

SITE NAME: SKY HI

ARCHITECT

YOUNG DESIGN CORP. 10245 E. VIA LINDA, #211 SCOTTSDALE, ARIZONA, 85258 PHONE: (480) 451-9609 CONTACT: MATTHEW YOUNG

SURVEYOR

RLF CONSULTING, LLC 2165 W. PECOS ROAD #5 CHANDLER, ARIZONA, 85281 PHONE: (480) 445-9189 CONTACT: RYAN FIDLER

SITE PHOTO:



TOWER OWNER

DW TOWER, LLC 11901 S. 202ND PLACE LOT C MESA, AZ 85212 PHONE: (602) 919-0299 CONTACT: RUSTY LEWELLEN

LESSOR / OWNER

CODE COMPLIANCE:

BUILDING CODE

PLUMBING CODE

ELECTRIC CODE

DRILLED CASSION

FIELD WELDING

REQUIREMENTS.

BOLTS IN CONCRETE

CONCRETE REINFORCING

FIRE DEPARTMENT NOTES:

PER MUNICIPAL REQUIREMENTS.

FIRE CODE

MECHANICAL CODE

ALL WORK AND MATERIALS SHALL BE

EDITIONS OF THE CODES AS ADAPTED BY

THE LOCAL GOVERNING AUTHORITIES.

SPECIAL INSPECTIONS REQUIRED:

PROVIDE A PORTABLE FIRE EXTINGUISHER

PROVIDE STREET ADDRESS IDENTIFICATION

PROVIDE AND INSTALL FIRE DEPARTMENT

APPROVED 'KNOX BOX' PER DEPARTMENT

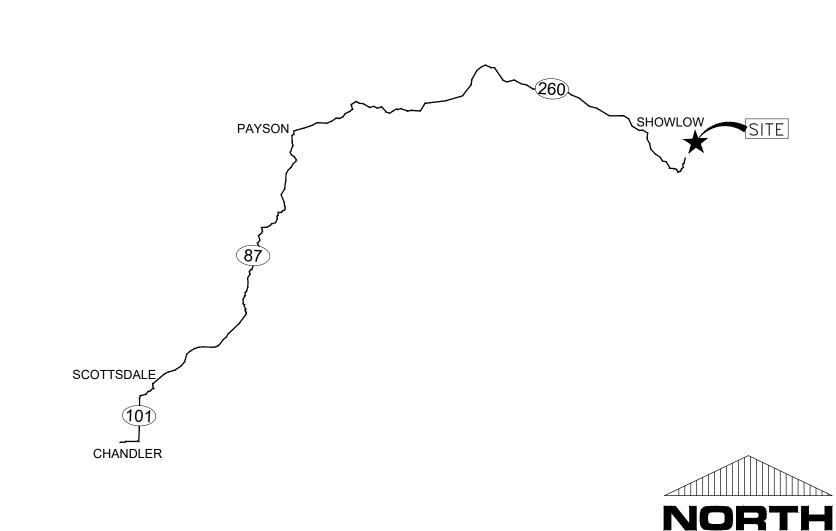
WITH A RATING NOT LESS THAN 2A-10BC.

PERFORMED AND INSTALLED IN

ACCORDANCE WITH THE CURRENT

SKY-HI DOMESTIC WATER IMPROVEMENT DISTRICT P.O. BOX 974 LAKESIDE, AZ 85929

VICINITY MAP:



SITE COORDINATES: **MEET POINT VAULT COORDINATES:** LATITUDE : 34° 09' 28.057" N

LATITUDE : 34° 09' 29.219" N LONGITUDE : 109° 53' 16.985" W ELEVATION: 7171' A.M.S.L.

LONGITUDE : 109° 53' 16.137" W ELEVATION: 7171' A.M.S.L.

FROM CHANDLER OFFICE, GET ON AZ-202 / AZ-202 LOOP E FROM S. 56TH ST AND W. ALLISON RD. FOLLOW AZ-87 N AND AZ-260 E TO W. WHIPPLE ST IN SHOW LOW. TAKE AZ-260 E / S. WHITE MOUNTAIN RD AND SKY HI RD / TOMAHAWK RD TO N. AZTEC CIR.

ZONING COMPLIANCE:

IBC

IMC IPC

NEC

IFC

: 2018

: 2018

: 2018

: 2017

: 2018

: YES

: YES

: NO

LOCAL JURISDICTION: NAVAJO COUNTY COUNTY: NAVAJO COUNTY ASSESSORS PARCEL: 311-19-020A **ZONING:** TELECOMMUNICATIONS FACILITY PARENT PARCEL AREA: 1.02 ACRES **EQUIPMENT LEASE AREA:** 2025 S.F. (144 S.F. SUBTENANT) PARKING REQ'D: PARKING PROVIDED:

GENERAL COMPLIANCE:

HVAC USED ON THIS STRUCTURE IS NOT INTENDED FOR HUMAN COMFORT; ITS USE IS SOLELY FOR ELECTRONIC **EQUIPMENT COOLING.**

DEVELOPMENT AND USE OF THIS SITE WILL CONFORM

TO ALL APPLICABLE CODES AND ORDINANCES. PROVIDE STREET ADDRESS IDENTIFICATION PER MUNICIPAL REQUIREMENTS. THE USE OF THIS SITE WILL GENERATE NO TRASH. THIS PROJECT DOES NOT REQUIRE WATER OR SEWER THIS PROJECT REQUIRES PERMANENT POWER &

TELEPHONE CONNECTION

A.D.A. COMPLIANCE:

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. LANDINGS AND EXITS SHALL COMPLY WITH THE APPLICABLE BUILDING CODE.

F.C.C. COMPLIANCE:

ALL NEW ANTENNAS SHALL BE IN COMPLIANCE WITH ALL FEDERAL COMMUNICATIONS COMMISSION (FCC) REGULATIONS, INCLUDING THOSE PROTECTING THE PUBLIC HEALTH AND THOSE PROTECTING HISTORIC DISTRICTS.

PROJECT DESCRIPTION:

THE PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNAS MOUNTED ON NEW MONOPINE AND ASSOCIATED EQUIPMENT FOR COMPANY'S WIRELESS TELECOMMUNICATIONS NETWORK. FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

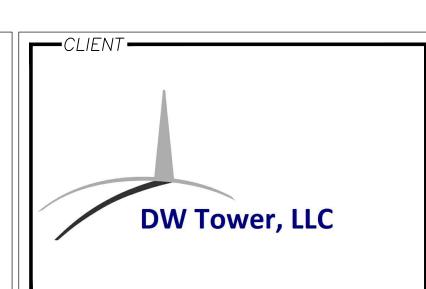
THIS FACILITY CONSISTS OF A NEW SITE BUILT BUILDING. NO HAZARDOUS MATERIAL WILL BE STORED WITHIN THE FACILITY.

ALL EXITS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR SPECIAL KNOWLEDGE. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS ARE PROHIBITED.

NEW 75' DW TOWER MONOPINE NEW DW TOWER SITE BUILT BUILDING NEW ELECTRICAL SERVICE

SHEET INDEX:

T-1	TITLE SHEET, PROJECT INFO				
LS-1	BOUNDARY DETAIL				
LS-2	TOPOGRAPHIC SURVEY				
A-1	OVERALL SITE PLAN				
A-2	ENLARGED SITE PLAN				
A-3	3 ELEVATIONS				
A-4	DETAILS				
GSN	EQUIP. SHELTER GENERAL NOTES				
S1.0	EQUIP. SHELTER ELEVATIONS				
S2.0	EQUIP. SHELTER FOUNDATION PLAN				
S3.0	EQUIP. SHLTR BLD. SECTION & FRAMING				
S4.0	EQUIP. SHELTER ROOF FRAMING PLAN				
S5.0	EQUIP. SHELTER BLD. & SIDE WALL SECT.				
S6.0	EQUIP. SHELTER BLD. & END WALL SECT.				
E-1	GENERAL NOTES / LEGENDS / SHEET INDEX				
E-2	SITE POWER PLAN				
E-3	ONE-LINE / CALCS				
E-4	GROUNDING PLAN				
E-4.1	GROUNDING DETAILS				
C-101	GRADING & DRAINAGE PLANS				
C-101	GRADING & DRAINAGE PROFILES				
	II I				

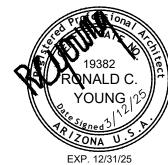


CARRIER **-**



architecture / project management 10245 E. Via Linda, Scottsdale, AZ 85258 ph: 480 451 9609 fax: 480 451 9608 corporate@ydcoffice.com

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PRELIMINARY UNLESS SIGNED

FNO.	-DATE	DESCRIPTION
1	02/28/2025	PRELIMINARY CD'S

YDC - 11240

PROJECT INFORMATION -

- ARCHITECTS JOB NO. -

SKY HI

112 N. AZTEC CIRCLE PINETOP, AZ 85935

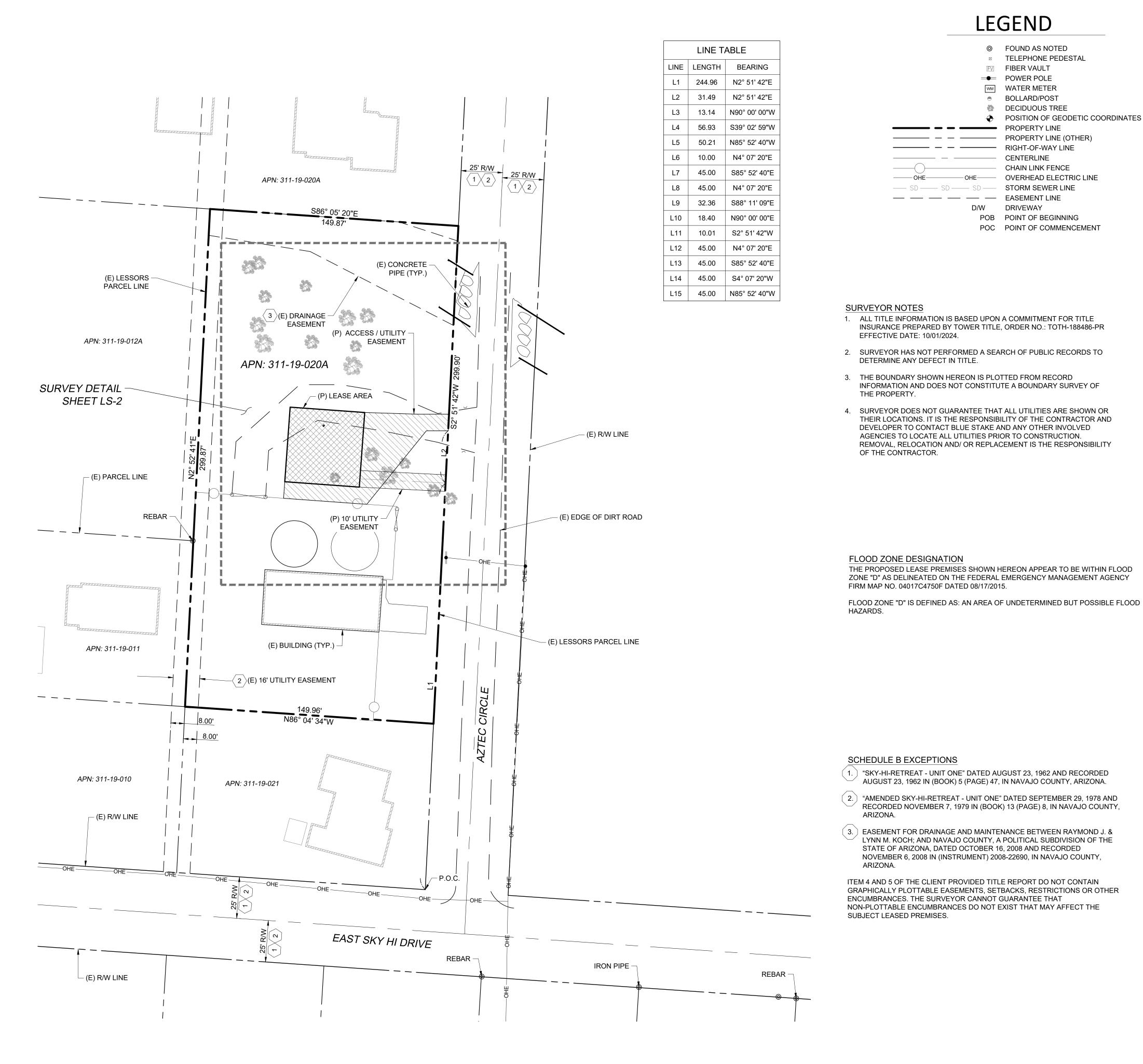
TITLE SHEET PROJECT INFO

JURISDICTION APPROVAL -

SHEET NUMBER -



(800) STAKE-IT

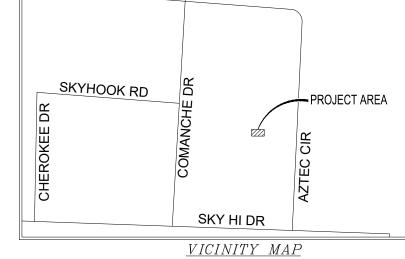


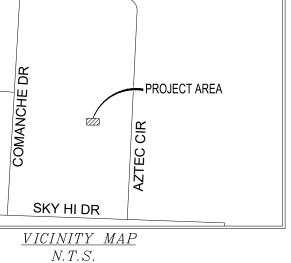
LEGEND

FOUND AS NOTED TELEPHONE PEDESTAL FV FIBER VAULT **■** POWER POLE WM WATER METER BOLLARD/POST DECIDUOUS TREE

POC POINT OF COMMENCEMENT

POSITION OF GEODETIC COORDINATES PROPERTY LINE PROPERTY LINE (OTHER) RIGHT-OF-WAY LINE CENTERLINE CHAIN LINK FENCE OVERHEAD ELECTRIC LINE — SD — SD — STORM SEWER LINE — — — — EASEMENT LINE D/W DRIVEWAY POB POINT OF BEGINNING







architecture 10245 E. Via Linda, ph: 480 451 9609 e mail:

project management Scottsdale, AZ 85258 fax: 480 451 9608 corp@ydcoffice.com

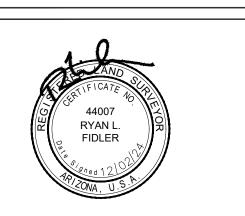
FIELD BY: NAY GAC

DRAWN BY: CHECKED BY: **REVISIONS**

REVISION 4 | 12/02/24 3 11/22/24 FINAL 10/23/24 TITLE REVIEW REVISION 10/14/24 **PRELIMINARY** 0 10/08/24 DESCRIPTION NO. DATE



LAND SURVEY • MAPPING SOLUTIONS WWW.RLFCONSULTING.COM • 480-445-9189



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PROJECT No. 2400798

SITE NAME: SKY HI

SITE ADDRESS:

112 N AZTEC CIR PINETOP, AZ 85935

SHEET TITLE:

BOUNDARY DETAIL

SHEET NO.

REVISION:

PROJECT META DATA

SITE.

LESSOR'S LEGAL DESCRIPTION LOTS 20, 21, AND 22, OF SKY-HI-RETREAT UNIT ONE AMENDED, ACCORDING TO BOOK 13 OF MAPS, PAGE 8, RECORDS OF NAVAJO COUNTY, ARIZONA.

PARCEL ID#: 311-19-020A (FORMERLY 311-19-018, 311-19-019, AND 311-19-020)

ELEVATIONS SHOWN HEREON ARE REPRESENTED IN NORTH

AMERICAN VERTICAL DATUM OF 1988 (NAVD88) ESTABLISHED FROM

CONSTRAINING TO NGS CORS STATIONS PROVIDED IN THE "ONLINE

POSITIONING USER SERVICE" (OPUS) SOLUTION FOR THIS SPECIFIC

BEARINGS SHOWED HEREON ARE BASED UPON U.S. STATE PLANE

ZONE EAST, DETERMINED BY GPS OBSERVATIONS.

3. FIELD WORK FOR THIS PROJECT WAS PERFORMED ON 10/01/24.

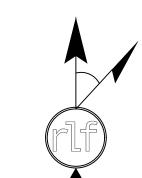
NAD83 COORDINATE SYSTEM ARIZONA STATE PLANE COORDINATE

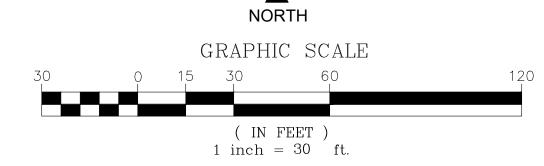
GPS DERIVED ELLIPSOID HEIGHTS, APPLYING GEOID 12B SEPARATIONS

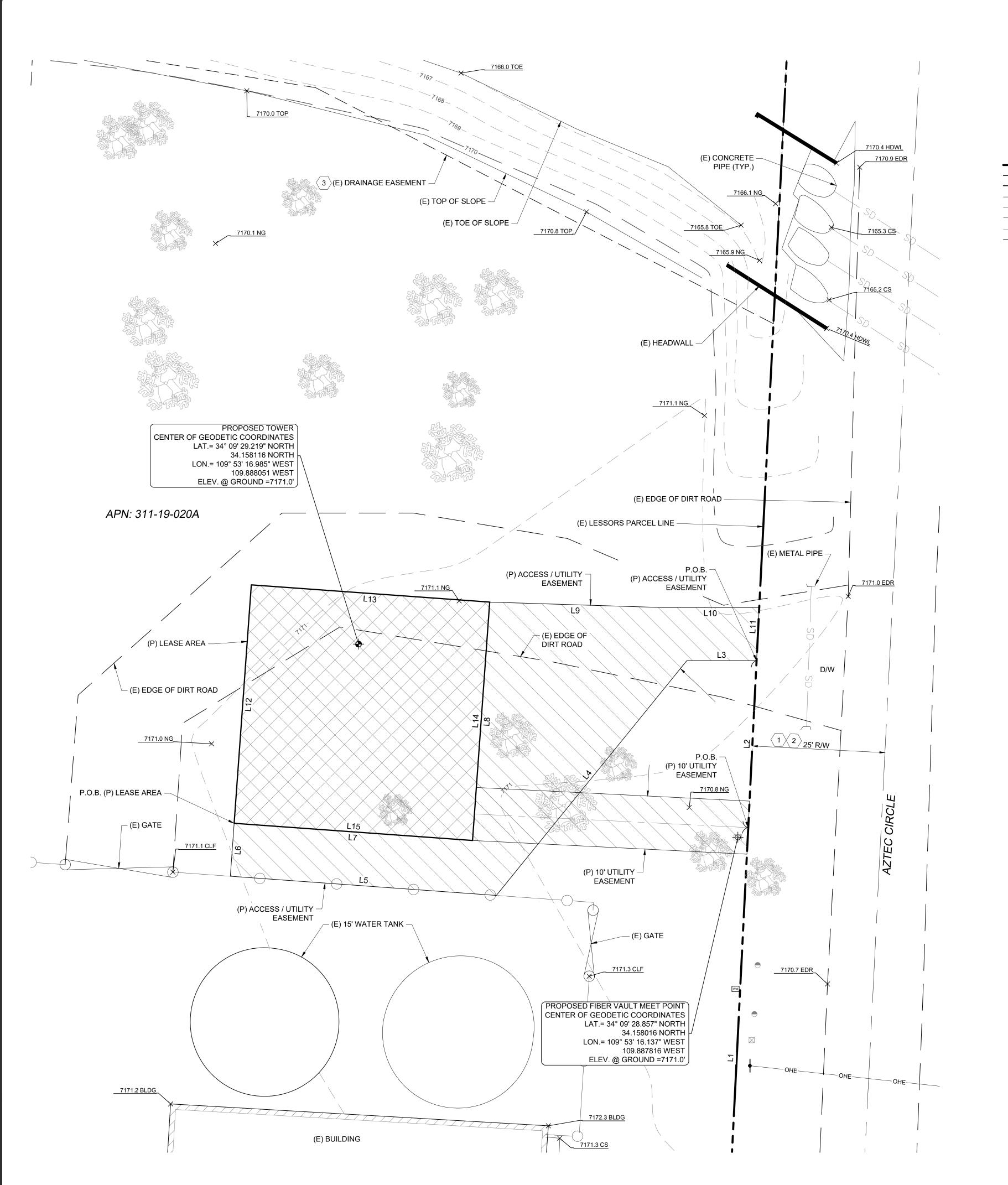
LOT 20 BEING THE SAME PROPERTY CONVEYED TO SKY HIGH DOMESTIC WATER IMPROVEMENT DISTRICT, AN ARIZONA CORPORATION FROM RAYMOND J. KOCH AND LYNN M. KOCH, HUSBAND AND WIFE IN A WARRANTYDEED DATED NOVEMBER 11, 2022, AND RECORDED NOVEMBER 16, 2022, AS INSTRUMENT NO. 2022-21388, IN NAVAJO COUNTY, ARIZONA.

LOT 21 BEING THE SAME PROPERTY CONVEYED TO SKY-HI DOMESTIC WATER IMPROVEMENT DISTRICT, AN ARIZONA CORPORATION FROM PATRICIA J. SCHWEIGHARDT KING, A WIDOW IN A WARRANTY DEED DATED NOVEMBER 29, 1991, AND RECORDED MARCH 12, 1992, IN BOOK 1069, PAGE 657, AND AS INSTRUMENT NO. 92 03839, IN NAVAJO COUNTY, ARIZONA., AND FURTHER DESCRIBED IN THAT RE-RECORDED WARRANTY DEED RECORDED APRIL 29, 1992, IN BOOK, 1175 PAGE 888, AND AS INSTRUMENT NO. 92 06240, IN NAVAJO COUNTY, ARIZONA.

LOT 22 BEING THE SAME PROPERTY CONVEYED TO SKY-HI DOMESTIC WATER IMPROVEMENT DISTRICT, A MUNICIPAL CORPORATION FROM HIGH FLIGHT PARTNERSHIP, A GENERAL PARTNERSHIP IN A WARRANTY DEED DATED DECEMBER 12, 1989, AND RECORDED DECEMBER 14, 1989, IN BOOK 977, PAGE 882, AND AS INSTRUMENT NO. 89 18318, IN NAVAJO COUNTY, ARIZONA.









FOUND AS NOTED ▼ TELEPHONE PEDESTAL FV FIBER VAULT ■ POWER POLE WM WATER METER BOLLARD/POST DECIDUOUS TREE POSITION OF GEODETIC COORDINATES PROPERTY LINE

LESSEE ACCESS / UTILITY EASEMENT LEGAL DESCRIPTION

A TRACT OF LAND LAND BEING IN LOT 21 OF SKY-HI-RETREAT UNIT ONE

COMMENCING AT THE INTERSECTION OF THE NORTH RIGHT-OF-WAY OF

02°51'42" EAST, A DISTANCE OF 244.96 FEET; THENCE CONTINUING NORTH

THENCE SOUTH 02°51'42" WEST, A DISTANCE OF 10.01 FEET TO THE POINT

A 10.00 FOOT WIDE STRIP OF LAND BEING IN LOT 21 OF SKY-HI-RETREAT

OF NAVAJO COUNTY, ARIZONA, LYING 5.00 FEET ON EACH SIDE OF THE

COMMENCING AT THE INTERSECTION OF THE NORTH RIGHT-OF-WAY OF EAST SKY HI DRIVE AND THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE;

02°51'42" EAST, A DISTANCE OF 244.96 FEET TO THE POINT OF BEGINNING;

THENCE NORTH 87°08'18" WEST, A DISTANCE OF 51.61 FEET TO THE POINT

THENCE ALONG THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE NORTH

ALL SIDELINES TO BE LENGTHENED OR SHORTENED TO FORM ONE

UNIT ONE AMENDED, ACCORDING TO BOOK 13 OF MAPS, PAGE 8, RECORDS

02°51'42" EAST, A DISTANCE OF 31.49 FEET TO THE POINT OF BEGINNING;

EAST SKY HI DRIVE AND THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE;

THENCE ALONG THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE NORTH

THENCE NORTH 90°00'00" WEST, A DISTANCE OF 13.14 FEET;

THENCE SOUTH 39°02'59" WEST, A DISTANCE OF 56.93 FEET;

THENCE NORTH 85°52'40" WEST, A DISTANCE OF 50.21 FEET; THENCE NORTH 04°07'20" EAST, A DISTANCE OF 10.00 FEET;

THENCE SOUTH 85°52'40" EAST, A DISTANCE OF 45.00 FEET;

THENCE NORTH 04°07'20" EAST, A DISTANCE OF 45.00 FEET:

THENCE SOUTH 88°11'09" EAST, A DISTANCE OF 32.36 FEET;

THENCE SOUTH 90°00'00" EAST, A DISTANCE OF 18.40 FEET;

LESSEE UTILITY EASEMENT LEGAL DESCRIPTION

FOLLOWING DESCRIBED CENTERLINE:

AMENDED, ACCORDING TO BOOK 13 OF MAPS, PAGE 8, RECORDS OF

NAVAJO COUNTY, ARIZONA, LYING 5.00 FEET ON EACH SIDE OF THE

FOLLOWING DESCRIBED CENTERLINE:

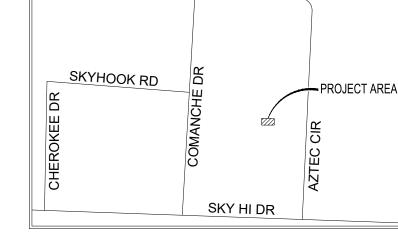
OF BEGINNING.

OF TERMINUS.

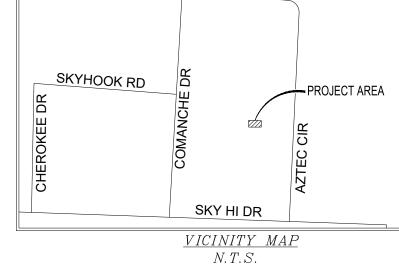
OF BEGINNING;

CONTIGUOUS PARCEL.

PROPERTY LINE (OTHER) RIGHT-OF-WAY LINE CENTERLINE CHAIN LINK FENCE -OHE-----OVERHEAD ELECTRIC LINE —— SD ——— SD ——— STORM SEWER LINE — EASEMENT LINE D/W DRIVEWAY POB POINT OF BEGINNING POC POINT OF COMMENCEMENT



LINE TABLE LINE | LENGTH | BEARING L1 | 244.96 | N2° 51' 42"E L2 31.49 N2° 51' 42"E L3 | 13.14 | N90° 00' 00"W L4 56.93 S39° 02' 59"W L5 50.21 N85° 52' 40"W 10.00 N4° 07' 20"E 45.00 S85° 52' 40"E L8 45.00 N4° 07' 20"E L9 32.36 S88° 11' 09"E L10 | 18.40 | N90° 00' 00"E 10.01 S2° 51' 42"W L12 | 45.00 | N4° 07' 20"E L13 | 45.00 | S85° 52' 40"E L14 | 45.00 | S4° 07' 20"W L15 | 45.00 | N85° 52' 40"W





DW TOWER, LLC.

architecture 10245 E. Via Linda, ph: 480 451 9609

project management Scottsdale, AZ 85258 fax: 480 451 9608 corp@ydcoffice.com

FIELD BY: NAY DRAWN BY: GAC CHECKED BY:

,	REVISIONS						
4	12/02/24	REVISION					
3	11/22/24	FINAL					
2	10/23/24	TITLE REVIEW					
1	10/14/24	REVISION					
0	10/08/24	PRELIMINARY					
NO.	DATE	DESCRIPTION					



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PROJECT No. 2400798

SITE NAME: SKY HI

SITE ADDRESS:

112 N AZTEC CIR PINETOP, AZ 85935

SHEET TITLE:

TOPOGRAPHIC SURVEY

SHEET NO.

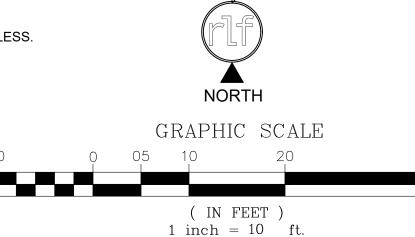
REVISION:

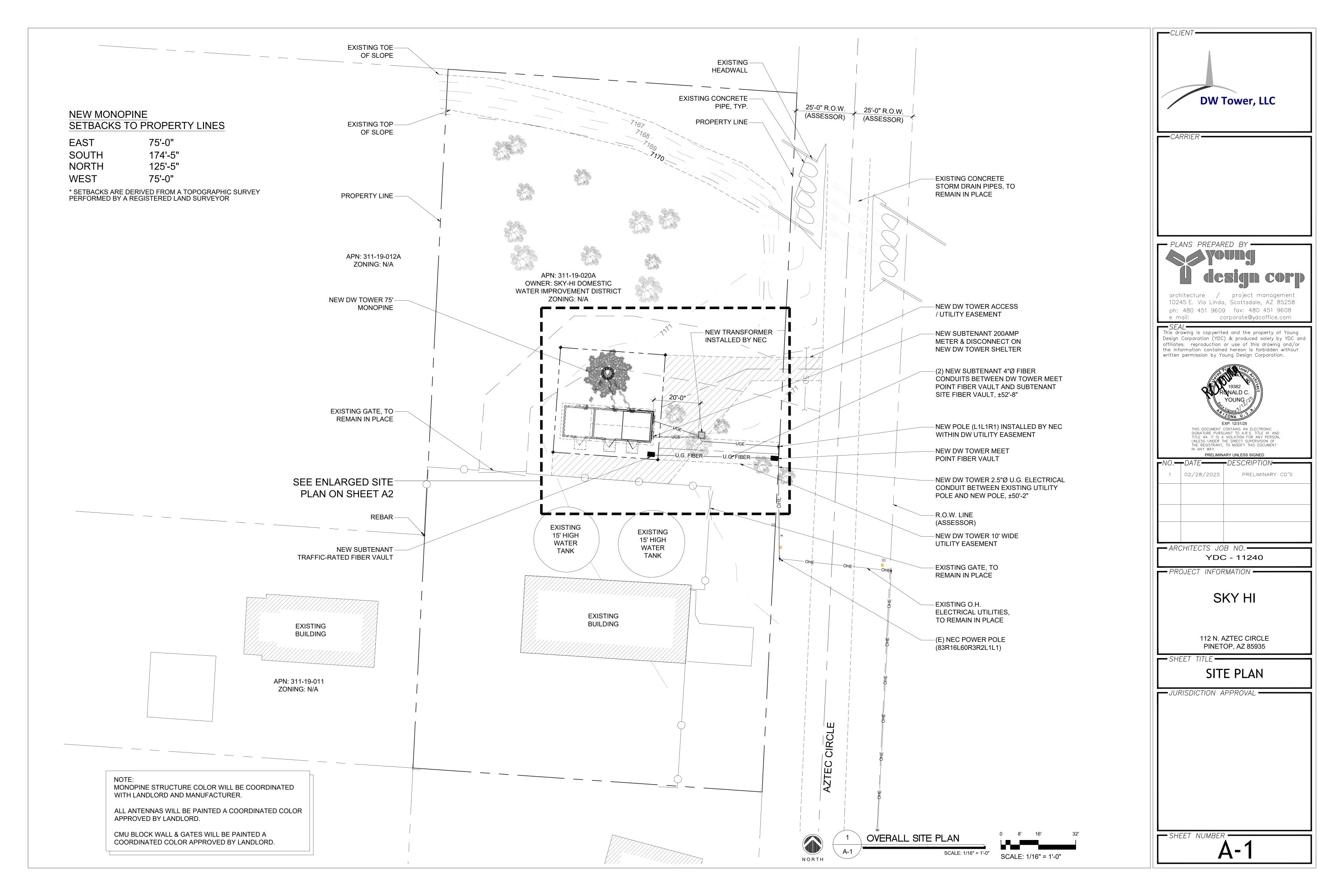
LESSEE LEASE AREA LEGAL DESCRIPTION A PORTION OF LOT 21 OF SKY-HI-RETREAT UNIT ONE AMENDED, ACCORDING TO BOOK 13 OF MAPS, PAGE 8, RECORDS OF NAVAJO COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

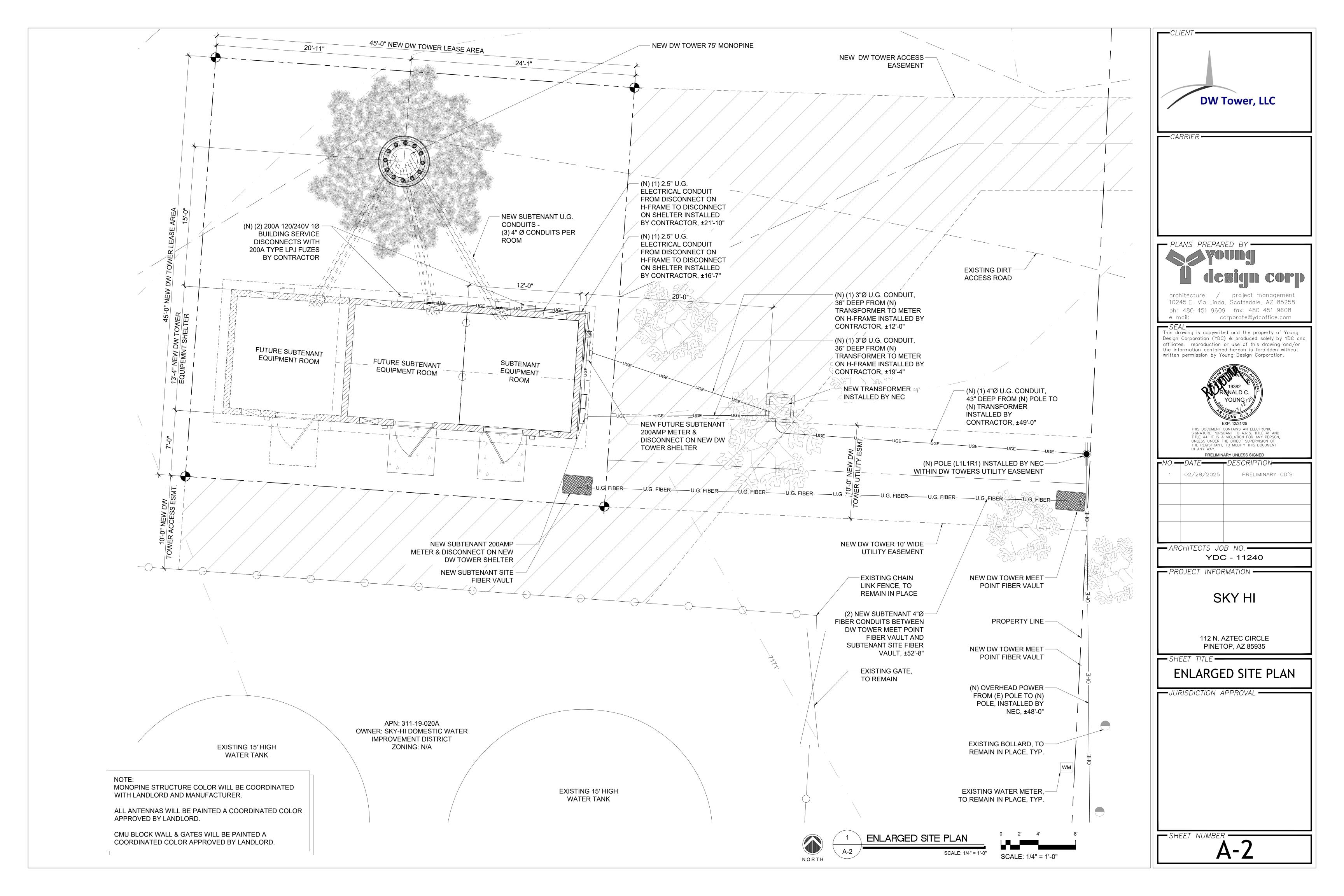
COMMENCING AT THE INTERSECTION OF THE NORTH RIGHT-OF-WAY OF EAST SKY HI DRIVE AND THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE; THENCE ALONG THE WEST RIGHT-OF-WAY OF AZTEC CIRCLE NORTH 02°51'42" EAST, A DISTANCE OF 244.96 FEET; THENCE CONTINUING NORTH 02°51'42" EAST, A DISTANCE OF 31.49 FEET; THENCE NORTH 90°00'00" WEST, A DISTANCE OF 13.14 FEET; THENCE SOUTH 39°02'59" WEST, A DISTANCE OF 56.93 FEET; THENCE NORTH 85°52'40" WEST, A DISTANCE OF 50.21 FEET; THENCE NORTH 04°07'20" EAST, A DISTANCE OF 10.00 FEET TO THE POINT

THENCE NORTH 04°07'20" EAST, A DISTANCE OF 45.00 FEET; THENCE SOUTH 85°52'40" EAST, A DISTANCE OF 45.00 FEET; THENCE SOUTH 04°07'20" WEST, A DISTANCE OF 45.00 FEET; THENCE NORTH 85°52'40" WEST, A DISTANCE OF 45.00 FEET TO THE POINT

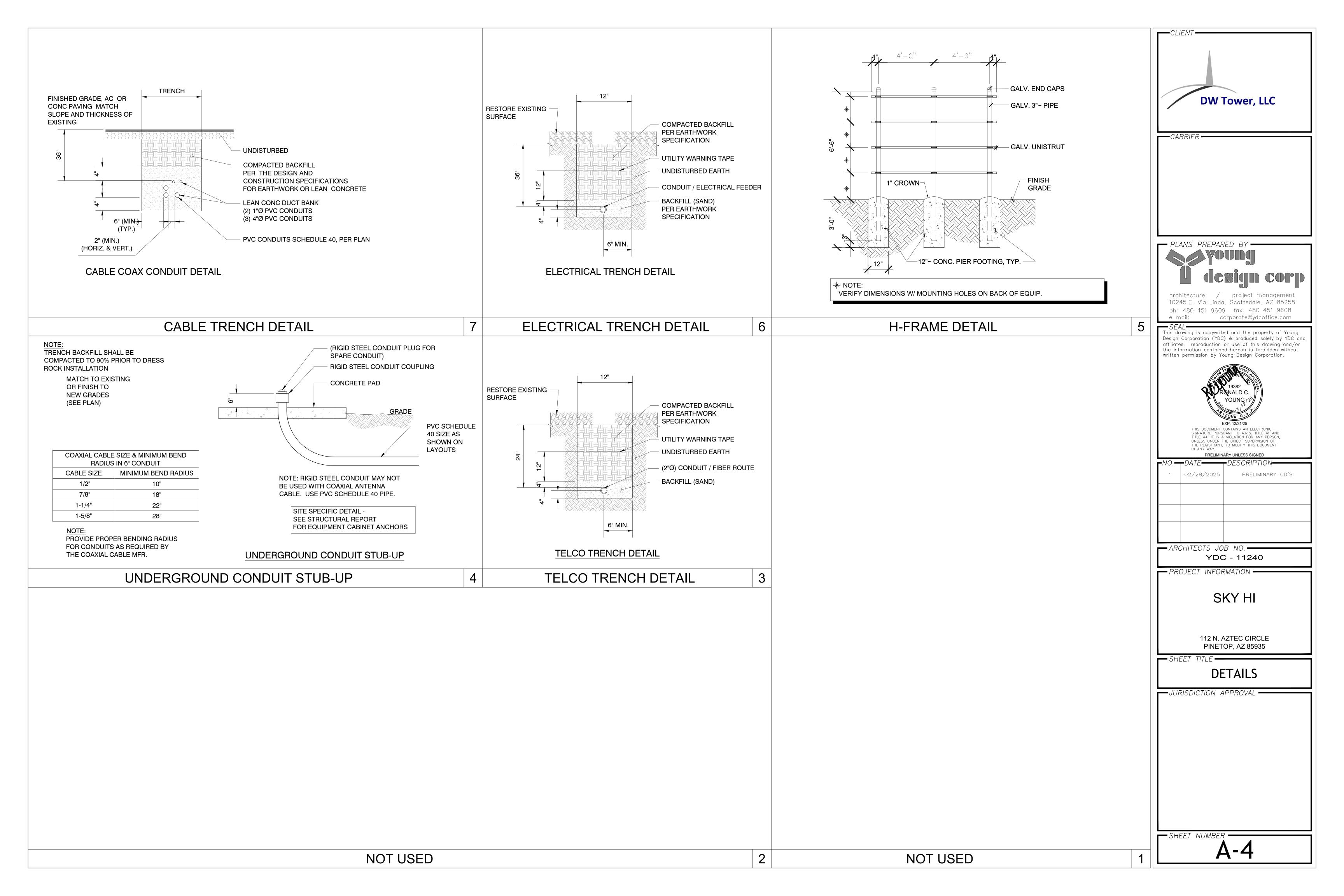
OF BEGINNING. CONTAINING 2025 SQUARE FEET OR 0.046 ACRES, MORE OR LESS.













DW TOWER - SKY HI SKY-HI DOMESTIC WATER IMPROVEMENT DISTRICT EQUIPMENT SHELTER

112 N AZTEC CIRCLE, PINETOP, AZ 85935 LATITUDE: 34° 20' 12.69" N, LONGITUDE: 110° 47' 57.24" W

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL VERIFY DIMENSIONS, CONDITIONS, AND ELEVATIONS BEFORE STARTING WORK. SEE SPECIAL CONSTRUCTION NOTES THIS PAGE. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- 2. THE TYPICAL NOTES AND DETAILS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY DETAILED ELSEWHERE. WHERE NO DETAIL IS SHOWN, THE CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK AND AS REQUIRED BY THE BUILDING CODE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH LOCAL CONSTRUCTION SAFETY ORDERS. APPROVAL OF SHOP DRAWINGS BY THE ARCHITECT OR STRUCTURAL ENGINEER SHALL NOT BE CONSTRUED AS ACCEPTING THIS RESPONSIBILITY.
- 4. ALL STRUCTURAL FRAMING MEMBERS SHALL BE ADEQUATELY SHORED AND BRACED DURING ERECTION AND UNTIL FULL LATERAL AND VERTICAL SUPPORT IS PROVIDED BY ADJOINING MEMBERS.

CONSTRUCTION NOTES:

- 1. IF EXISTING CONDITIONS ARE NOT AS INDICATED ON DRAWINGS, THE CONTRACTOR SHALL CONTACT THE STRUCTURAL ENGINEER (GLEN HUNT) AT ISE INCORPORATED, FOR IN FIELD ADJUSTMENT(S), PRIOR TO PROCEEDING WITH ANY CONSTRUCTION.
- 2. CONTRACTOR TO FIELD VERIFY AND/OR FIELD LOCATE ALL ITEMS LABELED AS FIELD VERIFY OR FIELD LOCATE.
- 3. CONTRACTOR SHALL FIELD VERIFY EXISTING BUILDING CONSTRUCTION IN THE AREA THAT EPOXY SET ANCHORS ARE USED AND INSTALL ANCHORS WITH THE CORRECT EPOXY.

CONCRETE:

- 1. CONCRETE: F'c = 2500 PSI @ 28 DAYS
 TYPE II CEMENT, W/C ≤ 0.45, 4% TO 6% AIR ENTRAINED
 PLACE CONCRETE AT 4" SLUMP MAX. AND CONSOLIDATE WITH MECHANICAL VIBRATION
- 2. REINFORCING STEEL: A615 GR 60 MINIMUM
- 3. SLAB SURFACE FINISH LEVEL TOLERANCE: +/- 1/4"
- 4. EXISTING NATIVE SOIL TO BE GRADED, SHAPED, AND COMPACTED BENEATH SLAB. ALL FOOTING EXCAVATION SHALL BE CLEAN AND FREE OF DEBRIS AND LOOSE SOIL PRIOR TO CONCRETE PLACEMENT.
- 5. REINFORCING STEEL SHALL BE PLACED, TIED, AND SPACED PER PLANS AND ACI 318 SPECIFICATIONS. BARS MAY BE SPLICED WITH MINIMUM 24" OVERLAP.
- 6. SET FOOTING STEEL ON CHAIRS, OR DOBE SUPPORTS. DO NOT ALLOW SUPPORTS TO SINK INTO GRADE.
- 7. SOILS: VANN ENGINEERING PROJECT 23314, DATED 11-26-14, ALLOWABLE BEARING PRESSURE = 3500 PSF.

WOOD:

- 1) ALL PLYWOOD SHALL BE C-D EXTERIOR GRADE SHEATHING STRUCTURAL 2 OR BETTER WITH EXTERIOR GLUE AND SHALL BEAR THE STAMP OF APPROVED TESTING AGENCY.
- 2) ALL FRAMED WALLS ARE TO BE FRAMED AS SHEAR WALLS: 1/2" WITH #10 FLAT HEAD SCREWS AT 6" ON CENTER AT ALL EDGES AND 12" ON CENTER AT INTERIOR STUDS.
- 3) ALL SAWN LUMBER SHALL BE DF#2 OR BETTER.

DEFERRED SUBMITTALS:

1) PRE-ENGINEERED WOOD TRUSSES

DRAWING SCALES: FULL SCALE (1:1) (100%) ON (ANSI D) 34" X 22" HALF SCALE (1:2) (50%) ON 11" X 17"

	SHEET INDEX	
	GENERAL NOTES	GSN
	ELEVATIONS	S1.0
	FOUNDATION DETAILS	S2.0
4	BUILDING SECTION & FRAMING DETAILS	S3.0
	ROOF FRAMING PLAN	S4.0
4	BUILDING AND SIDE WALL SECTIONS	S5.0
,	BUILDING & END WALL SECTIONS	S6.0
6		

CODE COMPLIANCE:

IBC 2018

DESIGN WIND: 115 MPH ULTIMATE WIND SPEED

SEISMIC DESIGN CLASS: B

SOIL SITE CLASS: D

 $S_s = 0.255, S_1 = 0.080$

 $S_{DS} = 0.271 \ S_{D1} = 0.127$

 $C_S = 0.136$

DW TOWER - SKY HI
SKY-HI DOMESTIC WATER IMPROVEMENT DISTR
EQUIPMENT SHELTER

DW Tower, LLC

480 451 9609 fax: 480 451 9608

ISE JOB #: 19952

ISE Incorporated Structural Engineers

P.O. BOX 50039

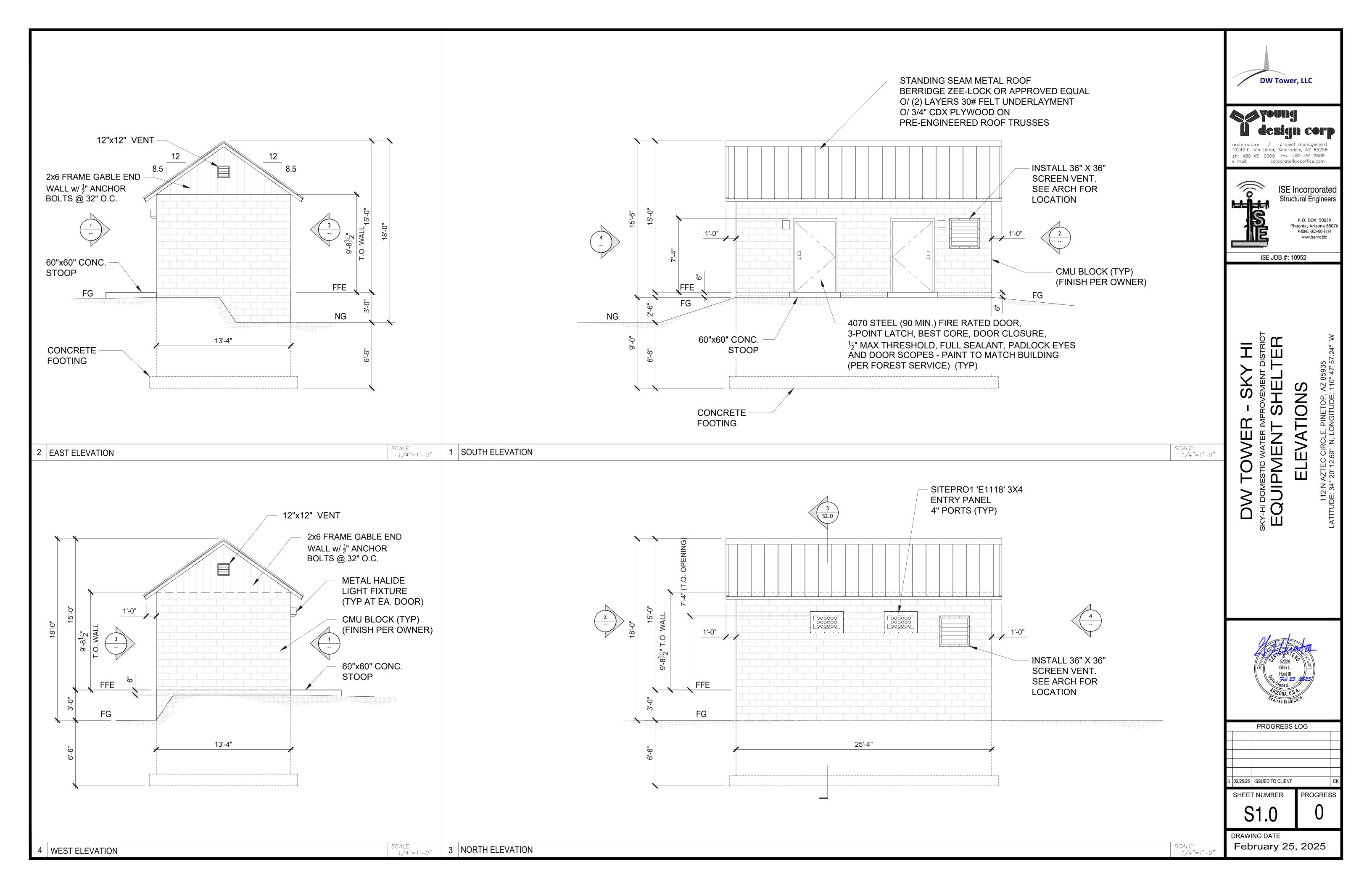
Phoenix, Arizona 8507 PHONE: 602-403-8614

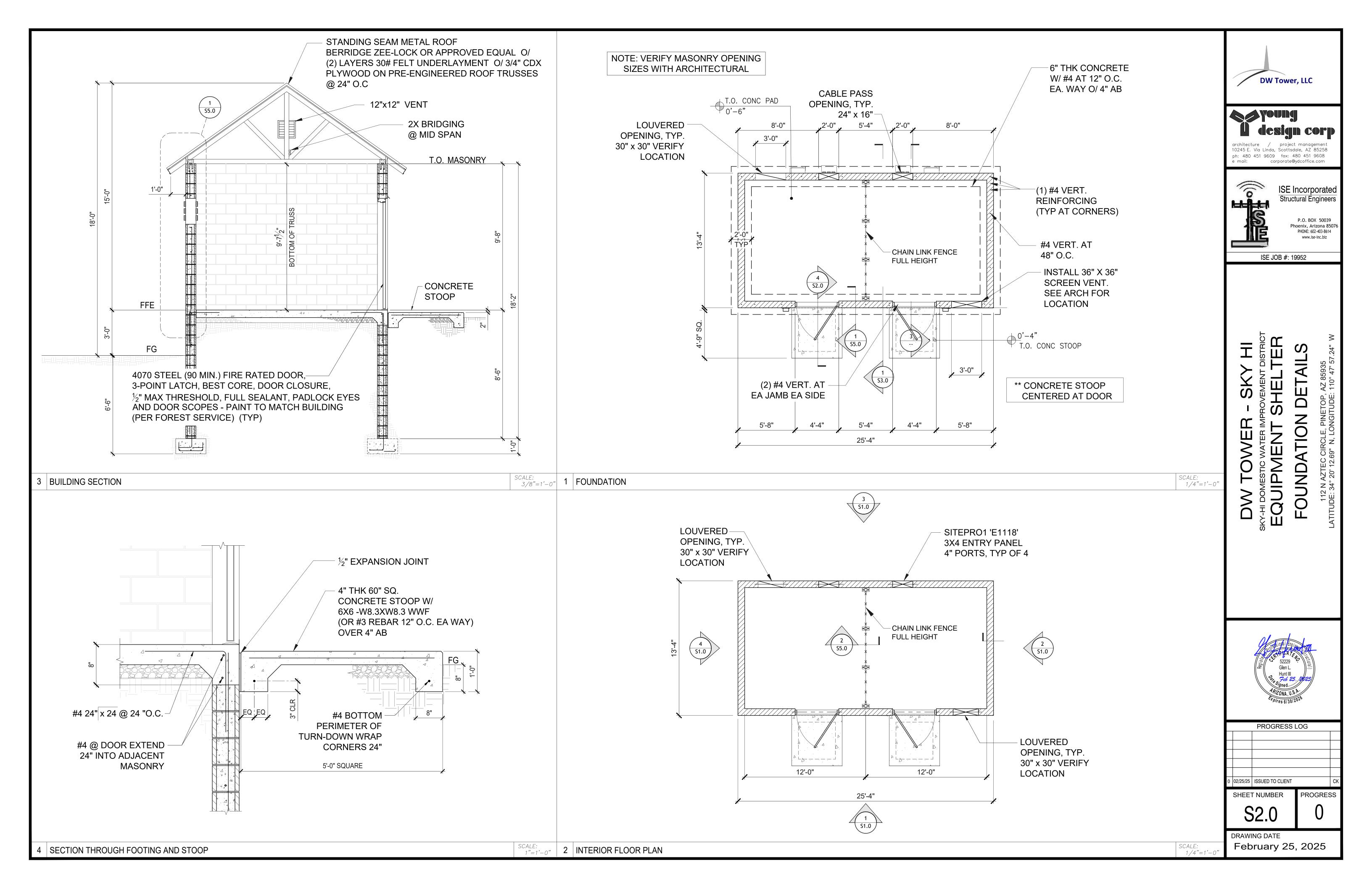
	CHEET	LVILIMDED	DDOCD
0	02/25/25	ISSUED TO CLIENT	
		PROGRESS	LOG

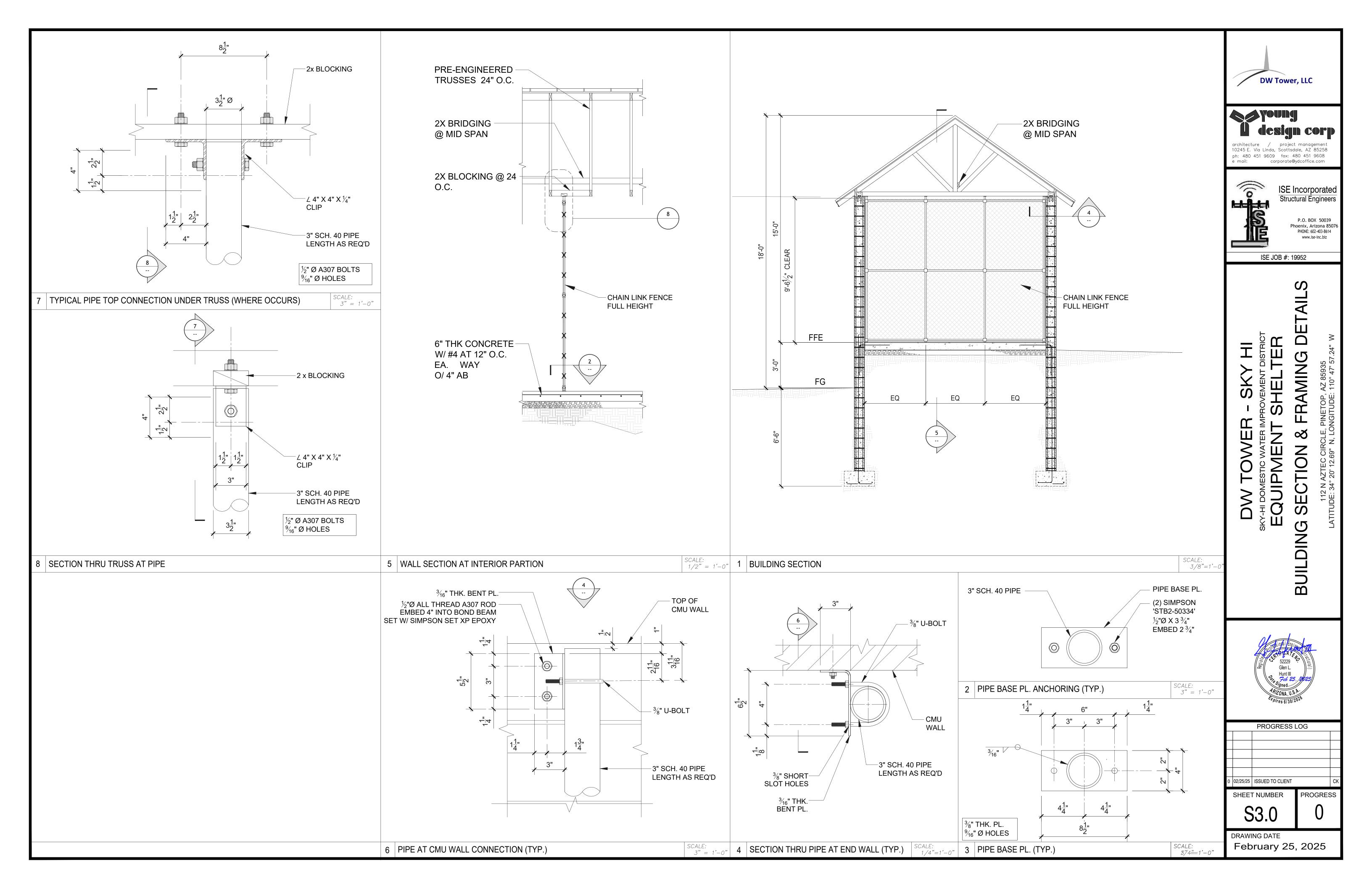
SHEET NUMBER

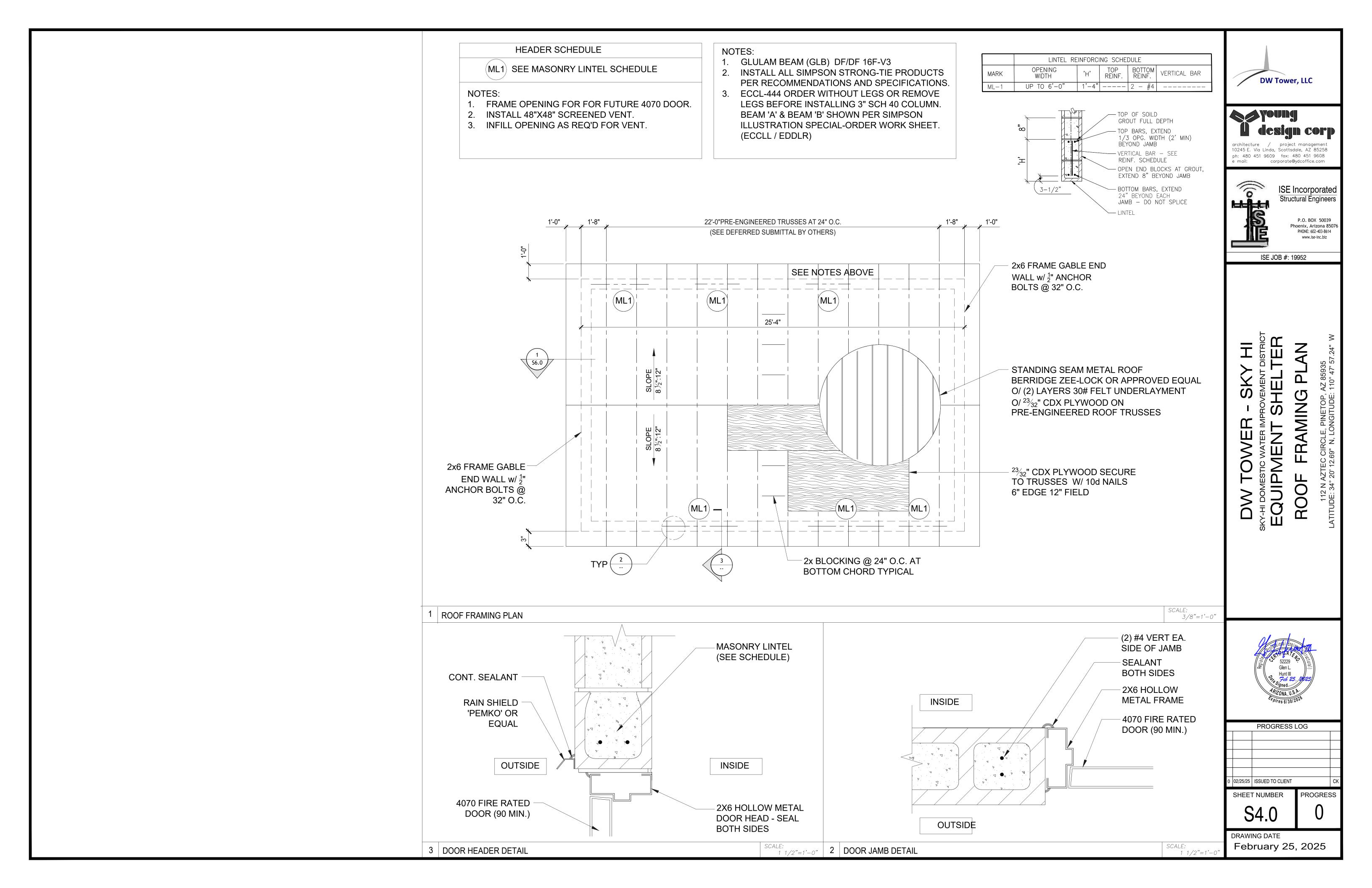
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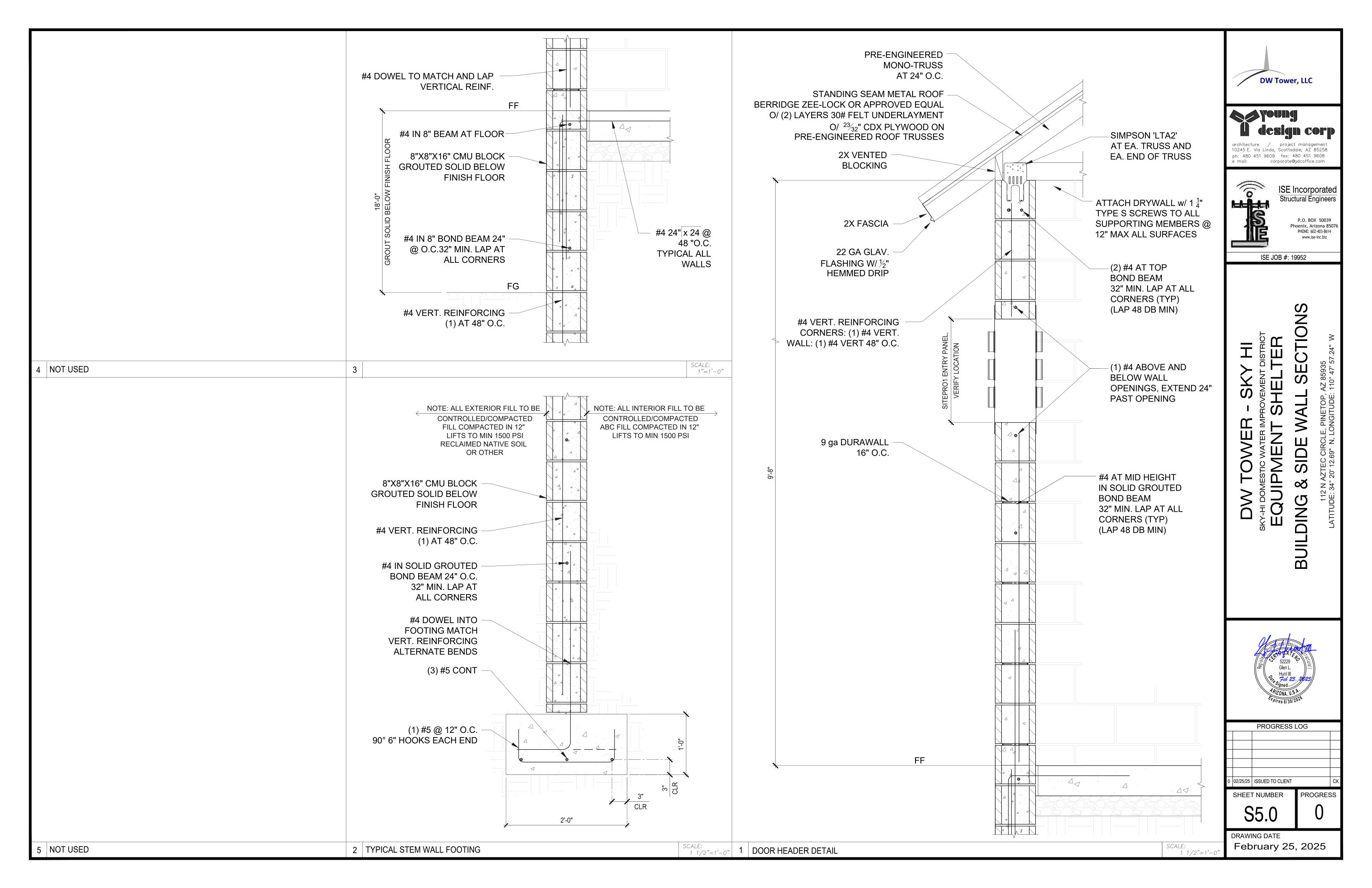
DRAWING DATE
February 25, 2025

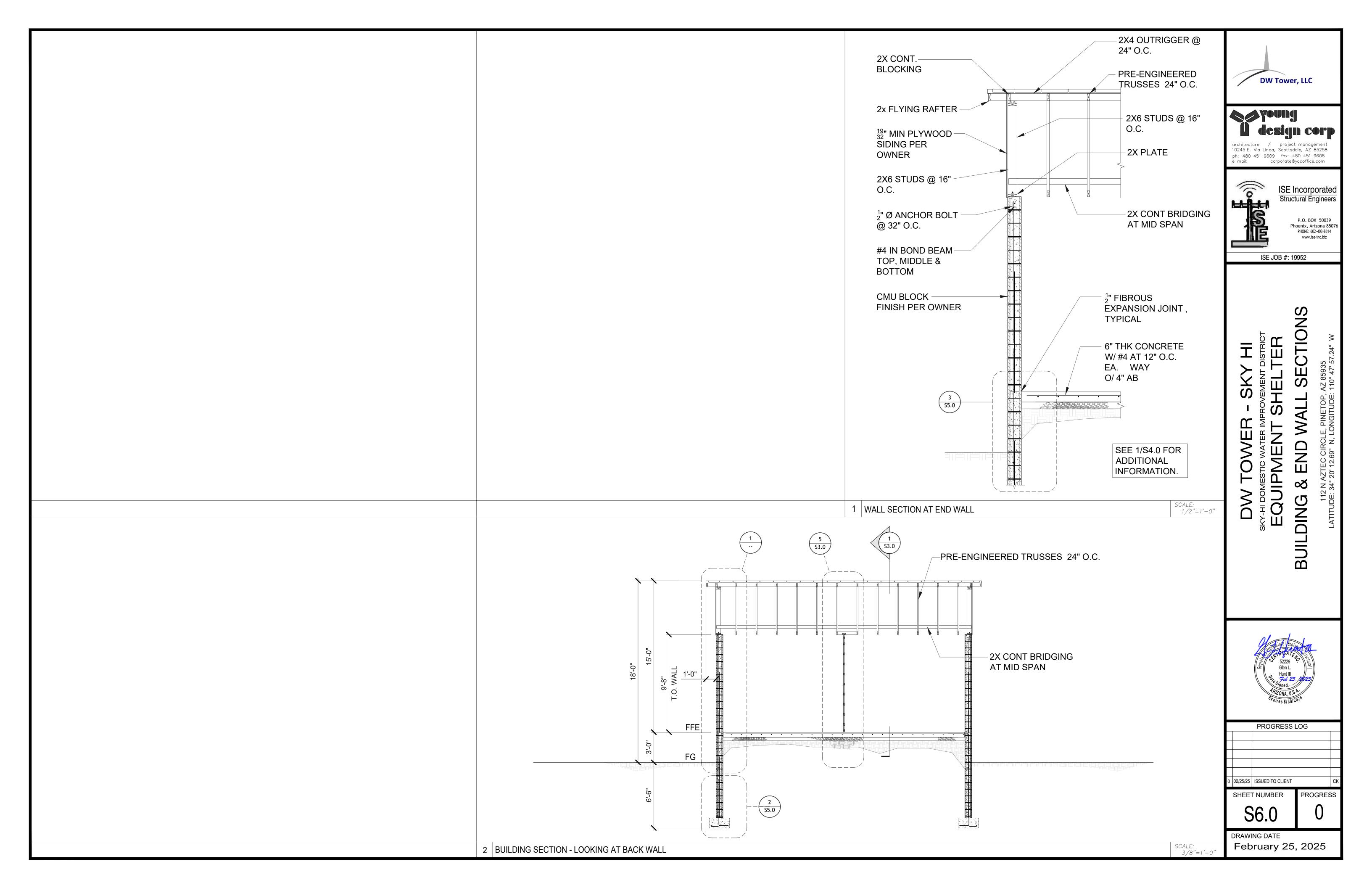












ELECTRICAL SPECIFICATIONS

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
 THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERTY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWNING AS SPECIFIED HEREIN AND AS OTHERWISE PROVIDED.
- DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.

 7 ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- 8 CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
- 9 CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- 11 ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- 12 PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
- 13 ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE
- TURNED OVER TO OWNER AT JOB COMPLETION.
- 14 USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE.
- 15 ALL CONDUCTORS SHALL BE COPPER
- 16 ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- 17 THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
- 18 PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- 19 IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- 20 LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X—RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH SECTION NO. 4305 AND NO. 4304 OF THE U.B.C.
- 22 RECEPTACLES SHALL BE 20 AMPERE, 125 VOLT A.C., WHITE AS REQUIRED BY THE ARCHITECT OR APPROVED EQUAL.
- 23 WALL SWITCHES SHALL BE SINGLE-POLE, HUBBELL #1201 OR EQUIVELENT, WHITE AS REQUIRED BY THE ARCHITECT.
- PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS, SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE RACO #800, 1/2" RAISED WORK COVERS
 WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM, NO BX OR
- NONMETALLIC SHEATHED (NM) CABLE IS PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.

 26 GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED #2.
- 26 GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER AND ANNEALED #2.
 27 GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG.
- 28 METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY SQUARE D COMPANY OR APPROVED EQUAL.
- 29 ALL MATERIALS SHALL BE U.L. LISTED.

COPPERWELD OR APPROVED EQUAL.

- 30 CONDUIT:
- CONDUIT:

 a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN COTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.

 b. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.

 c. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.

 d. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.
- 31 ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
- CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.

GENERAL ELECTRICAL NOTES

- 1. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC, NOT INDICATING THE EXACT ROUTING REQUIRED. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF
- INSTALLATION.

 2. ALL EQUIPMENT PROVIDED BY THE ELECTRICAL CONTRACTOR SHALL BE NEW, LISTED, AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FOR THE CONDITIONS OF INSTALLATION.
- 3. DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT DEVICE LOCATIONS SHALL BE AS INDICATED ON THE ARCHITECTURAL PLANS OR AS DIMENSIONED. IF NOT SHOWN ON THE ARCHITECTURAL PLANS OR DIMENSIONED ON THE ELECTRICAL PLANS, VERIFY EXACT LOCATION WITH THE ARCHITECT PRIOR TO ROUGH—IN.
- 4. ALL WIRE COUNTS ARE TYPICALLY NOT SHOWN BETWEEN LIGHT FIXTURES OR RECEPTACLES. PROVIDE ALL REQUIRED EVEN WHERE NOT SHOWN.
 5. WHERE SIZE IS NOT SHOWN ON THE DRAWINGS, CIRCUITS SHALL CONSIST OF #12 PHASE AND
- GROUNDED (NEUTRAL CONDUCTORS) AND A #12 CU GROUND IN 3/4" CONDUIT. MC CABLE SHALL BE ACCEPTACLE IN WALLS. ALL BRANCH CIRCUIT HOME—RUNS SHALL BE IN CONDUIT.

 6. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL
- CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE DRAWINGS. VERIFY THE TYPE OF FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD.

 7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL, PLUMBING AND GENERAL CONTRACTORS, PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, MECHANICAL AND PLUMBING EQUIPMENT REQUIREMENTS ARE PROVIDED IN THE ELECTRICAL DESIGN. THE CONTRACTOR WILL NOT BE

OMPENSATED FOR COSTS ASSOCIATED WITH CHANGING THE ELECTRICAL SYSTEMS TO MATCH

- UTILIZATION EQUIPMENT, EVEN IF THE ELECTRICAL WORK IS INSTALLED PER THE ELECTRICAL DRAWINGS.

 8. INSULATION & WIRE TYPES SHALL BE AS FOLLOWED: PANEL FEEDERS XHHW COPPER, WIRING ABOVE GRADE THHN COPPER, WIRING BELOW GRADE THWN COPPER, UNLESS NOTED OTHERWISE.

 9. SOME CONDUCTOR SIZES ARE BASED ON THE USE OF 75 DEGREE C CONDUCTOR RATINGS. THE CONTRACTOR SHALL VERIFY, PRIOR TO INSTALLATION OF CONDUCTORS OR CONDUIT FEEDING ANY EQUIPMENT, THAT ALL ELECTRICAL EQUIPMENT IS RATED FOR USE WITH 75 DEGREE C WIRING. IF ANY
- EQUIPMENT IS RATED FOR USE WITH LESS THAN 75 DEGREE C CONDUCTORS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR EVALUATION/CORRECTION.

 10. UNLESS SPECIFICALLY NOTED OTHERWISE, SYSTEMS PROVIDED OR INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE COMPLETE AND FULLY—FUNCTIONING AFTER INSTALLATION. COMPONENTS NOT SHOWN, BUT REQUIRED FOR THE PROPER OPERATION OF THE EQUIPMENT OR SYSTEM, SHALL BE
- PROVIDED AT NO ADDITIONAL COST TO THE PROJECT.

 11. THE CONTRACTOR SHALL PERFORM ALL ACCEPTANCE TESTS REQUIRED OR RECOMMENDED BY EQUIPMENT MANUFACTURERS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SEVEN (7) DAYS PRIOR TO TESTING AND SHALL ALLOW OBSERVATION OF THE TESTING BY THE ENGINEER.
- ALL RECEPTACLES INSTALLED WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED.
 UNLESS OTHERWISE NOTED, ALL EQUIPMENT DISCONNECTS SHALL BE NEMA TYPE 3R, FUSIBLE, 30A, 3 POLE. FUSE PER EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 14. ALL PENETRATIONS IN WALLS SHALL BE SEALED WITH FLEXIBLE ACOUSTIC CAULKING. CAULKING SHALL BE APPLIED AROUND OUTLET BOXES TO PROVIDE A COMPLETE SEAL BETWEEN THE BOX AND THE
- 15. PRIOR TO TRENCHING IN ANY AREA, THE CONTRACTOR SHALL CONTACT ELECTRICAL,
 COMMUNICATIONS/DATA, CABLE TV, GAS, AND WATER UTILITY PROVIDERS (BLUE STAKE) AND HAVE ALL
 UTILITIES IN THE AREA IDENTIFIED. IN ADDITION, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A
 SUBCONTRACTOR SPECIALIZING IN THE LOCATION OF UNDERGROUND STRUCTURES TO IDENTIFY ANY
 OBSTACLES IN THE PATH OF TRENCHING (PRIOR TO COMMENCING WORK). DAMAGE TO ANY
 UNDERGROUND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO
 THE PROJECT.
- 16. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL AND STATE CODES INCLUDING THE NEC.

 17. OVER CURRENT DEVICES SHALL BE LOCATED WHERE THEY WILL NOT BE EXPOSED TO PHYSICAL
- HOMERUNS SHALL NOT BE GANGED TOGETHER UNLESS SHOWN GANGED.
 CONTRACTOR SHALL CONTACT ENGINEER IN WRITING (RFI) PRIOR TO PROCEEDING WITH ANY WORK NOT CLEARLY SHOWN ON THESE CONTRACT DOCUMENTS. ENGINEER WILL NOT ACCEPT ANY RESPONSIBILITY
- CLEARLY SHOWN ON THESE CONTRACT DOCUMENTS. ENGINEER WILL NOT ACCEPT ANY RESPONSIBILITY FOR WORK HE HAS NOT EXPLICITLY AUTHORIZED.

 20. PROVIDE IDENTIFICATION AT THE DISTRIBUTION PANEL FOR BRANCH CIRCUITS THAT FEED EMERGENCY
- LIGHTING UNIT EQUIPMENT.

 21. ELECTRICAL EQUIPMENT THAT IS LIKELY TO REQUIRE MAINTENANCE WHILE ENERGIZED SHALL BE PROPERLY MARKED TO WARN PERSONNEL OF ARC FLASH HAZARD.
- 22. PROVIDE A #18 OR LARGER COPPER TRACER WIRE SECURELY ATTACHED TO THE NON-METALLIC CABLE, PIPE OR CONDUIT AT 8'-0" ON CENTER. IT SHALL HAVE A 12" OF TRACER WIRE ACCESSIBLE ABOVE GRADE AT ANY ABOVE GRADE TERMINATION PER ARIZONA STATE STATUTE.
- 23. UTILITY COORDINATION

 a. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF DRAWINGS TO ELECTRICAL AND TELCO
 UTILITIES AS REQUIRED FOR DESIGN.
- b. THE CONTRACTOR SHALL NOT TRENCH OR INSTALL CONDUITS (ON THE UTILITY OR LOAD SIDE) TO THE SES OR TO THE UTILITY TRANSFORMER (PRIMARY OR SECONDARY), OR TO THE UTILITY CONNECTION POINT BEFORE RECEIVING A FINAL DESIGN FROM THE UTILITY.
- c. THE CONTRACTOR SHALL NOT INSTALL EQUIPMENT PADS FOR THE SES OR ANY UTILITY EQUIPMENT (TRANSFORMERS, SWITCHING CABINETS, ETC) PRIOR TO RECEIPT OF FINAL PLANS FROM THE UTILITY.
 d. THE CONTRACTOR SHALL NOT BE COMPENSATED FOR ADDITIONAL WORK REQUIRED TO MEET THE REQUIREMENTS OF THE UTILITY WHICH IS THE RESULT OF PROCEEDING PRIOR TO RECEIPT OF A
- 24. SERIES RATING NOTES:

 A. WHERE A CIRCUIT BREAKER IS USED ON A CIRCUIT HAVING AN AVAILABLE FAULT CURRENT HIGHER THAN THE MARKED INTERRUPTING RATING BY BEING CONNECTED ON THE LOAD SIDE OF AN ACCEPTABLE OVERCURRENT PROTECTIVE DEVICE HAVING A HIGHER RATING, THE CIRCUIT BREAKER
- SHALL MEET THE REQUIREMENTS SPECIFIED IN (1) AND (2).

 (1). TESTED COMBINATIONS. THE COMBINATION OF LINE—SIDE OVERCURRENT DEVICE AND LOAD—SIDE CIRCUIT BREAKER(S) IS TESTED AND MARKED ON THE END USE EQUIPMENT,
- SUCH AS SWITCHBOARDS AND PANELBOARDS.

 (2). MOTOR CONTRIBUTION. SERIES RATINGS SHALL NOT BE USED WHERE

 a. MOTORS ARE CONNECTED ON THE LOAD SIDE OF THE HIGHER-RATED OVERCURRENT DEVICE AND ON THE LINE SIDE OF THE LOWER-RATED OVERCURRENT DEVICE, AND
- CAUTION SERIES COMBINATION STSTEM RATED ______ AMPERES.

 IDENTIFIED REPLACEMENT COMPONENTS REQUIRED

 C. TESTED COMBINATIONS. THE COMBINATION OF THE LINE—SIDE OVERCURRENT DEVICE AND LOAD SIDE CIRCUIT BREAKER(S) IS TESTED AND MARKED ON THE END USE EQUIPMENT, SUCH AS SWITCHBOARDS AND PANFI BOARDS.
- D. FOR SERIES RATING COMBINATION, MANUFACTURER OF PANELBOARDS AND SWITCHBOARDS AND ASSOCIATED DEVICES SHALL BE OF SAME MANUFACTURER AS THE UPSTREAM EQUIPMENT/DEVICE.

 25. GENERATOR NAMEPLATES NOTE:

 A. CONTRACTOR TO INSTALL A NAMEPLATE AT THE S.E.S. FOR THE GENERATOR PER 2020 NEC ARTICLE 702.

SYMBOL LIST (NOT ALL MAY BE USED)

ELECTRICAL SYMBOLS

FLUORESCENT STRIP FIXTURE, LENGTH PER PLAN.

SURFACE WALL-MOUNTED LIGHT FIXTURE.

SOLID 'JBOX' ON ANY FIXTURE INDICATES A FIXTURE WITH AN INTEGRAL EMERGENCY POWER SUPPLY, PER THE SPECIFICATIONS.

EMERGENCY POWER SUPPLY, PER THE SPECIFICATIONS.

POLE—MOUNTED LIGHT FIXTURE.

\$ SINGLE POLE TOGGLE SWITCH

PHOTOCELL, MOUNTED ON ROOF UNLESS NOTED OTHERWISE.

DUPLEX CONVENIENCE RECEPTACLE

"CROSS SLASH" ON ANY RECEPTACLE INDICATES INTEGRAL GROUND FAULT PROTECTION.

DOUBLE DUPLEX (FOURPLEX) CONVENIENCE RECEPTACLE

JUNCTION BOX. 'C' INDICATES CEILING MOUNTED. 'F' INDICATES FLOOR MOUNTED (SUBSCRIPTS ARE TYPICAL FOR ALL DEVICES)

VOICE OUTLET

DATA OUTLET

COMBINATION TELEPHONE AND DATA OUTLET IN THE SAME BOX

HORSEDOWER BATED MANUAL MOTOR SWITCH

HORSEPOWER RATED MANUAL MOTOR SWITCH

FUSIBLE DISCONNECT SWITCH FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE. SIZE AND FUSES AS PER RECOMMENDATIONS OF EQUIPMENT'S MANUFACTURER OR AS NOTED.

30A, 3P, 250V, NEMA 3R UNLESS NOTED OTHERWISE.
(N. INDICATES NON-FUSED.)

ELECTRICAL MOTOR. SEE DRAWINGS FOR SIZE.

DISTRIBUTION PANELBOARD, MOTOR CONTROL CENTER OR SERVICE ENTRANCE SECTION. SEE DRAWINGS FOR EXACT TYPE.

DISTRIBUTION TRANSFORMER
SURFACE MOUNTED PANEL BOARD.
FLUSH MOUNTED PANEL BOARD.

TMB

TELEPHONE MOUNTING BOARD.

TEST WELL/GROUND ROD

GROUND ROD − 5/8" × 10' COPPER CLAD

CADWELD CONNECTION

MECHANICAL CONNECTION

GROUNDING WIRE

GROUND BAR

SURGE SUPPRESSOR GROUND BAR

M METER AND MAIN BREAKER

MANUAL XFR SWITCH AND GEN. RECPT.

G ● GPS ANTENNA

ELECTRICAL POWER

•——

(G)---

T-1 LINE

WIRE AND CONDUIT

FLEXIBLE CONDUIT

CONDUIT CONCEALED IN WALLS OR ABOVE CEILING W/ 2 #12, #12 GND, 3/4 °C., UNLESS NOTED OTHERWISE.

CONDUIT ROUTED UNDER FLOOR OR BELOW GRADE W/ 2 #12, #12 GRD., 3/4" C., UNLESS NOTED OTHERWISE.

CONDUIT TURNING UP.

CONDUIT TURNING DOWN.

1—LINE DIAGRAM

CIRCUIT BREAKER, FIXED MOUNTED.

CIRCUIT BREAKER, DRAWOUT MOUNTING.

FUSIBLE SWITCH. SIZE AS INDICATED ON DRAWINGS.

TRANSFORMER. SEE ONE—LINE FOR TYPE AND SPECIFICATION.

CURRENT TRANSFORMER

CURRENT TRANSFORMER

METERING DEVICE

PANELBOARD, MAIN LUG ONLY

PANELBOARD, MAIN CIRCUIT BREAKER

TRANSFER SWITCH — MANUAL OR AUTOMATIC

INDICATES A FEED—THROUGH LUG CONNECTION

UNINTERRUPTIBLE POWER SUPPLY

GENERATOR WITH INTEGRAL PROTECTION

SHEET INDEX

E1 GENERAL NOTES / LEGENDS / SHEET INDEX

E2 SITE POWER PLAN

E3 ONE-LINE / CALCS

E4 GROUNDING PLAN

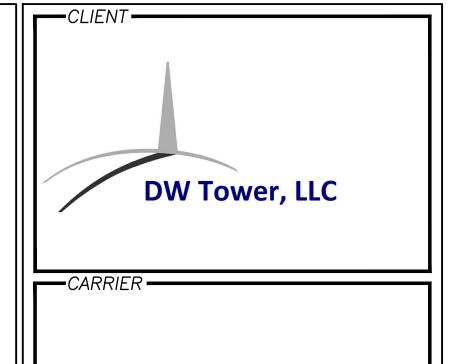
ABBREVIATIONS

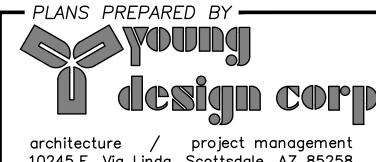
E4.1 GROUNDING DETAILS

= CONDUIT ONLY = SCHEDULE 40 PLASTIC CONDUIT = GALVANIZED RIGID CONDUIT = MOUNTED = WEATHERPROOF = UNLESS OTHERWISE NOTED = GROUND N. OR NEUT. = NEUTRAI A. OR AMP. = AMPERE = KILOWATTS = WATTS = PHASE = DIAMETER H.P. OR HP = HORSEPOWER = TRANSFORMER = CIRCUIT BREAKER = CIRCUIT = SWITCH = MANUAL TRANSFORMER SWITCH = FIRE ALARM RECPT. = RECEPTACLE = ELECTRIC CONTRACTOR = GENERAL CONTRACTOR = SINGLE POLE, TWO POLE, & THREE POLE = EQUIPMENT GROUND BUS = MAIN GROUND BUS = AVAILABLE FAULT CURRENT = AMERICAN WIRE GAUGE = BARE TINNED COPPER WIRE = GLOBAL POSITIONING SYSTEM = POWER PROTECTION CABINET = TYPICAL = RIGID GALVANIZED STEEL = ELECTRICAL METALLIC TUBING = DRAWING = BASE TRANSMISSION SYSTEM = GENERATOR = BARE STRANDED COPPER WIRE BSCW = INSULATED STRANDED COPPER WIRE

CODE INFORMATION:

2017 NEC, 2018 IECC. ALL SYSTEM SHALL BE IN COMPLIANCE WITH ABOVE CODES AS ADOPTED BY THE CITY OF PINETOP, ARIZONA.





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PROJECT INFORMATION -

SKY HI

YDC - 11240

112 N. AZTEC CIRCLE PINETOP, AZ 85935

GENERAL NOTES /
LEGENDS / SHEET INDEX

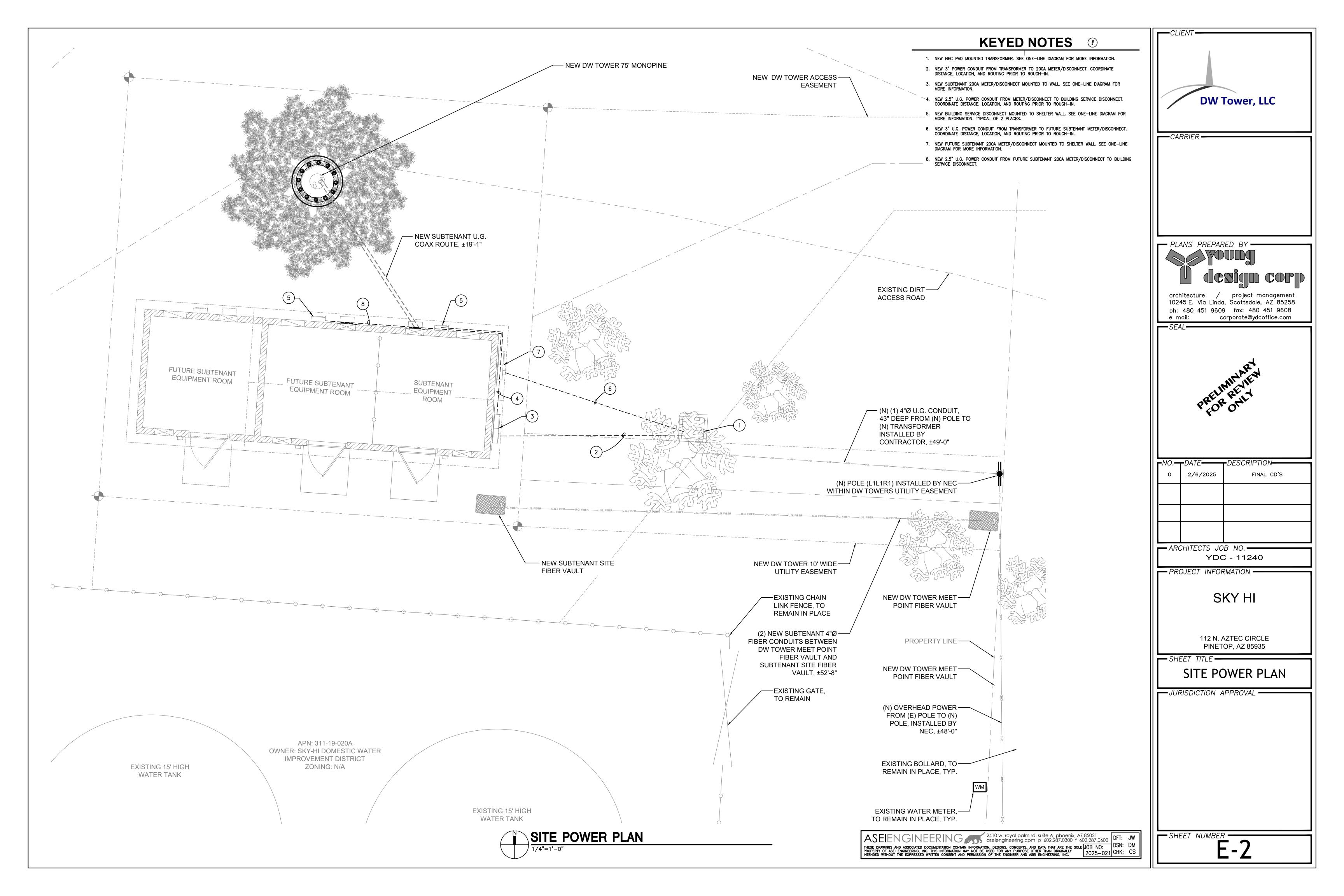
----JURISDICTION APPROVAL ---

— SHEET NUMBE<u>R</u> —

ASEIENGINEERING 2410 w. royal palm rd. suite A, phoenix, AZ 85021 aseiengineering.com o 602.287.0300 f 602.287.0600

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DFT: JW DSN: DM CHK: CS



Power Company: <u>NEC</u>

Submit drawings to Utility Company representative as required in the General Notes included in the Electrical Drawings.



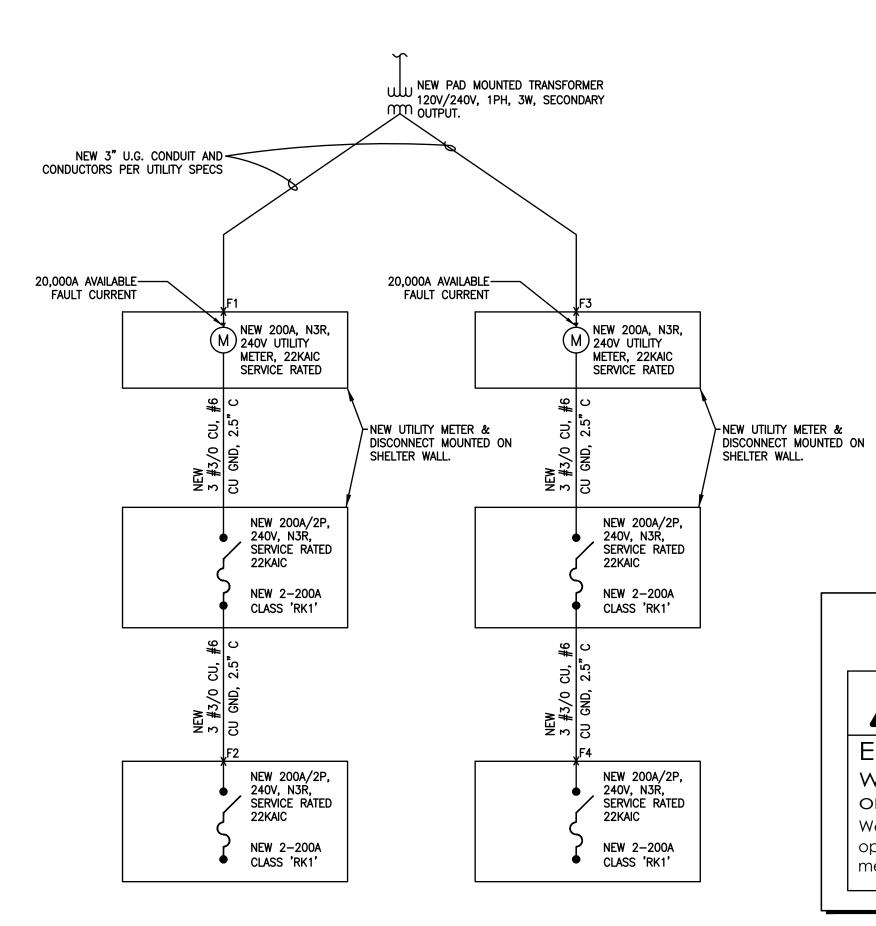
Know what's below.

Call before you dig.

NOTE:
ALL WIRES SHALL BE COPPER THWN WIRE
OR XHHW UNLESS NOTED OTHERWISE.

NOTE:
PRIOR TO RUNNING CONDUIT ROUTE — CONTRACTOR
SHALL CONTACT THE SUN—STATE PROJECT MANAGER
AND VERIFY THE EQUIPMENT CABINET LAYOUT
CONFIGURATION AND ROUTE CONDUITS ACCORDINGLY.

NOTE:
PRE-CONSTRUCTION MEETING AND
ELECTRICAL EASEMENT REQUIRED.



PROVIDE APPROVED ARC-FLASH
HAZARD WARNING ON ALL REQUIRED
ELECTRICAL EQUIPMENT PER NEC 110.16

A WARNING

Electric Arc Flash Hazard

Will cause severe injury

or death

Wear proper protective equipment before opening or performing diagnostic measurements while energized. (See NFPA 70E)

ONE-LINE DIAGRAM

NTS

ELECTRICAL CONTRACTOR SHALL PROVIDE LABELING OF THE AVAILABLE FAULT CURRENT FOR EACH PANEL AS NOTED, PER NEC 110.24.

1-PHASE, LINE-TO-LINE SHORT CIRCUIT CALCULATIONS BASED ON THE "POINT-BY-POINT" METHOD

I sca = Isc x M M = 1/(1 + f) Cable: f = 2 x L x I / C x E

w here:

Isc = the available short-circuit current, in amperes, at the beginning of the circuit.

= Line-to-line voltage or Line-to-ground voltage, w here applicable.

the available short-circuit current, in amperes, at the beginning of the circuit.

= the length of circuit to the fault, in feet.

the constant from Table C for the type of conductors and circuit arrangement.
For parallel runs, multiply "C" value by the number of conductors per phase.

lp = primary current, in amperes.

ls (sca) = Vp/Vs x M x ls

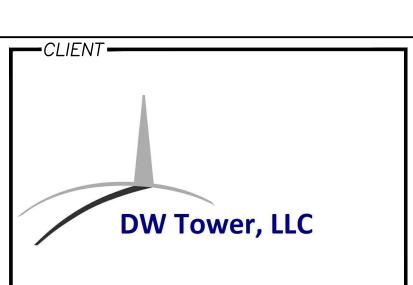
Vp = primary line-to-line voltage of transformer, in volts.
Vs = secondary line-to-line voltage of transformer, in volts.
%Z = impedance of transformer.

* Use row 'ca' for feeder cables; and row 'xf' for transformers.

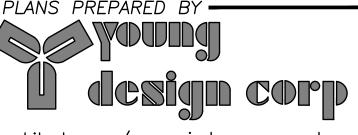
Xfm r: f = Ip sc x Vp x %Z/100000 x KVA

Fault	*	Description	Source Isc	Wire / Cable Size	No. of cond	Type of	<u>"</u>	E	L (length)	XFMR.	XFMR.	Vp	Vs	f	М	l sca
Point	Ш		(amps)		per phase	conduit	value	(volts)	in feet	KVA	%Z	(volts)	(volts)			(amps)
F1	ca	SERVICE ENTRANCE #1	20000.00											0.00	1.00	20000.00
	xf	(PER UTILITY SPECS)												0.00	1.00	0.00
F2	ca	BUILDING SERVICE DISCONNECT #1	20000.00	#3/0 CU	1	NON-MA	13923	240	15					0.18	0.85	16955.49
	xf													0.00	1.00	0.00
F3	ca	SERVICE ENTRANCE #2	20000.00											0.00	1.00	20000.00
	xf	(PER UTILITY SPECS)												0.00	1.00	0.00
F4	ca	BUILDING SERVICE DISCONNECT #2	20000.00	#3/0 CU	1	NON-MA	13923	240	20					0.24	0.81	16136.68
	xf													0.00	1.00	0.00

Note: The above calculations neglected motor short-circuit contributions. If significant, motor short-circuit contribution may be added to the transformer secondary short-circuit current value. A practical estimate of motor contribution is to multiply the total motor load in amperes by 4. Lengths are for calculations only. DO NOT USE for cost estimating or take-off purposes.



---CARRIER -



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-1

- NO. 	-DATE	DESCRIPTION————
0	2/6/2025	FINAL CD'S

YDC - 11240

PROJECT INFORMATION -

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112 N. AZTEC CIRCLE PINETOP, AZ 85935

SHEET TITLE -

ONE-LINE / CALCS

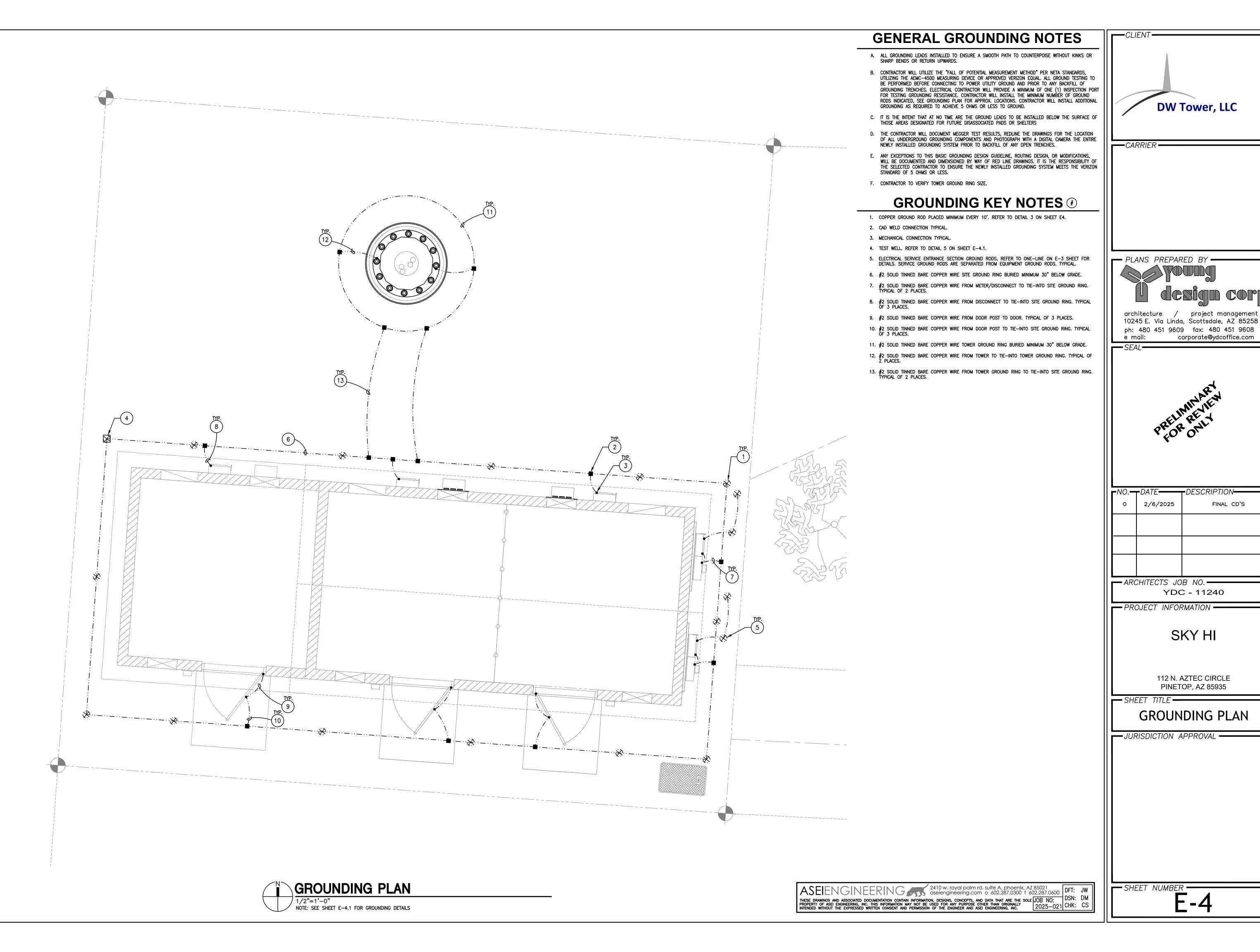
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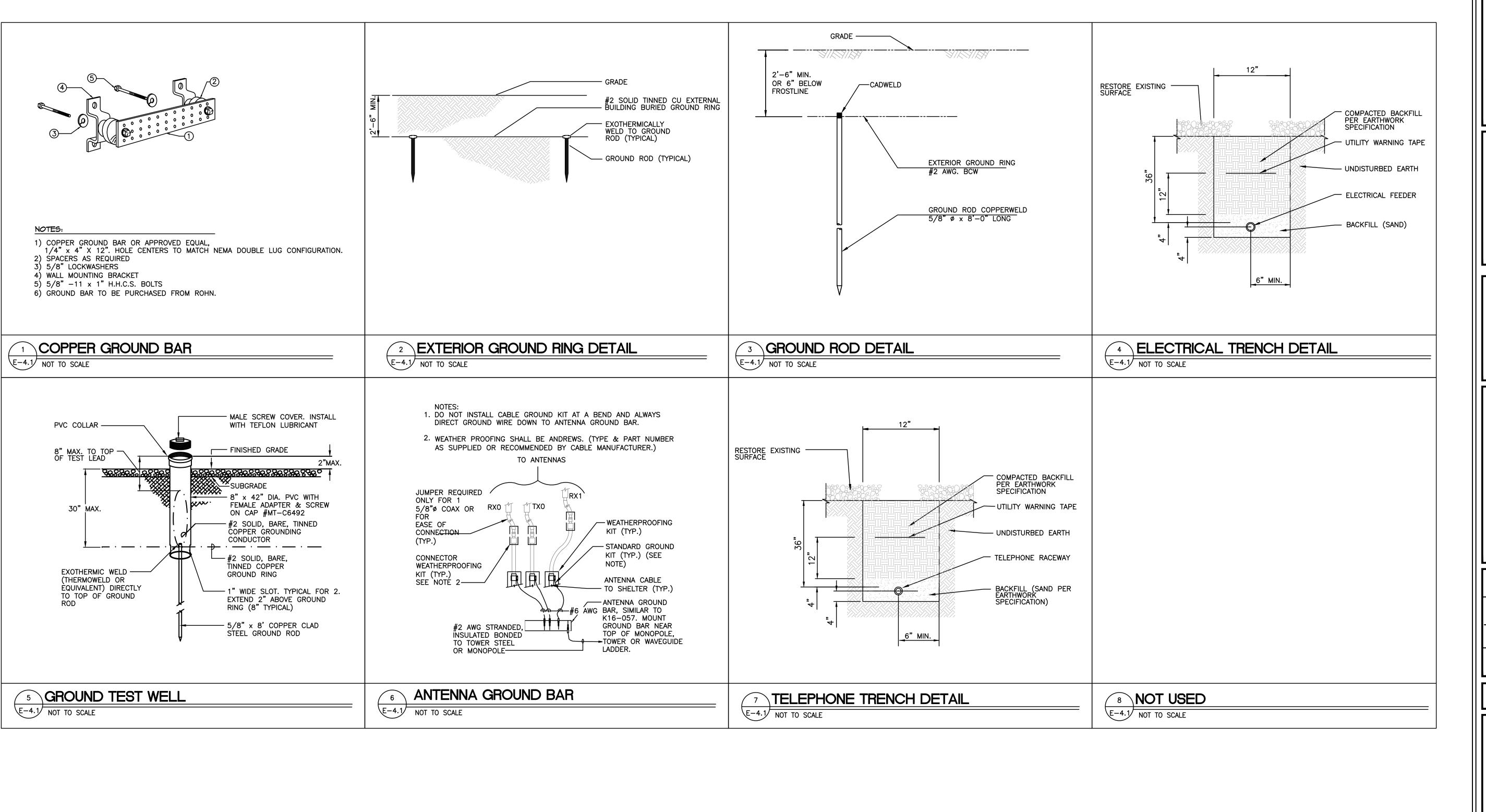
E-3

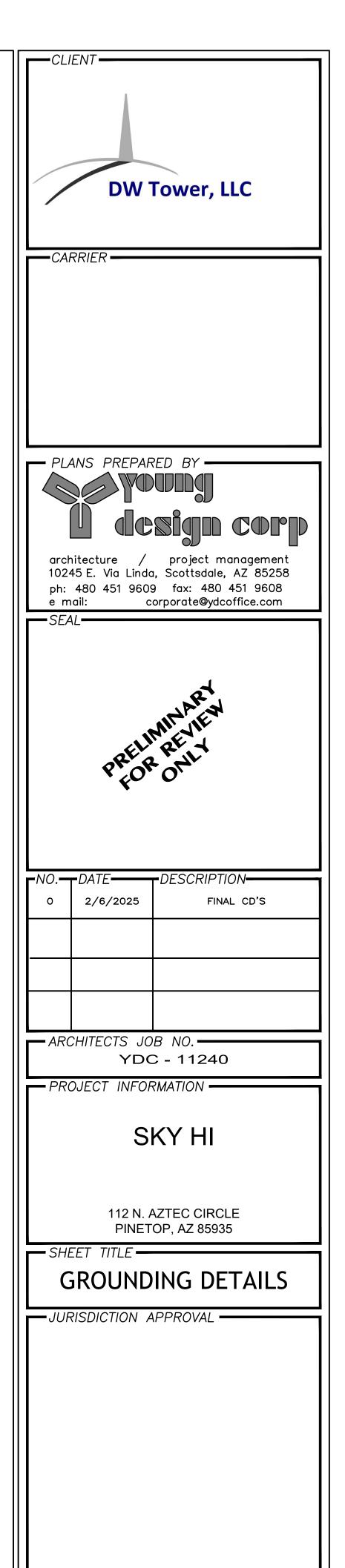
ASEIENGINEERING 2410 w. royal palm rd. suite A, phoenix, AZ 85021 aseiengineering.com o 602.287.0300 f 602.287.0600

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FINAL CD'S

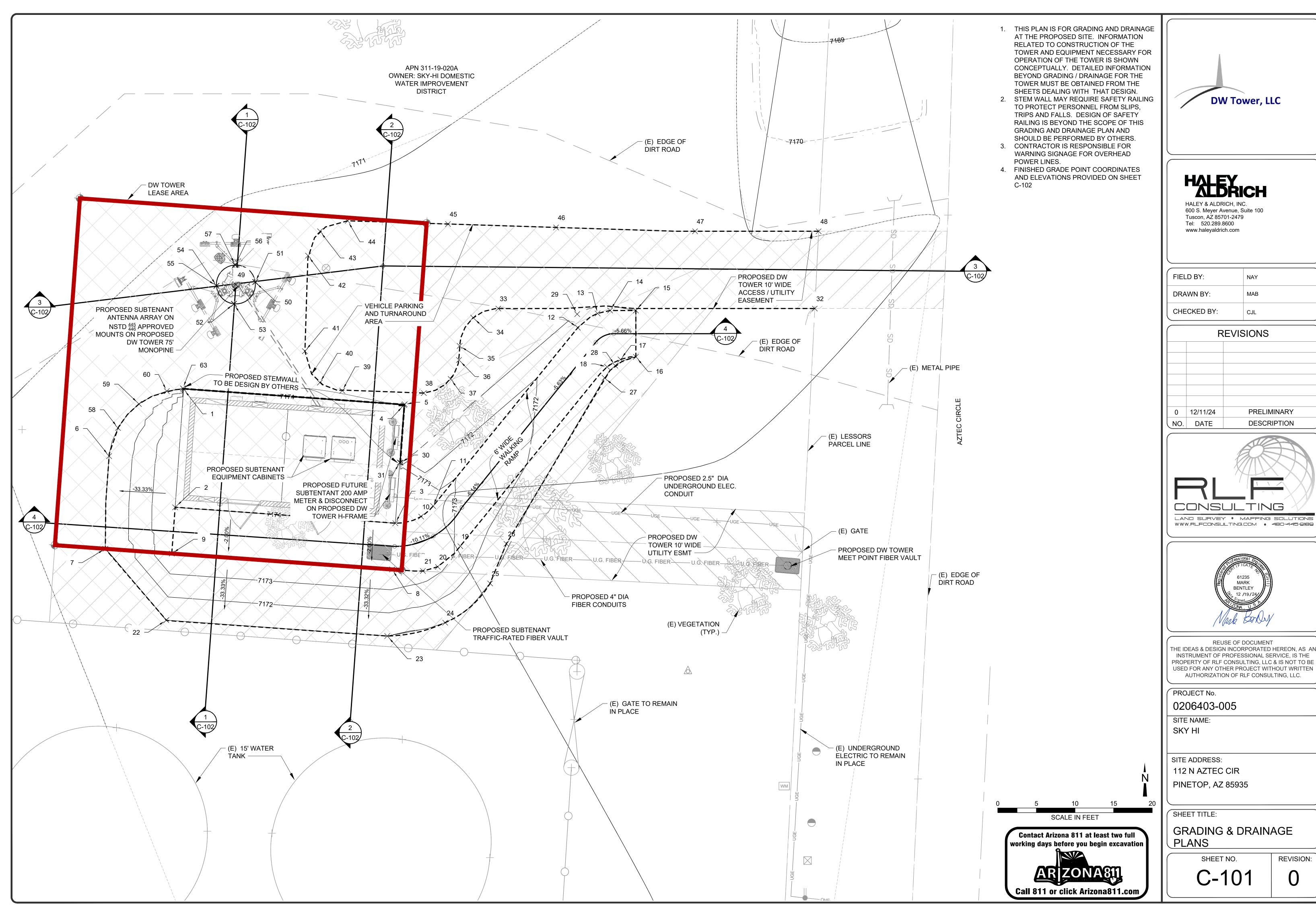




SHEET NUMBER -

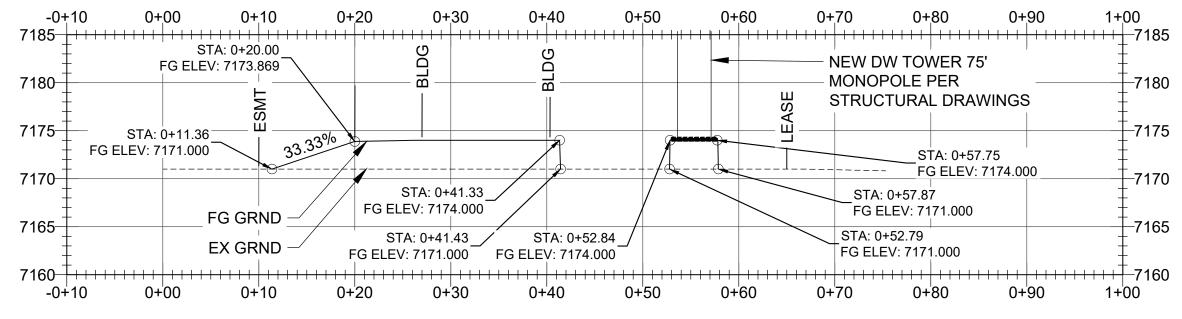
E-4.1

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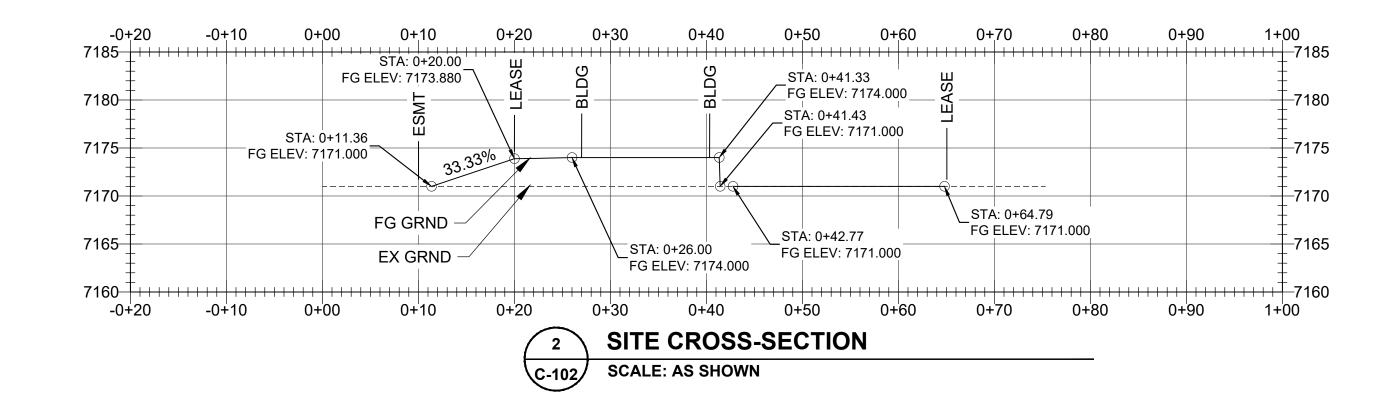


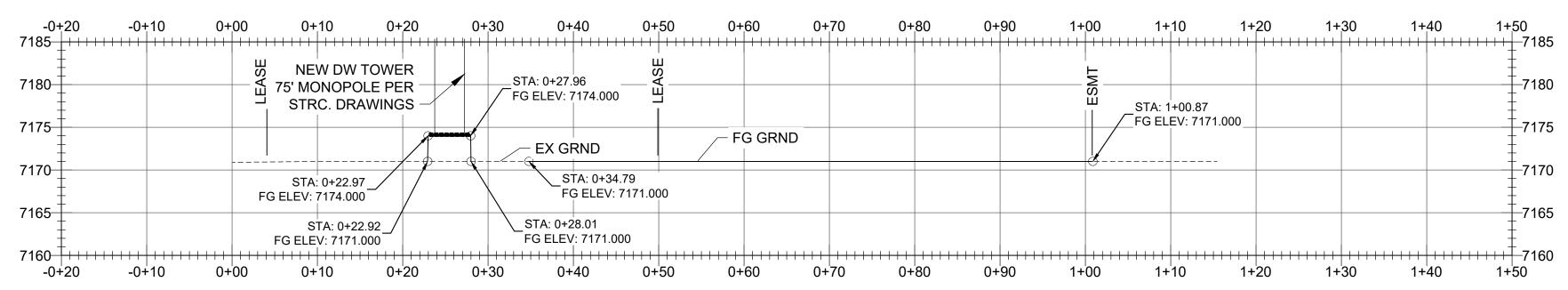


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SITE CROSS-SECTION
SCALE: AS SHOWN





3 SITE CROSS-SECTION
C-101 SCALE: AS SHOWN

85		A: 0+18.12 : 7173.937		LEASE	STA: 0+57.72 FG ELEV: 7172	2.816	ESM -	7185
75		33.34%	FG GRND	-10.2	21%	.55%		7175
70				/ _t	GTA: 0+47.63 FG ELEV: 7173.834			7170
65	STA: 0+09.31_/ FG ELEV: 7171.000	,	EX G	RNDSTA:	0+42.53 _EV: 7173.929		STA: 0+90.42 FG ELEV: 7171.000	7165
60 + + + + + + + + + + + + + + + + + + +)+10	0+10 0-	+20 0+30	0+40 0+50	0+60 0+70	0+80 0+90	1+00 1+10	7160 1+20 1+30

	FINISHED G	RADE POINT	S
POINT NO.	ELEVATION	NORTHING	EASTING
1	7174.000	1149022.0267	784276.3242
2	7174.000	1149006.7330	784275.2220
3	7174.000	1149004.6784	784303.7315
4	7174.000	1149019.9721	784304.8337
5	7171.000	1149020.0646	784304.9406
6	7171.000	1149013.3643	784266.6786
7	7171.000	1149001.3684	784266.1894
8	7173.880	1148998.6939	784303.3002
9	7173.880	1149000.7485	784274.7908
10	7173.651	1149005.5415	784307.0610
11	7173.444	1149006.8975	784308.6195
12	7171.494	1149029.9856	784327.3491
13	7171.302	1149031.8276	784329.9125
14	7171.171	1149032.2057	784331.5288
15	7171.000	1149032.2057	784334.8673
16	7171.000	1149026.2057	784334.8673
17	7171.100	1149025.8666	784332.8789
18	7171.198	1149024.9044	784331.1361
19	7172.880	1149001.7040	784312.1324
20	7173.280	1148999.0411	784309.2076
21	7173.480	1148998.5026	784307.2910
22	7171.000	1148992.1381	784274.0700
23	7171.000	1148990.0763	784302.6791
24	7171.000	1148991.8082	784310.1805
25	7171.000	1148996.8878	784315.9931
26	7171.000	1149002.0132	784318.1005
27	7171.000	1149023.4886	784330.8204
28	7171.000	1149025.0739	784332.1932
31	7174.000	1149012.5219	784304.2968
32	7171.000	1149032.4632	784358.0275
33	7171.000	1149032.4632	784317.0523
34	7171.000	1149031.2723	784313.8133
35	7171.000	1149027.6215	784312.0548
36	7171.000	1149025.7967	784311.9667
37	7171.000	1149023.3418	784310.8904
38	7171.000	1149021.5195	784307.4183
39	7171.000	1149021.8224	784296.8636
40	7171.000	1149022.8736	784293.9515
41	7171.000	1149026.9428	784292.0234
42	7171.000	1149039.3021	784292.4256

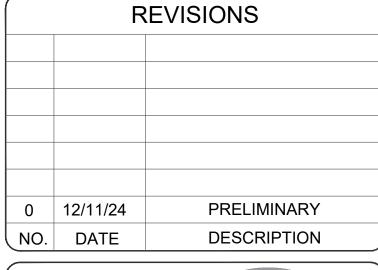
FINISHED GRADE POINTS						
POINT NO.	ELEVATION	NORTHING	EASTING			
43	7171.000	1149042.4572	784293.9773			
44	7171.000	1149043.8114	784297.5600			
45	7171.000	1149043.4002	784310.5422			
46	7171.000	1149042.9570	784324.5352			
47	7171.000	1149042.4632	784342.5274			
48	7171.000	1149042.4632	784358.5274			
49	7174.000	1149035.5754	784283.0894			
50	7174.000	1149035.8924	784285.5693			
51	7171.000	1149035.8987	784285.6189			
52	7174.000	1149033.0885	784282.8347			
53	7171.000	1149033.0387	784282.8296			
54	7174.000	1149035.4038	784280.5953			
55	7171.000	1149035.4003	784280.5455			
56	7174.000	1149038.0735	784282.9907			
57	7171.000	1149038.1234	784282.9887			
58	7171.000	1149017.0086	784267.8231			
59	7171.000	1149020.1073	784270.5384			



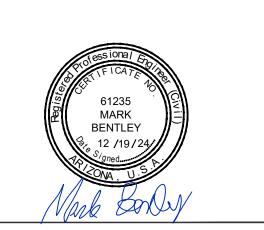


HALEY & ALDRICH, INC. 600 S. Meyer Avenue, Suite 100 Tuscon, AZ 85701-2479 Tel: 520.289.8600 www.haleyaldrich.com

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CHECKED BY:	CJL







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PROJECT No.

0206403-005

SITE NAME: SKY HI

SITE ADDRESS:

112 N AZTEC CIR

PINETOP, AZ 85935

SHEET TITLE:

GRADING & DRAINAGE PROFILES

SHEET NO. **C-101**

REVISION:

