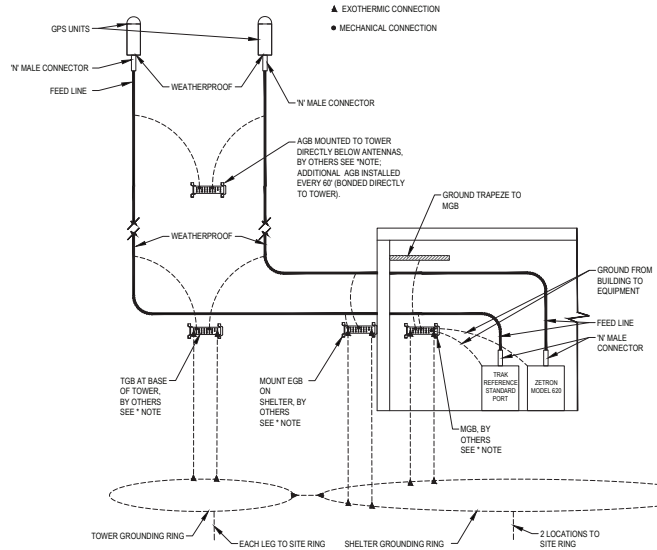


TYPICAL 700/800/UHF/VHF TX ANTENNA WITHOUT TTA, AND TEST ANTENNAS GROUNDING SCHEMATICS

1

GENERAL NOTES
 ALL ANTENNAS, LINES AND RELATED
 INSTALLATION HARDWARE TO BE
 PROVIDED BY THE LAND MOBILE
 COMMUNICATIONS PROVIDER

NOTE: GPS ANTENNAS MUST HAVE A CLEAR VIEW OF THE SOUTHERN SKY AND ABOVE ANY TREE CANOPY OR ADJACENT STRUCTURES THAT MAY BLOCK THAT VIEW. ALL GROUNDING DESIGN, SPECIFICATIONS, AND CONSTRUCTION METHODS SHALL COMPLY WITH THE MOTOROLA R56 "STANDARDS AND GUIDELINES FOR COMMUNICATION SITES". BENDS SHOWN ON GROUND TAILS AND GROUND CONNECTION WIRES ARE FOR ILLUSTRATION PURPOSES ONLY. AVOID EXCESSIVE BENDS. WIRES TO BE AS STRAIGHT AS POSSIBLE. INSTALL DIRECT FROM EQUIPMENT TO GROUND POINT.
 * CONTRACTOR TO PROVIDE STUB UP (TYP.)



TYPICAL GPS ANTENNA GROUNDING SCHEMATICS

SCALE: NTS 2

"AS-BUILT"
 THE "AS-BUILT" INFORMATION ON THIS SHEET WAS PROVIDED BY THE CONTRACTOR. CONDITIONS MAY VARY FROM THESE "AS-BUILT" DRAWINGS.
 Signed: _____
 DATE: 11/02/21

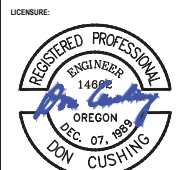


PROJECT INFORMATION:
C-4 WILSONVILLE TANK
 8323 SW ELLIGSEN ROAD
 TUALATIN, OR 97062

DATE	RELEASE
12/11/17	PRELIM CONSTRUCTION SUBMITTAL
01/18/17	FINAL CONSTRUCTION SUBMITTAL
02/11/17	UPDATED GEN. & PROP. TANK SHED
03/16/16	FINAL CONSTRUCTION SUBMITTAL
02/21/16	FINAL CONSTRUCTION SUBMITTAL
02/02/15	FINAL CONSTRUCTION SUBMITTAL
07/19/14	FINAL CONSTRUCTION SUBMITTAL
01/16/14	FINAL CONSTRUCTION SUBMITTAL
02/25/14	FINAL CONSTRUCTION SUBMITTAL
01/21/13	PLAN CHECK
11/01/11	AS BUILTS
01/10/02	AS BUILTS (ELECT. REV'S)

DRAWING INFORMATION:
 THIS DRAWING IS COPYRIGHTED AND IS THE SOLE PROPERTY OF THE OWNER. IT IS PROVIDED SOLELY FOR USE BY THE OWNER AND ITS AFFILIATES. REPRODUCTION OR USE OF THIS DRAWING AND/OR THE INFORMATION CONTAINED IN IT IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
PLANS PREPARED BY:

Don Cushing Associates
 Civil Engineers
 107 SE WASHINGTON STREET
 SUITE 200
 PORTLAND, OR 97214
 (503) 287-8321
www.doncushing.com



RENEWAL DATE 12/31/21

SHEET TITLE:
GROUNDING DETAILS III

SHEET NUMBER:
E-5