



CHRISTOPHER B. BURKE ENGINEERING, LTD.

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September 3, 2014

Village of Lombard
255 E. Wilson Avenue
Lombard, IL 60148

Attention: Mr. Luke Sharp

Subject: Standby Generator Improvements
(CBBEL Project No. 14-0120)

Reference: Your Emails Dated August 20, 2014 and August 27, 2014

Dear Mr. Sharp:

The following are our responses to the comments listed in your referenced email.

PW Comments

Comment 1: Bid Opening Date: 9/23/2014 – insert on page 3 (CBBEL to have memo to Luke by end of day 9/24 so Sue can include in the agenda for October 2 BOT meeting).

Response 1: Noted. The Specs have been revised as requested.

Comment 2: Mandatory Pre-Bid: 9/11/2014 – insert on page 7.

Response 2: The Specs have been revised as requested.

Comment 3: BOT Award: 10/2/2014 – FYI for everyone.

Response 3: Noted.

Comment 4: If CCRF soil remediation holds up project, Dave Dratnol and Finance have both said no issue with running into 2015. However contractor may have to demobilize and mobilize again in the spring? Do we have some language to address this in the contract? Fees? Will contractor want retainage from the first 1 or 2 pay requests for

Garfield/Westmore? What about partial waivers, etc. Trying to cover all angles prior to pre-bid/letting.

Response 4: The General Terms and Conditions cover this.

Comment 5: Page 3 – Scope of Work for Westmore – you have removal of landscaping but not “installation of new landscaping” – please make note.

Response 5: The Specs have been revised as requested.

Comment 6: Page 6 – Scope of Work for Westmore – you have removal of landscaping but not “installation of new landscaping” – please make note.

Response 6: The Specs have been revised as requested.

Comment 7: Page 7 under Section 101.60 – Substantial Completion – you reference Section 108.09 for liquidated damages. If you go to that section (pg. 16) – doesn't really make sense. What language have you used on past projects? Is it an issue? Do we just remove the reference to liquidated damages? I have attached a clause that worked for me in the past.

Response 7: The Specs have been revised as requested.

Comment 8: Section 109.07 – down in the body of the paragraph you refer to Mobilization (Section 671 will not be paid). Go to page 22 – there is no 671. Should we address mobilization (see note 4 above).

Response 8: This contract references the “Standard Specifications for Road and Bridge Construction” as the standard specifications. The special provisions in this contract modify the standard specifications as described herein. The reference to section 671 in this contract is referring to the standard specs.

Comment 9: Section 202 – Earth and Rock Excavation – to CYA, do we make a note about the Village having pretested the sites or do plan sets supersede the contract docs?

Response 9: Note on plans covers this issue.

Comment 10: Page 31 – Start-Up Form – just so I'm clear – this is not an all-inclusive form, right? Flolo, Flygt, Cummins, etc. – they all have to inspect and test their own products with their own test forms in addition to contractor's work – and then we sign off on everything.

Response 10: Correct.

Comment 11: Page 51 – Section 26 05 19 – Low Voltage Info – make sure my notes #23 and 24 on the plan sets under general notes (regarding wire labeling, etc.) don't interfere with your contract language here. I don't want to get into an argument with the contractor about which "document" he followed. If the plan sets supersede the contract docs...fine.

Response 11: The Specs have been revised as requested.

Comment 12: Page 86 – Section 1.3 – A. It's Energenecs/Kamp; correct it on page 87 too.

Response 12: The Specs have been revised as requested.

Comment 13: Page 87 – down in Section A and B – you refer to pumping down ponds. I think this operation should be geared towards the Garfield Lift Station operation.

Response 13: The Specs have been revised as requested.

Comment 14: Make sure the wiring diagram on page 89 matches what Flolo has provided as far as alarms.

Response 14: This is what has been the Village Standard for alarm addresses. Final address positions will be evaluated during shop drawing review.

Comment 15: Page 90 – Section 2.4 – three complete copies, not four maintenance manuals.

Response 15: The Specs have been revised as requested.

Comment 16: Page 93 and 94 – Energenecs/Kamp – not Kamp Synergy.

Response 16: The Specs have been revised as requested.

Comment 17: Bottom page 94 – three copies, not four.

Response 17: The Specs have been revised as requested.

Comment 18: Page 100 – Garfield Bid – do we add a line item for irrigation repair? Also, does your "concrete sidewalk, special" cover the concrete pad for the gen set and control cabinet?

Response 18: Irrigation repair is incidental. The generator concrete pad is covered under the generator spec.

Comment 19: Page 100, 101, 102 – do we need to put a line item for crane? Or is having it noted in the plan sets sufficient?

Response 19: The spec requires the contractor to provide means to off load the generator from the truck.

Comment 20: Page 102 – line item for gen set removal and disposal? What about a line item for ceiling patching where existing muffler is? What about a line item for the temporary electrical work needed at Civic prior to diesel tank removal? If we are covered...fine.

Response 20: Generator removal and disposal is covered under the demolition spec. The temporary electrical work is covered under the items they include (i.e. conduit, wire & cable, etc.).

Comment 21: Starting in Section 100 – Section 101.28 – Plans. Throughout the document from this point you make comments like “Add the following at the end of the last sentence in the Section”...? I think it needs to be cleaned up so it flows; to me it sounds like it may or may not need to be there...maybe this is normal? I understand these are general conditions used on other projects – just want clarification in case it comes up in pre-bid.

- a. Section 102.02 – you have “add the following”...?
- b. Section 104.01 – you have “add the following at the end of this Section”...?
- c. Section 104.02 & 104.07 – “delete this article in its entirety”...?
- d. Section 107.26 – “in lieu of the first paragraph of Article 107.26 insert the following”...? Same with 107.27.
- e. Bottom of page 28 – correct the font/size to match rest of document.

Response 21: See response #8.

Lens Comments to Flolo drawings

Comment 1: All electrical systems provided with a utility company supply containing a grounded conductor, usually a neutral, shall be bonded to that conductor at the first point of disconnect within and on the enclosure. This may be evident on Sheet 13 Terminal Layout – but is not clear in the wiring diagrams. An electrical one line of the service or feeder with a grounding detail and all the usual service/feeder data should be provided. If this is an existing service or feeder, please provide the pertinent information.

Response 1: The one line diagram showing the bonding of the neutral to ground in the service disconnect is shown in the overall drawing set, not the Flolo drawings.

Comment 2: This control shall be NRTL listed and installed per listing, to include any O.E.M. instructions.

Response 2: Noted. O.E.M. material will be supplied by the Vendor at time of installation.

Comment 3: Review of these drawings is for code compliance, NEC 2008 and Village of Lombard Amendments to same. Our review does not address the effectiveness for use and intended functions of this control.

Response 3: Noted.

Comment 4: Gen. Input does not show a neutral nor is a Utility N and Gen. N connection shown.

Response 4: The drawing has been revised to show a neutral termination into the pump controller from the utility/fixed generator. Since there are no loads on the service neutral, the neutral terminates in the panel and does not continue. The neutral in the portable generator does not extend outside the generator therefore no neutral is shown for it. The portable and fixed generators are not separately derived therefore they are grounded through the service ground.

Comment 5: At line 300 Sheet 3 the line and load at 40A MCCB are confusing (perhaps flipped).

Response 5: The line and load labels have been switched.

Lens Drawing Comments

Comment 1 – Sheet 4: On Civic Center Site Plan - Single line shows building system as 3W, and conduit/wire also describe 3W system. What happened to neutral of 4W Gen. Temp? Gen. shown as 3W also? How do we integrate 3W utility and building system with 4W generator?

Response 1: The service to the Civic Center is 277/480 Volt 3 phase 4 wire, this was verified with ComEd. The service neutral does not extend past the main switch as there are no 277 volt loads connected. The fixed (and portable) generator neutral is bonded at the generator and the neutral does not leave the generator.

Comment 2 – Sheet 4: On Civic Center Site Plan – Note: If service is 3W then 8-500 MCM sounds interesting. If service is 3WΔ is it corner grounded B or does it operate ungrounded? If ungrounded, is there a ground detector system? See Section 250.56 regarding testing or number of rods required. Also add WR rated to notes.

Response 2: As stated above the service to the Civic Center is 277/480 Volt 3 phase 4 wire, which matches the 2 sets of 4/C #500 service. Since the generator is not a separately derived system it is grounded thru the service ground. The ground rod at the generator is supplementary only and is not required to be tested. The portable generator is also grounded thru the service ground.

Comment 3 – Sheet 4: On Single Line Diagram make wire descriptions legible.

Response 3: The wire descriptions were made more legible.

Comment 4 – Sheet 4: On East Wall Elevation add WR GFCI to note.

Response 4: The receptacle note has been revised to show a weather resistant (WR) type.

Comment 5 – Sheet 5: On One Line Diagram - Note: Is the 100A 3P disconnect to remain? Also, High "B" phase signage required.

Response 5: Signage has been added for the high leg on the meter, disconnect and ATS. Also signage for the identification of the service disconnect and Caution of an on-site generator has been added to the service disconnect enclosure.

Comment 6 – Sheet 6: On Gas Fuel Piping Detail – Union? Drip Leg?

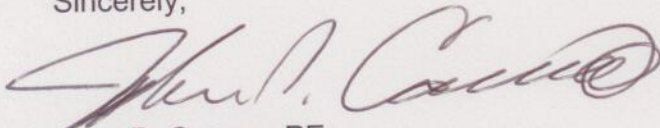
Response 6: A union and drip leg has been added.

Comment 7 – Sheet 7: On Pump Cable Junction Box Detail – Note: Bonding conductors are drawn as #6 AWG CU on previous sheets and in some cases that is the minimum. Also add enclosure shall be bonded to notes.

Response 7: The #8 bonding conductor has been changed to #6awg.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "John P. Caruso". The signature is fluid and cursive, with a large, stylized initial "J" and "C".

John P. Caruso, PE
Head, Mechanical/Electrical Department

AJD/pjb

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