



R2BUILD dba R2B Engineering Inc
23441 S. Pointe Dr., #280 Laguna Hills, CA 92653
License #1031564 A, B DIR 1000059338

CHANGE ORDER REQUEST

No. **001**

To: **City of Commerce**
2535 Commerce Way
Commerce, CA 90040
Attn:Chidi Ugwueze

Date 6/25/2018
Project Name **Electrical for CNG**
Project # **190205**
Owner's Project #: _____
Contract Number: _____

Proposed Change:

Provide labor and material to form, pour 9 additional bollards as requested by the SCE inspector. Plans called for 10 bollards, 19 bollards were installed.

This cost proposal is based solely on the usual cost elements, such as labor, material, equipment and normal mark ups, and does not include any sum for changes in sequence of Work, delays, disruptions, rescheduling, extended overhead, acceleration and/or impact costs. CBEC expressly reserves the right to make claim for any and all of these and related items of cost prior to any final settlement of this contract.

	<i>QTY</i>	<i>UNIT</i>	<i>RATE</i>	<i>SUB TOTAL</i>
<i>Per the attached itemization</i>				
<i>Furnish and install additional bollards</i>	9	LS	\$ 993.63	8,942.63

Time Extensions Requested 4 (Work) Days

Net Add or Deducts \$ **8,942.63**

Submitted by: R2B Engineering

Accepted by: _____

By: _____

By: _____
Date

Title: _____

Reviewed & Approved by: _____

By: _____
Title: _____ Date _____

R2BUILD

23441 S. Pointe Dr., #280,

Laguna Hills, CA

Tel: (714) 609-7625 FAX: (714) 455-0712

Job Title: Power for CNG Fueling Station

Reference:

Furnish and install 9 additional bollards

Date: 6/21/19

Job#: CNG

File#:

Prepared by: Shiva

COST BREAKDOWN**MATERIAL/ DIRECT EXPENSES**

Qty	Units	Description	Unit	Total
9	LS	4" Pipe Bollards 7' long	350.00	\$3,150.00
0	LS	Concrete Mortar Mix	300.00	\$0.00
1	LS	Footing Concrete	1800.00	\$1,800.00
0	LS	Paint	350.00	\$0.00
		Tax (9.75%)	9.75%	\$482.63
		SUB-TOTAL		\$5,432.63

LABOR

Qty	Units	Classification	Rate	Total
0	MH	Superintendent/ Foreman	95.00	\$0.00
	MH	Electrician	125.00	\$0.00
	MH	Pipe Fitter	108.75	\$0.00
40	MH	Laborer	87.75	\$3,510.00
		SUB-TOTAL		\$3,510.00

EQUIPMENT

Qty	Units	Description	Rate	Total
0	Day	Skidsteer	125.00	\$0.00
0	Day	Drill	125.00	\$0.00
0	LS	Dump fees	300.00	\$0.00
		Sales Tax	9.75%	\$0.00
		SUB-TOTAL		\$0.00

SUBTOTAL (Material, Labor, Equipment)

\$8,942.63

Overhead & Construction Fee

0%

\$0.00

Performance & Payment Bond

0%

\$0.00

Total

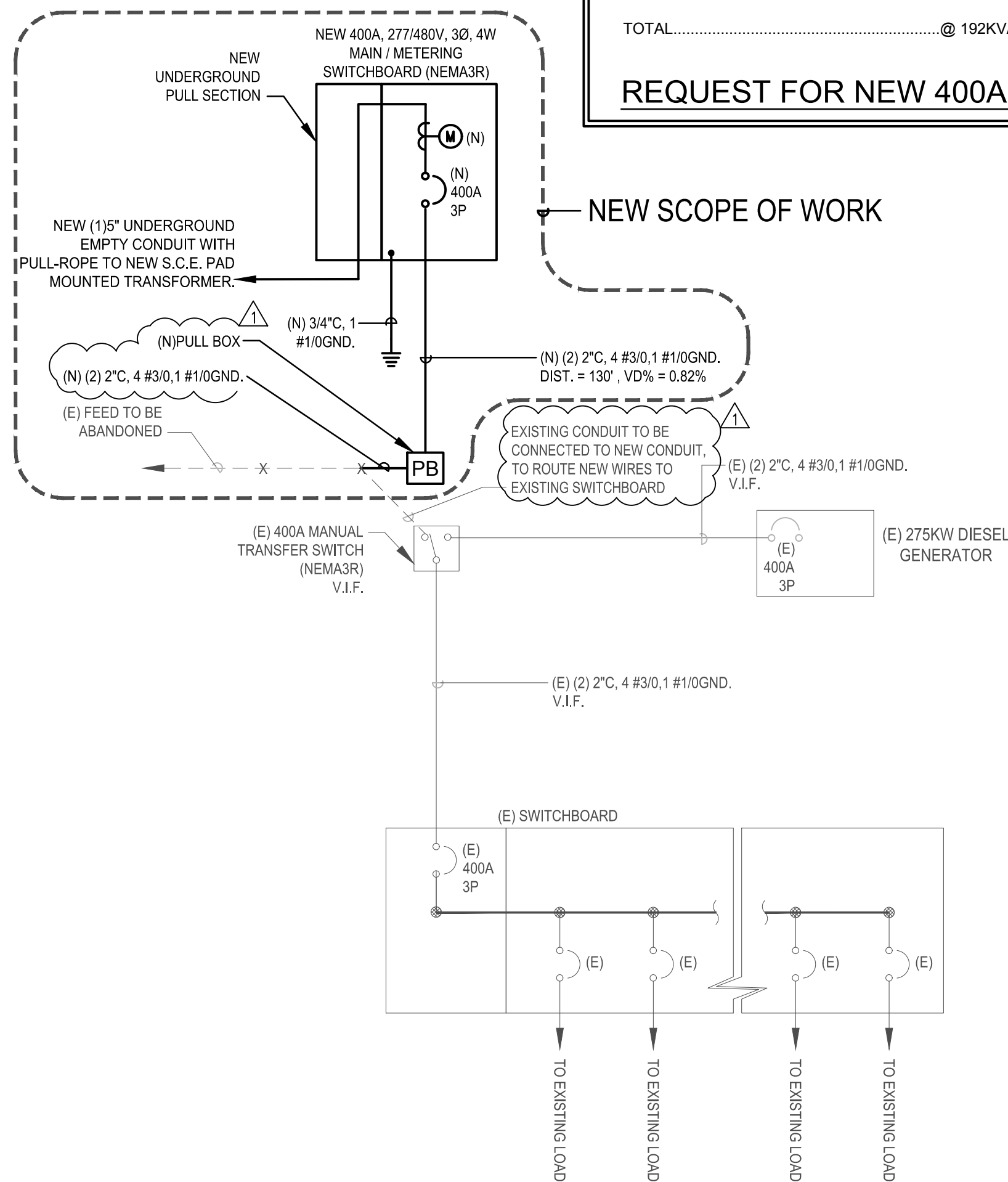
\$8,942.63

Q & A

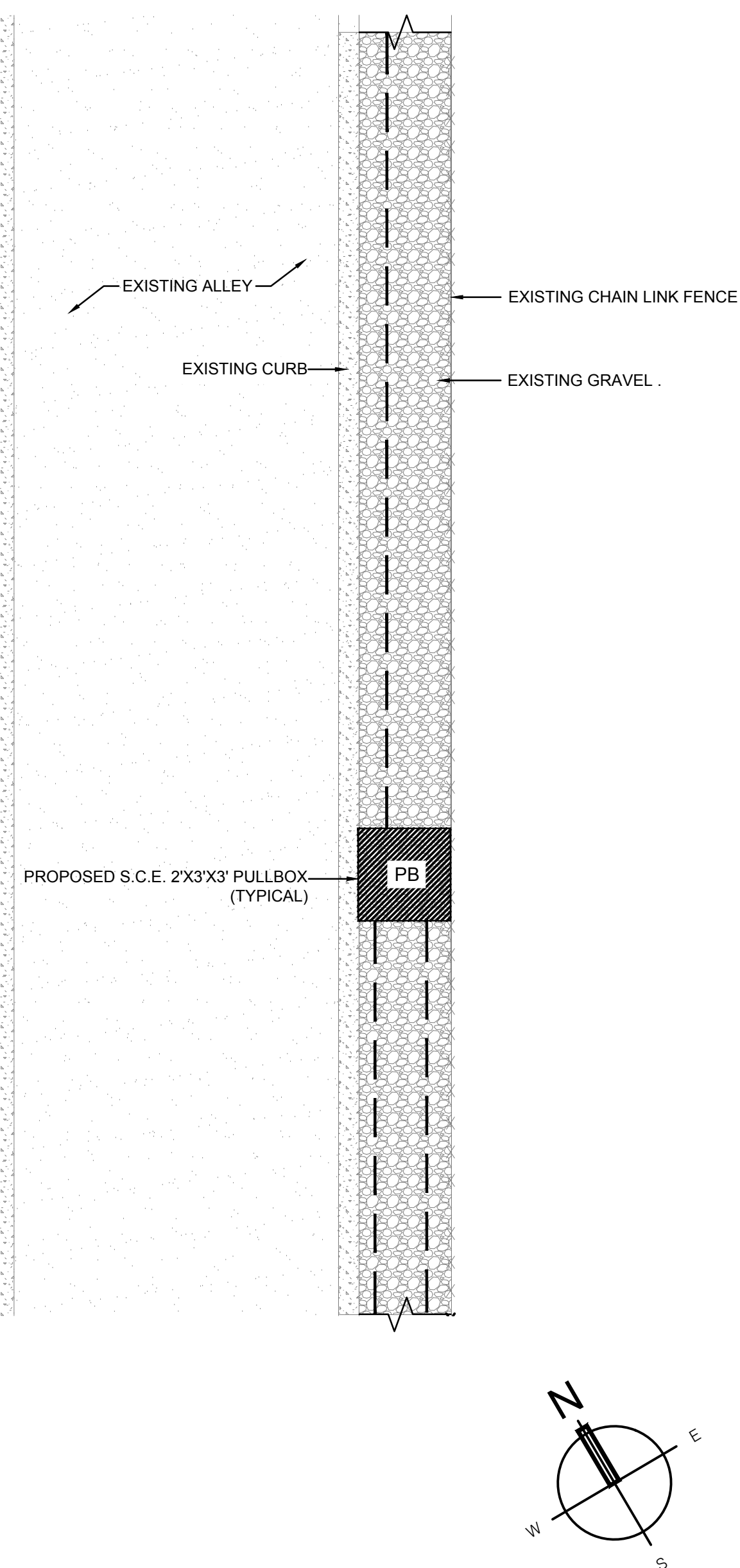
Set	Question	Answer	Release Date
1.1	Will a Class C-10 license be satisfactory for the purposes of the contractor license requirements in this bid?	1) C-10 license contractor is acceptable to bid on this project. 2) B-license contractor, must have C-10 license as a sub-contractor to pull the permit.	02/07/2019 11:21 AM (Pacific)
2.1	Will a Class A License suffice the license requirements, if a C-10 sub-contractor is used to pull the permit, for this bid?	Yes, Class A License contractor can suffice if a C-10 sub-contractor is used to pull the permit.	02/19/2019 9:26 AM (Pacific)
2.2	Will an A License be satisfactory to bid this project, so long as a C-10 licensed sub-contractor pulls the permits? Or only a B-License will be allowed to bid? Would you please advise.	Yes, A license is satisfactory to bid this project, so long as a C-10 licensed sub-contractor pulls the permit.	02/19/2019 9:26 AM (Pacific)
3.1	Per Field visit, the existing trench layout area has (2) 8" gate post and one underground monitoring well. Please advise if these are to be removed and abandoned.	Response: Remove the post and trench away from the monitoring well (See revised E1.00 dated 3/6/19).	03/07/2019 11:21 AM (Pacific)
3.2	Plansheet E1.00 calls for a new pullbox at the existing switchboard. Please provide pullbox size.	Response: 16"Hx16"Wx4"D. The plan shows new conduit will terminate at switchboard but it will terminate at the new pullbox (See revised E1.00 dated 3/6/19).	03/07/2019 11:21 AM (Pacific)
3.3	Per Plansheet E1.00, detail 3 - Please confirm that a new pullbox is required to intercept the transfer switch for the existing generator. At the site walk, we understood that the new metering switchboard is to back feed the existing switchboard not the generator alone?	Response: For the existing generator, No pullbox is required, however a new pullbox is required to connect the new secondary conduit to existing conduit as shown on single line diagram	03/07/2019 11:21 AM (Pacific)
3.4	SCE plans show 10 bollards around the slab-box while plansheet E1.00 shows 7 bollards. Please confirm quantities.	Response: Refer to SCE plans sheet 3 of 3 for protective barrier details also (See revised E1.00 dated 3/6/19).	03/07/2019 11:21 AM (Pacific)
3.5	Please confirm that SCE will furnish and install the transformer and the conductors (3# 1/0) from the street pole to the transformer and the main metering switchboard.	Response: SCE to furnish and install.	03/07/2019 11:21 AM (Pacific)
3.6	The SCE plans show both removable and permanent bollards. Please indicate how many are to be removable vs permanent.	Response: No removable bollards.	03/07/2019 11:21 AM (Pacific)
3.7	Since the project involves street work, earthwork, asphalt/concrete repairs, traffic control etc., it is recommended that in addition to a C-10 subcontractor license, the prime contractor posses an "A" General Engineering Contractor license not a "B" General Building Contractor.	Response: A License, B License and C-10 License can be the prime contractor.	03/07/2019 11:21 AM (Pacific)
3.8	Please confirm that the 72' of conduit along Shiela Street will be installed on the asphalt.	Response: Confirmed.	03/07/2019 11:21 AM (Pacific)

S:\PROJECTS\2018\SHIELA ST COMMERCIAL CNG NEW ELECTRICAL SERVICE\05 CAD\06 ELECTRICAL\01 ELECTRICAL SITE PLAN.dwg 3/6/2019 4:24:04 PM

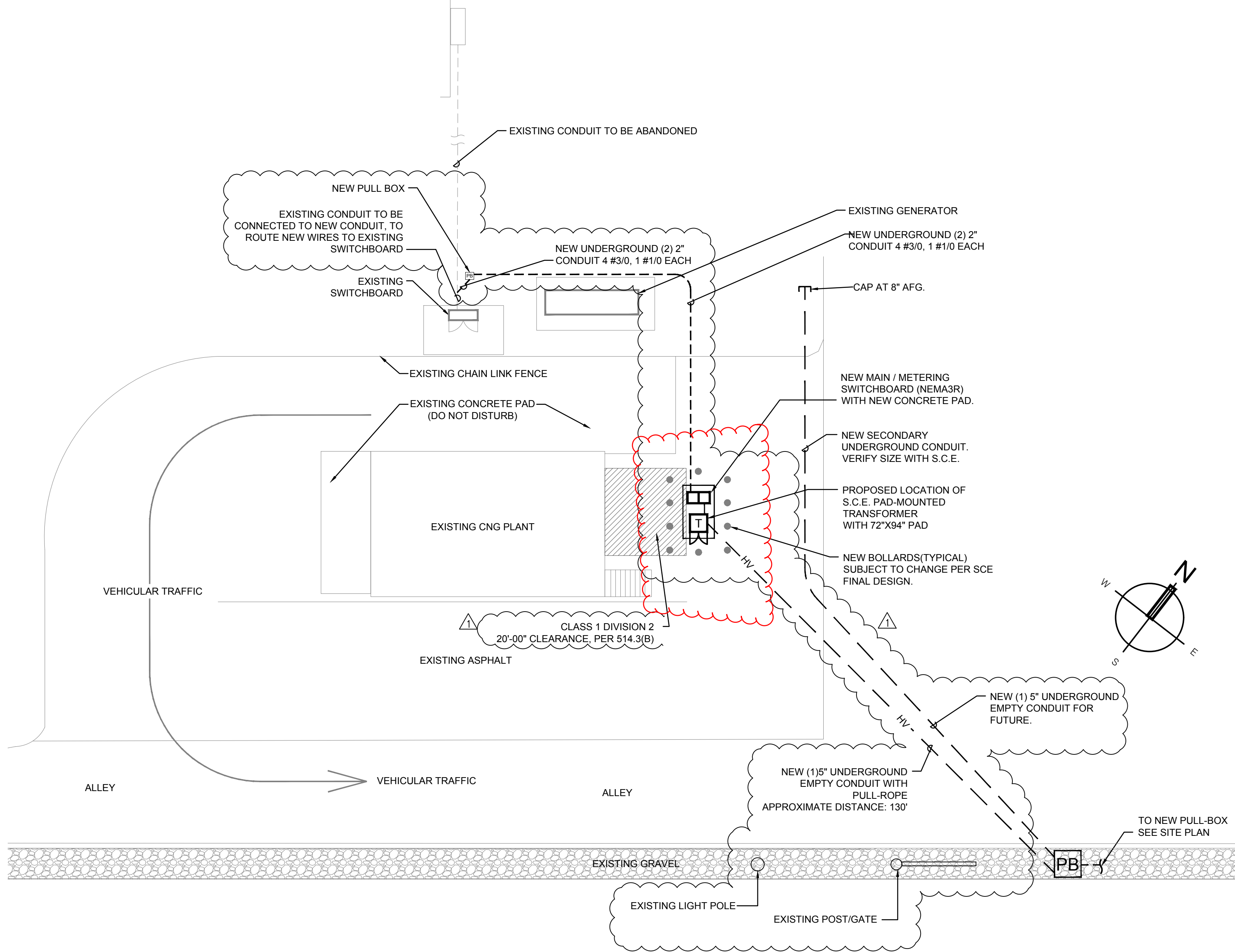
LOAD CALCULATIONS: (ALL LOADS ARE BASED ON AS-BUILT PLANS)	
EXISTING STEP-DOWN TRANSFORMER	@ 11KVA
EXISTING CNG PUMP P-200A	@ 20KVA
EXISTING CNG PUMP P-200A	@ 20KVA
EXISTING CNG PUMP P-200A	@ 20KVA
EXISTING CNG PUMP P-200A	@ 20KVA
EXISTING PUMP P-600A	@ 99 KVA (LARGEST MOTOR @ 125%)
EXISTING CNG AIR COMPRESSOR	@ 2 KVA
TOTAL.....@ 192KVA X 125% = 240 KVA / (480V x 1.73)	
289A @ 277/480V, 3Ø, 4W	
REQUEST FOR NEW 400A, 277/480V, 3Ø, 4W SERVICE	



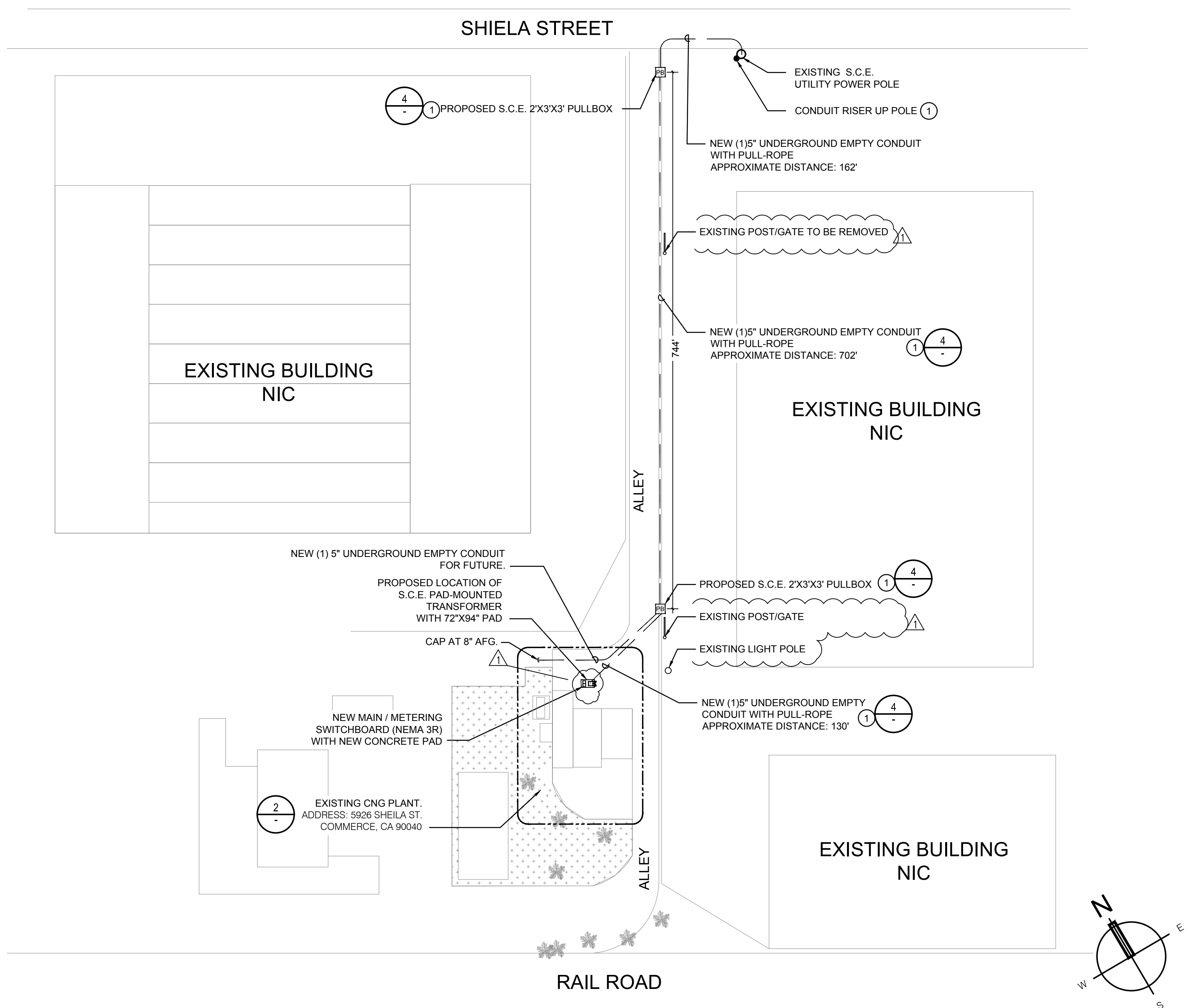
SINGLE LINE DIAGRAM AND LOAD CALCULATIONS NTS 3



NOT USED NTS 5 ELECTRICAL PULL-BOX DETAIL 1/4" = 1'-0" 4



ELECTRICAL ENLARGED PLAN 1" = 20'-0" 2



ELECTRICAL SITE PLAN 1" = 80'-0" 1

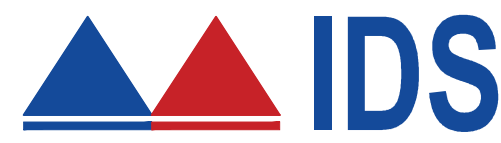
GENERAL NOTES

- ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT. ANY LIABILITY AS A RESULT OF DESIGN MODIFICATIONS, AS WELL AS ANY COST ASSOCIATED WITH SUCH MODIFICATIONS, MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER/ARCHITECT OF RECORD SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK TO COMPLY WITH THE 2016 CEC (2014 NEC).
- USE LONG RADIUS SWEEPS FOR ALL CONDUITS THAT CHANGES IN DIRECTION.
- ALL FEEDERS & CONDUCTORS TO BE COPPER.
- AVAILABLE FAULT CURRENT TO BE VERIFIED BY S.C.E..
- ALL WORK MUST BE VERIFIED WITH S.C.E. OWNER AND ARCHITECT PRIOR TO BIDDING AND INSTALLATION.
- UTILITY POINTS OF SERVICE AND WORK/MATERIAL SHOWN ARE BASED ON PRELIMINARY INFORMATION ONLY BY THE UTILITY COORDINATOR AND ARE FOR BID PURPOSES ONLY.
- LOCATIONS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO PREVENT HAZARD AND DAMAGE TO EXISTING UNDERGROUND OF UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR INSTALLED BY ANY OTHER CONTRACTS. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATION DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY.
- CONTRACTOR SHALL COORDINATE WITH S.C.E. FOR FINAL AND EXACT WORK/MATERIAL REQUIREMENTS AND CONSTRUCT TO S.C.E. ENGINEERING PLANS AND SPECIFICATIONS ONLY. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, PULL WIRES, CABLES, PULL BOXES, CONCRETE ENCASMENT OF CONDUIT (IF REQUIRED), TRANSFORMER PAD, BARRIERS, POLE RISERS, TRENCHING, BACKFILL, AND INCLUDE ALL UTILITY REQUIREMENTS IN SCOPE OF WORK.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF METER PANEL TO S.C.E. FOR THEIR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF METER PANEL.
- CALL "UNDERGROUND ALERT" BEFORE YOU DIG. SOUTHERN CALIFORNIA: 1-800-227-2600

KEYNOTES

- INSTALL IN ACCORDANCE WITH S.C.E. DESIGN, STANDARDS AND SPECIFICATIONS.

ENGINEER



IDS GROUP

1 PETERS CANYON ROAD, SUITE 130
IRVINE, CA 92606
TEL: 949-387-8500, FAX: 949-387-0800

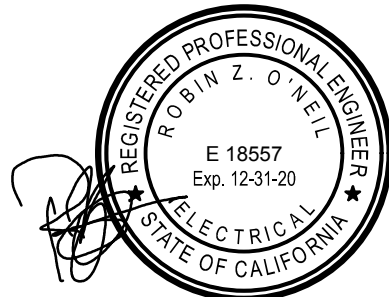
PROJECT NAME

CITY OF COMMERCE CNG ELECTRICAL SERVICE

5940 SHEILA ST.
COMMERCE, CA 90040

ARCHITECT / STRUCTURE

STAMP



AGENCY APPROVAL

ISSUE

REV.	DESCRIPTION	DATE
1	DESIGN REVISION	3/6/19

KEY PLAN

PROJECT NO.	18X038
PRINT DATE	01/18/2019
DRAWN BY	RA
CHECKED BY	RO

SHEET TITLE

ELECTRICAL SITE PLAN, SINGLE LINE DIAGRAMS AND LOAD CALCULATIONS

SHEET NUMBER

E1.00

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