

WEST HAVEN CITY COUNCIL AGENDA

August 5, 2020 6:00 P.M.
City Council Chambers
4150 South 3900 West, West Haven, UT 84401

NOTICE IS HEREBY GIVEN THAT ON **August 5, 2020** THE COUNCIL OF WEST HAVEN CITY WILL HOLD THE FOLLOWING PUBLIC MEETINGS: **5:30 PM: COUNCIL WORKSHOP** **6:00 PM: REGULAR WEDNESDAY CITY COUNCIL MEETING**. DUE TO EMERGENCY PROTOCOLS RECENTLY ENACTED BY MAYOR BOLOS AND EXECUTIVE ORDER 2020-33 ISSUED BY THE LT. GOVERNOR PUBLIC ATTENDANCE IS ALLOWED WITH A MAXIMUM OF 50 PEOPLE. JOIN US DIGITALLY FOR THE WORK SESSION [HTTPS://US02WEB.ZOOM.US/J/89139078776](https://us02web.zoom.us/j/89139078776) AND COUNCIL MEETING [HTTPS://US02WEB.ZOOM.US/J/85971880341](https://us02web.zoom.us/j/85971880341).

1. MEETING CALLED TO ORDER: Mayor Bolos
2. OPENING CEREMONIES
 - A. PLEDGE OF ALLEGIANCE Councilmember Vanderwood
 - B. PRAYER/MOMENT OF SILENCE Councilmember Dixon
3. PUBLIC PRESENTATION: Resident(s) attending this meeting will be allotted 2 minutes to express a concern or ask a Question about any issue that **IS NOT ON THE AGENDA** No action can or will be taken on any issue(s) presented.

AGENDA ACTION ITEMS

4. ACTION ON PLANNING COMMISSION MEETING RECOMMENDATION(S)
 - A. PRELIMINARY AND FINAL SITE PLAN APPROVAL-WASTE MANAGEMENT-2433 S 2050 W-THOMAS MITCHELL
 - B. ACTION ON ORDINANCE 30-2020-REZONE FROM A-2 TO C-2-4095 S 3500 W-JOHNNY PAGANO
 - C. ACTION ON ORDINANCE 31-2020-CITY WIDE GENERAL PLAN MAP
 - D. ACTION ON ORDINANCE 32-2020-MASTER DEVELOPMENT AGREEMENT-STAKER FARMS-APPROX. 2700 S 3500 W-BRYCE THURGOOD
 - E. PRELIMINARY SUBDIVISION APPROVAL-STAKER FARMS PHASE 5-APPROX. 2700 S 3500 W-BRYCE THURGOOD
5. ACTION ON BID AWARD-2020 ROAD MAINTENANCE PROJECT
6. ACTION ON RESOLUTION 24-2020-ACCEPTANCE OF PETITION FOR ANNEXATION-3789 W 2550 S AND 3771 W 2550 S-NOLA STAUFFER
7. ADVICE & CONSENT OF: APPEAL AUTHORITY/ HEARING OFFICER Submitted by Mayor Bolos
8. DISCUSSION-CITY MANAGER APPOINTMENT
9. ACTION ON CONSENT AGENDA

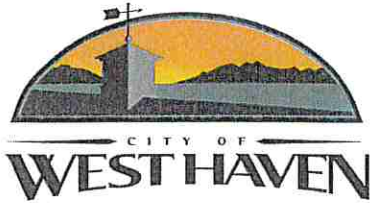
A. CITY COUNCIL MINUTES	MEETING HELD	July 15, 2020
B. SPECIAL CITY COUNCIL MINUTES	MEETING HELD	July 16, 2020
C. GARDNER ENGINEERING	\$28,756.00	Inv. #0620092-0620097
D. WEBER COUNTY ANIMAL SERVICES	\$20,680.75	Inv. #25379
E. STAKER PARSON	\$242,741.99	Inv. 213524-2
F. MARRIOTT CONSTRUCTION	\$75,498.11	Inv. 5485
10. ADJOURNMENT

Emily Green
Emily Green, City Recorder

In compliance with the Americans with Disabilities Act, persons needing special accommodations, including auxiliary communicative aids and services, for this meeting should notify the city recorder at 731-4519 or by email: emilyg@westhavencity.com at least 48 hours in advance of the meeting.

CERTIFICATE OF POSTING

The undersigned, duly appointed city recorder, does hereby certify that the above notice and agenda has been posted in the West Haven City Recorder's office; at the West Haven City Complex on the Notice Board and at westhavencity.com; emailed to the Standard-Examiner with a request that it be posted in their Wednesday night meeting section; mailed and emailed to the West Haven City Mayor and each West Haven City Council Member who has email capacity and to the city attorney



**WEST HAVEN CITY
PRE-COUNCIL WORKSHOP AGENDA
HELD PRIOR TO CITY COUNCIL MEETING
WEDNESDAY AUGUST 5, 2020**

@

5:30 PM – In City Council Chambers

*NO ACTION CAN OR WILL BE TAKEN ON ANY CITY COUNCIL MEETING AGENDA ITEMS DISCUSSED DURING
PRE-COUNCIL WORKSHOP - DISCUSSION OF SUCH ITEMS IS FOR CLARIFICATION OF AGENDA ITEMS.*

MEETING TO ORDER:

MAYOR BOLOS

REPORTS AND DISCUSSION AS FOLLOWS:

1. Staff Updates- Mayor Bolos
2. Assignment Updates
3. Other Business-Mayor Bolos
4. Planning Commission/City Council Agenda Items- Steve Anderson

SITE PLAN

RESORT COMMERCIAL, COMMERCIAL OR MANUFACTURING



Date 7/8/20

Address of Site: 2433 S 2050 W

Property Parcel # 1513100005
1513200001 thru 1513200005

Applicant's Name: Waste Management of Utah, Inc.

Address: 2433 S 2050 W, Ogden, UT 84404 Phone: 801-731-5542

Application is hereby made to West Haven City requesting the following permitted use(s).

Add Compressed Natural Gas Vehicle Fuel And To Existing Vehicle Maint Facility
(Diesel Fueling already on site)

Site plan design, be approved on 3.19 of
(acreage)

Property in the M-1 zone in accordance with the attached site plan. (see attached form for site plan requirements.)

Signed: Thomas Mitchell Date: 7/8/20
(Owner/Petitioner)

I authorize Thomas Mitchell to act as my representative in all matters relating to this application.
(Owner)

Thomas Mitchell (Agent as Authorized by Owner)

Please initial to indicate that you have received a copy of the site plan requirements and Chapter 28

Elevations	Please show the percentage of each elevation for each category.
N E S W	Primary Materials i.e. architecture insulated metal panels, block, brick, glass, rock, and stone.
<u>80 0 80 100</u>	<u>RIBBED METAL (PRE-ENGINEERED METAL BLDG.)</u>
<u>20 100 20 0</u>	Secondary Materials i.e. concrete, corrugated or ribbed metal, fiber/cement siding, oriented strand board treated siding such as LP siding, stucco, tile and wood. <u>BRICK</u>
<u>X X X</u>	Upgraded Architectural Features i.e. archways, awnings, bays, bonds, quoins and different brick patterns, canopies, corbels, decorative cornices, dormers, permanent decorative art, pillars, porte cocheres, porches, porticos, and timbers. <u>Facia at Roof line & Awning at Entry</u>
Percentage of Landscaping	Number of Parking Spaces

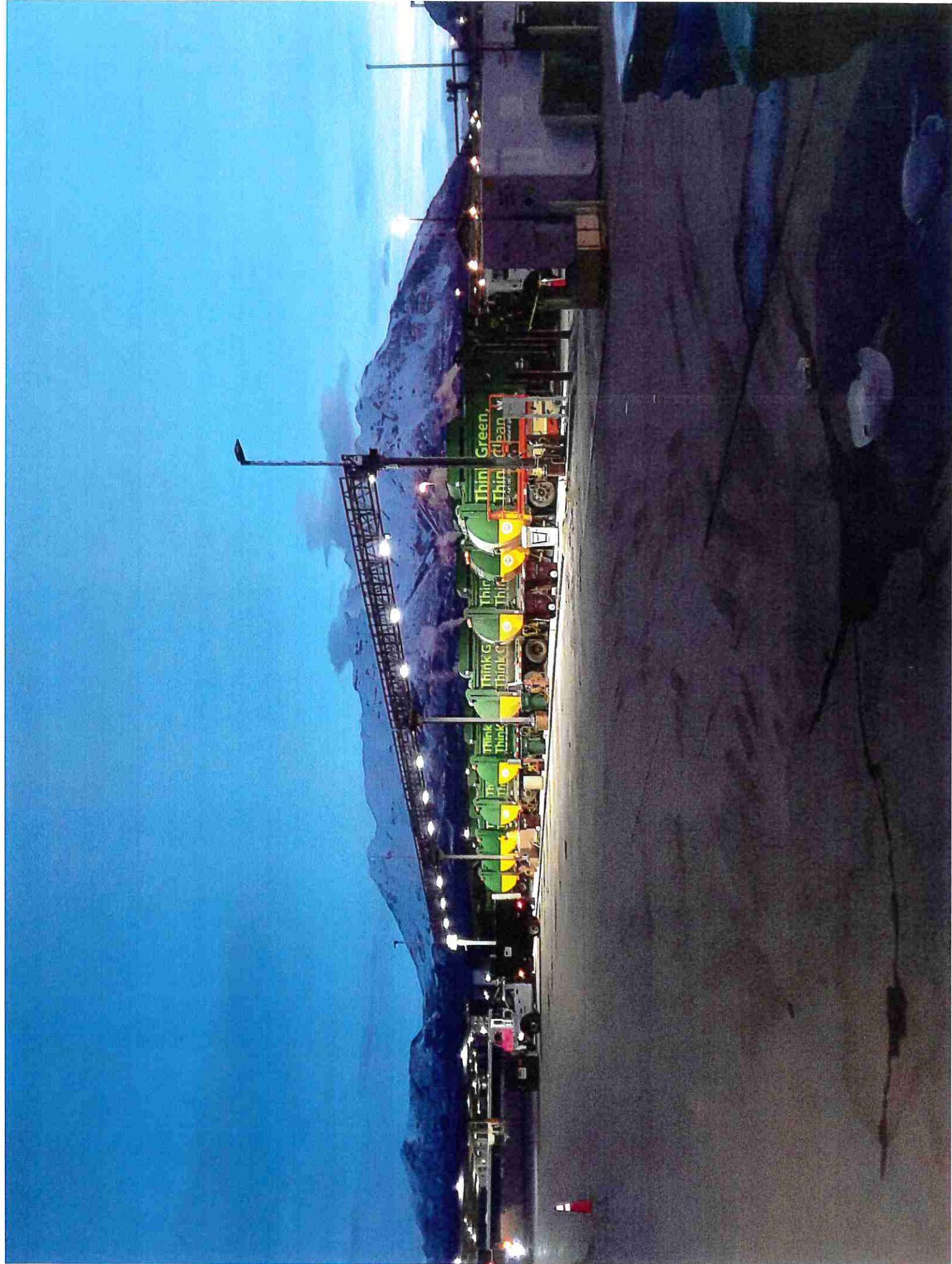
*****For Office Use Only*****

Fees		
	\$100.00 for the first acre plus \$25.00 for each acre over one to five and \$10.00 for each additional acre or part thereof.	
City Review	\$100.00	Amount <u>\$350.00</u> Date Paid <u>7/15/2020</u>
Final	\$100.00	

Scheduled date for Agenda 7/22/2020
 Planning Commission Preliminary Approval _____ Conditions _____
 Council Preliminary Approval _____ Conditions _____
 Planning Commission Final Approval _____ Conditions _____
 Council Final Approval _____ Conditions _____

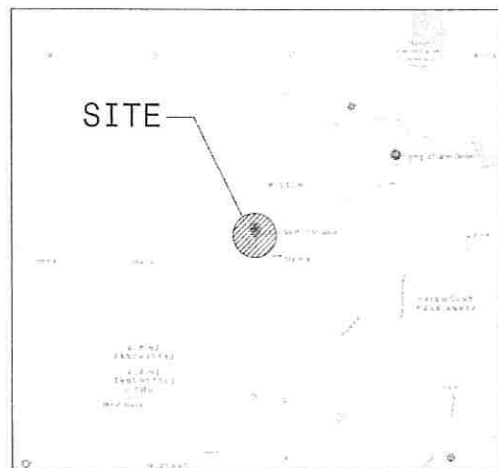
Received	N/A	Received	Letters of acknowledgment/approval/conditions from
☒ 18-11"x17" copies of final site plan and required elevations.	☒	☐	Culinary Water Company (stating if they want secondary water provided on proposal)
☒ Digital copies	☒	☐	Fire Department <u>sent to fire / done @ building</u>
<u>FINAL</u>	☒	☐	Health Department (If Applicable)
☐ Color Elevations	☒	☐	UDOT Application Letter
	☒	☐	All other items required by City Planner

ALL APPLICABLE ITEMS MUST BE RECEIVED BEFORE BEING ADDED TO THE AGENDA.





CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401



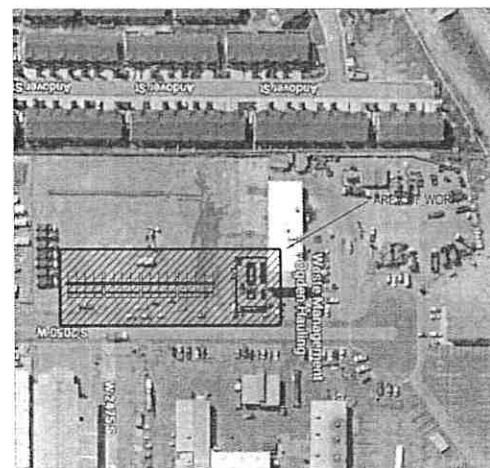
VICINITY MAP
NOT TO SCALE

PROJECT DESCRIPTION

THIS PROJECT IS GENERALLY INTENDED TO ADD A NEW COMPRESSED NATURAL GAS (CNG) VEHICLE FUELING SYSTEM TO FACILITATE ONSITE REFUELING OF NATURAL GAS POWERED VEHICLES AT THE EXISTING WASTE MANAGEMENT FACILITY IN OGDEN, UTAH (TRUCK MAINTENANCE IS ALREADY PERFORMED ON-SITE).

NEW CNG SYSTEM WILL BE DESIGNED AS AN OUTDOOR CNG FLEET FUELING FACILITY AND IS INTENDED TO SERVE THE REFUELING NEEDS FOR WASTE MANAGEMENT'S CNG POWERED VEHICLES WHICH WILL BE OPERATED IN AND AROUND THE LOCAL AREA. THE PROPOSED NEW NATURAL GAS POWERED VEHICLES WILL REPLACE EXISTING DIESEL VEHICLES AND DOES NOT REPRESENT AN INCREASE TO THE CURRENT FLEET SIZE.

PROPOSED WORK WILL INCLUDE THE INSTALLATION OF A NEW COM
COMPRESSOR, GAS STORAGE, AND OVERHEAD TRUSS SYSTEM. WORK
WILL ALSO INCLUDE ALL RELATED CIVIL, PIPING, AND
ELECTRICAL WORK TO ACCOMMODATE THE NEW EQUIPMENT AND ALL
RELATED SAFETY SYSTEMS.



SITE PLAN
NOT TO SCALE

DRAWING INDEX	
CS-1.10	TITLE/COVER SHEET
	GENERAL
G-1.10	GENERAL ARRANGEMENT
G-1.11	GENERAL SPECIFICATIONS
	CIVIL
C-2.10	CIVIL - SITE PLAN
C-2.11	PARTIAL PLAN - EQUIPMENT AREA
C-2.12	PARTIAL PLAN - TIMEFILL AREA
C-2.30	CIVIL SECTIONS AND DETAILS
	PIPING
P-1.10	PIPING - GENERAL NOTES
P-1.20	CNS PIPING SCHEMATIC
P-2.10	PIPING PLAN
P-2.11	PARTIAL PIPING PLAN - EQUIPMENT AREA
P-2.12	PARTIAL PIPING PLAN - TIMEFILL AREA
P-2.30	SECTIONS AND DETAILS
	ELECTRICAL
E-1.10	ELECTRICAL SPECIFICATIONS
E-1.20	ELECTRICAL SINGLE LINE
E-1.30	CONDUIT SCHEDULE
E-2.10	ELECTRICAL PLAN
E-2.11	PARTIAL ELECTRICAL PLAN-EQUIPMENT AREA
E-2.12	PARTIAL ELECTRICAL PLAN-TIMEFILL AREA
E-2.13	AREA CLASSIFICATION PLAN-EQUIPMENT AREA
E-2.14	AREA CLASSIFICATION PLAN-TIMEFILL AREA
E-2.15	GROUNDING PLAN-EQUIPMENT AREA
E-2.16	GROUNDING PLAN-TIMEFILL AREA
E-2.30	GENERAL ELECTRICAL DETAILS
	SAFETY SIGNAGE
SI-1.10	SAFETY SIGNAGE SCHEDULES AND DETAILS
SI-2.11	EQUIPMENT AREA SIGNAGE PLAN
SI-2.12	TIMEFILL AREA A SIGNAGE PLAN
	REFERENCE (FOR REFERENCE ONLY)
	IDEALTR TRUSS UPLIFT DRAWINGS

CONSULTANT:



CLIENT:



TITLE/COVER SHEET
FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

SITE INFORMATION

PARCEL #: 151310005, 151320001 THRU 151320005

ZONING: M-1 (LIGHT MANUFACTURING)

LOT SIZE: 3.19 ACRES

BUILDING INFO

NOT APPLICABLE:

PROJECT IS FOR INSTALLATION OF OUTDOOR EQUIPMENT ONLY - NO BUILDINGS INCLUDED IN PROPOSED PROJECT SCOPE

RELEVANT CODES AND STANDARDS

THE WORK SHALL CONFORM TO THE MOST RECENT EDITION OF THE FOLLOWING CODES AND STANDARDS AS SUPPLEMENTED, AMENDED, OR OTHERWISE MODIFIED BY STATE AND LOCAL REQUIREMENTS:

INTERNATIONAL BUILDING CODE 2018 (IBC)
INTERNATIONAL MECHANICAL CODE 2018 (IMC)
NATIONAL ELECTRIC CODE 2017 (NEC)
INTERNATIONAL FIRE CODE 2018 (IFC)
INTERNATIONAL FUEL GAS CODE 2018 (IFGC)

NFPA 52 VEHICULAR FUEL SYSTEMS CODE 2016

IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS, WRITTEN SPECIFICATIONS, AND/OR REFERENCED STANDARDS, THE MOST STRINGENT SHALL GOVERN.

PROJECT TEAM

PROPERTY OWNERS

WASTE MANAGEMENT OF UTAH
P O BOX 1450
CHICAGO, IL 60690

WASTE MANAGEMENT
2400 W UNION AVE.
ENGLEWOOD, CO 80110
(303)914-1438

ATTN: CHIP WERTZ
NATIONAL DIRECTOR
FLEET FACILITY
INFRASTRUCTURE

ENGINEER(S)

T. MITCHELL ENGINEERS
14256 DOOLITTLE DR.
SAN LEANDRO, CA 94577
(510) 777-0520
ATTN: TOM MITCHELL

ATTN: TOM MITCHELL

CONTRACTOR

TO BE DETERMINED

[illegible]

DATE: 05/12/20

PROJECT #:	1951
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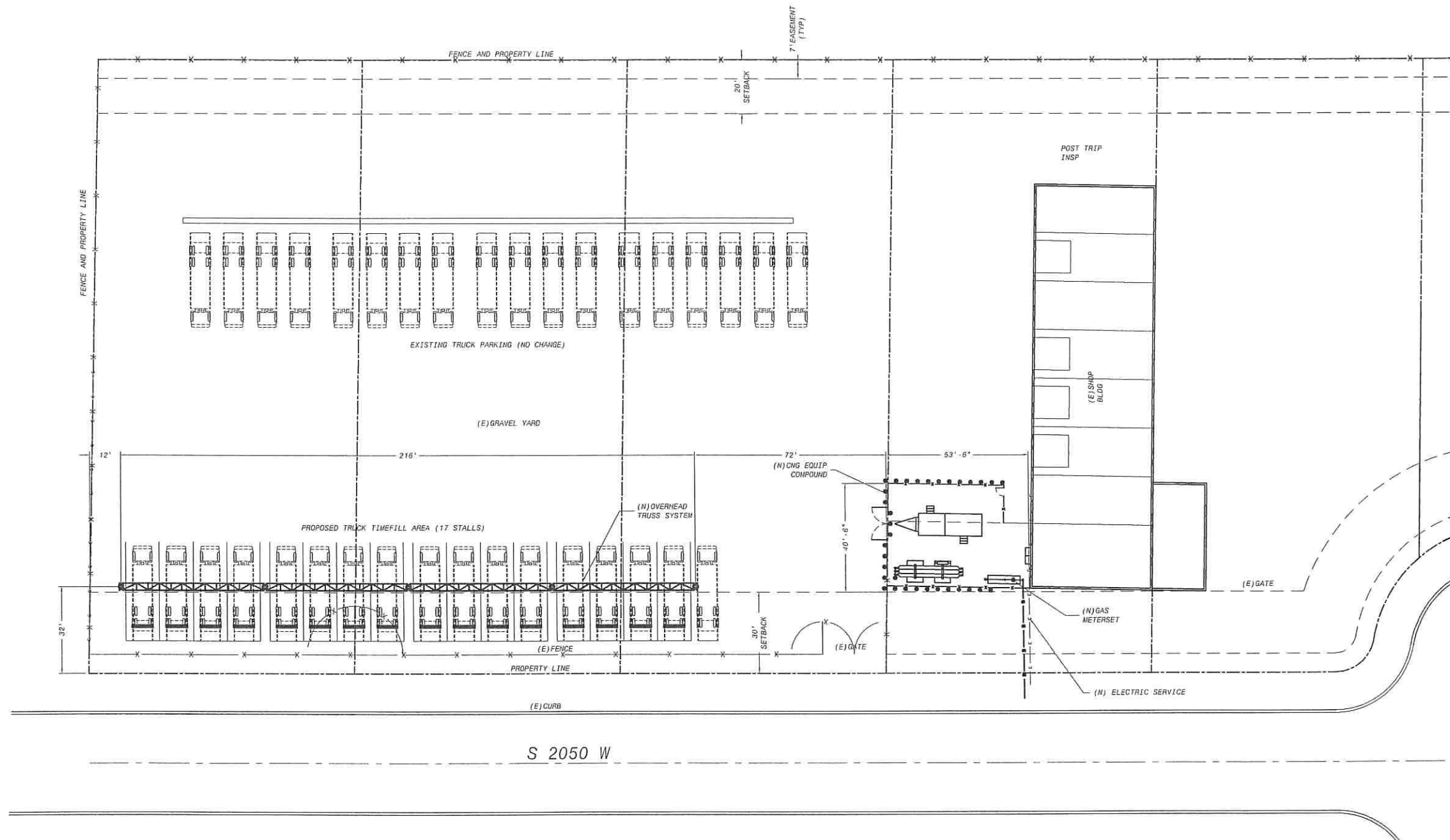
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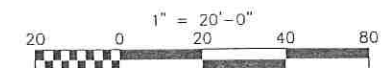
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Rev0

CS-1.10



GENERAL ARRANGEMENT
SCALE: 1" = 20'-0"



CONSULTANT:



CLIENT:



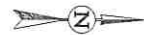
GENERAL ARRANGEMENT
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:	
SET ISSUE:	DATE:
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DATE: 05/12/20

PROJECT #:	1951
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G-1.10

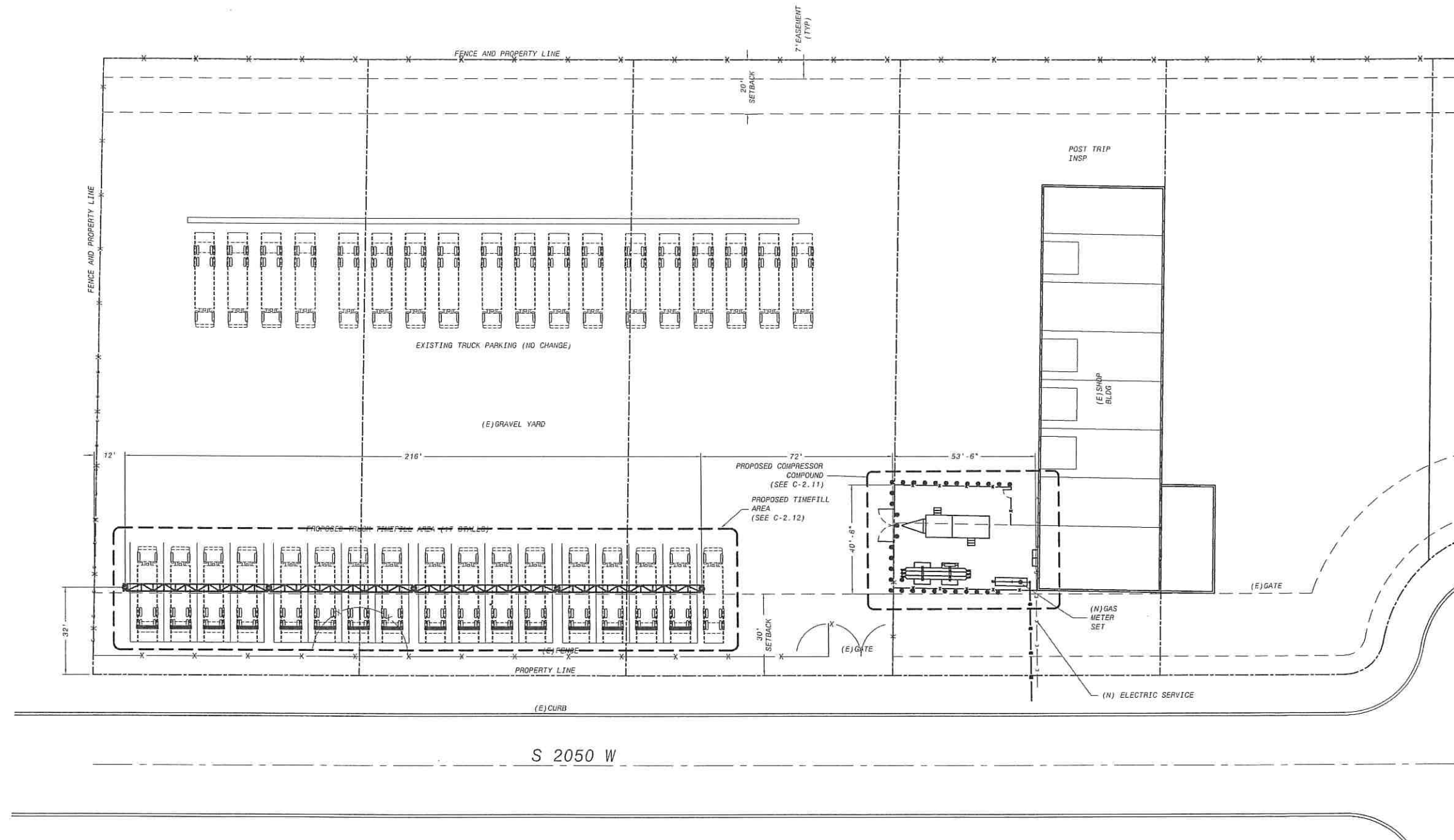


GENERAL NOTES

1. DIMENSIONS SHOWN ARE APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. ALL NEW STRIPING TO BE 2 COATS THERMOPLASTIC OR LATEX PAVEMENT STRIPING PAINT, 6" WIDE, SAFETY YELLOW.

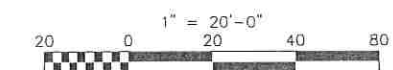
SHEET NOTES: XX

1.



GENERAL ARRANGEMENT

SCALE: 1" = 20'-0"



CONSULTANT:



CLIENT:



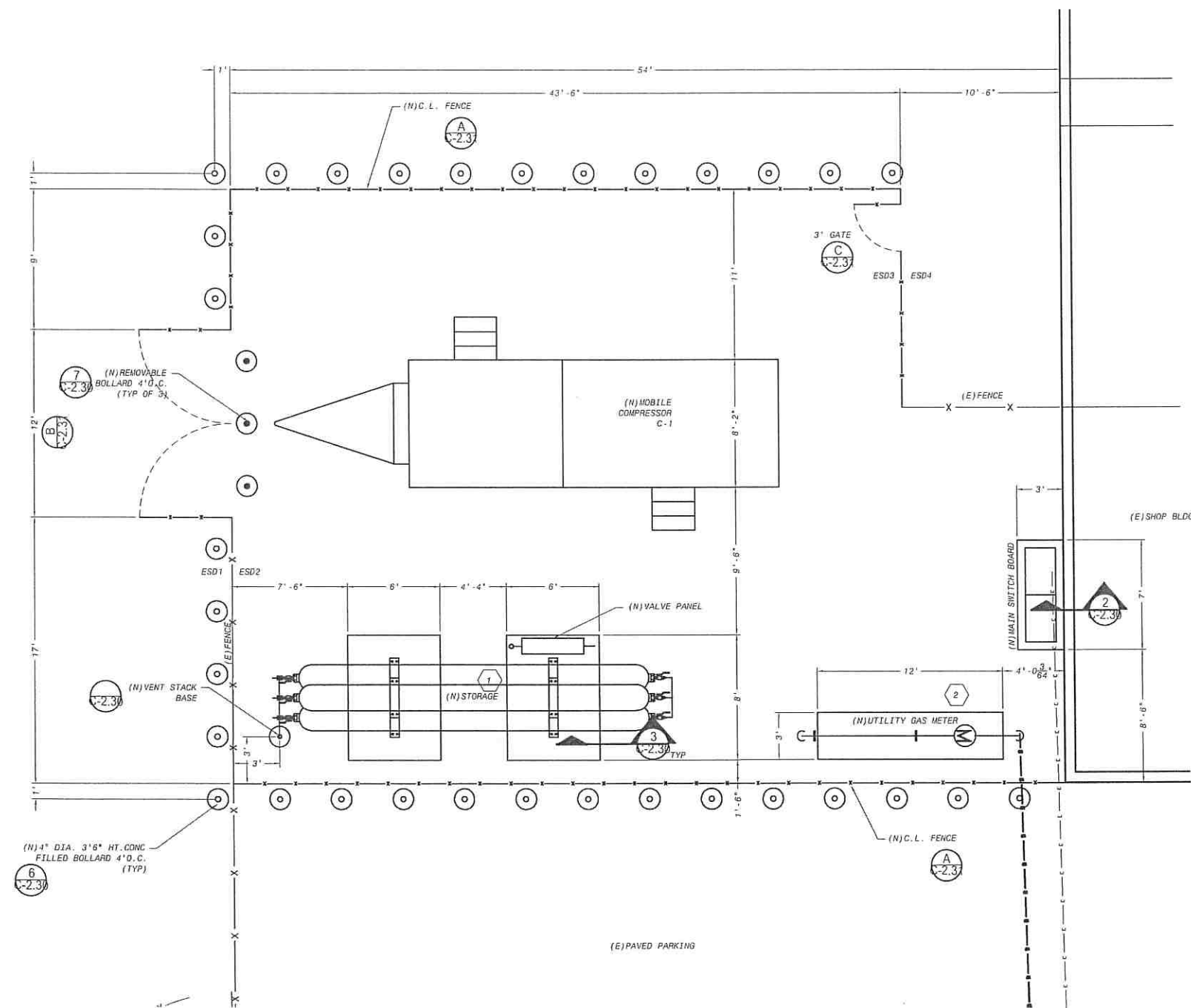
CIVIL SITE PLAN
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:
SET ISSUE: DATE:
0 FOR REVIEW 05/12/20

DATE: 05/12/20

PROJECT #: 1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: C-2.10
REV0.dwg

C-2.10



SCALE: 1/4" = 1' - 0"

1. PROVIDE (4) 3/4" DIA EPOXY ANCHOR 8" EMBED.
2. PROVIDE REINF CONC PAD FOR NEW METER SET IF REQ'D BY LOCAL UTILITY. NEW PAD TO MEET UTIL CO REQUIREMENTS.

T. MITCHELL WHITFIELD
ASTON 2175

Production Engineering and Technology
+2474 666666
Fax: +2474 666666

Phone: 011 44 1904 2555
Fax: 011 44 1904 2555



WM
WASTE MANAGEMENT

CNG FUELING SYSTEM

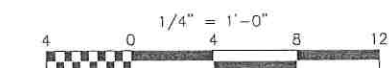
FUELING SYS
2433 S 2050 W
OGDEN UT 84401

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PROJECT #:	1951
DRAWN BY:	TM
CHECKED BY:	TM
APPROVED BY:	TM
FILENAME:	P-2.11
	REV0.dwg

C-2.11





GENERAL NOTES:

1. DIMENSIONS SHOWN AND ROUTING APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST TO SUIT FIELD CONDITIONS.

2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.

SHEET NOTES:

1. CONTRACTOR VERIFY DIMENSIONS TO MATCH EXISTING. ADJUST DIMENSIONS TO SUIT FIELD CONDITIONS.

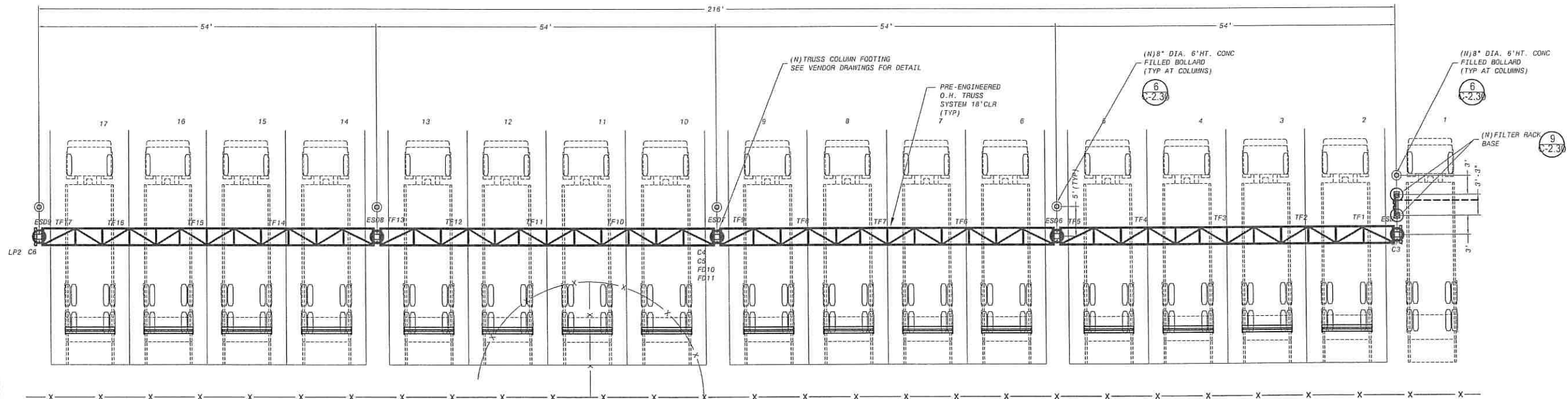
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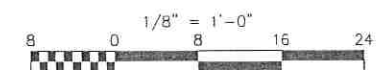


PARTIAL PLAN-TIMEFILL AREA
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401



PARTIAL PLAN-TIMEFILL AREA

SCALE: 1/8" = 1'-0"

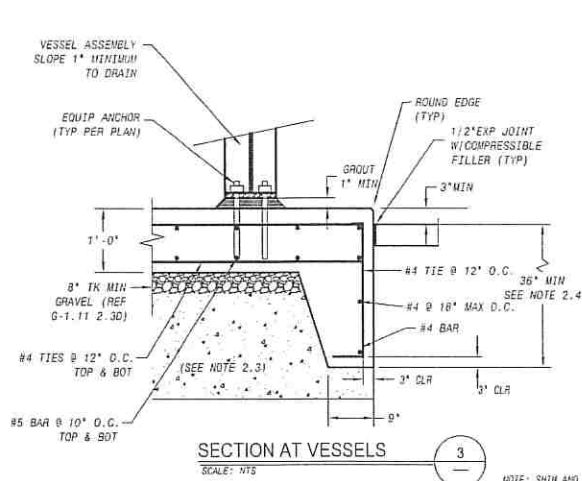


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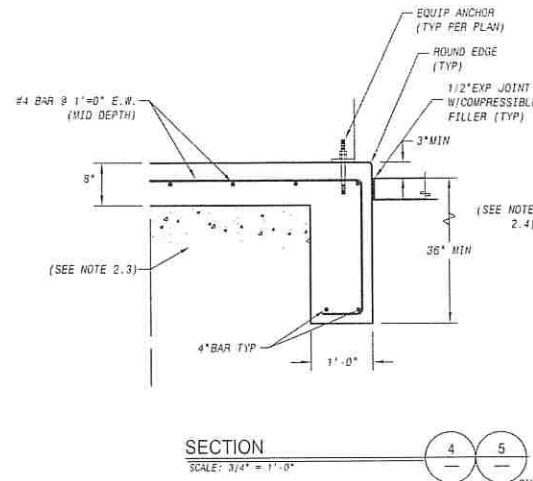
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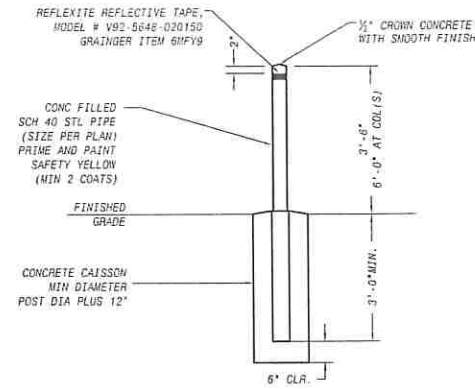


NOTE: SHIM AND GROUT AT ONE END OF VESSELS TO PROVIDE 1" SLOPE TO DRAIN VALVES



SECTION

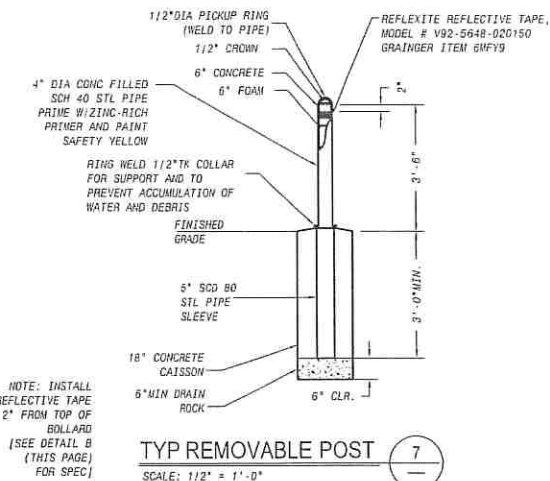
SCALE: 3/4" = 1'-0"



GUARD POST DETAIL

SCALE: 1/2" = 1'-0"

NOTE: PAINT WITH 1 COAT ZINC RICH PRIMER AND 2 COATS SAFETY YELLOW ENAMEL FINISH

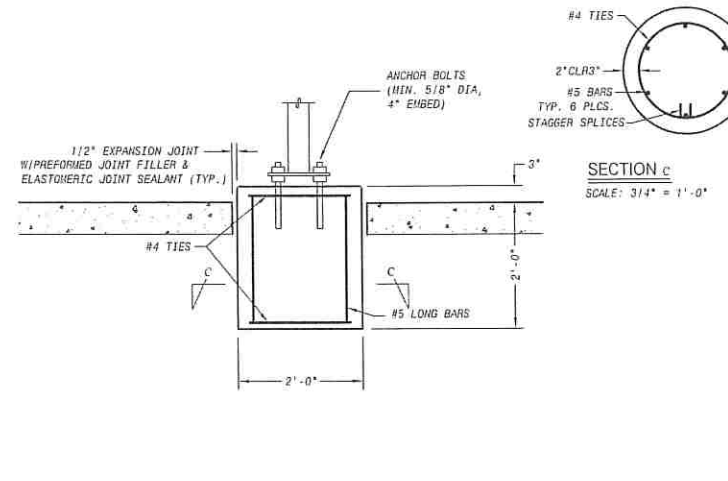


NOTE: INSTALL REFLECTIVE TAPE 2" FROM TOP OF BOLLARD (SEE DETAIL B (THIS PAGE) FOR SPEC)

TYP REMOVABLE POST

SCALE: 1/2" = 1'-0"

NOTE: PAINT WITH 1 COAT ZINC RICH PRIMER AND 2 COATS SAFETY YELLOW ENAMEL FINISH



FILTER RACK BASE

SCALE: 3/4" = 1'-0"

GENERAL NOTES:

- GENERAL
 - THE CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE AND LOCAL REGULATORY AGENCIES' REQUIREMENTS.
 - THE CONTRACTOR SHALL VERIFY ALL PERTINENT DIMENSIONS PRIOR TO CONSTRUCTION.
 - CHANGES FROM THE CONTRACT DRAWINGS SHALL BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ANY UNDERGROUND UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
 - EQUIPMENT DIMENSIONS ARE APPROXIMATE. COORDINATE ACTUAL INSTALLATION WITH CERTIFIED VENDOR DRAWINGS.
- FOUNDATIONS
 - PROPOSED FOUNDATIONS ARE OF A SPREAD FOOTING TYPE.
 - SOIL DESIGN BEARING PRESSURE 1,000 psf ON FIRM COMPACTED SOIL OR ENG FILL.
 - ALL NEW EQUIPMENT PADS SHALL BE UNDERLAIN BY AN 8-INCH LAYER OF FREELY DRAINING GRANULAR MATERIAL (3/4" CRUSHED ROCK) ON TOP OF FIRM UNDISTURBED SOIL TO MINIMIZE MOVEMENT FROM FROST HEAVE. COMPACT TO 95%.
 - FOOTINGS SHALL EXTEND A MINIMUM OF 6-INCHES BELOW ESTABLISHED FROST LINE OF 36-INCHES.
- MATERIALS
 - CONCRETE: HARDROCK, WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH EQUAL TO 3,500 PSI (4,000 PSI MIN FOR COMPRESSOR PAD(S)). DENSE GRADED, 3/4" MAX. AGGREGATE
 - REINFORCING STEEL: ASTM A615, GRADE 60
 - THREADED RODS: ASTM A193 GR B7, ASTM F 568M CLASS 5.8, OR ISO 898-1 CLASS 8.8, WITH ASTM A563 GR OR NOTES. NOT DIPPED GALVANIZED TO ASTM A-153 CLASS C OR D.
 - ANCHOR BOLTS: ST STL SIMPSON STRONG BOLT, ICB0 # ER-1771 OR HILTI KWIK BOLT TZ, ICB0 #ESR-1917. 5/8" DIA, 4-5/8" MIN EMBED U.O.N.
 - EPOXY ANCHORAGE: SIMPSON SET-XP, ICB0 #ESR-2508 OR HILTI HIT 500-SD, ICB0 ESR-2322. INSTALL ONLY WITH AMBIENT TEMP BETWEEN 41 AND 104°F. USE WITH THREADED RODS AS LISTED ABOVE.
 - MACHINE GROUT: MASTER BUILDERS EMB60 606 PLUS (ASTM C1107 GR B)
- CONCRETE CONSTRUCTION:
 - BENDS AND HOOK REBAR SHALL CONFORM TO UBC AND ACT REQUIREMENTS REGARDING BEND RADIUS AND EXTENSION.
- SPECIAL INSPECTIONS:
 - EPOXY ANCHORS

CONCRETE FINISH NOTES:

ALL EQUIPMENT PAD(S) SHALL BE TRUE AND FLAT WITH A LIGHT BROOM FINISH.

FLATNESS TOLERANCE FOR CNG COMPRESSOR PADS: 1/8" MAX IN 10' (STRAIGHT EDGE METHOD). TO BE FIELD VERIFIED BY SPECIAL INSPECTOR.

ANY AND ALL GAPS BETWEEN CONCRETE SURFACE AND COMPRESSOR SKID IN EXCESS OF 3/32" OVER MORE THAN 12-INCHES SHALL BE SHIMMED USING 6-INCH SQUARE GALVANIZED STEEL SHIMS PRIOR TO FINAL TIGHTENING OF EQUIPMENT ANCHORS. SHIMS SHALL BE SIZED FOR A SNUG FIT REQUIRING ONLY LIGHT HAMMER TAPS TO INSTALL AND SHALL BE TACK WELDED IN PLACE AFTER FINAL INSPECTION AND APPROVAL BY SITE SUPERINTENDENT. UNDER NO CIRCUMSTANCES SHALL SHIMS BE INSTALLED IN SUCH A WAY THAT COMPRESSOR SKID IS ELEVATED OR SKID LOOSES CONTACT WITH ADJACENT AREAS OF CONCRETE PAD.

CIVIL SECTIONS AND DETAILS (1 OF 2)
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

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APPROVED BY: TM
FILENAME: C-2.30
REV: 0.dwg

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C-2.31

PART 2: PIPING AND EQUIPMENT INSTALLATION

3.1 GENERAL

A. THIS SECTION OF THE SPECIFICATION, TOGETHER WITH ANY SPECIAL CONDITIONS, AND THE CONSTRUCTION DRAWINGS PROVIDED, COVER THE WORK TO BE PERFORMED FOR THE COMPLETE FABRICATION, INSTALLATION, AND TESTING OF THE PIPING SYSTEMS REQUIRED FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING THE INTENT OF THE PROJECT DRAWINGS, AND FOR PROVIDING A COMPLETE WORKING SYSTEM. ANY OMISSIONS OR DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS, DRAWINGS, AND THE INTENT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID.

B. THE WORK UNDER THIS SECTION OF THE SPECIFICATIONS INCLUDES ALL IN-GROUND PIPING, ABOVE GROUND PIPING (INCLUDING VENTING), AND STAINLESS STEEL TUBING REQUIRED TO MAKE THE SYSTEMS OPERATIONAL.

C. CONSTRUCTION AND INSTALLATION SHALL CONFORM TO CURRENT EDITIONS OF THE FOLLOWING CODES AND STANDARDS AS MODIFIED OR AMENDED BY FEDERAL, STATE OR LOCAL AUTHORITIES:;

ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
B31.3 - PETROLEUM REFINERY PIPING
B31.5 - STEEL PIPING AND FLANGES
ASTM (AMERICAN SOCIETY OF TESTING AND MATERIALS)
OSHA (OCCUPATIONAL SAFETY AND HEALTH ACT)
INTERNATIONAL PLUMBING CODE
NFPA 52 (NATIONAL FIRE PROTECTION ASSOCIATION)
NFPA 54 NATIONAL FUEL GAS CODE
INTERNATIONAL FIRE CODE
AGA (AMERICAN GAS ASSOCIATION)

D. CONTRACTOR SHALL NOTIFY OWNER OF ANY DAMAGE TO ANY UNDETECTED EXISTING UNDERGROUND SEWER, WATER, OR GAS PIPING, OR TO ANY CONDUITS DAMAGED DURING TRENCHING, AND SHALL REPAIR THEM IMMEDIATELY ACCORDING TO THE STANDARDS OF THE AGENCY HAVING JURISDICTION OVER THEM.

E. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND INSPECTING SITE FOR EXISTING SUBSTRUCTURES AND UNDERGROUND UTILITIES AND SHALL NOT RELY ON PLANS OR DRAWINGS ALONE. CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING UNDERGROUND UTILITIES AND SUBSTRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DURING CONSTRUCTION, REGARDLESS OF WHETHER THEY WERE OR WERE NOT SHOWN ON THE CONSTRUCTION DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ALL DAMAGED SUBSTRUCTURES OR UNDERGROUND UTILITIES IMMEDIATELY.

3.2 DESIGN CONDITIONS

A. THIS CNG FUELING STATION HAS BEEN DESIGNED WITH THE FOLLOWING PRESSURE AND TEMPERATURE PARAMETERS:

OPERATING PRESSURE:	4500 PSIG
DESIGN PRESSURE:	4500 PSIG
DESIGN TEMPERATURE:	-20 TO 110 DEGREES F
PIEUMATIC TEST PRESSURE:	6000 PSIG (FOR CNG PIPING)
MATERIALS:	ALL PIPING AND TUBING SHALL BE SEAMLESS

3.3 PIPE SPECIFICATIONS

ALL BURIED CARBON STEEL PIPING SHALL BE CLEANED, PRIMED, PAINTED, ELECTRICALLY ISOLATED FROM ABOVE GROUND PIPING OR STRUCTURES, AND CATHODICALLY PROTECTED IN ACCORDANCE WITH THIS SPECIFICATION AND CURRENT INDUSTRY STANDARDS.

A. CARBON STEEL (CS): ASTM A106B SCHEDULE 40 BLACK.

- FITTINGS: ASTM A234/A234M FORGED STEEL WELDING TYPE.
- JOINTS: ASME B31.9, WELDED.
- PLUG VALVES: REFER TO LOCAL UTILITY STANDARDS.
 - 2 INCHES AND SMALLER: USS SP 78, 200PSI WOG, THREADED ENDS, SEMI STEEL CONSTRUCTION, AND FULL PIPE AREA.
 - 2-1/2" AND LARGER: USS SP 78, 200PSI WOG, FLANGED ENDS, SEMI-STEEL CONSTRUCTION, FULL PIPE AREA. FURNISH WITH WORM GEAR OPERATOR.
- CHECK VALVES: KF SERIES 358 #7779-113#B1911 OR TOM WHEATLEY FISSURE #55

B. CARBON STEEL (CS40 OR CS2): ASTM A106B SCHEDULE 80 BLACK.

- FITTINGS: ASTM A234/A234M FORGED STEEL WELDING TYPE.
- JOINTS: ASME B31.9, SOCKET WELDED.

C. CARBON STEEL - HEAVY WALLED (CS160) SCHEDULE 160 ASTM A106 GRADE B.

- FITTINGS: 6000PSI FORGED STEEL SOCKET WELD - ASME SA 105 (IF BURIED), ASME SA 350LF2 (IF ABOVE GROUND)

3.4 STAINLESS STEEL TUBING (SST)

A. GENERAL

THE TUBING SHALL BE AMERICAN MADE, SEAMLESS, FULLY ANNEALED TUBE FOR GENERAL SERVICE CONFORMING TO THE REQUIREMENTS OF ASTM A 213 FOR GRADES TP 304 OR TP 316 MATERIAL HAVING A MINIMUM ULTIMATE TENSILE STRENGTH OF 75,000 PSI. TUBING SHALL BE COLD FINISHED AND FREE OF SCRATCHES. ALL TUBING IS SIZED ACCORDING TO THE MAXIMUM EXPECTED FLOW RATE AND MUST BE INSTALLED PER THE DRAWINGS. NO TUBING WITH OTHER THAN THE MINIMUM WALL THICKNESS REQUIRED IS TO BE USED WITHOUT APPROVAL OF THE OWNER. ALL BENDS ABOVE GRADE MUST BE MADE WITH TUBING BENDERS AND SHOULD BE 90 DEGREES WHENEVER POSSIBLE. ALL UNDERGROUND TUBING SHALL BE CONTINUOUS WITH NO INTERMEDIATE JOINTS FITTINGS OR UNIONS AND SHALL BE INSTALLED INSIDE A BURIED PLASTIC PIPE OR PVC CONDUIT SLEEVE. ALL LENGTHS OF TUBING SHALL BE ANCHORED PER CODE TO PREVENT EXCESSIVE VIBRATION. ALL TUBING SHALL RUN TRUE TO THE VERTICAL AND HORIZONTAL AXIS OF THE EQUIPMENT. THE INTERNAL AND EXTERNAL SURFACES OF THE TUBING SHALL BE PROVIDED WITH ADEQUATE PROTECTION FROM CORROSION AND ABRASION DURING NORMAL HANDLING AND STORAGE. THE MANUFACTURER OR VENDOR SHALL BE PREPARED TO CERTIFY THAT ALL TUBING CONFORMS TO THE REQUIREMENTS OF THIS SPECIFICATION AND SHALL PROVIDE FORMAL MILL CERTIFICATES FOR EACH LOT.

B. ABOVE GROUND TUBING SHALL BE OF RIGID STRAIGHT LENGTHS AND SUPPORTED AND CLAMPED USING ST STL UNITS/UT, CUSH-A-CLAMPS, AND FASTENERS AS FOLLOWS:

DIAMETER	MAX SPACING
3/16" TO 1/2"	3'-0"
5/8" TO 7/8"	4'-0"
1"	5'-0"
>1"	7'-0"

ADDITIONAL SUPPORTS REQUIRED BETWEEN 1-1/2 AND 6 INCHES ON EITHER SIDE OF ALL INTERMEDIATE JOINTS OR FITTINGS AND ON EITHER SIDE OF EACH TUBE BEND TO RESIST THRUST FORCES W/ILD ALLOWING FOR THERMAL EXPANSION OF THE TUBING.

UNDERGROUND TUBING SHALL BE CONTINUOUS, OR ORBITAL WELDED SECTIONS), WITH NO VALVES OR FITTINGS THAT ARE BURIED OR INACCESSIBLE.

C. MINIMUM TUBE WALL THICKNESS (INCHES):

REFER TO PIPING DRAWINGS

D. TUBE FITTINGS: SWAGelok, 316 STAINLESS STEEL, 5500 PSI, OR APPROVED EQUAL

E. BALL VALVES: HIGH PERFORMANCE, HOKE OR SWAGelok, 316 STAINLESS STEEL BODY AND TRIM, SUITABLE FOR COMPRESSED NATURAL GAS SERVICE, 5500PSI, OR EQUAL.

F. NEEDLE VALVES: SWAGelok OR HOKE, 316 STAINLESS STEEL BODY AND TRIM, SUITABLE FOR COMPRESSED NATURAL GAS SERVICE, 5500PSI, OR EQUAL.

G. BLEED VALVE: 5500 PSI STAINLESS STL BLEED VALVE W/CAPTIVE CAP. SWAGelok #55-BVING OR ANDERSON GREENWOOD #HVS15

H. SLEEVE (FOR BURIED TUBING): CONTINUOUS PVC CONDUIT OR HDPE (HIGH DENSITY POLYETHYLENE) TUBING WITH WATER TIGHT COUPLINGS OR JOINTS. SIZED AS SHOWN ON DRAWINGS.

3.5 POLYETHYLENE (HDPE) PIPE: SDR AS CALLED FOR ON DRAWINGS

A. RISERS: ANODELESS RISERS (PIPE WITHIN A PIPE)

3.6 INSTRUMENTATION AND SPECIALTY ITEMS

A. PRESSURE GAUGES: LIQUID FILLED, RANGE AS INDICATED. TO BE MOUNTED ON ANDERSON GREENWOOD BLEED/BLOCK VALVE ASSEMBLY.

B. DIFFERENTIAL PRESSURE GAUGES: 2.5"OD LIQUID FILLED 5000PSIG MAX, G-10PSIG RANGE, INLET PORT (HIGH) ON LEFT OUTLET (LOW) ON RIGHT, 6T STL HOUSING, ST STL VENTED PARTS, VITON SEALS FOR NATURAL GAS (METHANE) SERVICE. WIKIA 625.170.63

C. ESD VALVE (FV-V1): SVF BALL VALVE KY-B414B4G-130R200 SUITABLE FOR USE IN NATURAL GAS SERVICE. W/IA25-XXX ACTUATOR - FACTORY ASSEMBLED AIR-TO-OPEN, SPRING CLOSED. VENDOR TO SIZE ACTUATOR FOR NATURAL GAS AT 80 PSI W/1.3 F.S. BOTH VALVE AND ACTUATOR SHALL BE SUITABLE FOR COLD TEMPERATURE OUTDOOR SERVICE DOWN TO -30F.

D. FIRE EXTINGUISHER(S): 24/20 B/C MINIMUM RATING, CURRENTLY CERTIFIED AND TAGGED WITH LOCAL INSPECTION TAG, MOUNTED IN LOCKABLE PLASTIC ENCLOSURE WITH BREAK-FRONT.

E. PRESSURE REGULATOR (GAS INLET): DUCTILE IRON PILOT OPERATED PRESSURE REDUCING REGULATOR SIZED FOR 15000SCFH WITH SP5I DROP AT INLET AND SET PRESSURES AS STATED ON DRAWINGS. RAISED FACE FLANGES, SUITABLE FOR NATURAL GAS (METHANE) SERVICE. KIRWAY SERIES 319 OR #15.

3.7 INSTALLATION

A. ALL TUBING AND TUBE FITTINGS SHALL BE INSTALLED BY VENDOR CERTIFIED TUBING INSTALLERS USING HYDRAULIC SHAPING TOOL AND SHALL CHECK FITTING INSTALLATION WITH MANUFACTURER RECOMMENDED GAP INSPECTION GAUGE PRIOR TO INITIAL PRESSURIZATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE TUBING INSTALLERS TRAINED AND CERTIFIED BY THE TUBE FITTING MANUFACTURER TO INSTALL TUBE AND REQUIRED FITTINGS PER THE MANUFACTURERS' INSTALLATION INSTRUCTIONS. CONTRACTOR TO PROVIDE PROOF OF CERTIFICATION PRIOR TO COMMENCEMENT OF WORK.

B. ALL PIPING SHALL BE INSTALLED NEATLY AND IN A WORKMANLIKE MANNER. ALL PIPING SHALL BE PROPERLY ANCHORED, SUPPORTED, AND/OR PITCHED ACCORDING TO THESE CONSTRUCTION SPECIFICATIONS AND THE DRAWINGS, OR IN THE ABSENCE OF SPECIFIC DETAIL, PER DIRECTION OF THE ENGINEER. ALL PIPING SHALL RUN TRUE TO VERTICAL AND HORIZONTAL AXES OF THE EQUIPMENT AND FACILITY. ALL VALVES SHALL BE INSTALLED NEATLY AND IN A WORKMANLIKE MANNER. ALL VALVES SHALL BE ACCESSIBLE FOR EASY OPERATION AND MAINTENANCE. CONTRACTOR SHALL PROVE ALL PIPING IS FREE OF OBSTRUCTION AND DEBRIS PRIOR TO ANY CONNECTION TO ABOVE GROUND EQUIPMENT.

C. THE INTERNAL PIPE SURFACES SHALL BE CLEAN AND FREE OF DIRT, DEBRIS, AND LOOSE CORROSION OR SCALE. OPEN ENDS OF ALL COMPLETED PIPE RUNS SHALL BE KEPT SECURELY CLOSED OR CAPPED TO PREVENT THE ENTRANCE OF DIRT, DEBRIS, MOISTURE, OR ANIMALS INTO THE PIPE. ALL END CLOSURES SHALL BE APPROVED BY THE OWNER.

D. ALL CARBON STEEL PIPE, WHEN WELDED, SHALL INCLUDE A TIG (TUNGSTEN INERT GAS) ROOT. THE FILLER PASSES SHALL BE STICK SHIELDED METAL ARC WELDING (SHAW).

3.8 FABRICATION, HANDLING AND STORAGE

A. ALL VALVES, PREFABRICATED PIPING, FLANGES, ETC. SHALL BE PROTECTED DURING STORAGE, TRANSIT, AND ERECTION WITH PLYWOOD COVERS 1/2" THICK AND SECURED WITH BOLTS FOR CLOSURE, OR EQUAL. SHOP FABRICATED SECTIONS SHALL NOT BE LEFT WITH OPEN ENDS EXPOSED TO ATMOSPHERE DURING STORAGE, TRANSIT, OR ERECTION. SUITABLE CAPS SHALL BE PROVIDED ON ALL SCREWED CONNECTIONS.

B. TEMPORARY SUPPORTS SHALL BE PROVIDED AND INSTALLED DURING ERECTION TO AVOID OVER-STRESSING PIPING OR EQUIPMENT TO WHICH PIPING IS CONNECTED.

3.9 TRENCHES

A. PIPE TRENCHES SHALL BE FREE OF LOOSE ROCK GRAVEL, HARD CLOS, AND ANY MATERIAL WHICH MAY DAMAGE PIPING OR PIPE COATING. WHERE SUCH MATERIALS EXIST, THE CONTRACTOR SHALL REMOVE THE NON-CONFORMING MATERIAL, PAD THE DITCH WITH TWELVE (12) INCHES OF SAND, SIX (6) INCHES ABOVE AND SIX (6) INCHES BELOW PIPE TO BED THE PIPING AND PREVENT DAMAGE.

B. CONTRACTOR SHALL NOTIFY "UNDERGROUND SERVICE ALERT" (USA), AND ANY OTHER AGENCIES NOT A MEMBER OF "USA". 48 HOURS PRIOR TO ANY EXCAVATING.

C. CONTRACTOR SHALL PROSPECT OR DECODE THE COVER FOR ALL EXISTING SUBSTRUCTURES THAT ARE MARKED OR ANTICIPATED THAT MAY INTERFERE WITH THE INSTALLATION OF THE NEW WORK, PRIOR TO EXCAVATION.

D. SAW CUTTING: ALL MAIN AND SERVICE TRENCHES, PASSING THROUGH EXISTING PAVED AREAS, SHALL BE SAWCUT PRIOR TO EXCAVATING, AND THE SITE WASHED DOWN IN ACCORDANCE WITH APPLICABLE CODES AND SPECIFICATIONS, WHEN REQUIRED BY THE OWNER OR GOVERNING AGENCIES.

E. TRENCHES SHALL BE EXCAVATED ON ALIGNMENTS DESIGNATED BY THE CONTRACTOR. THE WIDTH OF TRENCH SHALL BE AT LEAST 6 INCHES GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE OR CONDUIT TO BE INSTALLED. AT HORIZONTAL ANGLES, THE TRENCH SHALL PROVIDE A MINIMUM CLEARANCE OF AT LEAST 3 INCHES BETWEEN THE SIDES OF THE TRENCH AND THE PIPE OR CONDUIT.

F. DEPTH OF TRENCH SHALL PROVIDE FOR A MINIMUM OF 18 INCHES DEPTH OF COVER FROM PROPOSED FINISH GRADE.

G. ROAD CROSSINGS: WHENEVER IT IS PERMISSIBLE TO OPEN CUT ROAD CROSSINGS, THE CONTRACTOR SHALL DO SO IN ACCORDANCE WITH THE RESTRICTIONS AND REQUIREMENTS OF THE PUBLIC OR PRIVATE AGENCY HAVING JURISDICTION.

B. CONTRACTOR SHALL NOT BACKFILL ANY TRENCH PRIOR TO INSPECTION AND APPROVAL OF THE OWNER AND DESIGNATED INSPECTOR.

3.10 WELDING

A. WELDING PROCEDURE SHALL BE STRICTLY IN ACCORDANCE WITH ANSI B31.3, "CHEMICAL PLANT AND REFINERY PIPING", LATEST EDITION.

B. CONTRACTOR SHALL SUBMIT WELDING PROCEDURE SPECIFICATIONS (WPS) TO OWNERS REPRESENTATIVE FOR APPROVAL PRIOR TO PERFORMANCE OF WORK. EACH WPS SHALL BE IDENTIFIED WITH CONTRACTOR'S NAME AND IDENTIFICATION NUMBER. WELDING SHALL NOT COMMENCE UNTIL THE PROCEDURE IS APPROVED.

C. EACH WELDER MUST PROVIDE A COMPLETE PROCEDURE QUALIFICATION RECORD (PQR) SIGNED BY AN AUTHORIZED OFFICER OF THE TESTING LABORATORY OR DEPUTY WELDING INSPECTOR AND CONTRACTOR'S AUTHORIZED REPRESENTATIVE. PREVIOUS WELDING CERTIFICATION (ACTIVE CERTIFICATION WITHIN THE PREVIOUS SIX (6) MONTHS) MAY BE SUBMITTED FOR APPROVAL.

D. WELD TESTS MUST BE APPROVED BY THE CITY.

E. CONTRACTORS SHALL COORDINATE WITH GENERAL CONTRACTORS, INDEPENDENT WELD INSPECTORS AS REQUIRED BY ANSI B31.3 CHAPTER VI FOR NORMAL FLUID SERVICE. INSPECTION COSTS TO BE PAID BY GENERAL CONTRACTOR.

3.11 COATING AND WRAPPING

A. ALL CARBON STEEL PIPE, TO BE BURIED, SHALL BE COATED AND MACHINE WRAPPED, EPOXY COATED OR PVC SLEEVED, TO MEET ALL CODE REQUIREMENTS INCLUDING THOSE ESTABLISHED BY LOCAL UTILITY COMPANY OR JURISDICTIONS. PRIMER: POLYKEN 937 OR TAPCOAT COLDPRIME. TAP: 4" POLYQUARD 600 (FOR 3" PIPING), 2" POLYKEN 930-35 (FOR ALL BRANCHES, FITTINGS AND MULTI-DIRECTIONAL WRAPPING. PROVIDE TWO LAYERS OF WRAP FOR ALL JOINTS OR FITTINGS WITH A 60 DEGREE OVERLAP.

B. EXPOSED PIPING, VALVES, FITTINGS, FLANGES AND RELATED MATERIAL SHALL BE

PRIMED IN ACCORDANCE THE MANUFACTURER'S INSTRUCTIONS. FIELD WRAPPED JOINTS AND FITTINGS FOR UNDERGROUND PIPING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT CODES AND INDUSTRY STANDARDS AND SHALL BE APPROVED BY THE DESIGNATED INSPECTOR PRIOR TO BACKFILL OF TRENCHES. WHERE PIPE EMERGES, WRAP SHALL EXTEND A MINIMUM OF 2 INCHES ABOVE FINISHED GROUND LEVEL.

3.12 CATHODIC PROTECTION

A. ALL BURIED STEEL PORTIONS OF THE PIPING SYSTEM SHALL BE ELECTRICALLY ISOLATED (USING DIELECTRIC FITTINGS) AND CATHODICALLY PROTECTED IN ACCORDANCE WITH CURRENT CODES AND NACE INTERNATIONAL STANDARD RP0169, CURRENT EDITION TO INSURE A -850 MILLIVOLT PIPE TO SOIL POTENTIAL FOR A MINIMUM OF 30 YEARS. SOIL RESISTIVITY TEST IS THE RESPONSIBILITY OF THE CONTRACTOR.

B. CONTRACTOR SHALL FURNISH ALL PERMANENT MATERIALS FOR TEST LEADS, INCLUDING WIRE, CONDUIT AND FITTINGS, TERMINAL POST, TERMINAL UNITS, CAD WELD THERMITE CARTRIDGES, ETC. PER INDUSTRY ACCEPTED PRACTICES.

C. ELECTRICAL TEST LEADS SHALL BE TERMINATED IN A FRAME AND COVERED AT FINISHED GRADE.

3.13 TESTING AND INSPECTION

A. WHEN ASSEMBLY OF A WELDED GAS PIPING OR TUBING ASSEMBLY IS COMPLETE, A PNEUMATIC PRESSURE TEST SHALL BE PERFORMED AND DOCUMENTED IN ACCORDANCE WITH ASME/ANSI B31.3 FOR PIPING ABOVE 600 PSI (CNG SYSTEMS) AND THE IFGC FOR PIPING LESS THAN 600 PSI (GAS SYSTEMS). THE LEAK TEST PROCEDURE SHALL BE AS FOLLOWS:

PIPE	PRESSURE
CNG PIPING AND TUBING (CNG)(AFTER COMPRESSOR)	5000 PSIG (110% MAX WORKING PRESSURE PER ANSI B31.3)
NATURAL GAS PIPING (G) (BEFORE COMPRESSOR)	150% MAX WORKING PRESSURE PER IFGC

VENT PIPING (V)

N/A

1. REMOVE ALL PRESSURE SENSITIVE DEVICES FROM SYSTEM TO BE TESTED.

2. CONNECT A SOURCE OF HIGH-PRESSURE INERT GAS (NITROGEN) WITH APPROPRIATE REGULATOR, GAUGES, VALVES AND FITTINGS TO ONE END OF THE SYSTEM TO ALLOW SYSTEM TO BE SAFELY PRESSURIZED AND DEPRESSURIZED.

3. INTRODUCE INERT GAS INTO THE SYSTEM. SLOWLY INCREASE PRESSURE TO 500PSIG AND CHECK FOR LEAKS. IF NO LEAKS ARE DETECTED, CONTINUE TO INCREASE PRESSURE, IN 500 PSIG INCREMENTS, HOLDING AT EACH STAGE LONG ENOUGH TO ALLOW RESIDUAL STRESSES TO EQUALIZE, UNTIL MAXIMUM PRESSURE IS REACHED. HOLD FOR 30-MINUTES THEN REDUCE PRESSURE TO STATED DESIGN PRESSURE. RECORD BOTH PRESSURES.

4. INSPECT AND LEAK TEST ALL JOINTS AND FITTINGS WITH A SUITABLE LEAK TEST SOLUTION. IDENTIFY LEAKS, IF ANY AND BLEED OFF THE GAS IN A CONTROLLED AND SAFE MANNER. IF A LEAK WAS FOUND, FIND AND REPAIR THE LEAK AND REPEAT THE TEST PROCEDURE.

5. UPON COMPLETION OF THE PNEUMATIC PRESSURE TEST, ALL PRESSURE SENSITIVE DEVICES SHALL BE REINSTALLED IN THE SYSTEM. THE SYSTEM PRESSURIZED TO NORMAL OPERATING PRESSURES AND THEIR CONNECTIONS TESTED FOR LEAKS.

6. CONTRACTOR SHALL USE AN APPROVED LEAK DETECTION SOLUTION (SNOOP OR EQUAL, TO TEST ALL PIPE FITTINGS AND CONNECTIONS DURING TESTING AND AT START-UP.

3.14 PURGING AND PRESSURIZING

A. ALL PURGING AND PRESSURIZING SHALL BE DONE BY CONTRACTOR AND OBSERVED BY THE OWNER OR DESIGNATED REPRESENTATIVE.

PRIOR TO FINAL CONNECTION, ALL NEW PIPING SYSTEMS SHALL BE CLEARED OF ANY AND ALL LOOSE DIRT, SCALE, DEBRIS AND/OR MOISTURE WITH CLEAN DRY AIR OR NITROGEN.

B. PRIOR TO PRESSURIZING THE SYSTEM WITH NATURAL GAS, THE ESD SYSTEM MUST BE OPERATIONAL. NITROGEN SHALL NOT BE INTRODUCED INTO THE SYSTEM WITHOUT PRIOR AUTHORIZATION FROM THE OWNER. ALL AIR SHALL BE PURGED FROM THE ENTIRE SYSTEM TO THE SATISFACTION OF THE OWNER AND IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS PRIOR TO PRESSURIZING THE SYSTEM.

C. PRIOR TO NATURAL GAS BEING INTRODUCED INTO ANY PIPING SYSTEM, ALL FABRICATION, TESTING, AND WORK REQUIRING FLAME OR SPARKING DEVICES SHALL BE COMPLETE. AFTER NATURAL GAS HAS BEEN INTRODUCED, THE CONTRACTOR SHALL DO WELDING OR OTHER WORK, WHICH COULD IGNITE NATURAL GAS VAPORS, ONLY UPON AUTHORIZATION.

D. ONCE THE SYSTEM IS PRESSURIZED (TO FULL OPERATING PRESSURE) ALL VALVES, WELDS, JOINTS AND FITTINGS SHALL BE LEAK TESTED AND SIGNED OFF BY THE OWNER.

GENERAL INSTALLATION NOTES

1. CONTRACTOR SHALL PROVIDE PVC PIPE SLEEVES FOR ALL METAL PIPING PENETRATIONS THROUGH CONCRETE UNLESS PIPE IS SUITABLY WRAPPED.

2. PIPE UNIONS, VALVES, COUPLINGS OR SIMILAR FITTINGS SHALL NOT BE BURIED NOR INACCESSIBLE.

3. ALL EQUIPMENT SHALL BE LISTED AND/OR APPROVED IN ACCORDANCE WITH NFPA 52 AND CHAPTER 2209 OF THE IFC, AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS.

4. ALL PIPING ABOVE GRADE MUST BE LABELED WITH THE NAME OF THE MATERIALS CONVEYED AND WITH DIRECTIONAL FLOW ARROWS NEAR EVERY VALVE OR JUNCTION AND EVERY 20' ON LONG RUNS AS PER ANSI/ASME A13.1.

5. ALL EXPOSED STEEL GAS PIPING SHALL BE PRIMED AND PAINTED YELLOW.

6. ALL GAS PIPING ("G") SHALL BE PRESSURE TESTED AND INSPECTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE AND NATIONAL FUEL GAS CODE PRIOR TO BURIAL. ALL CNG PIPING SYSTEMS ("CNG") SHALL BE PNEUMATICALLY PRESSURE TESTED AND INSPECTED IN ACCORDANCE WITH ANSI B31.3.

7. ALL PIPE AND TUBING WELDING SHALL BE PERFORMED BY CERTIFIED PIPE WELDERS. PROVIDE PROOF OF CERTIFICATION AND CERTIFIED WELDING PROCEDURES FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.

8. PIPING AND TUBING WILL BE INSTALLED WITH ALL NECESSARY OFFSETS OR EXPANSION LOOPS, AND WILL BE SUPPORTED IN A WAY TO ALLOW FOR NORMAL EXPANSION AND CONTRACTION OF LINES DUE TO PRESSURE AND TEMPERATURE FLUCTUATIONS.

CONSULTANT:



CLIENT:



PIPING - GENERAL NOTES
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:

SET/ISSUE: 01FOR REVIEW

DATE: 05/12/20

DATE: 05/12/20

PROJECT #: 1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: P-1.10
REV0.dwg

P-1.10



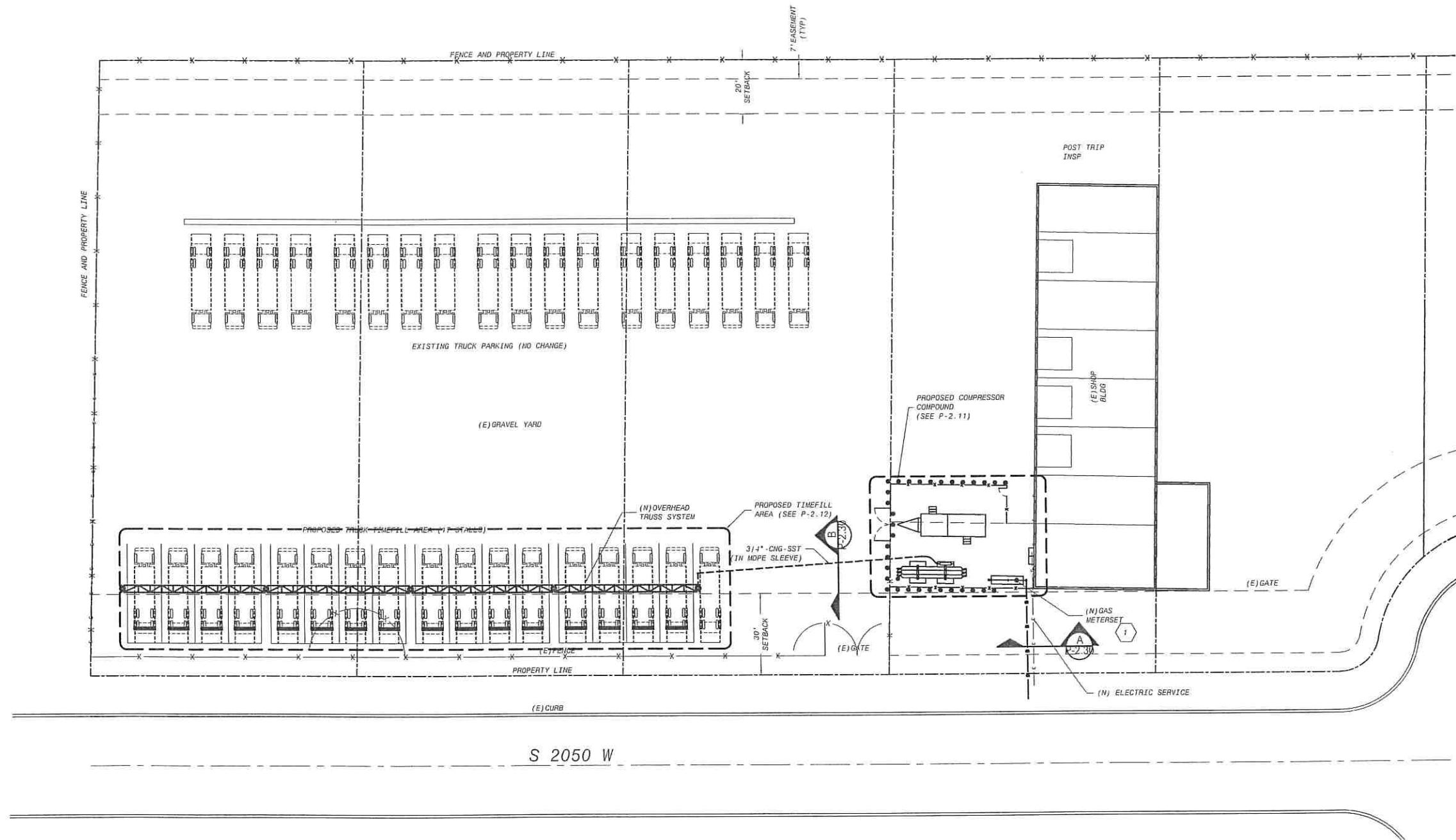
GENERAL NOTES:

1. DIMENSIONS SHOWN ARE APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION.

2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.

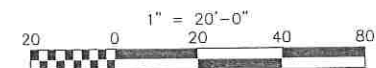
SHEET NOTES

1. BY GAS UTILITY.



PIPING PLAN

SCALE: 1" = 20'-0"



CONSULTANT:



CLIENT:



PIPING PLAN
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:
SET ISSUE: DATE:
01 FOR REVIEW 05/12/20

DATE: 05/12/20

PROJECT #: 1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: P-2.10
REV0.dwg

P-2.10



1. EQUIPMENT TIE-INS AND ROUTING SCHEDULE IS APPROXIMATE AND MAY VARY AS MUCH AS FEET IN ANY DIRECTION TO ACCOMMODATE FIELD CONDITIONS. REFER TO VENDOR-CERTIFIED DRAWINGS AND INSTALLATION INSTRUCTIONS FOR FURTHER INFORMATION.
2. ALL BURIED STAINLESS STEEL TUBING SHALL BE RUN IN CONTINUOUS PVC OR PEP SLEEVES. TUBING SHALL BE CONTINUOUS WITH NO VALVES, UNIONS OR FITTINGS BURIED OR INACCESSIBLE.
3. ALL PIPING AND IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.

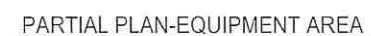
SHEET NOTES:

1. COORDINATE WITH LOCAL UTILITY CO.

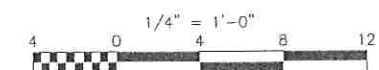
PIPING SUPPORTS

ALL CNG PIPING AND TUBING SHALL BE SUPPORTED AT IN
ACCORDANCE WITH P-1.10

ALL UNISTRUT, PIPE PLAMPS (CUSH-A-CLAMP STYLE W/INSULATORS), AND HARDWARE SHALL BE STAINLESS STEEL.



SCALE: $1/4^* = 1' - 0''$



CONSULTANT:

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CLIENT:



PARTIAL PLAN-EQUIPMENT AREA

CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:

SET ISSUE:	DATE:
01/01/2020	05/12/20

DATE: 05/12/20

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APPROVED BY:		TM
FILENAME:	P-2.11	
	REV0.dwg	

P-2.11



1. DIMENSIONS SHOWN AND ROUTING APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST TO SUIT FIELD CONDITIONS.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. REFER TO OTHER DRAWINGS FOR DETAIL NOT SHOWN.
4. ROUTING SHOWN IS APPROXIMATE.
5. DIRECTIONAL BORING MAY BE USED FOR LONG UNDERGROUND PIPING OR ELECTRICAL RUNS. COORDINATE CONSTRUCTION WITH OTHER TRADES.

CONSULTANT:

[illegible]

CLIENT:



PARTIAL PIPING PLAN-TIMEFILL AREA (SHT 1 OF 2)

CNG FUELING SYSTEM

FUELING SYS
2433 S 2050 W
OGDEN UT 84401

REVISIONS:

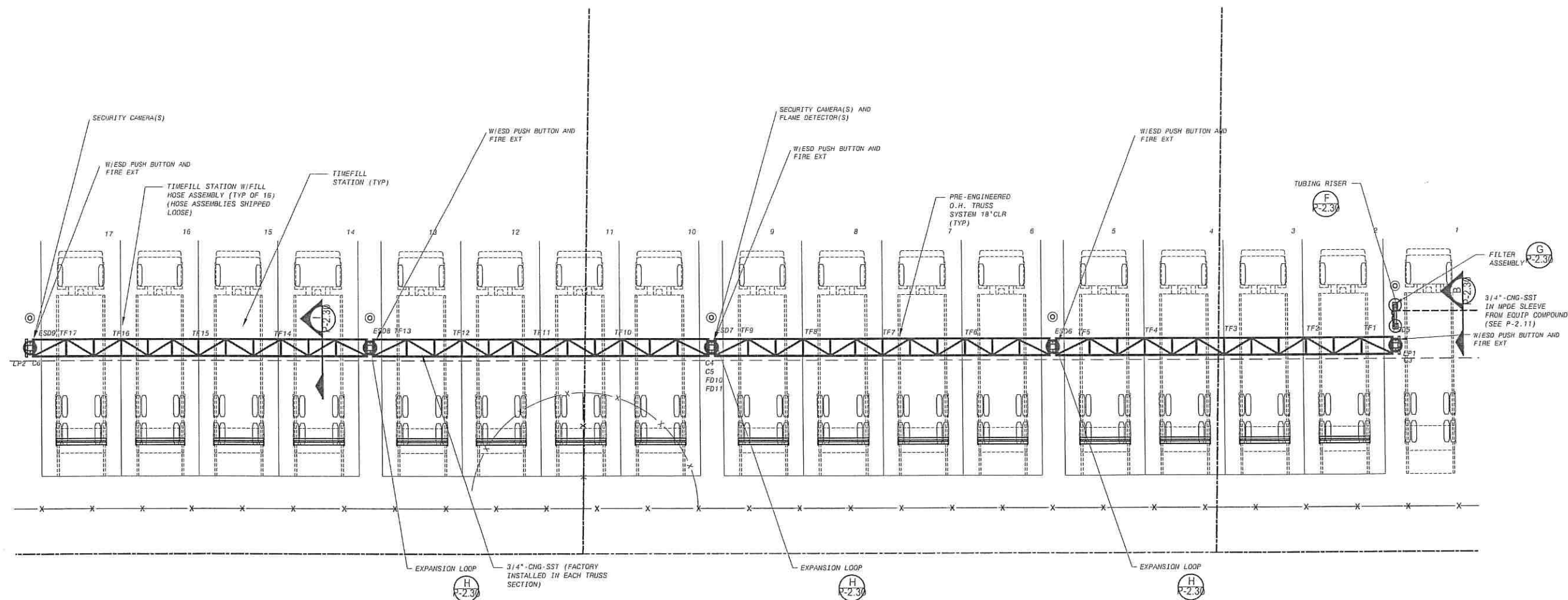
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DATE: 05/12/20

PROJECT #:	1951
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APPROVED BY:	TM
FILENAME:	P-2.12

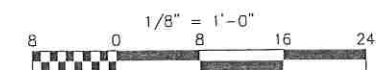
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P-2.12A



PIPING PLAN-TIMEFILL AREA 'A'

SCALE: 1/8" = 1' - 0"



PART 4 - ELECTRICAL

4.1 GENERAL

A. SCOPE

THIS SECTION DESCRIBES THE MATERIALS, TOOLS, TRANSPORTATION, EQUIPMENT, PERMITS, AND PERFORMANCE OF ALL WORK REQUIRED AS INDICATED ON THE DRAWINGS. COMPLETE INSTALLATION AND TESTING OF ALL ELECTRICAL SYSTEMS FOR THE COMPRESSED NATURAL GAS VEHICLE (CNG) FUELING STATIONS. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING TASKS:

1. INSTALLATION OF A NEW 480 VOLT SWITCHBOARDS.
2. INSTALLATION OF INSTRUMENTATION CONDUIT AND WIRE AS SHOWN ON DRAWINGS.
3. INSTALLATION OF EQUIPMENT GROUNDING SYSTEM AS SHOWN ON DRAWINGS.
4. INSTALLATION OF POWER AND LIGHTING CONDUIT AND WIRE AS REQUIRED FOR THIS PROJECT.
5. INSTALLATION OF ALL UNDERGROUND ELECTRICAL DUCT BANKS AND PULL-BOXES AS SHOWN ON DRAWINGS.
6. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL EQUIPMENT AND INCIDENTALS, UNLESS NOTED OTHERWISE, AS REQUIRED TO COMPLETE THE WORK INDICATED IN THE SPECIFICATIONS AND DESIGN DRAWINGS.

B. CODES

1. MATERIALS, EQUIPMENT, AND INSTALLATION PROVIDED AND PERFORMED UNDER THIS SECTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE FOLLOWING CODES:

- a. NATIONAL FIRE PROTECTION ASSOCIATION NO. 70, NEC
- b. NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA).
- c. NATIONAL FIRE PROTECTION ASSOCIATION NO.52.
- d. LOCAL CODES AND REGULATIONS.

2. IN CASE OF DIFFERENCE BETWEEN BUILDING CODES, SPECIFICATIONS, STATE LAWS AND FEDERAL LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS AND ELECTRICAL DEPARTMENT REGULATIONS AND THE CONTRACT DRAWINGS, THE MOST STRINGENT SHALL GOVERN. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER, IN WRITING OF ANY SUCH DIFFERENCE.

3. NOTHING IN THESE DRAWINGS AND SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO GOVERNING CODES. THIS SHALL NOT BE CONSTRUED AS TO RELIEVING CONTRACTOR FROM COMPLYING WITH ANY REQUIREMENTS OF THE PLANS OR SPECIFICATIONS WHICH MAY BE IN EXCESS OF REQUIREMENTS OF THE HEREIN BEFORE MENTIONED GOVERNING CODES AND RULES AND NOT CONTRARY TO THE SAME.

4. SHOULD ANY DEVIATIONS TO WORK INDICATED ON THE DRAWINGS OR DESCRIBED IN SPECIFICATIONS BE NECESSARY IN ORDER TO COMPLY WITH ABOVE REQUIREMENTS, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID OR IMMEDIATELY IN WRITING FOR APPROVAL OF REQUIRED DEVIATION.

4.2 MATERIALS

A. GENERAL

1. ALL MATERIALS SHOWN ON DETAILS AND PLAN DRAWINGS ARE THE MAIN ITEMS OF CONSTRUCTION AND ARE NOT TO BE CONSTRUED AS ALL-INCLUSIVE. CONTRACTOR SHALL MAKE COMPLETE ALL ELECTRICAL INSTALLATIONS IN A NEAT, PROFESSIONAL, AND WORKMAN-LIKE MANNER.

2. DESIGN DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS, ELBOWS, OR OTHER SPECIFIC ELEMENTS, WHICH MAY BE REQUIRED FOR PROPER INSTALLATION, EXCEPT WHERE SHOWN IN DIMENSIONAL DETAIL. THE LOCATIONS OF SWITCHES, RECEPTACLES, LIGHTS, MOTORS, OUTLETS, AND OTHER EQUIPMENT ON PLANS ARE APPROXIMATE. SUCH ITEMS SHALL BE PLACED AS TO ELIMINATE INTERFERENCE WITH DUCTS, PIPING, AND EQUIPMENT. THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD.

3. EQUIPMENT SIZES SHOWN ON THE DRAWINGS ARE MINIMUM UNLESS OTHERWISE INDICATED. BEFORE INSTALLING ANY WIRE OR CONDUIT, CONTRACTOR SHALL OBTAIN THE EXACT EQUIPMENT REQUIREMENTS AND SHALL INSTALL WIRE, CONDUIT, DISCONNECT SWITCHES, MOTOR STARTERS, HEATERS, CIRCUIT BREAKERS, AND OTHER ITEMS OF THE CORRECT SIZE FOR THE EQUIPMENT ACTUALLY INSTALLED. HOWEVER, WIRE AND CONDUIT SIZES SHOWN ON THE DRAWINGS SHALL BE TAKEN AS A MINIMUM AND SHALL NOT BE REDUCED WITHOUT WRITTEN APPROVAL.

4. THE ELECTRICAL WORK SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES. COORDINATION SHALL INCLUDE ADEQUATE CLEARANCES FOR THE INSTALLATION AND MAINTENANCE OF EQUIPMENT AND PHYSICAL AND ELECTRICAL REQUIREMENTS OF ITEMS OR EQUIPMENT REQUIRING CONNECTIONS TO PROVIDE ELECTRIC SERVICE, EXTEND CONDUITS, AND MAKE ALL NECESSARY CONNECTIONS AS REQUIRED TO MINIMIZE INTERRUPTION OF SERVICES.

A. CABLE AND WIRE

1. CABLE AND WIRE FOR SERVICE AT 600 VOLTS AND BELOW SHALL BE #10 VOLT STRANDED COPPER TYPE THW/THWN SIZE #12 AWG THROUGH #8 AWG AND TYPE XHHW SIZE #6 AWG AND LARGER.

2. GROUND WIRE SHALL BE MEDIUM DRAWN BARE COPPER STRANDED, ALL CONNECTIONS AND FITTINGS SHALL BE CAST COPPER ALLOY BODY.

3. INSTRUMENT WIRING SHALL BE AS CALLED FOR ON PLANS.

C. GROUNDING

GROUNDING RODS SHALL BE 3/4 INCH DIAMETER BY 10 FOOT LONG COPPER CLAD STEEL. CONNECTIONS TO GROUND RODS AND THE MAIN GROUND GRID SHALL BE MADE WITH EXOTHERMIC WELDS OR TELETYPE-PENUMINON SERIES CGCP COMPRESSION CONNECTORS OR EQUAL. CONNECTIONS TO EQUIPMENT SHALL BE MADE WITH COPPER OR BRONZE SPLIT BOLT CONNECTORS. SPLIT BOLT CONNECTORS SHALL BE ATTACHED TO EQUIPMENT STRUCTURE THAT HAS BEEN STEEL BRUSHED TO BRIGHTNESS AND LUBRICATED WITH AN ELECTRICALLY CONDUCTING

COMPOUND MADE FOR THAT PURPOSE. WIRE SIZES WILL BE AS CALLED FOR ON PLANS.

D. MATERIAL

1. ELECTRICAL AND INSTRUMENTATION MATERIALS AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF UNDERWRITERS LABORATORIES (UL) AND BE LISTED AND LABELED FOR THE INTENDED APPLICATION.

2. MATERIALS AND EQUIPMENT FURNISHED BY THE CONTRACTOR SHALL BE NEW, AND BE IN COMPLIANCE WITH THE SPECIFICATION REQUIREMENTS. MATERIALS AND EQUIPMENT SHALL DUPLICATE ITEMS THAT HAVE BEEN IN SATISFACTORY COMMERCIAL OR INDUSTRIAL USE AT LEAST TWO YEARS PRIOR TO AWARD OF CONTRACT.

3. ALL CONDUIT, CONDUIT FITTINGS, AND ENCLOSURES SHALL BE PROPERLY PROTECTED FROM ANY MOISTURE DURING STORAGE. THE CONTRACTOR SHALL ENSURE THAT AT THE TIME OF USE, THE MATERIALS ARE CLEAN, DRY AND SUITABLE FOR THEIR INTENDED USE.

D. CONDUIT

1. CONDUIT FOR PERMANENTLY INSTALLED NON-FLEXING SERVICES SHALL BE THREADED RIGID OR INTERMEDIATE GALVANIZED STEEL ON ALL ABOVE GRADE LOCATIONS OR PVC FOR BELOW GRADE USE.

2. CONDUIT INSTALLED UNDERGROUND SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE NOTED OR REQUIRED TO MEET ELECTRIC DEPARTMENT REQUIREMENTS.

3. FLEXIBLE CONDUIT SHALL BE STEEL LIQUID-TIGHT WITH A PVC JACKET SUITABLE FOR THE AREA CLASSIFICATION IN WHICH IT IS TO BE INSTALLED.

4. CONDUIT INSTALLED WITHIN CLASSIFIED AREAS SHALL BE THREADED RIGID OR INTERMEDIATE STEEL CONDUIT. PROVIDE CONDUIT SEALS - QUANTITY, SIZE, AND LOCATIONS AS REQUIRED BY CODE.

E. CONDUIT FITTINGS

1. WHERE BURIED, CONDUIT FITTINGS SHALL BE PVC COATED AND MADE OF NON-CORRODING FERROUS ALLOY. STANDARD FITTINGS WITH COVERS SHALL HAVE GASKETS AND NON-CORRODING ATTACHING SCREWS.

2. CONDUIT BUSHINGS ON RISERS INTO SWITCHGEAR SHALL BE INSULATING TYPE.

F. CONCRETE FOR DUCT BANKS (AS REQUIRED BY LOCAL AGENCIES OR ELECTRIC DEPARTMENT)

G. CABLE AND WIRE TERMINATIONS

1. ALL POWER CABLE SHALL BE TERMINATED IN PRESSURE LUGS.

2. CONTROL, ALARM AND SIGNAL WIRE SHALL BE TERMINATED WITH PRESSURE APPLIED SPADE OR RING LUGS WHERE SCREW TERMINALS ARE PROVIDED. SOLDER CONNECTIONS ARE NOT ALLOWED.

H. ENCLOSURES

1. ENCLOSURES FOR EQUIPMENT AND DEVICES SHALL BE UL LISTED MINIMUM NEMA 3R OR 4X (DUST AND WATER- TIGHT) IN NON-HAZARDOUS AREAS, AND NEMA 7 WHERE REQUIRED IN DESIGNATED CLASS 1 OR DIV 1 OR DIV 2 AREAS.

2. ENCLOSURES IN NON-HAZARDOUS AREAS SHALL BE PROVIDED WITH WATER TIGHT CONDUIT HUBS ON TOP AND VERTICAL SURFACES. GASKET AND "O RINGS" SHALL BE INSTALLED AS INSTRUCTED BY MANUFACTURER, TO MAINTAIN WEATHER TIGHTNESS.

3. PULL BOX OR JUNCTION BOXES SHALL BE UL LISTED FOR NEMA 4X (DUST AND WATERTIGHT) IN NON-HAZARDOUS OR CLASS 1 DIV 2 AREAS, AND NEMA 7 IN CLASS 1 DIV 1 AREAS. ALL PULL BOXES INSTALLED WHEREVER TRAFFIC MIGHT COME IN CONTACT SHALL BE TRAFFIC RATED. ALL IN GROUND PULL BOXES SHALL BE EQUIPPED WITH LOCK DOWN DEVICES.

I. EQUIPMENT MOUNTING

1. EQUIPMENT SHALL BE SECURED WITH CORROSION-PROOF BOLTS, STRAPS, HANGERS, AND SUCH OTHER HARDWARE AND DEVICES AS ARE NECESSARY OR APPROPRIATE. STAINLESS STEEL UNISTRUT, HARDWARE AND FASTENERS WHERE INSTALLED OUTDOORS OR WHERE EXPOSED TO POTENTIAL MOISTURE OR CORROSION.

A. SPECIALTY EQUIPMENT

1. ESD PUSH BUTTONS: BUTTONS SHALL EITHER BE MAINTAINED PUSH-PULL TYPE WITH LARGE, RED, MUSH-ROOM HEAD BUTTON, OR, WHERE NOTED, "BREAK GLASS" PUSH BUTTON THAT IS NORMALLY CLOSED. ASSEMBLY SHOULD HAVE ELECTRICAL CLASSIFICATION APPROPRIATE TO THE HAZARDOUS CLASSIFICATION OF THE LOCATION OR AS NOTED. MUSHROOM TYPE PUSH BUTTONS SHALL BE FURNISHED W/ GUARD COLLAR.

2. EMERGENCY PHONE: STANDARD INDUSTRIAL DIAL-OUT PHONE. HIGH IMPACT ANTI CORROSIVE ENCLOSURE FOR OUTDOOR USE. GAI-TRONICS 257-001.

4.3 INSTALLATION REQUIREMENTS

A. GENERAL

1. INSTALL THE SWITCHBOARD ON THE FOUNDATIONS AS INDICATED BY THE DRAWINGS. INSTALL CONDUITS, WIRE, LIGHTING FIXTURES, GROUND GRID, ETC., AS SHOWN ON DRAWINGS.

B. GROUNDING

1. ALL GROUNDS SHOULD BE THROUGH SLAB. HIDDEN WHERE POSSIBLE AND PROTECTED BY PVC CONDUIT.

C. CONNECTIONS AND CONTROLS

1. CONTRACTOR SHALL WIRE ALL CONTROL DEVICES FURNISHED BY OTHERS IN ACCORDANCE WITH SCHEMATIC AND

WIRING DIAGRAMS FURNISHED WITH THE EQUIPMENT, THIS SPECIFICATION, AND CONSTRUCTION DRAWINGS.

D. IDENTIFICATION AND LABELING

1. INSTALL NON-CORRODING METAL-STRIP CONDUIT TAGS WITH EMBOSSED CONDUIT NUMBERS AT END POINTS OF ALL CONDUITS AND AT PENETRATIONS INTO SLABS, GROUND, AND THE EQUIPMENT, ATTACHED WITH DOUBLE METAL BANDS.

- a. CONTROL WIRES SHALL BE IDENTIFIED WITH IMPRINTED SLIP-ON HEAT SHRINK SLEEVES.
- b. ALL SPARE CONDUCTORS SHALL BE TAPED AT EACH END AND IDENTIFIED AS SPARE.
- c. THE INSULATION OF A SINGLE-CONDUCTOR WIRE WILL BE COLORED AS FOLLOWS:

120/208-VOLT CIRCUITS	
WIRE	COLOR
NEUTRAL	WHITE
PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE

277/480 -VOLT CIRCUITS	
WIRE	COLOR
NEUTRAL	WHITE
PHASE A	BROWN
PHASE B	ORANGE
PHASE C	YELLOW

4. ALL NEW ELECTRICAL DEVICES (SWITCHBOARDS, PANEL-BOARDS, MOTOR CONTROL CENTERS, ETC.) AND DISCONNECTS SHALL BE LABELED IN ACCORDANCE WITH NEC REQUIREMENTS. EXTERIOR PANEL LABELING SHALL BE WHITE ENGRAVED ON BLACK. AT MINIMUM LABELING SHALL INCLUDE NAME, PANEL VOLTAGE, PHASE, AND FED FROM OR DISCONNECT(S)

5. PANEL BOARDS SHALL BE PROVIDED WITH PANEL SCHEDULES INCLUDING CIRCUIT NAMES, BREAKER SIZE AND NUMBER OF POLES, PANEL NAME, VOLTAGE, AND PHASE.

6. PROVIDE ARC FLASH LABELING ON EXTERIOR OF ALL NEW PANEL BOARDS, SWITCHBOARDS, MOTOR CONTROL CENTERS AND SIMILAR DEVICES AS REQUIRED BY NEC.

E. TESTING AND DEFICIENCIES

1. WHEN DEFICIENCIES ARE FOUND, THE DEFICIENCY SHALL BE CORRECTED AND THE TEST RERUN. THIS PROCEDURE SHALL BE REPEATED UNTIL THE DEFICIENCY IS CLEARED. TESTS SHALL BE PERFORMED BY QUALIFIED AND EXPERIENCED PERSONS AND WITNESSED BY THE OWNERS INSPECTOR.

2. ALL INSTALLATIONS AND WIRING SHALL BE THOROUGHLY TESTED TO DETERMINE PROPER POLARITY, PHASING, AND FREEDOM FROM GROUNDS AND SHORT CIRCUITS AND FOR CONTINUITY AND OPERATION OF EQUIPMENT, METERS, RELAYS, INSTRUMENTS, ETC. CONTRACTOR SHALL OPERATE ALL CIRCUIT BREAKERS, HAND SWITCHES AND PUSH BUTTONS BY HAND TO DEMONSTRATE PROPER MECHANICAL FUNCTIONING.

3. COMPLETE TEST AND INSPECTION RECORDS SHALL BE MADE BY THE CONTRACTOR AND INCORPORATED INTO A REPORT, WHICH SHALL BE GIVEN TO THE OWNER. ALL READINGS TAKEN SHALL BE RECORDED. THE CONTRACTOR SHALL GIVE THE OWNER SUFFICIENT NOTICE OF ALL TESTS SO THAT THE OWNERS REPRESENTATIVE MAY BE PRESENT (MINIMUM OF 48 HOURS).

4. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE OWNERS REPRESENTATIVE UNLESS INSTRUCTED OTHERWISE.

5. ALL TESTING SHALL BE SCHEDULED BY THE CONTRACTOR AND COORDINATED WITH THE OWNER. NO TESTING SHALL BE DONE WITHOUT THE OWNERS APPROVAL.

6. AUTHORIZATION MUST BE OBTAINED FROM THE OWNER BEFORE ANY WORK IS DONE ON AN ENERGIZED CIRCUIT. THERE SHALL BE NO INTERRUPTION OF ENERGIZED CIRCUITS WITHOUT PREVIOUS ARRANGEMENTS WITH THE OWNER.

7. ALL CABLES AND EQUIPMENT, INCLUDING MOTORS AND TRANSFORMERS, SHALL BE TESTED FOR GROUND AND SHORTS BY MEANS OF A MEGGER INSULATION TESTING INSTRUMENT, WHICH SHALL IMPRESS A VOLTAGE OF NOT LESS THAN 500 VOLTS DC UPON THE CIRCUIT UNDER TEST.

8. INSULATION RESISTANCE TEST ON 480-VOLT CIRCUITS SHALL BE MADE TO 1-1/2 TIMES THE CIRCUIT VOLTAGE RATING.

9. WHERE TESTS INDICATE THAT INSULATION WAS DAMAGED BY HANDLING OR DURING INSTALLATION, NEW CABLE SHALL BE INSTALLED AT THE CONTRACTOR'S EXPENSE.

- a. AFTER THE GROUNDING SYSTEM HAS BEEN INSTALLED, CONTRACTOR SHALL PERFORM THE FOLLOWING:

- b. MEASURE GROUND RESISTANCE OF THE GROUNDING SYSTEM WITH A MEGGER (TWO TEST PROBE TYPE) GROUND TESTER. TEST SHALL BE MADE IN THREE (3) WIDELY SEPARATED LOCATIONS AS SPECIFIED BY THE OWNER AND SHALL SHOW A RESISTANCE OF TWENTY-FIVE (25) OHMS OR LESS.

- c. TESTS MUST BE COMPLETED AND THE GROUNDING SYSTEM APPROVED BEFORE GROUND RODS ARE COVERED.

- d. ALL ABOVE GRADE CONNECTIONS SHALL BE ACCESSIBLE FOR INSPECTION AND TESTING. INTERLOCKING CONTROL AND INSTRUMENTATION WIRING FOR EACH SYSTEM AND/OR PART OF A SYSTEM SHALL BE CAREFULLY CHECKED TO ASCERTAIN THAT THE SYSTEM WILL FUNCTION PROPERLY AS INDICATED BY THE WIRING DIAGRAMS, SCHEMATIC DIAGRAMS, DESCRIPTION OF OPERATION, ETC.

- e. CONTRACTOR SHALL SET CIRCUIT BREAKERS AND RELAYS SO THAT EQUIPMENT WILL BE IN PROPER OPERATING CONDITION BEFORE BEING PLACED IN SERVICE.

- f. UPON COMPLETION OF PRELIMINARY CHECKS, ALL EQUIPMENT SHALL BE TESTED FOR SATISFACTORY OPERATION. CONTRACTOR SHALL START EQUIPMENT AS DIRECTED BY THE OWNER AND/OR EQUIPMENT MANUFACTURER'S REPRESENTATIVE.

F. ENCLOSURES AND SUPPORTS

1. SUPPORTS AND ENCLOSURES SHALL BE PROVIDED FOR ALL EQUIPMENT.

2. BOLT ELECTRICAL EQUIPMENT TO RACKS, TO PLATES WELDED TO RACKS, TO PLATES WELDED OR BOLTED TO OTHER STRUCTURES, TO BUILDINGS, OR WHERE PERMITTED TO STRUCTURES, DO NOT WELD TO ELECTRICAL EQUIPMENT. PROVIDE BACKING PLATES WHERE EQUIPMENT IS ATTACHED TO METAL THAT IS LESS THAN 1/8" INCH THICK. CONDUIT BOXES UP TO 8 INCHES SQUARE MAY BE SUPPORTED IN CONDUIT RUNS WITHOUT ADDITIONAL SUPPORT; HOWEVER, BOXES ON FREE-STANDING STUB-UPS SHALL BE PROVIDED WITH EXTRA SUPPORT.

3. SUPPLEMENTARY SUPPORTS, CLIPS, AND BRACKETS SHALL BE CONSTRUCTED FROM STANDARD ROLLED STEEL SHAPES NOT DIPPED GALVANIZED AFTER FABRICATION, ANGLES, PLATES, CHANNELS, UNI-STRUT, POWER STRUT OR RODS MAY BE USED FOR THIS PURPOSE. WELDING TO A GALVANIZED STRUCTURE SHALL NOT BE PERMITTED. USE CORROSION-PROOF BOLTS, STRAPS, ETC.

4. RACKS SHALL BE STRUCTURAL SHAPES WELDED OR BOLTED TOGETHER AND SUPPORTED FROM OTHER STRUCTURES, OR INDEPENDENTLY SUPPORTED BY CONCRETE FOUNDATIONS.

G. UNDERGROUND CONDUITS

1. ALL SINGLE AND MULTIPLE UNDERGROUND CONDUIT RUNS SHALL BE A MINIMUM OF 24 INCHES BELOW FINISH GRADE TO TOP OF FIRST CONDUIT. ALL UNDERGROUND CONDUIT RUNS MUST BE CLEAR OF CROSSING PIPES OR STRUCTURES BY AT LEAST 6 INCHES; THUS, MINIMUM DEPTHS MAY BE REQUIRED THAT ARE GREATER THAN 24 INCHES PREVIOUSLY DESCRIBED.

2. CONDUITS PLACED UNDERGROUND SHALL BE RUN AS SHOWN ON DRAWINGS AND SUPPORTED A MINIMUM OF EVERY 10 FEET TO PREVENT SAGGING WHILE WAITING FOR ENCASEMENT OR BACKFILL. CONDUITS RUN IN MULTIPLE SHALL BE SEPARATED AT LEAST 2 INCHES CLEAR. THEY SHALL BE SEPARATED EVENLY THROUGHOUT THE RUN, EXCEPT WHERE IT IS NECESSARY TO FAN OUT AT RISERS AND TRANSITIONS. CHANGE OF HORIZONTAL DIRECTIONS OF CONDUIT RUNS SHALL BE MADE IN LONG, GENTLE SWEEPS. INSTALL SPARE CONDUITS AS SHOWN ON DRAWINGS. BACKFILL AND TRENCHING SHALL BE CONSISTENT WITH THE PROVISIONS OF THIS SPECIFICATION.

3. WHERE MULTIPLE CONDUITS COME TO THE SURFACE, THROUGH SLABS OR PADS, CONCRETE ENCASEMENT SHALL CONTINUE TO 6 INCHES ABOVE THE SURFACE. THE CONCRETE CROSS SECTION ABOVE THE SURFACE SHALL BE ROUND OR RECTANGULAR AS APPROPRIATE. TROWELED SMOOTH, WITH 45 DEGREE BEVELED CORNERS.

4. WHERE A SINGLE CONDUIT COMES TO THE SURFACE THROUGH SLABS OR PADS, CONCRETE ENCASEMENT SHALL TERMINATE AT THE SLAB OR PAD SURFACE. IF RISING INTO SLAB-MOUNTED OR PAD MOUNTED SWITCHBOARDS, MOTOR CONTROL CENTERS, AND SIMILAR EQUIPMENT, EXTEND THE CONDUIT UP 3 INCHES AND BUSH WITH AN INSULATED GROUNDING BUSHING.

5. ALL PVC CONDUIT RUNS COMING UP TO A CONCRETE SLAB, PAD, OR ABOVE GRADE CONDUIT RUN SHALL BE TERMINATED WITH A RIGID STEEL CONDUIT RISER AND THE APPROPRIATE ADAPTER FOR THIS TRANSITION OR AS NOTED ON PLANS.

6. WHERE CONDUIT INTENDED FOR FUTURE USE COMES UP TO THE SURFACE THROUGH A CONCRETE SLAB OR PAD, CONDUIT SHALL BE TERMINATED WITH A THREADED COUPLING AND SHALL BE FITTED WITH A FLUSH PLUG FLUSH WITH THE CONCRETE SURFACE TO AVOID TRIPPING HAZARDS.

- H. ARRANGEMENT AND GROUPING OF DUCTS SHALL BE AS SHOWN ON THE DRAWINGS FROM PLACE-TO-PLACE, AND SHALL BE INSTALLED AT ELEVATIONS SHOWN

1. SUPPORT EXPOSED CONDUIT ON MAXIMUM SIX (6) FOOT CENTERS AND WITHIN TWO (2) FEET OF ANY CONNECTION POINT. CONDUIT AND FITTINGS MAY BE SUPPORTED FROM MACHINERY SUPPORTING STRUCTURES ADEQUATE FOR ADDITIONAL WEIGHT. CONDUIT AND FITTINGS CAN NOT BE CLAMPED OR WELDED OR BOLTED TO VESSELS FOR MACHINERY EXCEPT AS SPECIFICALLY PERMITTED BY OWNER OR AS SHOWN ON THE DRAWINGS.

2. FACTORY 90 DEGREE CONDUIT BENDS SHALL BE USED FOR CONDUIT SIZED 1-1/2 INCHES AND ABOVE. RADIUS OF FIELD BENDS SHALL NOT BE LESS THAN 10 TIMES DIAMETER OF CONDUIT. CONDUIT BENDS AND OFFSETS SHALL BE AVOIDED WHERE POSSIBLE. CONDUIT FLATTENED OR WRINKLED DURING BENDING SHALL NOT BE USED.

3. ENDS OF ALL CONDUITS TERMINATING IN OTHER THAN WIRING DEVICE BOXES SHALL BE PROVIDED WITH INSULATING BUSHINGS. INSULATED GROUNDING BUSHINGS WITH THROUGH-TERMINALS FOR NO. 6 AWG WIRE SHALL BE PROVIDED ON ALL CONDUITS RISING INTO MOTOR CONTROL CENTERS AND SWITCHBOARDS.

4. INSTALL LIQUID-TIGHT STEEL CONDUIT BETWEEN RIGID CONDUIT AND MOTORS, VIBRATING EQUIPMENT, MOVABLE EQUIPMENT, AND INSTRUMENTS (MINIMUM 1 FOOT AND MAXIMUM 3 FEET IN LENGTH).

5. INSTALL CONDUIT SEALS WHERE REQUIRED. POUR SEALS WITH THE SEAL MANUFACTURERS SPECIFIED COMPOUND AFTER SYSTEMS ARE FUNCTIONAL AND HAVE BEEN ACCEPTED BY OWNER AN CITY. SEAL FITTING PLUGS SHALL NOT BE INSTALLED FOR 24 HOURS AFTER POURING SEALING COMPOUND.

6. OPEN ENDS OF CONDUITS SHALL BE CAREFULLY PLUGGED DURING CONSTRUCTION TO PREVENT THE ENTRANCE OF FOREIGN MATERIALS. AFTER CONDUITS ARE INSTALLED, PULL A MANDREL THROUGH EACH CONDUIT TO CLEAR THE CONDUIT OF DEBRIS. FOLLOW THE MANDREL WITH WIRE BRUSHES AND SWABS TO COMPLETELY CLEAN THE CONDUIT. IMMEDIATELY AFTER A CONDUIT IS CLEANED, PLUG OR CAP THE RUN. INSTALL PULL STRINGS IN ALL SPARE CONDUITS.

7. COVER OPENINGS ON CONDUIT FITTINGS SHALL NOT BE BLOCKED BY STRUCTURAL STEEL OR PIPE WHICH WOULD CAUSE THE NECESSITY OF DISASSEMBLY OF PIPE OR OTHER EXTREME MEASURES FOR ACCESS TO THE INTERIOR OF FITTINGS FOR FUTURE WIRE REPLACEMENT AND PULLING.

8. ON MACHINRY AND CONCRETE STRUCTURES, CONDUITS

SHALL BE ATTACHED WITH ONE-HOLE PIPE STRAPS AND CLAMP-BACKS USING SCREW ANCHORS OR EXPANSION BOLTS.

9. EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL TO STRUCTURAL MEMBERS AND SURFACES.

10. TWO OR MORE CONDUITS IN THE SAME GENERAL ROUTING SHALL BE PARALLEL WITH SYMMETRICAL BENDS.

11. CONDUITS SHALL BE AT LEAST 6 INCHES FROM HIGH TEMPERATURE PIPING, DUCTS, AND FLUES.

12. CONDUIT CONNECTIONS TO SHEET METAL ENCLOSURES SHALL BE SECURELY FASTENED BY LOCKNUTS INSIDE AND OUTSIDE.

13. CONDUITS SHALL BE INSTALLED BETWEEN THE REINFORCING STEEL IN WALLS OR SLABS WHICH HAVE REINFORCEMENT IN BOTH FACES. IN SLABS WHICH HAVE ONLY A SINGLE LAYER OF REINFORCING STEEL, CONDUITS SHALL BE CLEAR OF THE STEEL AND THE CONCRETE SURFACE.

14. UPON COMPLETION, ENSURE THAT EQUIPMENT IS CLEAN; STRUCTURAL ELEMENTS ARE COMPLETE AND TIGHT; ARE PROPERLY HARNESSSED, SECURED, AND IDENTIFIED; CONDUITS ARE BUSHED, TAGGED, AND SUPPORTED; SEALS ARE IN PLACE; GROUND WIRES ARE PROVIDED AND CONNECTED; TAGS, LABEL PLATES, AND INSTRUCTION PLATES ARE ATTACHED AND SECURE.

GENERAL NOTES

1. AT ALL TIMES THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITION OF JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ENGINEERS JOB SITE REVIEW IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES.

2. THE CONTRACTOR SHALL MAKE AN EXAMINATION OF THE SITE. HE SHALL COMPARE THE SITE WITH THE DRAWINGS AND SPECIFICATIONS AND SATISFY HIMSELF AS TO CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. HE SHALL ASCERTAIN AND CHECK THE LOCATIONS OF ANY EXISTING STRUCTURES OR EQUIPMENT WHICH MAY AFFECT THIS WORK. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE IN HIS BEHALF FOR ANY EXPENSE TO WHICH HE MAY BE PUT DUE TO FAILURE OR NEGLECT ON HIS PART TO MAKE SUCH EXAMINATION.

3. ALL WORK SHALL BE COORDINATED WITH THE OWNER TO MAINTAIN CONTINUITY OF SERVICE AND MAXIMUM UTILIZATION OF THE OWNERS FACILITY. ALL WORK SHALL BE BID ON A NORMAL TIME BASIS WITH PREMIUM TIME IN ADDITION ONLY AS AUTHORIZED FOR CORE BORING OR OTHER WORK WHICH WILL BE NOISY, DIRTY OR OTHERWISE OBSTRUCT THE WORK PROCESS.

4. THE CURRENT ISSUE OF ALL NFPA, CEC, CBC, UBC, UFC, ANSI, OSHA, ASTM, NEMA, AND OTHER NATIONALLY PUBLISHED CODES OR STANDARDS, AS WELL AS STATE AND LOCAL CODES AND ORDINANCES, SHALL APPLY TO THIS WORK WHETHER ADOPTED BY LOCAL AGENCIES OR NOT. THE MOST STRINGENT CODE SHALL APPLY.

5. NOTHING IN THE DRAWING OR SPECIFICATIONS INTENDED TO ALLOW A VIOLATION OF ELECTRICAL WORKING SPACE AROUND ELECTRICAL EQUIPMENT. A 30"W MIN X 48"D X 6-6"H SPACE SHALL BE CLEAR TO THE FLOOR IN FRONT OF ALL ELECTRICAL PANELS, CONTROLS OR ITEMS THAT REQUIRE MAINTENANCE OR ACCESS WHILE ENERGIZED. ANY DEVIATION FROM THIS MINIMUM SHALL BE APPROVED, IN WRITING.

6. ALL CONDUITS SHALL RUN TIGHT TO SLAB AND BEAMS. WHERE EQUIPMENT IS INSTALLED TIGHT TO SLAB, RUN CONDUIT BELOW OR ABOVE AS TIGHT TO EQUIPMENT AS POSSIBLE.

7. DO NOT SUPPORT CONDUITS FROM DUCTS, MECHANICAL SUPPORTS OR EQUIPMENT OF ANY KIND.

8. ALL CABLES, CONDUITS, PIPING OR EQUIPMENT LOCATIONS AND ELEVATIONS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING AND MAKING ALL NECESSARY OFFSETS, AS REQUIRED, TO AVOID EXISTING INTERFERENCES AND COORDINATE WITH OTHER TRADES.

9. IDENTIFY EACH CONDUCTOR BY SHRINK-ON INDELIBLY MARKED BRADY-TAGS AND EACH ELECTRICAL ITEM BY BLACK- WHITE - BLACK ENGRAVED SCREW - ON PLASTIC NAMEPLATE. LEGEND PER DRAWING.

10. ALL GROUND WIRES SHALL BE SEGREGATED FROM PHASE CONDUCTORS IN CONDUITS TO MINIMIZE GROUND LOOPS.

11. ELECTRICAL DESIGN BASED UPON TYPICAL VENDOR EQUIPMENT. COORDINATE FINAL INSTALLATION WITH ACTUAL EQUIPMENT FURNISHED.

12. THE CONTRACTOR SHALL PROVIDE ALL FUSES REQUIRED FOR PROJECT POWER INCLUDING ANY FUSES BLOWN DURING INITIAL TESTING.

13. BONDING JUMPERS SHALL BE INSTALLED TO INSURE CONTINUITY WHERE CONDUIT CONNECTIONS AT CONCENTRIC KNOCKOUTS ARE TO SERVE AS A GROUND.

14. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO ALL WALLS, FLOORS AND PAVING, IF DAMAGE OCCURS DURING CONSTRUCTION. THEY SHALL COORDINATE WITH OWNER TO PATCH, PAINT AND REPAIR TO MATCH EXISTING CONDITIONS.

15. ALL WIRING SHALL BE COPPER, THW/THWN OR XHHW INSULATED.

16. ABOVEGROUND CONDUIT SHALL BE RIGID STEEL.

17. UNDERGROUND CONDUIT SHALL BE PVC WIRGS RISERS EXCEPT WHERE ENTERING PANEL OR SWITCHGEAR. PROVIDE CONDUIT SEAL-OFFS AS REQUIRED BY CODE.

18. MINIMUM BURIAL DEPTH FOR UNDERGROUND CONDUITS SHALL BE 24".

CONSULTANT:



CLIENT:



ELECTRICAL SPECIFICATIONS
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

REVISIONS:

SET ISSUE: DATE:
01 FOR REVIEW 05/12/20

DATE: 05/12/20

PROJECT #1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: E-1.10
Rev0.dwg

E-1.10



400A BREAKER ADEQUATE

PHASE A:	6.00	KVA
PHASE B:	6.50	KVA
PHASE C:	6.00	KVA

E-1.20



1. DIMENSIONS SHOWN ARE APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. ALL PULL BOXES SHALL BE BEDDED IN 12" FREELY DRAINING CRUSHED ROCK AND SET WITH 12" WIDE BY 12" DEEP CAST CONCRETE RING. SET RIM ELEVATION FLUSH WITH SURROUNDING GRADE (SEE DETAIL G/E2.30). SIZE AS REQ'D BY CODE.

CONSULTANT:



CLIENT:



ELECTRICAL PLAN

CNG FUELING SYSTEM

2433 S 2050 W

OGDEN UT 84401

[illegible]

DATE: 05/12/20

PROJECT #:	1951
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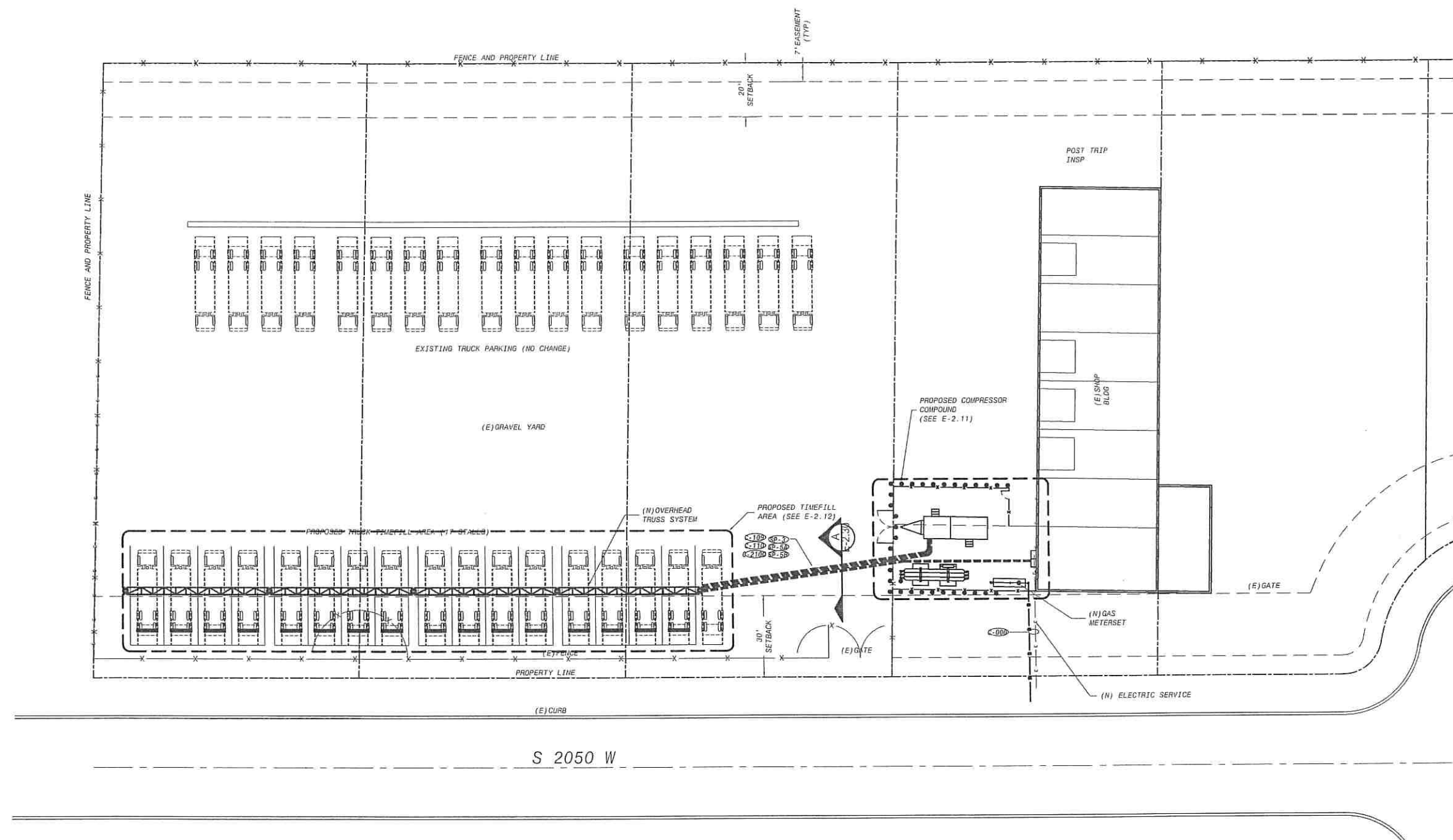
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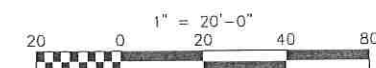
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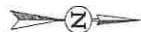
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ELECTRICAL PLAN

SCALE: 1" = 20' - 0"





FIXTURE SCHEDULE

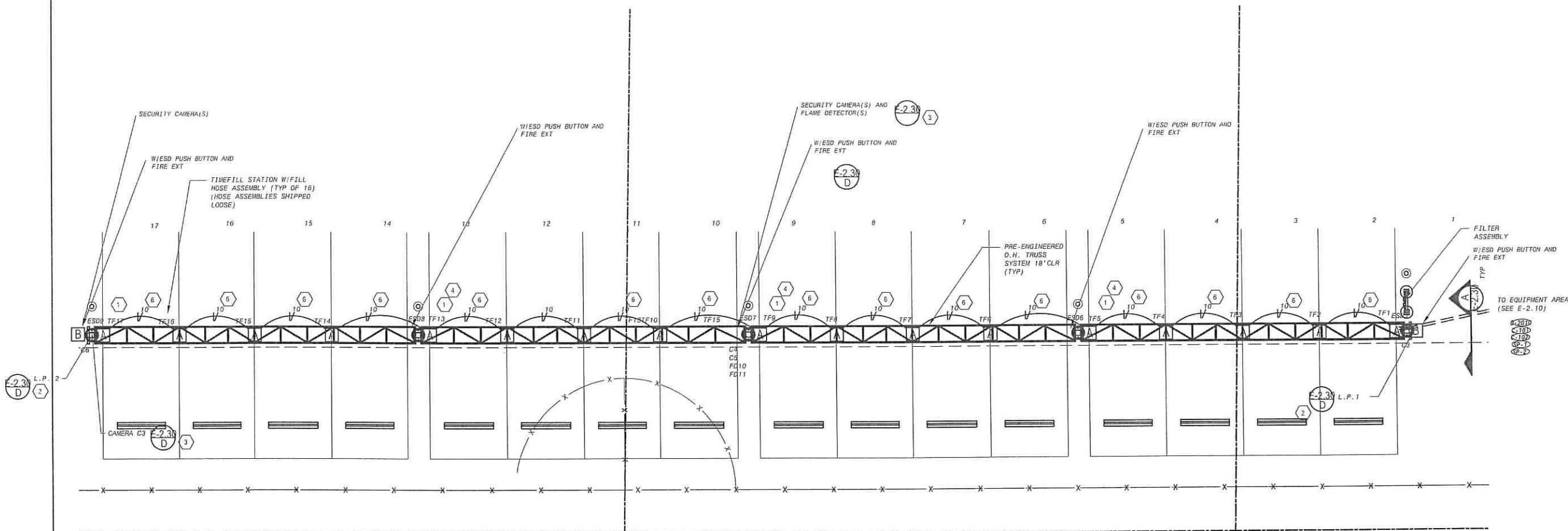
A	LED AISLE LIGHT. 88 WATTS, MULTI-VOLT DRIVER, WHITE HOUSING. LSI CRUS-SC-LED-LW-CW-UE-WHT OWNER FURNISHED PRE-INSTALLED ON TRUSS.
B	LED AREA LIGHT. 278 WATTS, FORWARD THROW, MULTI-VOLT DRIVER, BRONZE HOUSING WITH TENON MOUNT ADAPTER. LSI XLCA-FT-LED-HO-CW-UE-BRZ OWNER FURNISHED CONTRACTOR INSTALLED

SHEET NOTES:

1. EMERGENCY SHUT DOWN PUSH BUTTON. PROVIDE 3/4" CONDUIT W/ (3) #12 (1) #10G. ROUTE CONDUIT UP TO JUNCTION BOX ON TRUSS.
2. YARD LIGHTING. PROVIDE 3/4" CONDUIT W/ (2) #10, (1) #12G. ROUTE CONDUIT UP TO JUNCTION BOX ON COLUMN EXTENSION ABOVE TRUSS.
3. CAMERA AND FLAME DETECTOR. PROVIDE 1-1/4" CONDUIT WITH PULL ROPE TO JUNCTION BOX ON COLUMN EXTENSION ABOVE TRUSS.
4. PROVIDE SEAL-TIGHT CONNECTOR BETWEEN EACH TRUSS JUNCTION BOX. SIZE SAME AS CONDUITS ON TRUSS.
5. PRE-WIRED TO J-BOXES AT EACH END OF EACH TRUSS SECTION. TRUSS TO TRUSS CONNECTION AND VERTICAL RUNS UP TO INDIVIDUAL YARD LIGHTS WITH IMC CONDUIT BY CONTRACTOR.
6. AISLE LIGHTING PRE-INSTALLED AND WIRED TO J-BOXES AT EACH END OF EACH TRUSS SECTION. TRUSS TO TRUSS CONNECTION BY CONTRACTOR.

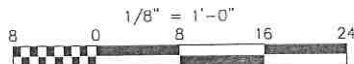
GENERAL NOTES:

1. EQUIPMENT DIMENSIONS AND CONDUIT ROUTING APPROXIMATE. REFER TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST CONDUIT ROUTING TO SUIT FIELD CONDITIONS.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. CONDUIT SEALS REQUIRED WITHIN 10'-FT OF ENTRY OR EXIT INTO NEC DESIGNATED CLASSIFIED SPACE - EXCEPT CONDUITS PASSING ENTIRELY THROUGH WITH NO JOINTS OR FITTINGS WITHIN THE SPACE.



PARTIAL PLAN-TIMEFILL AREA

SCALE: 1/8" = 1'-0"



CONSULTANT:



CLIENT:



PARTIAL PLAN-TIMEFILL AREA
CNG FUELING SYSTEM
2433 S 2050 W
OGDEN UT 84401

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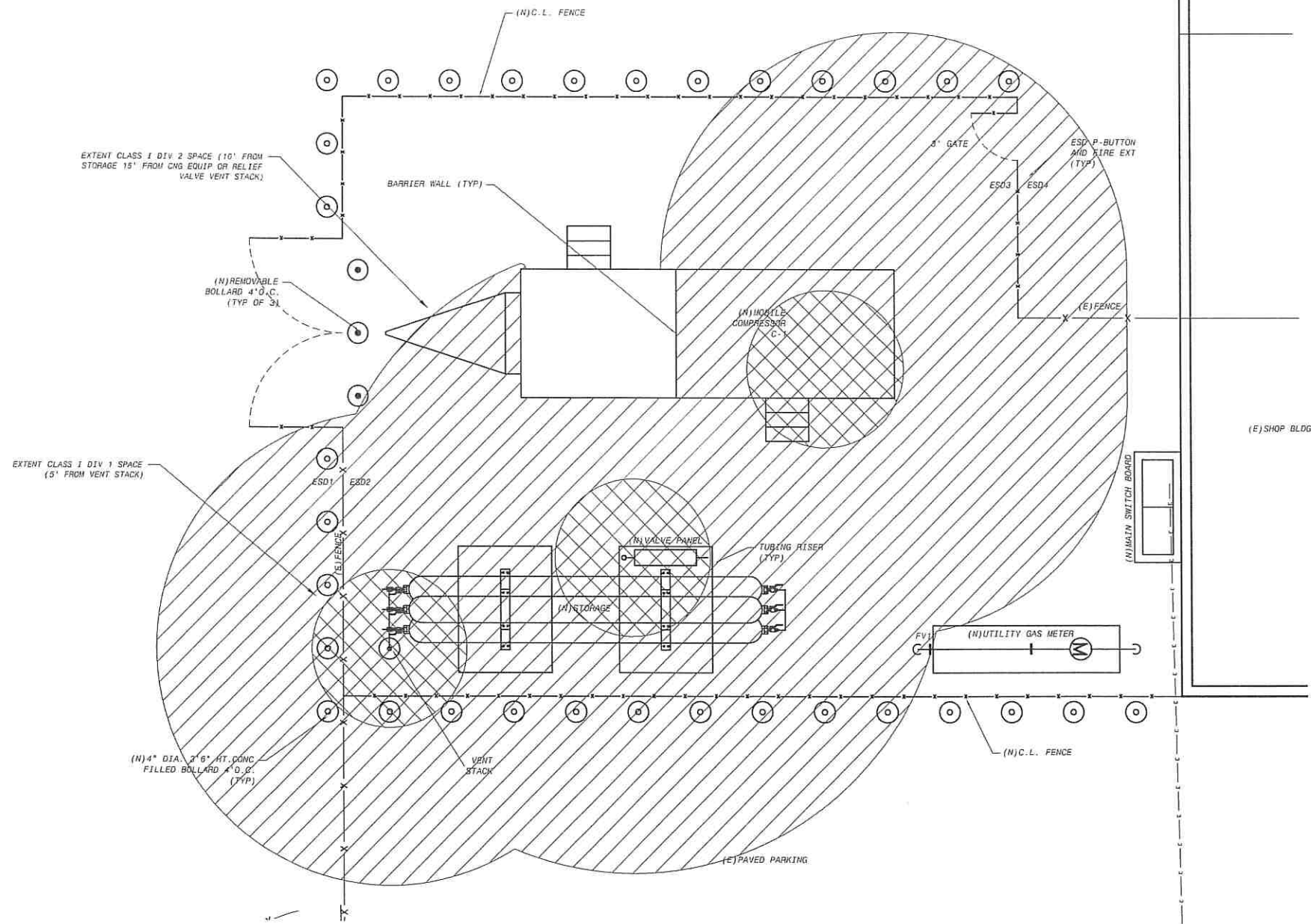
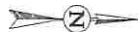
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APPROVED BY: TM

FILENAME: E-2.12

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E-2.12A



AREA CLASSIFICATION PLAN-EQUIPMENT AREA

SCALE: 1/4" = 1'-0"

GENERAL NOTES

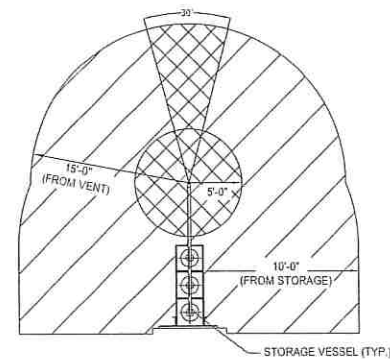
1. DIMENSIONS SHOWN ARE APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. CONDUIT SEALS REQUIRED AT BOTH ENDS OF CONDUITS LEAVING CLASSIFIED AREA(S).



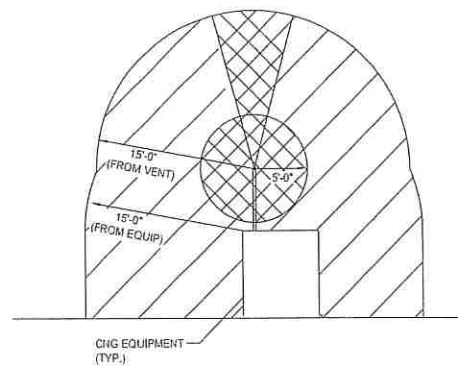
CLASS I, DIV 1 SPACE



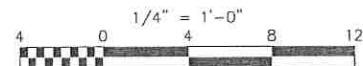
CLASS I, DIV 2 SPACE



ELEVATION- (TYP STORAGE)



ELEVATION- (TYP EQUIP)
SCALE: 1/8" = 1'-0"



CONSULTANT:



CLIENT:



AREA CLASSIFICATION PLAN-EQUIPMENT AREA

CNG FUELING SYSTEM

2433 S 2050 W
OGDEN UT 84401

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PROJECT #: 1951

DRAWN BY: TM

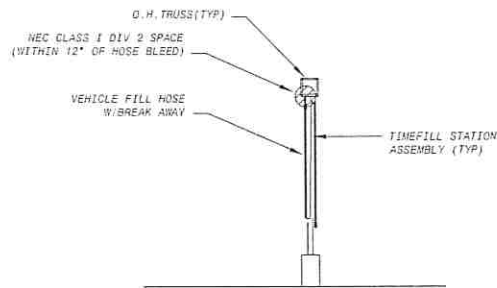
CHECKED BY: TM

APPROVED BY: TM

FILENAME: E-2.13

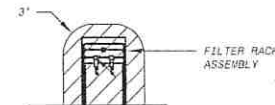
REV0.dwg

E-2.13



ELEVATION- (TYP TIMEFILL STA)

SCALE: 1/8" = 1'-0"



ELEVATION- (AT FILTER ASSEMBLY)

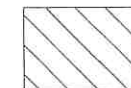
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

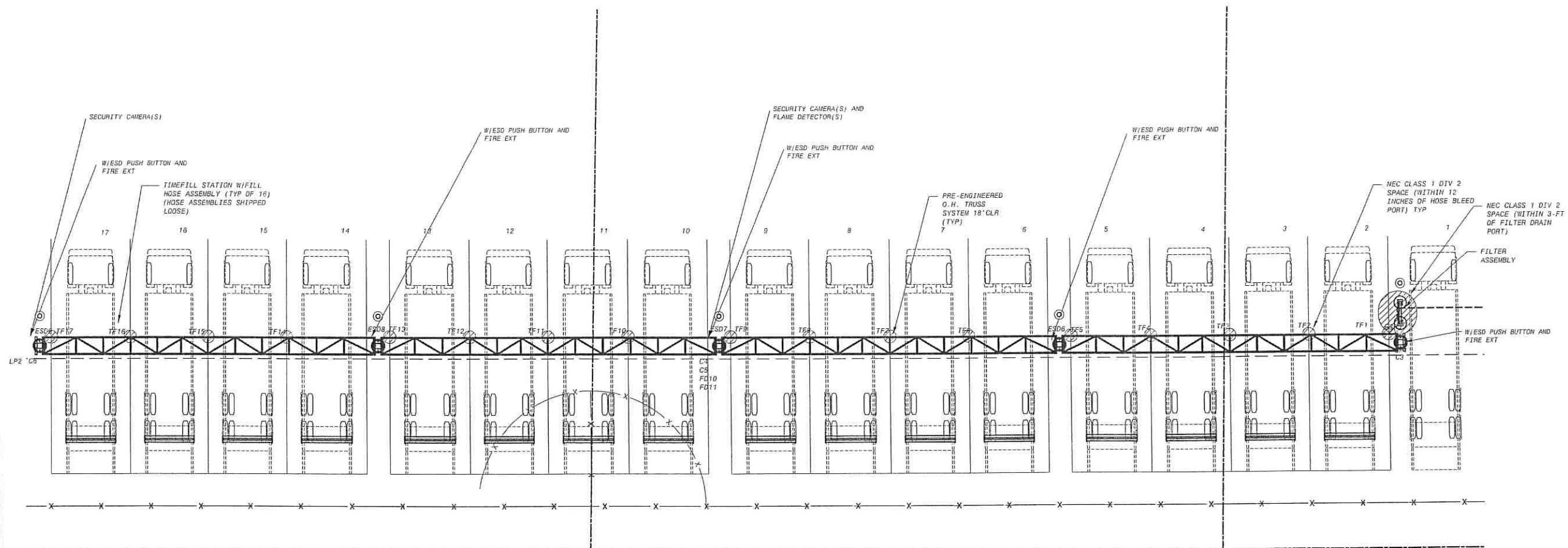
1. EQUIPMENT DIMENSIONS AND CONDUIT ROUTING APPROXIMATE. REFER TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST CONDUIT ROUTING TO SUIT FIELD CONDITIONS.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. CONDUIT SEALS REQUIRED WITHIN 10-FT OF ENTRY OR EXIT INTO NEC DESIGNATED CLASSIFIED SPACE - EXCEPT CONDUITS PASSING ENTIRELY THROUGH WITH NO JOINTS OR FITTINGS WITHIN THE SPACE.



CLASS I, DIV 1 SPACE
(WITHIN DISPENSER OR
DISPENSER PIT, 5' FROM
VENT STACK)

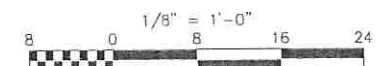


CLASS I, DIV 2 SPACE
(5' FROM DISPENSER OR
FILL POST, 15' FROM
VENT STACK)



AREA CLASSIFICATION PLAN-TIMEFILL AREA

SCALE: 1/8" = 1'-0"



CONSULTANT:



CLIENT:



AREA CLASSIFICATION PLAN-TIMEFILL

CNG FUELING SYSTEM

2433 S 2050 W
OGDEN UT 84401

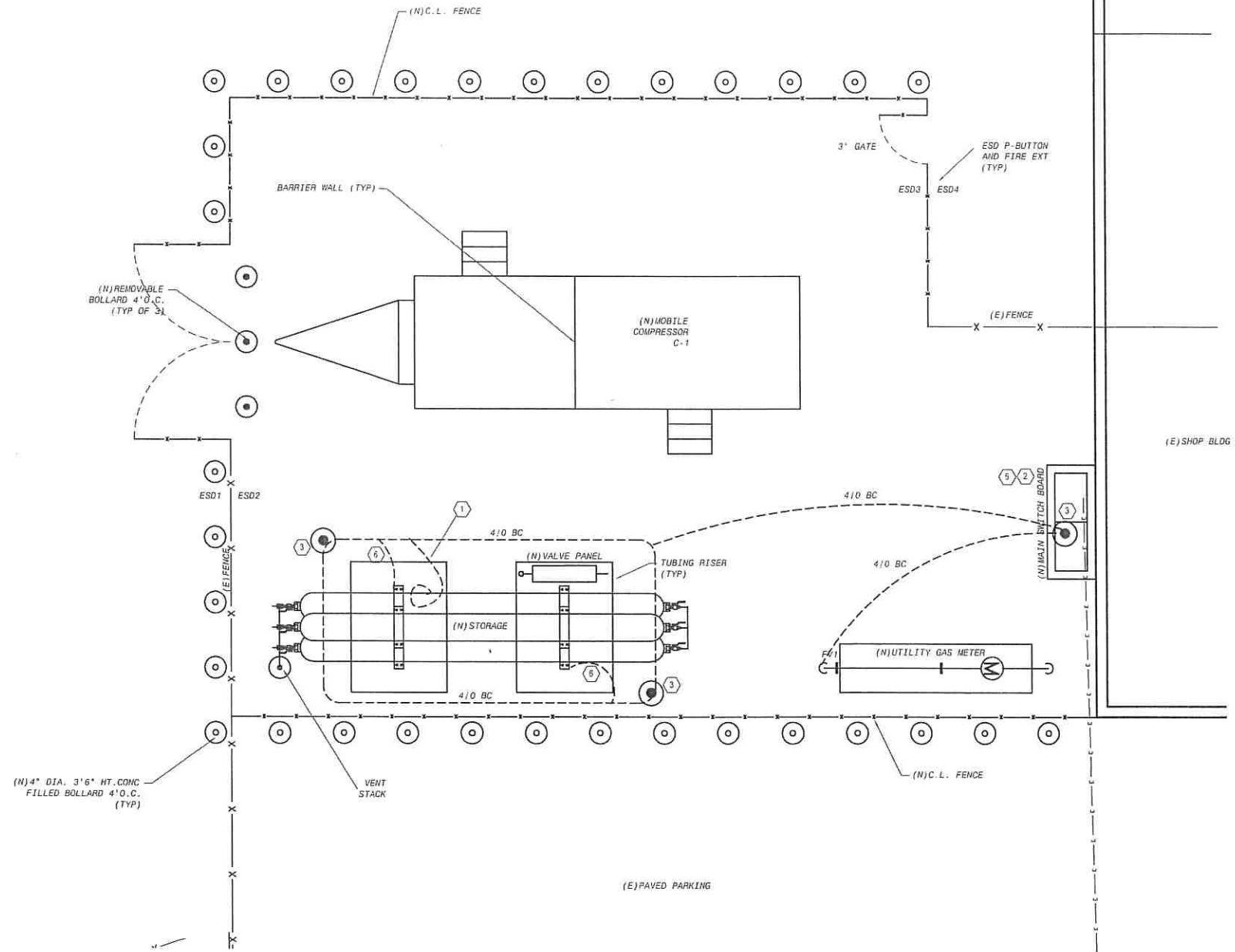
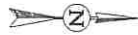
REVISIONS:

SET ISSUE:	DATE:
06/01/20	05/12/20

DATE: 05/12/20

PROJECT #: 1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: E-2.14
REV0.dwg

E-2.15A



GROUNDING PLAN-EQUIPMENT AREA

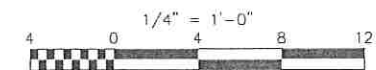
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. DIMENSIONS SHOWN AND ROUTING APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST TO SUIT FIELD CONDITIONS.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. REFER TO OTHER DRAWINGS FOR DETAIL NOT SHOWN.
4. ROUTING SHOWN IS APPROXIMATE.
5. DIRECTIONAL BORING MAY BE USED FOR LONG UNDERGROUND PIPING OR ELECTRICAL RUNS. COORDINATE CONSTRUCTION WITH OTHER TRADES.

SHEET NOTES:

1. CADWELD #4/0 PIGTAIL TO SLAB REBAR - LOCATIONS MINIMUM
2. CONNECT #2/0 PIGTAIL TO GROUND BUS AT MAIN SWBD. COORDINATE LOCATION WITH ACTUAL SWITCHGEAR FURNISHED
3. SEE TYPICAL GROUND ROD SEE DETAIL E-2.30 (PROVIDE WELL WHERE REQ'D)
4. ALL BURIED GROUND CONNECTIONS SHALL BE CADWELDED
5. PROVIDE POLE RISER, AND TRANSFORMER GROUNDING PER NEC STD'S
6. PROVIDE #1 PIGTAIL FOR EQUIPMENT GROUND.



CONSULTANT:



CLIENT:



GROUNDING PLAN-EQUIPMENT AREA

CNG FUELING SYSTEM

2433 S 2050 W
OGDEN UT 84401

REVISIONS:	DATE:
SET/ISSUE:	05/12/20
0/FOR REVIEW	

DATE: 05/12/20

PROJECT #:	1951
DRAWN BY:	TM
CHECKED BY:	TM
APPROVED BY:	TM
FILENAME:	E-2.15
	REV0.dwg

E-2.16

SHEET NOTES:

- 1 SEE TYPICAL GROUND ROD (PROVIDE WELL WHERE REQ'D:
DETAIL B/E-3.10)
- 2 ALL BURIED GROUND CONNECTIONS SHALL BE CADWELDED
- 3 BOND #4/0 BC GROUND TO STEEL TRUSS COLUMN
- 4 #2 GROUND BOND EQUIPMENT FRAME

GENERAL NOTES:

1. DIMENSIONS SHOWN AND ROUTING APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION. ADJUST TO SUIT FIELD CONDITIONS.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.
3. REFER TO OTHER DRAWINGS FOR DETAIL NOT SHOWN.
4. ROUTING SHOWN IS APPROXIMATE.
5. DIRECTIONAL BORING MAY BE USED FOR LONG UNDERGROUND PIPING OR ELECTRICAL RUNS. COORDINATE CONSTRUCTION WITH OTHER TRADES.

CONSULTANT:



CLIENT:



GROUNDING PLAN-TIMEFILL AREA

CNG FUELING SYSTEM

FUELING SY.
2433 S 2050 W

2433 S 2050 W
GODEN UT 84401

REVISIONS:

SET ISSUE:	DATE:
0 FOR REVIEW	05/12/20

DATE: 05/12/20

PROJECT #:	1951
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PROJECT 9, 1951
DRAWN BY:

CHECKED BY: _____
APPROVED BY: _____

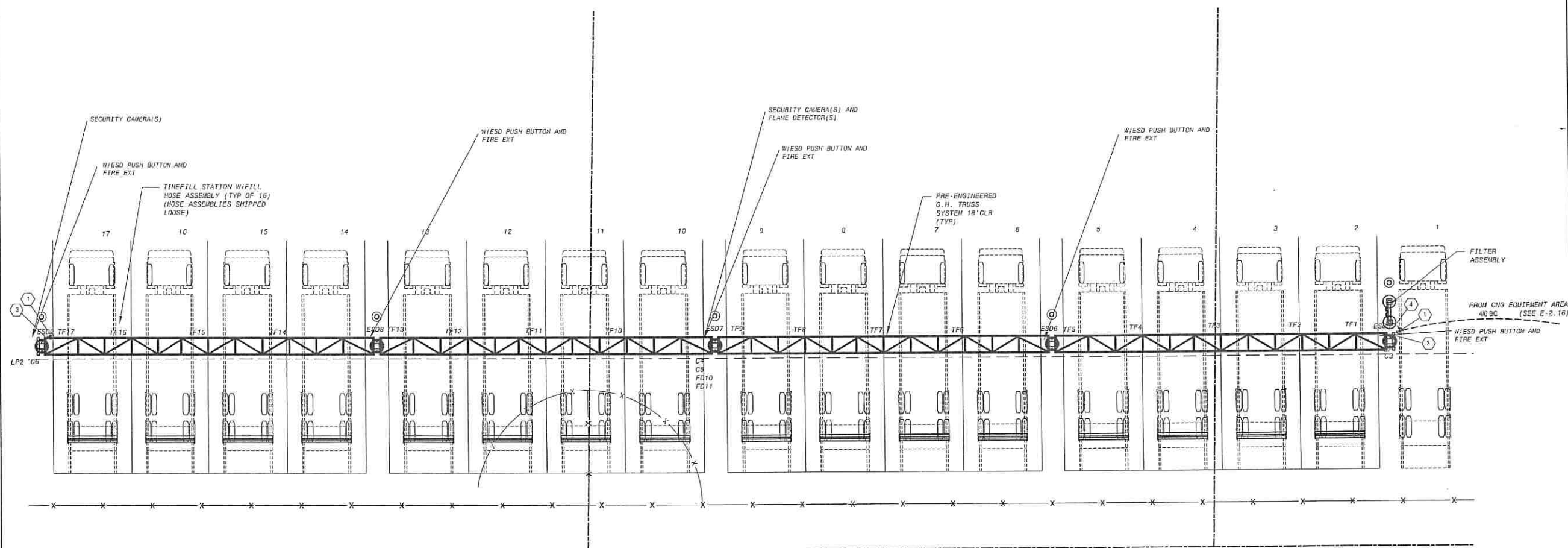
APPROVED BY: _____
FILENAME: F-2.18

FILENAME.	E-2.1
	REV0

724

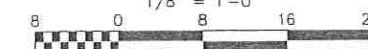
E-2.1

2000



GROUNDING PLAN-TIMEFILL AREA

SCALE: 1:B'' = 1' : 0"

$$1/8" = 1'-0"$$


D-2		CODE REFERENCE: CAGI B19-2010 SECTION 2.1.13.1 COLORS: RED "DANGER" SYMBOL, WHITE BACKGROUND, BLACK LETTERING
D-3		CODE REFERENCE: NONE COLORS: RED "DANGER" SECTION, WHITE BACKGROUND, BLACK LETTERING
W-2		CODE REFERENCE: 2012 NFPA 30A 9.2.5.4 COLORS: RED "WARNING" HEADER, WHITE BACKGROUND, BLACK LETTERING
N-1		CODE REFERENCE: OSHA 29 CFR 1910.157(C)(1) COLORS: RED BACKGROUND, WHITE LETTERING
N-3		CODE REFERENCE: 2013 NFPA 52 7.11.5.2 COLORS: WHITE BACKGROUND, RED LETTERING
N-7		CODE REFERENCE: NONE COLORS: BLUE HEADER, WHITE BACKGROUND, BLACK LETTERING
N-8		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND, BLACK LETTERING
N-10		CODE REFERENCE: 2012 NFPA 704 4.2.3.3 COLORS: BLACK LETTERING, BACKGROUNDS: LEFT-BLUE, TOP-RED, RIGHT-YELLOW, BOTTOM-WHITE NOTE: "CNG" LETTERING SHALL BE SHOWN INSIDE THE BOTTOM WHITE DIAMOND
N-23		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND, BLACK LETTERING, COLORED LOGOS CEC 24/7 CALL SERVICE NUMBER: 1-866-278-3674 CEC SERVICE CONTACT EMAIL: CONTRACTS@CLEANENERGYFUELS.COM ANGI 24/7 CALL SERVICE NUMBER: 1-800-934-5219
N-29		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING NOTE: POST LABEL ON TWO SIDES OF EACH HOSE RETRACTOR
N-30		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING
N-31		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING
N-32		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING
N-33		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING
N-34		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND, BLACK LETTERING
N-37		CODE REFERENCE: NONE COLORS: WHITE BACKGROUND WITH BLACK LETTERING AND NUMBERING
CS-1		CODE REFERENCE: OSHA 29 CFR 1910.95, 2012 NFPA 30A 9.5.3, 2013 NFPA 52 7.14.12.1 COLORS: VARIOUS
CS-2		CODE REFERENCE: 2013 NFPA 52 7.14.12, 2013 NFPA 52 7.11.5.2, 2012 NFPA 30A 9.5.3 COLORS: VARIOUS

SIGN NAMING CONVENTION

X-XX-X MATERIAL
SIGN DESIGNATION FROM SCHEDULE A=0.040" ALUMINUM
D=DECAL (EXTERIOR-RATED VINYL)

NOTES:

- ALL SIGNS SHALL BE IN ACCORDANCE WITH OSHA SPECIFICATIONS 1910.145 AND ANSI SPECIFICATIONS Z535.
- ALL SIGNS SHALL BE SUITABLE FOR OUTDOOR USE. SIGNS SHALL MEET THE FOLLOWING STANDARDS OF QUALITY:
 - DECALS SHALL BE PRINTED 3M SCOTCHCAL GRAPHIC FILM SERIES 3690 OR EQUAL.
 - ALUMINUM SIGNS SHALL BE MANUFACTURED BY PANDUIT OR APPROVED EQUAL. ALUMINUM SIGNS SHALL BE CONSTRUCTED OF 0.040" ALUMINUM AND SHALL HAVE AN OUTDOOR DURABILITY RATING OF 5-8 YEARS.
- VENDORS LISTED ARE ONLY FOR ESTABLISHING STANDARDS OF QUALITY AND PERFORMANCE. OTHER MANUFACTURERS MAY BE SUBSTITUTED IF APPROVED.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL SIGNAGE AS SHOWN ON DRAWINGS. IN ADDITION, THE CONTRACTOR SHALL TAG ALL EQUIPMENT AND VALVES AND SHALL LABEL ALL LINES WITH BOTH FLOW DIRECTION AND CONTENTS WHERE THE LINE PASSES THROUGH A BARRIER, NEAR EVERY VALVE, AND EVERY 20-FT RUN IN ACCORDANCE WITH ANSI A13.1 2007. LINES MAY BE COLOR CODED WHERE TOO SMALL FOR LETTERING TO BE LEGIBLE. LABELS SHALL BE VINYL WRAPAROUND SETON OR EQUAL.
- SIGNS SHALL BE PROVIDED AND INSTALLED WITH NECESSARY BRACKETS, SUPPORTS AND HARDWARE. BRACKETS, SUPPORTS AND HARDWARE SHALL BE GALVANIZED. ALL HARDWARE SHALL BE VANDAL AND TAMPER RESISTANT.
- WHERE SIGNAGE IS TO BE ATTACHED TO EXTERIOR SURFACE OF EQUIPMENT, SUCH AS COMPRESSOR ENCLOSURE OR DISPENSER FRONT PANEL, SIGN MATERIAL SHALL BE SELF ADHESIVE VINYL. APPLY ADHESIVE ONLY TO CLEAN AND DRY SURFACES.
- SIGNS SHALL BE LOCATED FOR EASY VISIBILITY FROM ALL SIDES.
- ALL ELECTRICAL DEVICES AND DISCONNECTS SHALL BE LABELED IN ACCORDANCE WITH CURRENT NEC REQUIREMENTS. EXTERIOR PANEL LABELING SHALL, AT A MINIMUM, INCLUDE NAME, PANEL VOLTAGE AND PHASE, LOCATION OF DISCONNECTS, ARC FLASH HAZARD WARNING.
- DRILL MOUNTING HOLES IN ALUMINUM SIGNS USING A 3/16" DRILL BIT FOR THE CHAIN LINK FENCE MOUNTING BRACKET WHEN NECESSARY.
- LABEL ALL PANELS AND SWITCHBOARDS IN ACCORDANCE WITH THE NEC ARTICLE 408. ENSURE THAT EACH PANEL HAS ITS SOURCE OF SUPPLY AND SUPPLY VOLTAGE CLEARLY MARKED.
- INCLUDE ALL LABELING PER NEC REQUIREMENTS (SELF ADHESIVE VINYL OR ENGRAVED PLASTIC LAMINATED LABEL ATTACHED WITH FASTENERS). INCLUDE THE FOLLOWING ON ALL PANELS:
 - PANEL NAME, VOLTAGE, PHASES
 - WHERE THE PANEL IS FED FROM
 - DESCRIPTION FOR EACH CIRCUIT
 - BREAKER AMPERAGE AND POLES
 - SPARE BREAKERS
 - LOAD SUMMARY
 - ARC FLASH HAZARD WARNING
 - AIC RATING

PADLOCKS

- PRESSURE RELIEF VALVES: MASTER LOCK - RED
GRAINGER ITEM #4RD94 NOTE: ONE SIGN 'N-32' REQ'D FOR EACH.
- GATES: MASTER LOCK - BLACK
GRAINGER ITEM #4RD90
- JOB BOX: MASTER SIZE 5 (REKEYABLE)
GRAINGER ITEM #3HUJ3 KEY TO MATCH #4RD90 (GATE LOCK) ABOVE

CONSULTANT:



SEAL:



CLIENT:



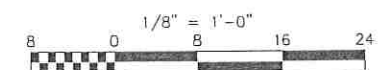
SAFETY SIGNAGE NOTES AND DETAILS
CNG VEHICLE FUELING SYSTEM
40950 COUNTY ROAD 25,
AULT, CO

REVISIONS:	DATE:
SET ISSUE:	08/21/18
01 FOR REVIEW	01/11/18
11 ADDED TRUSS	01/11/18
21 FOR PERMIT	01/15/18

DATE: 07/16/18

PROJECT #: 1832
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: SI-1.10.dwg

SI-1.10





GENERAL NOTES

1. DIMENSIONS SHOWN ARE APPROXIMATE. REFER TO DETAILED DESIGN DRAWINGS AND TO CERTIFIED VENDOR DRAWINGS FOR CONFIRMATION AND ADDITIONAL INFORMATION.
2. ALL SITE IMPROVEMENTS EXISTING UNLESS NOTED OTHERWISE.

LEGEND

XX SAFETY SIGNS SEE SI-1.10 FOR DETAILS

SHEET NOTES

1. CONTRACTOR SHALL FURNISH AND INSTALL SIGNS TO IDENTIFY NEW CAMERAS, FLAME DETECTORS, TIMEFILL STATIONS, ESD PUSH BUTTON STATIONS, AND LIGHT POLES (SIGN NUMBER N-29). COORDINATE SPECIFIC IDENTIFIERS WITH ELECTRICAL DRAWINGS.

CONSULTANT:



CLIENT:



TIMEFILL AREA A SIGNAGE PLAN (1 OF 2)

CNG FUELING SYSTEM

2433 S 2050 W
OGDEN UT 84401

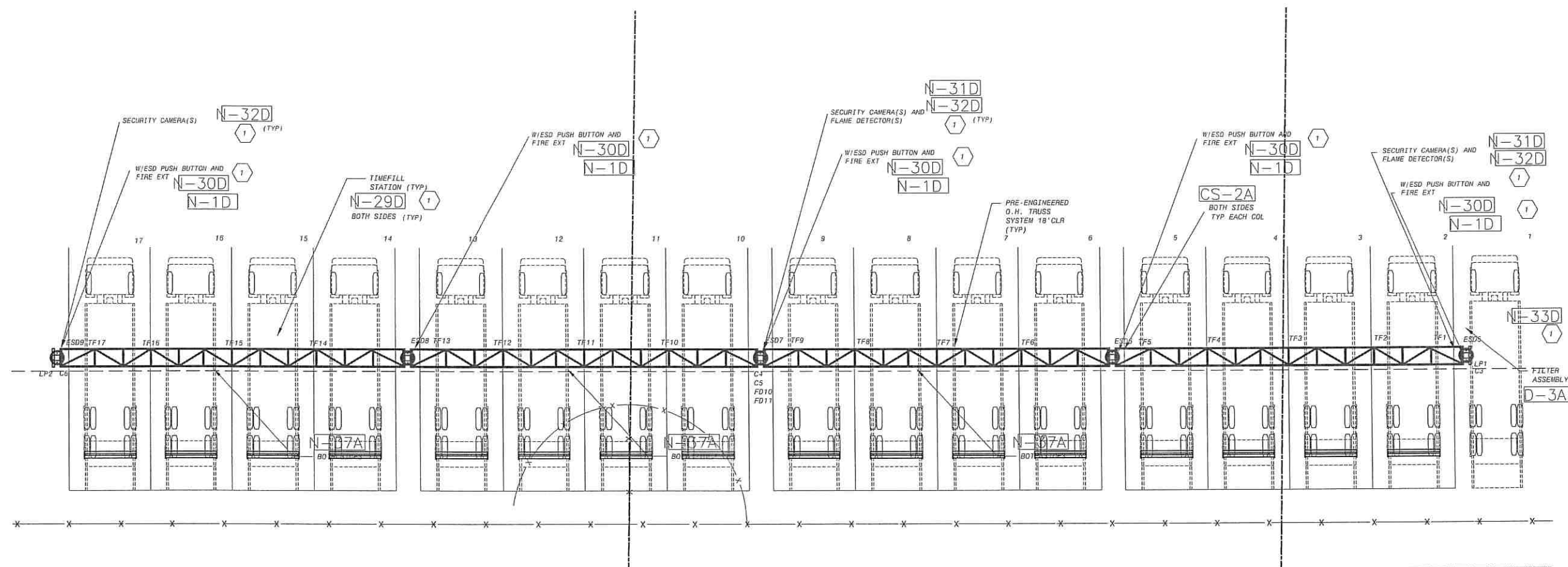
REVISIONS:

SET ISSUE: DATE: 05/12/20
FOR REVIEW

DATE: 05/12/20

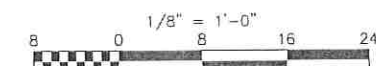
PROJECT #: 1951
DRAWN BY: TM
CHECKED BY: TM
APPROVED BY: TM
FILENAME: SI-2.12
REV0.dwg

SI-2.12A



SIGNAGE PLAN-TIMEFILL AREA 'A'

SCALE: 1/8" = 1'-0"





ZONING MAP AMENDMENT APPLICATION

West Haven City Planning Commission

4150 S 3900 W

West Haven, UT

801-731-4519

Owners Name: JOHNNY PALANO Phone: 801-870-0320 Fax: _____
Address: 1087 W. 700 N. City: BOONVILLE State UT Zip 84087

Agents Name: _____ Phone: _____ Fax: _____
Address: _____ City: _____ State: _____ Zip: _____

Property Address: 4095 S. 3500 W. Parcel # _____
WEST HAVEN, UTAH 84401

Existing Zone A-2 Proposed Zone C-2 No. of Acres/Sq. Ft. 1.03 ACRES
What Use is requested? PROFESSIONAL OFFICE / AUTOMOBILE
MAINTENANCE

OFFICE USE

Scheduled for Planning Commission Agenda 7/22/2020

Request for Recommendation sent to the following agencies:

Fire District -Date NA Water District; Name NA Date _____
Questar Gas -Date NA UDOT - Date NA
Rocky Mtn. Power -Date NA Century Link - Date NA

PLANNING COMMISSION ACTION:

APPROVED _____ DATE _____ DENIED _____ DATE _____

CITY COUNCIL:

APPROVED _____ DATE _____ DENIED _____ DATE _____

Fee: 200- Date Paid: July 9, 2020

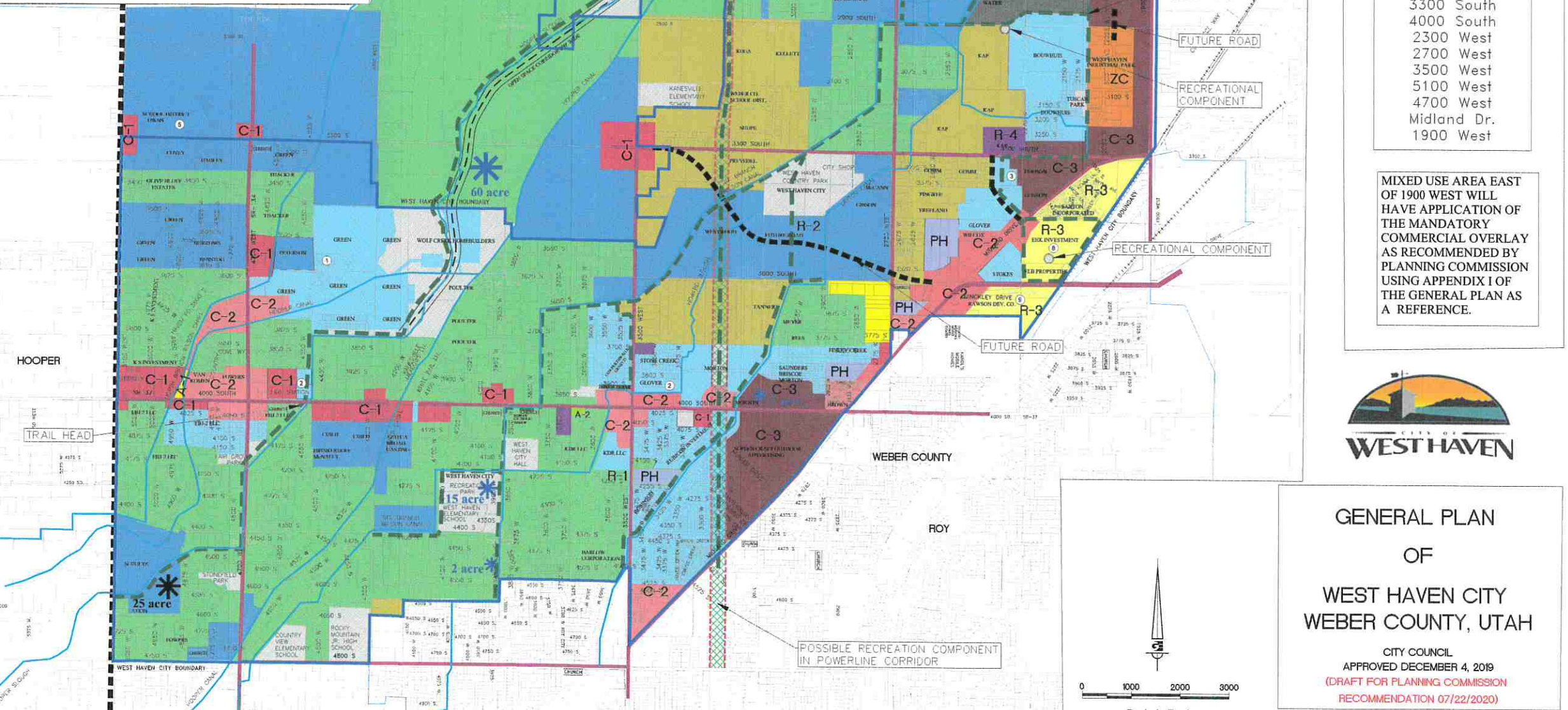
Comments:

LEGEND

- PROPOSED ARTERIAL / COLLECTOR ROAD
- EXISTING ARTERIAL / COLLECTOR ROADS
- UTAH POWER & LIGHT CORRIDOR
- TRAIL SYSTEM
- AGRICULTURE (A-1)
- AGRICULTURE (A-2)
- COMMERCIAL (C-1)
- COMMERCIAL (C-2)
- COMMERCIAL (C-3)
- HEAVY INDUSTRIAL (M-2)
- LIGHT INDUSTRIAL (M-1)
- MIXED USE ZC HIGH / MEDIUM / LOW DENSITY RESIDENTIAL & COMMERCIAL
- 1 UNITS PER ACRE - 20,000 SQFT MIN (R-1)
- 2 UNITS PER ACRE - 12,500 SQFT MIN (R-2)
- 2.5 UNITS PER ACRE - 10,000 SQFT MIN (R-2.5)
- MULTI-FAMILY UNITS (R-3) - SEE KEYNOTES FOR DENSITY
- 4 UNITS PER ACRE - 8,000 SQFT MIN (R-4)
- PH ZONE
- DRINKING WATER TREATMENT FACILITY
- DETENTION BASIN
- PARKS / PUBLIC OPEN SPACES / SCHOOLS
- OPEN SPACE / RECREATION / RESIDENTIAL (1 ACRE DENSITY)

KEY NOTES

- 1 MIXED USE: LOW DENSITY
- 2 MIXED USE: MEDIUM / LOW DENSITY
- 3 MIXED USE: MEDIUM / HIGH DENSITY
- 4 MIXED USE: HIGH DENSITY
- 5 FUTURE SCHOOL
- C MANDATORY COMMERCIAL OVERLAY
- 6 5 UNITS PER ACRE
- 7 10 UNITS PER ACRE
- 8 12 UNITS PER ACRE
- 9 24 UNITS PER ACRE



BIKE ROUTES

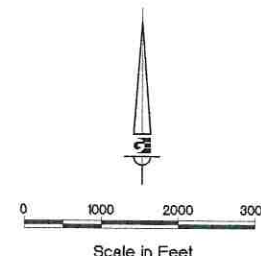
1800 South
2100 South
2550 South
3300 South
4000 South
2300 West
2700 West
3500 West
5100 West
4700 West
Midland Dr.
1900 West

MIXED USE AREA EAST OF 1900 WEST WILL HAVE APPLICATION OF THE MANDATORY COMMERCIAL OVERLAY AS RECOMMENDED BY PLANNING COMMISSION USING APPENDIX I OF THE GENERAL PLAN AS A REFERENCE.



GENERAL PLAN OF WEST HAVEN CITY WEBER COUNTY, UTAH

CITY COUNCIL
APPROVED DECEMBER 4, 2019
(DRAFT FOR PLANNING COMMISSION
RECOMMENDATION 07/22/2020)



DEVELOPMENT AGREEMENT

Staker Farms 1st Amendment

This Development Agreement (this "Agreement") is made and entered into and made effective as of the date entered below (the "Effective Date"), by and among West Haven City, a municipality and political subdivision of the State of Utah (the "City") and Castle Creek Homes, a Utah limited liability company (the "Developer"). The City and Developer may from time to time be collectively referred to as the "Parties," and each may be referred to individually as "**Party.**"

RECITALS

A. Developer has prepared and presented to the City a development application for the Staker Farms development (hereinafter referred to as the "Project"). The application package has been submitted and is being reviewed by the City pursuant to the requirements of the City Code and related protocols and policies and other applicable zoning, engineering, fire safety and building requirements. The resulting preliminary and final approved development plan, preliminary and final approved site plan, preliminary and final approved subdivision plat, approved engineering drawings, conveyance documents, title reports and other documents submitted during the City's review and approval process will be referred to herein as the "**Staker Farms Development Documents**" or the "**Development Documents**".

B. Pursuant to the authority of *Utah Code Ann*§. r 10-9a-102(2) and the specific provisions of the City Code, the City has determined to enter into this Agreement with Developer for the purpose of formalizing certain obligations of the Parties with respect to the Project, and such other matters as the City and the Developer have agreed.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

ARTICLE I

LEGAL AUTHORITY AND PURPOSE

1.1 City Laws and Purpose. The City represents that it has the legal authority to enter into and perform its obligations under this Agreement and that the City has determined that this Agreement effectuates the above-referenced public purposes, objectives and benefits.

1.2 Conditions Precedent. Each of the Parties is entering into this Agreement in anticipation of the satisfaction of certain conditions precedent, which, if not satisfied, will

frustrate the purposes of this Agreement. Accordingly, if the Conditions Precedent are not satisfied or otherwise waived by the Parties, this Agreement shall be rendered null and void and none of the Parties shall have any further obligation to the other arising out of this Agreement. The Parties recognize that some of the Conditions Precedent may be satisfied contemporaneously with or prior to the execution of this Agreement, but such Conditions Precedent have been identified herein for purposes of setting forth the intent of the Parties. For purposes of this Agreement, the following shall constitute the "**Conditions Precedent**":

1.5.1 the final non-appealable approval and acceptance of this Agreement by the City Council;

1.5.2 the final conditional administrative approval of the subdivision plat for Staker Farms;

1.5.3 recording of the Staker Farms plat.

ARTICLE II PROJECT DEVELOPMENT

2.1 Developer Obligations.

2.1.1 Development. **The Property Description is shown in Exhibit A.** The Project will consist of the improvements as shown in Exhibit B. Project will consist of ~~142~~**125** new construction lots as shown in Exhibit **BA**. Phasing can be changed up to 20% of Exhibit **BA**. Any changes to the phasing greater than 20% must be approved by planning commission and city council.

2.1.2 **Conveyance or Dedication of Required Easements/Roads/Park/Trails.**

A. Easements. Developer shall convey or dedicate to the City or other applicable utility provider at no cost such required utility easements on or across the Project as are necessary to facilitate the extension of required utility services to and throughout the Project.

B. Roads. City to pay for road widening and improvements along 3500 West in front of Development and park.

C. Park. Developer shall deed to city 7.6 acres of land for park along with all improvements installed in park as submitted in Exhibit **CB**. Park to be started and escrowed or completed prior to recording phase 2. Phase 3 can not be recorded until park is completed. City to contribute park impact fees for 125 lots at time of park being started. Details of park shall include the following-

Sprinklers on all grass areas

Trees as shown in Exhibit B. Trees to be 1 1/2" caliper tree for shade trees and 6' evergreen trees.

Tot Lot as shown in Exhibit C. Tot lot to have exterior concrete border and have wood chips installed under it.

Bowery similar to Exhibit D. Size to be 20' x 30'

Restroom constructed with brick block and metal roof. Bathroom to have 2 stalls and sink in both men's and women's side.

Sidewalks as shown in Exhibit B of park.

Park Benches to be installed as shown in Exhibit B.

Bridge from park to Staker Farms across the slough.

Parking area with parking for 56 cars and lighting sufficient for parking area.

The Developer will contribute \$80,000.00 toward park improvements for adding parcel numbers 15-088-004, & 0036, a total of 17 additional lots.

D. Trails. Developer shall design, construct and dedicate to the City the trail that is depicted on Exhibit B. The trail shall include 3 inch asphalt and 8 inches of road base for a 10 foot wide trail.

2.2 City Obligations.

A. As consideration for Developers agreement with the City as to Exhibit A, the City agrees to pay for the half width improvements on the west side of 3500 West Street including the storm drain along side said road in front of development and park from road impact fees. Fees shall be paid upon completion and inspection from city.

2.3 Development to be Consistent with the Development Documents. Except as expressly provided in this Agreement, all development, whether by the Developer or a successor in interest, will be consistent with this Agreement and the approved Development Documents.

ARTICLE IV DEFAULT AND COSTS

4.1 **Default.** In the event of a failure by any party to comply with the commitments set forth herein, within thirty (30) days of written notice of such failure from the other party, the non-defaulting party shall have the right to pursue any or all of the following remedies, which right shall be cumulative:

4.1.1 To cure such default or enjoin such violation and otherwise enforce the requirements contained in this Agreement; and

4.1.2 To enforce all rights and remedies available at law and in equity including, but not limited to, injunctive relief, specific performance and/or damages.

4.2 **Court Costs and Attorneys. Fees.** In the event of any legal action or defense between the Parties arising out of or related to this Agreement, or any of the documents provided for herein, the prevailing party shall be entitled, in addition to the remedies and damages, if any awarded in such proceedings, to recover their costs and reasonable attorneys' fees.

ARTICLE VI GENERAL MATTERS

6.1 **Amendments.** Any alteration or change to this Agreement shall be made only after complying with the same procedures followed for the adoption and approval of this Agreement.

6.2 **Laws and Forum.** This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors and assigns, and shall be construed in accordance with Utah law. Any action brought in connection with this Agreement shall be brought in a court of competent jurisdiction located in Weber County, Utah.

6.3 **Legal Representation.** Each of the Parties hereto acknowledge that they either have been represented by legal counsel in negotiating this Agreement or that they had the opportunity to consult legal counsel and chose not to do so.

6.4 **No Third Party Rights.** Unless otherwise specifically provided herein, the obligations of the Parties set forth in this Agreement shall not create any rights in or obligations to any other persons or third parties.

6.5 **Notices.** All notices shall be in writing and shall be deemed to have been sufficiently given or served when presented personally or when deposited in the United States mail, by registered or certified mail, addressed as follows:

The City: West Haven City
4150 S. 3900 W.
West Haven, Utah 84401
Attention: Steve Anderson

Developer: Castle Creek Homes

1798 West 5150 South #103

Roy Utah 84067

Attention: Bryce Thurgood

Such addresses may be changed by notice to the other party given in the same manner as above provided. Any notice given hereunder shall be deemed given as of the date delivered or mailed.

6.9 Entire Agreement. This Agreement, together with the Exhibits attached hereto, documents referenced herein and all regulatory approvals given by the City for the Project, contain and constitute the entire agreement.

6.10 Effective Date. This Agreement shall be effective upon the signing and execution of this Agreement by all Parties which, upon its occurrence, shall be deemed to have occurred as of the Effective Date.

6.11 Termination. This Agreement shall terminate upon mutual written agreement of the parties hereto, failure of the Conditions Precedent to occur on or before one year after the Effective Date.

6.12 Further Action. The Parties hereby agree to execute and deliver such additional documents and to take all further actions as may become necessary or desirable to fully carry out the provisions and intent of this Agreement.

[Signature Page Follows]

Exhibit A

Property Description

All of Staker Farms – Phase 1 Entry No.3054534

Parcel 15-088-0048

PART OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A BRASS CAP MONUMENT MARKING THE EASTQUARTER CORNER OF SAID SECTION 33, AND RUNNING THENCE NORTH 89°08'48" WEST 1736.88 FEET, MORE OR LESS, TO AN EXISTING FENCE; THENCE ALONG SAID FENCE THE FOLLOWING THREE (3) COURSES: (1) NORTH 00°43'34" EAST 851.15 FEET (2) NORTH 00°48'46" EAST 948.76 FEET (3) NORTH 00°37'53" EAST 859.63 FEET, MORE OR LESS TO THE NORTHERLY LINE OF SAID SECTION 33, THENCE SOUTH 89°07'48" EAST 240.16 FEET ALONG SAID NORTHERLY LINE, THENCE SOUTH 00°43'34" WEST 175.62 FEET, THENCE SOUTH 89°08'48" EAST 178.11 FEET, THENCE SOUTH 01°01'05" WEST 843.44 FEET, THENCE SOUTH 88°58'55" EAST 522.85 FEET, MORE OR LESS, TO THE PROJECTION OF AN EXISTING FENCE, THENCE ALONG SAID FENCE, AND PROJECTION THEREOF, THE FOLLOWING SIX (6) COURSES: (1) SOUTH 00°55'10" WEST 500.68 FEET, (2) SOUTH 89°24'29" EAST 155.99 FEET (3) NORTH 89°31'06" EAST 68.40 FEET (4) SOUTH 89°38'49" EAST 202.03 FEET (5) NORTH 89°59'01" EAST 211.17 FEET (6) SOUTH 89°24'54" EAST 168.06 FEET, MORE OR LESS, TO THE EASTERLY LINE OF SAID SECTION 33, THENCE SOUTH 00°55'08" WEST 293.26 FEET ALONG SAID EASTERLY LINE, THENCE NORTH 89°04'52" WEST 300.40 FEET, THENCE SOUTH 00°55'08" WEST 191.78 FEET, THENCE NORTH 89°04'52" WEST 8.00 FEET, THENCE SOUTH 00°55'08" WEST 141.83 FEET, THENCE NORTH 55°52'10" EAST 9.77 FEET, THENCE NORTH 67°55'23" EAST 135.66 FEET, THENCE SOUTH 89°04'52" EAST 175.52 FEET, MORE OR LESS, TO SAID EASTERLY LINE OF SAID SECTION 33, THENCE SOUTH 00°55'08" WEST 578.03 FEET ALONG SAID EASTERLY LINE TO THE POINT OF BEGINNING.

Parcel 15-088-0004

PART OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY: BEGINNING 1019 FEET SOUTH OF THE NORTHEAST CORNER OF SAID QUARTER SECTION; THENCE WEST 351 FEET; THENCE SOUTH 235 FEET; THENCE EAST 351 FEET; THENCE NORTH 235 FEET TO BEGINNING

Parcel 15-088-0036

BEGINNING 76 RODS SOUTH OF THE NORTHEAST CORNER OF SECTION 33, TOWNSHIP 6 NORTH, RANGE 2 WEST, OF THE SALT LAKE MERIDIAN, U.S. SURVEY, RUNNING THENCE WEST 21 RODS 4 1/2 FEET, NORTH 14 RODS 4 FEET, THENCE WEST 37.3 RODS, MORE OR LESS, TO A POINT 31.43 RODS EAST OF THE WEST LINE OF THE EAST HALF OF SAID NORTHEAST QUARTER SECTION, THENCE SOUTH 28 RODS THENCE EAST 48.57 RODS, MORE OR LESS, TO THE EAST LINE OF SAID SECTION, THENCE NORTH 13 RODS 12 1/2 FEET TO THE PLACE OF BEGINNING.



SUBDIVISION APPLICATION

WEST HAVEN CITY PLANNING COMMISSION
PHONE 801-731-4519

SUDIVISION NAME Staker Farms Ph. 2 - Amend development agreement for Staker Farms
LOCATION 2700 S. 3500 W. PARCEL # 15-088-0036 15-088-0004

NO. OF LOTS/NO. OF BUILDINGS 15 ZONE R1

Applicants Name Byrce Thurgood Phone 801-628-0229 Fax _____

Address _____ City West Haven State UT Zip _____

Surveyor/Engineer Reeves Phone _____ Fax _____

Address Rivdale City Utah State _____ Zip _____

OFFICE USE

Scheduled for Planning Commission Agenda June 10, 2020

PLANNING COMMISSION ACTION:

Preliminary - Approved ___ Date _____ Denied ___ Date _____

Final - Approved ___ Date _____ Denied ___ Date _____

Conditions: _____

CITY COUNCIL ACTION:

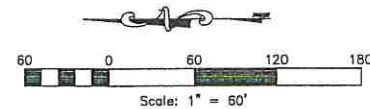
Preliminary - Approved ___ Date _____ Denied ___ Date _____

Final - Approved ___ Date _____ Denied ___ Date _____

Preliminary

Final

Amount 1,575 Paid Date 5/19/2020 Amount 3,000 Paid Date _____



Olsen - Keepers Property

West Haven City, Weber County, Utah

Developer:
 Castle Creek Homes
 Mike Schultz
 1798 W. 5150 S.
 Roy, UT. 84067
 (801) 525-0681



REVISIONS	DESCRIPTION
DATE	

Olsen - Keepers Property
 PART OF THE NE 1/4 OF SECTION 33, T.6N., R. 2W., S.1.B. & M., U.S. SURVEY
 WEST HAVEN CITY, WEBER COUNTY, UTAH

Sketch Plan

Project Info.
 Engineer: N. Reeve
 Designer: C. Cove
 Begin Date: 01-21-2020
 Name: OLSEN - KEEPERS
 PROPERTY
 Number: 3784-83

Sheet 1 of 1
 1 Sheets

BID RESULTS FOR WEST HAVEN CITY				
2020 Road Maintenance Project				
Schedule A - C				
July 13, 2020				
COMPANY				
	Schedule A	Schedule B	Schedule C	
1	\$142,619.24	\$221,580.97	-	
2	-	-	\$76,132.00	
3	\$115,584.60	\$202,624.14	-	
4	-	\$173,860.00	-	
5	-	-	\$65,612.20	

Nola Stauffer
3771 West 2550 South
Ogden Ut. 84401
3/15/2020

West Haven City
4150 South 3900 West
West Haven, Ut. 84401.

Request for Annexation into West Haven City, Utah.

In compliance with West Haven City's Annexation Procedure, the below signed, respectfully request that the following properties be considered for annexation into West Haven City.

Land serial #15-088-0040 - Dean R. Stauffer and Nola L. Stauffer Trust
etal. (Located at 3789 West 2550 South, Ogden, Ut.)

Land serial #15-088-0018 - Dean R. Stauffer and Nola L. Stauffer Trust
etal. (Located at 3771 West 2550 South, Ogden, Ut.)

Nola L. Stauffer - Trustee:

Date:

Nola L. Stauffer

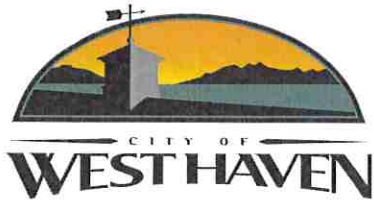
5/4/2020

Thomas Kevin Andelin - Trustee:

Date:

Thomas Kevin Andelin
Successor Trustee

3/18/2020



WEST HAVEN CITY COUNCIL MEETING MINUTES

July 15, 2020 6:00 p.m.

City Council Chambers
4150 South 3900 West, West Haven, UT 84401

Present: Sharon A. Bolos Mayor
Carrie Call Councilmember
Nina Morse Councilmember
Rob Vanderwood Councilmember
Randy Hunter Councilmember
Kim Dixon Councilmember

Staff Present: Emily Green City Recorder
Steve Anderson City Planner
Ken Bradshaw City Attorney

1. **MEETING BROUGHT TO ORDER:**

The Council met at their regularly scheduled meeting held in the City Council Chambers. Mayor Bolos brought the Meeting to order at 6:00 pm. and welcomed those in attendance.

2. **OPENING CEREMONIES**

A. Lead by Councilmember Dixon

B. Lead by Councilmember Morse

3. **PUBLIC PRESENTATION**

No one came up at this time.

4. **ACTION ON PLANNING COMMISSION MEETING RECOMMENDATION(S)**

There are no Planning Commission recommendations.

5. **DISCUSSION-ADMINISTRATIVE HEARING OFFICER**

Ken Bradshaw explained the administrative hearing officer ordinance.

6. **ACTION ON RESOLUTION 23-2020-ACCEPTANCE OF PETITION FOR ANNEXATION-3740 W 2550 S**

Councilmember Hunter made a motion to adopt resolution 23-2020. Councilmember Morse seconded the motion. Roll Call: Councilmember Morse, aye; Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; Councilmember Dixon, aye; **Vote was unanimous.**

7. **DISCUSSION-ASSIGNMENT UPDATES**

Councilmember Dixon gave an update on the CARES Act funding distribution, and the cancellation of the Weber County Fair.

8. **DISCUSSION-CITY MANAGER APPOINTMENT PROCESS**

Council discussed the process for appointing the city manager.

9. **DISCUSSION-REQUEST FOR PROPOSAL SOLID WASTE COLLECTION AND DISPOSAL**

Mayor Bolos explained that she is forming a committee to review the proposals and asked for volunteers.

10. **ACTION ON CONSENT AGENDA**

A. CITY COUNCIL MINUTES

B. CITY COUNCIL SPECIAL WORK SESSION

MEETING HELD

MEETING HELD

July 1, 2020

June 25, 2020

C. GRANITE
D. YOUNG AUTOMOTIVE
E. WEBER COUNTY

\$87,260.38
\$29,904.00
\$433,492.00

Inv. #1829702
Inv. #TB0093
CARES Act Funding

Councilmember Dixon suggested taking out the incomplete sentence on page 2.

Councilmember Call suggested adding that Ken Bradshaw and staff will research on page 4.

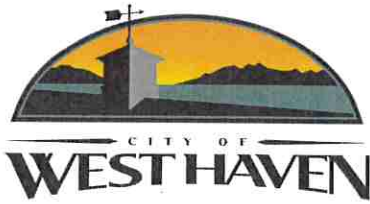
Councilmember Vanderwood moved to approve the Consent Agenda with the changes noted. **Councilmember Hunter seconded** the motion. **Roll Call:** Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Morse, aye; Councilmember Vanderwood, aye; Councilmember Dixon, aye; **Vote was unanimous.**

11. **ADJOURNMENT**

Councilmember Dixon moved to adjourn at 7:12 P.M. **Councilmember Morse seconded** the motion. Councilmember Morse, aye; Councilmember Dixon, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; Councilmember Hunter, aye; **Vote was unanimous.**

Emily Green
City Recorder

Date Approved: _____



WEST HAVEN CITY SPECIAL COUNCIL MINUTES

July 16, 2020 5:30 P.M.

City Council Chambers
4150 South 3900 West, West Haven, UT 84401

Present: Sharon A. Bolos Mayor
Nina Morse Councilmember
Kim Dixon Councilmember
Carrie Call Councilmember
Rob Vanderwood Councilmember
Randy Hunter Councilmember

Staff Present: Emily Green City Recorder
Steve Anderson City Planner
Ken Bradshaw City Attorney

1. **MEETING BROUGHT TO ORDER:**

Mayor Bolos brought the Meeting to order at 5:30 P.M. and welcomed those in attendance.

2. **INTERVIEWS FOR ENGINEERING REQUEST FOR QUALIFICATIONS**

Tyler Nielsen and Ryan Christensen gave a presentation for Gardner Engineering.

Mayor Bolos asked what other cities their firm supports.

Mr. Christensen said that they support West Point and are part of a pool of engineers for Ogden City.

Mayor Bolos asked why West Haven City is a priority.

Mr. Christensen said he has always worked with West Haven City directly so it has been easy to make the city a priority.

Councilmember Dixon asked for an example of the improvements made to the subdivision process.

Mr. Christensen said they worked with staff to review the fee schedule to make sure that it is fair and that West Haven can cover the cost of reviews, they updated the way that information is distributed to utilities, and have implemented predesign meetings prior to submittals.

Councilmember Morse asked if the work order system is used currently.

Mr. Christensen confirmed it is.

Councilmember Hunter asked the percentage of revenue is from West Haven City.

Mr. Christensen said it is probably 20-25%.

Councilmember Hunter asked what the subdivision review process entails.

Mr. Christensen said it is checking addresses. He said it is checking the roads and utilities to make sure they meet city standards, sometimes this entails several reviews to make sure it is accurate.

Councilmember Hunter asked if Gardner Engineering has ever proposed projects to the city and if maybe they are too much a part of the staff.

Mr. Christensen said that they have never proposed projects and that consulting is not billable work and this allows projects to be done in a timely manner.

Mr. Nielsen said a close relationship with the council would also be beneficial.

Councilmember Morse asked what kind of relationship they have with West Point.

Mr. Christensen said it is a little different they mostly interact with the city manager and sometimes city council.

Councilmember Call asked why the rates proposed are lower than their current rates.

Mr. Christensen said in an effort to stay competitive.

Councilmember Vanderwood asked if the civil engineering covers transportation.

Mr. Christensen said that if it is traffic counts that can be done in house, however for something more in depth they have a consultant they can use.

Scott Nielsen, Todd Freeman, and Jennifer Summers gave a presentation for CEC.

Mayor Bolos asked if they have experience working with a city that has rapid growth and how many employees the firm currently has.

Mr. Nielsen said yes that Clearfield City has rapid growth and that they have six employees.

Councilmember Hunter asked if there are six employees and they add another city as a client how can they facilitate that without adding additional staff.

Mr. Nielsen stated that he believed they will be able to handle a new city very easily.

Councilmember Dixon asked how much time it would take them to get up to speed for our city.

Mr. Nielsen said a month or two.

Councilmember Vanderwood asked if there is an assigned person for Clearfield.

Mr. Nielsen said they appoint someone to help with each city.

Councilmember Morse asked what kind of grants they have helped other cities get with their projects.

Mr. Nielsen gave some examples.

Councilmember Hunter asked the percentage of projects that went over budget.

Mr. Nielsen said that they have not had a project go over budget for the last five years.

Councilmember Hunter asked if they manage road miles and the maintenance of them or if it's done in conjunction with the budget. He also asked why mileage costs were included.

Mr. Freeman said that other cities have not had them manage road miles and the maintenance for those, and that mileage is just travel costs but is not necessary.

Councilmember Hunter stated that because the city does not have a property tax, we are a more tightly constrained budget and asked if that was a concern.

Mr. Nielsen said that it is not a concern for them.

Mayor Bolos said that often the city has several major road projects at the same time and asked how the staff would handle that.

Mr. Nielsen said that they don't want to hire for one project until it's absolutely necessary.

Mrs. Summers said that their firm started with four people and have grown since, they will add personnel if necessary.

Mayor Bolos asked if they have taken over projects during a transition.

Mr. Nielsen said they have done it in Garland and its been easy to do.

Jory Wallen and John Beargard gave a presentation for Wasatch Civil.

Mayor Bolos asked what the transition would look like.

Mr. Wallen said that sometimes that can be a challenge, however they have a great relationship with Gardner Engineering and that could really help.

Mayor Bolos asked for a timeline for transitioning.

Mr. Wallen said it would be from a week to a month.

Councilmember Vanderwood asked what kind of checks and balances they have for less mistakes on a project.

Mr. Beargard said that they prioritize reviews of projects and have multiple people reviewing.

Councilmember Vanderwood asked if there are specific assignments to specific cities.

Mr. Wallen said that they usually assign someone to primarily handle a city, but bring on other staff to help with the work load. They also do this so that if that point of contact is out of the office the city can still get the services they need.

Councilmember Hunter asked if they are the exclusive firm for Roy, South Ogden, and Plain City.

Mr. Wallen confirmed they are and sometimes it is contracted out.

Councilmember Hunter asked the percentage of projects over budget and on time.

Mr. Wallen said that he does not have a percentage, however with budget they are usually pretty close.

Councilmember Hunter asked if contracting with us would impact other cities or us.

Mr. Wallen said that they have enough employees to manage their current clients as well as us.

Councilmember Hunter asked about their successful grants.

Mr. Wallen gave some examples.

Councilmember Morse asked if there are cost control mechanisms in place.

Mr. Wallen said that they give a proposal and do not go over that proposal.

Mayor Bolos asked if they see a project that needs to be done how do you convince a city to do it.

Mr. Wallen said that they make recommendations and provide information and let the city take it from there.

Mayor Bolos said that they already handle two large cities how would their firm handle our tremendous growth.

Mr. Beargard said they would hire more people if necessary, to meet their timelines.

3. **EXECUTIVE SESSION-** The council will enter into a closed meeting for the purpose of discussion of the character and professional competence of an entity to be held in accordance with the provisions of Utah Code 52-4-205.

Councilmember Hunter made a motion to enter into an executive session. **Councilmember Morse seconded** the motion. Councilmember Dixon, aye; Councilmember Morse, aye; Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; **Vote was unanimous.**

Mayor Bolos stated that they have left an executive session reviewing the character and professional competence of several firms who are purporting to become the city engineer, after discussing what is best for the city they are now prepared to make a motion about how to move forward.

Councilmember Vanderwood made a motion to leave the executive session and enter back the public meeting. **Councilmember Morse seconded** the motion. Councilmember Dixon, aye; Councilmember Morse, aye; Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; **Vote was unanimous.**

4. **DISCUSSION AND/OR ACTION-AWARD CONTRACT-ENGINEERING**

Councilmember Dixon made a motion to authorize the mayor and city attorney to draft a contract to be reviewed by the council to retain Gardner Engineering. **Councilmember Morse seconded** the motion. Councilmember Dixon, aye; Councilmember Morse, aye; Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; **Vote was unanimous.**

5. ADJOURNMENT

Councilmember Vanderwood made a motion to adjourn at 8:53 PM. **Councilmember Morse seconded** the motion. Councilmember Dixon, aye; Councilmember Morse, aye; Councilmember Hunter, aye; Councilmember Call, aye; Councilmember Vanderwood, aye; **Vote was unanimous.**

Emily Green
City Recorder

Date Approved: _____

DRAFT