



September 27, 2013

BCE Project # 1112.13

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RE: *Cost Estimating Review Services for Downtown Development at 716 W 4<sup>th</sup> Avenue, Anchorage, AK*

Dear Doc,

Bratslavsky Consulting Engineers, Inc. (BCE) has reviewed a cost estimate prepared for the Downtown Development at 716 W 4<sup>th</sup> Avenue, Anchorage, AK, as provided by the Alaska Housing Finance Corporation (AHFC) on September 12, 2013, along with the preliminary design drawings and a narrative. As requested by AHFC, this was a brief review only (restricted primarily by the client's schedule and the limited amount of information available). Therefore, BCE's evaluation of the estimate is based primarily on the comparison of square footage costs and unit prices to those for similar projects.

As noted above, BCE's review of the cost estimate was restricted by the limitations of the design (conceptual only) for this project. BCE received a set of very preliminary architectural plans and a narrative; no structural, mechanical, or electrical drawings were provided.

### *Executive Summary:*

The cursory review of the contractor's cost estimate for this Downtown Development performed by BCE indicates that the cost estimate in general complies with standard estimating practices, and the prices can be compared to those provided by RSMeans. The construction cost estimate for 716 W 4<sup>th</sup> Avenue, Anchorage, Alaska, was reviewed by BCE and was found to be in general not unreasonable, even though some items may be on the high side. Due to the preliminary nature of the contractor's design and construction cost estimate, a precise validation cannot be made at this time.

Currently, the estimate has a number of contingencies and allowances that are difficult to verify, including but not limited to the following:

- A) Required demolition and hazardous materials abatement have been estimated high (the costs may be doubled).

- B) Costs for the required construction equipment, including cranes, lifts, and other material handling equipment, appear very high. BCE questions the need for all of this equipment, some of which appears to be redundant.
- C) Transparent interior partitions have been included as an allowance only at a fairly high price.
- D) BCE estimators consider that some costs, such as design and engineering, also may have been included more than once. For example, the cost of design for the photovoltaic system, mechanical design, and electrical design, have been included separately, even though the total design cost of 8% has already been accounted for.

The BCE cost estimators believe that the customer would be in a better position to negotiate this price if the project design were at a more advanced (complete) stage.

### ***Specific Comments Regarding the Cost Estimate***

BCE has reviewed the specific cost items for unit price reasonability. Due to time restrictions, only items with a relatively higher percentage of the total cost have been reviewed. Below is the list of these items, along with the corresponding comments:

#### **1. TOTAL ESTIMATED CONSTRUCTION COST**

The total estimated construction costs by CRITERION [dated 08-27-2013] is \$29,751,107. Direct Cost for Divisions 1 thru 16: \$26,631,890. Design and Engineer fees are included in this cost.

This project is being built under a Design-Build contract agreement.

Markups: Profit and Home Office General Markup (8%): \$ 2,263,710. Contractor markups are reasonable (Ref: RSMeans).

Bid price: Direct Costs + Markups: \$28,895,600 (excluding fees and bond costs, but including design fees).

The actual construction cost for this project equals: **\$450.90 PER SQ.FT.** based on the square footage of **64,048 SQ.FT.** This number is closer to **\$430.61 PER SQ.FT.** without the design fees. (It should be noted that several different square footage references are included in the design narrative; however, our calculations are based on the 64,048 SQ.FT. as the official number received from the AHFC).

#### **COMPARISON FOR THIS PROJECT VERSUS A NEW STAND-ALONE BUILDING:**

Cost for constructing a new Class B office building in Anchorage in 2014-15 is on the average between **\$325 and \$370.00 PER SQ.FT.** This number is taken from the generally

available construction data for Anchorage, Alaska, with amenities similar to this project. This number excludes the design fees.

All prices are adjusted to Year 2014-15 prices using RSMeans Historical Cost Index (published 3rd quarter 2013). This number is for new construction, and does not include demolition costs; however, it also does not consider cost savings associated with the reuse of many structural systems and materials. The cost above also includes tenant improvements.

In order to enable us to better compare these numbers, BCE offers the following modifying factors for the construction cost estimate (by Criterion) provided to BCE for evaluation. We propose to subtract the costs associated with conditions that differ between our project and a typical new development not located in downtown Anchorage. These are as follows:

- a) Costs associated with the **downtown location** for this development include: traffic control, shoring of adjacent existing improvements, pedestrian sidewalks, etc. If we remove the additional costs associated with this work, the per-square-foot cost of the proposed development is around **\$417.61**.
- b) Costs associated with the presence of hazardous materials and their abatement. The project cost would be **\$407.00 PER SQ.FT**.
- c) We also would remove some of the costs for cranes /hoists as the building would likely be more accessible. The project cost would be **\$399.00 PER SQ.FT**.
- d) There are allowances in the project that in our opinion could be a duplication of costs. If we take out the allowance for the translucent partitions, the project cost could be in the **\$390 PER SQ.FT** range.

This number includes demolition costs, which would not be associated with new construction; however, it also includes savings from re-use of existing foundations and structures, thus making a direct comparison difficult at this (preliminary) stage of the design.

Depending on the reviewer, there may be some other added costs found in this estimate that could be attributed to the proposed development. Therefore, we can conclude that the new construction would be slightly less (by approximately \$20 PER SQ. FT.) than the proposed development. As described below the difference may be attributed to somewhat high demolition cost, mechanical and electrical work, and some other high allowances.

BCE's order-of-magnitude cost per square foot estimate is based on the analysis of similar projects built in Anchorage during the past 8 years (also utilizing available Neeser construction cost data, etc.), as well as the RSMeans Square Foot Price Estimates for similar projects.

#### SPECIFIC COST ITEMS:

2. FEES & PREMIUMS: \$625,673

The following costs should require a further review (since limited design only is provided):

- ROAD CLOSURE & TRAFFIC PERMITS: \$100,000
- PERFORMANCE & PAYMENT BOND, IF REQUIRED: \$229,834

The bond equals 1% of the Bid Price + Fees. This is usually based on contractor's experience. The Owner will likely require a bond for the construction of this project. However, the bond price for projects of this size built by a contractor with a good record of past performance typically are lower.

### 3. GENERAL REQUIREMENTS

The General Requirements, excluding Design and Engineering, is estimated at 9.4% of Direct Costs. This amount is slightly higher than what is typical for a job of this size, but may not be unreasonable. (Ref: RSMeans: 6% to 8%)

Project Design & Engineering = \$1,306,644, which is 35% of total General Requirements costs, and 5.2% of the Direct Construction Cost. This is typical for this size of project (Ref: RSMeans).

### 4. 01508 TEMPORARY HEAT: 8.0 Months @ \$19,322.17 per MO

*Comment:* Temporary heat may not be needed for full 8 months.

### CRANES SERVICE, HOISTS, BOOM LIFTS, SCAFFOLDING.

Equipment rental was included in the estimate, but may not be needed for the full time of construction as indicated. Currently the estimate includes 12 Months of equipment rental. This amount is 25.5% of Total General Requirements (including design).

### 5. Recommend to CONFIRM SCOPE OF SELECTIVE BUILDING DEMOLITION.

DEMO is not specifically called out in the structural or architectural narrative, and should still be confirmed. BCE estimates that the following work will be included:

- Remove the Anchor Bar on the east side of the main building.
- Remove the east, west, south, and north concrete walls from the existing building.
- Remove the existing north elevator and stair core (along with the northern penthouse).
- Infill the east side addition with a new meeting and hearing space in the basement and first floors.

- New permanent shoring along the northern edge of the Anchor Bar along 4th Ave, and on the eastern side adjacent to the existing building ~18 feet deep.
- Gravity load resisting system in the existing building is adequate, but needs to be modified where the north core stairs and elevator are being removed.
- Construct six story elevator and a stair core on the north end including foundation, floor, roof, and exterior walls.
- The lateral-load resisting system in the existing building must be completely revised with buckling restrain brace frames (BRBF).
- Note: Removal of exterior walls is not specifically called out; therefore, the estimate is based on visual depiction of the future building provided.
- It should be noted that the demolition quantity estimate by BCE is significantly less.

6. 02221 DEMOLITION SUBCONTRACTOR - AK DEMO: \$2,017,277 - 7.58% of Direct Costs

This item seems high and requires further explanation of what is included or excluded:

- The extent of interior structural demolition should be confirmed; e.g. BCE assumed the floors will stay. There are other specific structural issues affecting demolition that should be investigated.
- BCE questions whether all demolition (e.g. mechanical, plumbing, structural, interiors, hazardous materials) is included in Alaska Demo's price? There are additional demolition line items included in the GC demolition. *The question is if the demolition costs have been doubled up.*
- One cannot tell at this time how much "contingency" does this item include.
- Were there other demolition subcontract quotations solicited from other local qualified companies?
- Will the General Contractor furnish all cranes, hoist and rigging? If so, are any of these costs "doubled-up" in the Alaska Demolition's subcontract quotation?
- How long is it expected to perform this demolition work? (Will it be done in the winter? Will temporary heat be required for mass demolition work? Temporary heat may already be included).
- Some additional costs for this work may be included (or "doubled-up") in several other line items in (Criterion's) cost estimate, e.g. Material Handling, Hauling, Dump Fees. One would need to identify and discuss them.

7. 02220 ADDITIONAL ASBESTOS ABATEMENT - ALLOWANCE: \$300,000

This item requires explanation of why it is not included in the demolition quote (by Alaska Demolition).

8. 02300 SITE & UTILITY SUBCONTRACTOR - BCX: \$362,622 - 1.36% of Direct Costs

It is not clear to BCE what is included in this subcontract? Site utilities and hook-ups, such as water, sanitary sewer, storm water, and site access? One would need to verify that this work is not also included ('doubled up') in other work.

9. 02455 H PILING & LAGGING (BASEMENT SHORING): \$571,933

Did Criterion receive a subcontractor quotation for this work (is this cost confirmed)? If not, the scope of work should be investigated and detailed further.

10. 00310 FORMWORK

Total cost of concrete work is \$1,380,201 for Division 3000, which does not seem unreasonable. BCE'S estimate of quantities, however, provides a much lower number than in the contractor's estimate. There is not enough design detail at this time for BCE to confirm the actual quantity or the cost of concrete work.

11. DIVISION 05000 METALS

The total for this division is \$2,211,554, or 8.3% of Direct Costs. Cost of fabricated steel is \$3,000 per lb. This is somewhat high.

Buckling Restraint Braces were counted as 104 ea. Is this a specialty item or just structural fabricated steel? The quantity of this material is consistent with BCE's estimate.

Estimated is 21,000 LF for cold-formed metal framing. Due to the lack of detailed design, BCE could not verify if this framing is not in the areas where the Kawneer exterior glazing or interior translucent glazing is already estimated. The total price as a percentage of the project is not unreasonable, but it would be good to confirm this material take-off and the price.

12. DIVISION 06000: WOOD & PLASTIC

Costs for these materials and installation at 1.32% of Direct Costs appear okay.

It is provided as a "Budget Allowance for Custom Case work". This could possibly be a fairly low estimate for cabinetry and case work, and should be verified by the Owner/ User.

13. DIVISION 07000 THERMAL & MOISTURE

Metal Siding Panels. It was not clear as to where will these be installed. Are these the Mechanical Penthouse walls? At \$552,824, or \$36.61 per square foot, they seem to be quite expensive.

Membrane roof price is not unreasonable.

Roofing price seems to be in line with the industry standard for insulated, contoured for drainage EPDM roofing prices and should also include all flashing.

14. DIVISION 08900: DOORS & WINDOWS

Interior door and frame prices are reasonable assuming they include all door hardware, too. This cost number comes in at \$2,264.00 per 'opening'. BCE believes that this is a good price for high quality door frames and hardware installed. While this reviewer had no design information on the grade of hardware, at this price the supplied materials should be of good quality and by a reputable manufacturer (i.e., Von Duprin, Schlage, Best, Precision, LCN).

15. 08900 GLAZED CURTAIN WALL & ALUMINUM ENTRANCES

The total price of \$2,103,322 is 7.90% of Direct Costs.  
The system quoted in the design narrative is a Kawneer product and should be at least a 6" back member extrusion depending on the structural/ wind load design requirements. The price is around \$85.00 per square foot. This should be a good number, especially if utilizing the Kawneer Versoliel Sun Shade extrusion (as noted).

16. DIVISION 09100: FINISHES

Partition Studs, GWB and Ceiling costs appear reasonable.

Painting and Taping is estimated at \$452,627, or \$1.7% of Direct Costs. Tape and paint price seems perfectly reasonable based on the square footage of sheetrock; it comes out to about \$1.36 per square foot, adding in the suspended ceilings. Painted and taped wall surface should be verified though with regard to the other materials listed (e.g. translucent partitions, etc.)

Flooring: This is another allowance price (\$6.83/SF), and should be negotiated based on quality of flooring used. It should be noted that this price does not reflect floor prep work. This price also seems reasonable for good commercial quality ceramic tile, carpets, etc.

Ceilings: This number calculates out to \$5.20 per SF, and is a good number for non regular, non fire rated suspended ceilings. This would be a standard grid and tile (I.E. Armstrong Cortega).

17. DIVISION 100000: SPECIALTIES

All prices for the items included in the estimate appear reasonable.

Is there a contract requirement for **1% for [Modular] Art?**  
It is currently **excluded** from the Criterion's estimate.

#### 18. 14000: GLASS WALL SYSTEMS

ALLOWANCE of \$654,983 (or 2.46% Project Direct Costs) has been included in the project budget estimate.

From the architectural narrative this system will be used for the Office Suites.

- Translucent and Clear Glass Partitions between Inner and Outer Offices.
- Translucent and Clear Glass Partitions between Office Suites and Common Corridor.

Floor - carpet or similar; ceiling - combination of GWB and 2'X2' ACT.

Almost all walls at exterior walls in the offices will be designed with full glazing. It appears that this allowance is for most of the interior office walls to get glass as well (Translucent Glazing is noted). This may be done to get light into the building, but still allow for relative privacy in the offices. The current base price for the translucent partitions (per our check) is about \$74.00 per square foot, which is very high. *However, because the price is given as an allowance, BCE staff would think it is up for negotiations.*

Notes:

It is not clear whether Criterion estimated the quantity of the total area of glass partitions required. Did they get a material supplier and/or an installing subcontractor quotation? The quantity may be "doubled-up" with GWB partition framing (see above).

#### 19. DIVISION 14200 - ELEVATORS

Elevator costs are reasonable. Could be confirmed by the quote from the supplier (i.e. Otis Elevator).

#### 20. DIVISION 15000, MECHANICAL

The MECHANICAL work will be accomplished under a separate Design-Build Contract. The total cost of this work is \$4,119,269, which is \$63.37 per square foot, or 15.47% of the total project Direct Cost. BCE believes that as a budgetary estimate this number is on the "conservative" / high side (Ref: RSMeans). This estimate is about 10-15 percent higher than what one would expect for this type of building (even with LEED / energy efficient features).

There are EXCLUSIONS in the mechanical estimate section:

- Mechanical Demolition is excluded (assumed to be performed by Alaska Demolition);
- Demolition of all plumbing systems, plumbing fixtures, HVAC systems;
- Work excludes all utility connections.



Work INCLUDED in the mechanical estimate.

The contractor's cost estimate currently includes the following items (as identified in the design narrative and other supplementary documentation provided for BCE review):

- Mechanical design and engineering.
- LEED Design Criteria.
- Fire Protection:
  - Subcontract price for a wet-pipe sprinkler system is included in the estimate, which is reasonable; however, a new fire pump may be needed (which is excluded from this estimate).
  - New fire department connection and sprinkler riser are included
- Plumbing
  - 6" Water Service; Sanitary Sewer Service; Gas Meter Connections (See BCX Utility Contractor quote above)
  - Natural gas piping
  - New duplex lift station needed. Sump pumps
  - Water pump package
  - Copper, CPVC, PEX piping
  - Two water heaters
  - All new plumbing fixtures and floor drains
  - New rain leader piping
- HVAC
  - 2 high efficiency boilers, controls, mechanical room piping;
  - Fin-tube radiation all along building perimeter at floors;
  - Cabinet unit heaters in entrances;
  - Roof top packaged HVAC unit. Building ventilation system variable air volume with sound control.
  - Terminal Heating Equipment: VAV boxes for terminal air supply w/Coils, etc.
  - IT Room Cooling refrigerator systems (2 ea).
  - Snowmelt in 3 areas: Front sidewalk, South rear entry/loading, and parking ramp will use a separate boiler.
- DDC Controls
  - Trane equipment interfaces. Pricing falls within the industry standards. VTC also is in a good range. The customer should find out if either of these includes *warranty and upgrades*, as there are high yearly costs for these items that are often overlooked.

## 21. DIVISION 16000, ELECTRICAL

The ELECTRICAL work will be accomplished under a separate Design-Build Contract. The total cost of \$3,054,429 for the electrical is \$46.99 per square foot, which is 11.47% of the Direct Cost. This is not unreasonable as this is believed to be a high budgetary estimate

(Ref: RSMMeans); it is "conservative" / high side. This item also includes \$319,000 for electrical engineering. This appears to be in addition to the total project design costs, which may be a duplication of costs.

Work INCLUDED in the electrical estimate.

The contractor's cost estimate currently includes the following items (as identified in the design narrative and other supplementary documentation provided to BCE):

- A main distribution switchboards consisting of metering equipment and overcurrent protection for distribution and branch circuit panels.
- Feeders to distribution and branch circuit panels.
- Branch circuit panels for power, lighting, HVAC, etc.
- Branch circuit wiring systems for equipment, lighting, duplex receptacles, appliances, motors, motor starters, etc., as required.
- Wall switches, duplex receptacles and other wiring devices.
- All hangers, anchors, sleeves, chases, support for fixture, and electrical materials and equipment.
- Interior lighting fixtures, controls complete with all lamps.
- Wiring and connections to all equipment furnished by the owner.
- Exterior lighting and controls.
- Telecommunication system.
- Fire Alarm system with monitoring of sprinkler system.
- Door Access.
- CCTV System.
- Cable TV system.
- 150 KW Standby Power Generator

### ***Conclusions and Recommendations***

This construction cost estimate for the Downtown Development at 716 W 4<sup>th</sup> Avenue, Anchorage, Alaska, was found to be not unreasonable in general, even though some items may be on the high side. There are several Allowances that will need to be verified (confirmed) in the future as the design is being completed.

Because this is a design-build project, it is prudent for the customer to make sure that the materials used in the building comply with the user's requirements and specifications. The project budget can definitely support very good to excellent quality of materials and installation workmanship.

It is also advisable to verify such items as warranties and upgrades that will come in the future during the building use.

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*Construction Cost Estimate Review  
Downtown Development at 716 W 4th Avenue, Anchorage, AK  
Bratslavsky Consulting Engineers, Inc  
October 2, 2013*

Please do not hesitate to contact us with any questions or requests for additional information regarding this report.

Sincerely,

Tanya Bratslavsky, P.E., S.E., AVS  
President

Attachments:

Appendix A - LIO Building Construction Estimate by Criterion General, LLC  
Appendix B - LIO Building Construction Estimate Worksheet by BCE  
Appendix C - Photographs by BCE