



TENDER DOCUMENT

FOR

Construction of Ferro-concrete Indoor Switchgear Building

Prepared by:
Belize Electricity Limited
Substation Operations
2½ Miles Philip Goldson Highway
Belize City, Belize
April 2023

Bidders will be required to submit a fixed price quotation via the price schedule linked [here](#) and provide all equipment and materials. Submit proposals via email to bidsubmittal@bel.com.bz no later than **3:00 p.m. local time on Monday, May 29, 2023**, and labelled:

BID #2023-1893 Construction of Ferro-concrete Indoor Switchgear Building

IMPORTANT DATES:

- Pre-bid site visit – 9:00 a.m. local time on Wednesday, May 3, 2023, at BEL Magazine Road Compound in Belize City
- Bid due date – 3:00 p.m. local time on Monday, May 29, 2023
- Questions or clarifications: all questions or clarifications will be addressed on the pre-bid meeting or emailed to bidboxrequest@bel.com.bz on or before Monday, May 22, 2023
- Price Schedule and Appendix B3 – Bidding Form should be submitted.

CRITERIA

1. Price - 40%
2. General Experience - 15% (5 construction projects 3% each)
3. Specific Experience - 15% (3 construction projects 5% each)
4. Financial Resources - 15% (credit 50% and finance 50%)
5. Current Contract Commitment - 5% (1-5 projects)
6. Time – 10%

TERMS OF BIDDING AND EVALUATION CRITERIA

GENERAL

1. Scope of Bid

- 1.1 BEL invites bids on a lump sum basis for the construction of roughly 200-square-foot structure made of masonry and reinforced concrete, reinforced concrete roofs with parapet walls, and reinforced concrete floor slabs at BEL Magazine Road Compound in Belize City.

2. Expected Works

A. Site Assessment

Conduct a visual assessment of the construction and surrounding area to identify potential hazards and risks.

B. Preliminaries

- Mobilization and Demobilization
- Temporary Structures & Utilities
- Site Security
- Insurances and guarantees
- Works Setting-out
- Material Testing

C. Site Works

- Fence
- Pedestrian Gate
- Vehicular Access Gate

D. Foundation

- Piling
- Pile caps

E. Ground Floor Beams

F. Ground Floor Columns

G. Ground Floor Walls

- Shear Walls

- Stair Walls

H. First Floor Slab and Beams

- First Floor Beams
- First Floor Slabs

I. First Floor Columns

J. First Floor Walls

- Exterior Walls
- Interior Walls
- Lintels
- Verandah & Stairs Railing

K. Roof Slab and Beams

- Roof Beams (Downturn included)
- Roof Slabs (Parapet included)

L. Roof Drainage

- Roof Beams (Downturn included)
- Roof Slabs (Parapet included)

M. Stairs

N. Finishes

O. Doors and Windows

P. Electrical

Q. Fire Equipment

R. Trenching

S. Debris Removal

- Safely remove and dispose of all construction debris.
- Transport debris offsite to a landfill.

3. Qualification Requirement

3.1 To qualify for the award of the contract, Bidders shall meet the following minimum qualifying criteria:

A. Personnel

The Bidder must demonstrate that it will have the personnel for the key positions that meet the following requirements:

No.	Position	Total Work Similar Experience (years)	In Similar Works Experience (years)
1	One (1) Project Manager or Contract Manager	5	4
2	One (1) Site Superintendent or Site Foreman	15	10

The Bidder shall provide details of the proposed personnel and their experience records in the relevant Forms.

B. Equipment

The Bidder must demonstrate that it will have access to the key Contractor's equipment listed hereafter:

No.	Equipment Type and Characteristics	Minimum Number required
	Heavy Equipment	
1	Crane with pile driving machine	1
2	Concrete mixer	1
	Other Equipment	
3	Compactor (plate)	1
4	Concrete vibrator machine	4

The Bidder shall provide further details of proposed items of heavy equipment using the relevant form.

C. Financial

The Bidder must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:

- I. The cash-flow requirement of one hundred thousand Belize dollars (BZD\$100,000)
- II. The cash flow requirements for this contract and its concurrent commitments.

D. General Experience

The Contractor should have experience under contracts in the role of Contractor, subcontractor, or management contractor for at least the last two (2) years prior to the applications submission deadline and with activity in at least nine (9) months in each year.

E. Specific Experience

- I. The Contractor should have experience as a Contractor, management contractor, or subcontractor in at least two (2) contracts within the last three (3) years that have been successfully and substantially completed and that are similar to the proposed works. The similarity shall be based on the physical size, complexity, methods/technology or other characteristics described in the specifications and drawings.
- II. For the above or other contracts executed during the period stipulated above, a minimum experience is required in the construction of an elevated first-floor level steel-reinforced concrete building on prestressed concrete piles with a steel-reinforced concrete roof.

F. Completion Time

The Employer anticipates the completion of the project within 24 weeks after commencement. The proposed commencement date shall be Monday, July 3, 2023, and the completion date shall be Friday, December 15, 2023.

Full completion shall include all civil works.

During the execution of the works, the Employer will ensure the availability of continuous oversight on its part to ensure that all works are in compliance with BEL's Safety, Environmental and Technical standards. Continuous feedback will be provided to the Contractor specifically to highlight those areas of work considered substandard to BEL to facilitate progressive repairs to remedy all deficiencies. Feedback will be provided to the Contractor in the form of an email.

The evaluation of bids will take into account the Bidder's proposed schedule in the following manner: no credit will be given to timetables proposing the project completion before 16 weeks, and bids proposing completion after 24 weeks will be considered non-responsive. Within the Bidder's proposed schedule of works, an adjustment equivalent to 1% of the bid price per week or part thereof will be added, for evaluation purposes only, to the bid price for bids offering proposed completion between the early and late dates of 16 to 24 weeks.

4. One Bid per Bidder

- 4.1 Each Bidder shall submit only one bid, either individually or as a partner in a joint venture. A Bidder who submits or participates in more than one bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

5. Cost of Bidding

- 5.1 The Bidder shall bear all costs associated with the preparation and submission of his bid, and the Employer will in no case be responsible or liable for those costs.

6. Site Visit

- 6.1 BEL will arrange a one-time site visit for all Bidders. Interested Bidders, at the Bidder's own responsibility and risk, will be provided with all information that may be necessary for preparing the bid and entering into a contract for the construction of a concrete building. The costs of visiting the site shall be at the Bidder's own expense.

7. Clarification of Bidding Documents

- 7.1 Clarifications related to this tender will be addressed in a pre-bid site visit, which will be held at **9:00 a.m. local time on Wednesday, May 3, 2023**, at BEL Magazine Road Compound in Belize City or emailed to bidboxrequest@bel.com.bz **on or before Monday, May 22, 2023**. The Employer will respond to any request for clarification received earlier than five business days before the deadline for submission of bids. Copies of the Employer's response will be forwarded to all Bidders, including a description of the enquiry, but without identifying its source.

8. Amendment of Bidding Documents

- 8.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 8.2 Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing to all Bidders. Prospective Bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend, as necessary, the deadline for submission of bids in accordance with sub-clause 11 below.

9. Language of Bid

- 9.1 All documents relating to the bid shall be in the English language.

10. Bid Prices

- 10.1 The Bidder shall fill in the price breakdown for all items of the works described in Appendix A. Items for which no rates or prices are entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the other prices in the activity schedule.
- 10.2 All duties, taxes, and other levies payable by the Contractor under the contract shall be included as a separate line item in the total price submitted by the Bidder.
- 10.3 Additional line items shall not be included by the Bidders. Items within the activity schedule will not be paid for separately and should be deemed included with the other prices in the activity schedule.

11. Deadline for Submission of Bids

- 11.1 Submissions for Construction of Ferro-concrete Indoor Switchgear Building will be received from the invited Bidders by email no later than **3:00 p.m. local time on Monday, May 29, 2023.**
- 11.2 To submit bids, please return the Price Schedule linked [here](#) and Appendix B3 - Bidding Form linked here as attachments via email to bidsubmittal@bel.com.bz and labelled:

BID #2023-1893 - Construction of Ferro-concrete Indoor Switchgear Building

11.3 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 8, in which case all rights and obligations of the Employer and the Bidders previously subject to the original deadline will then be subject to the new deadline.

12. Late Bids

12.1 Any bid received by the Employer after the deadline prescribed in Clause 11 will not be acknowledged by the Employer.

13. Modification and Withdrawal of Bids

13.1 Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 11.

13.2 Each Bidder's modification or withdrawal notice shall be emailed and additionally marked in the subject line: "MODIFICATION" or "WITHDRAWAL" as appropriate.

13.3 No bid may be modified after the deadline for submission of Bids.

13.4 Bidders may offer only discounts or otherwise modify the prices of their bids by submitting Bid modifications in accordance with this clause or including discounts or modifications in the original Bid submission.

14. Bid Opening

14.1 The Employer will open the bids, including modifications made pursuant to Clause 13, internally shortly after the bid submission deadline.

15. Process to be Confidential

15.1 Except as may be required by law, after the opening of the bids, information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any efforts by a Bidder to influence the Employer's processing of bids or award decisions may result in the rejection of its bid.

16. Clarification of Bids

16.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at the Employer's discretion, ask any Bidder for clarification of the Bidder's bid, including breakdowns of the prices in the Activity Schedule. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause 15.

17. Examination of Bids and Determination of Responsiveness

17.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid (a) meets the eligibility criteria defined in Clause 3, (b) has been properly signed, (c) is accompanied by the required securities, and (d) is substantially responsive to the requirements of the bidding documents.

17.2 A substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way, inconsistent with the bidding documents, the Employer's rights or the Bidder's obligations under the contract; or (b) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive bids.

17.3 If a Bid is not substantially responsive, it will be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

18. Correction of Errors

18.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows: Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

18.2 The amount stated in the bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, the bid will be rejected.

19. Evaluation and Comparison of Bids

- 19.1 The Employer will evaluate and compare only the bids determined to be substantially responsive in accordance with Clause 17.
- 19.2 In evaluating the bids, the Employer will determine for each bid the evaluated bid price by adjusting the bid price as follows:
- A. Making any correction for errors pursuant to Clause 18.
 - B. Excluding provisional sums and the provision, if any, for contingencies in the Activity Schedule but including day work priced competitively.
 - C. Making an appropriate adjustment for any other acceptable variations, deviations or alternative offers submitted in accordance with Clause 13; and
 - D. Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub-Clause 13.4.
- 19.3 The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations and alternative offers and other factors that are more than the requirements of the bidding documents or otherwise result in unsolicited benefits for the Employer will not be taken into account in the bid evaluation.
- 19.4 The estimated effect of any price adjustment conditions during the period of implementation of the contract will not be considered in the bid evaluation.
- 19.5 At the Employer's discretion, partial bids can be considered if all the required criteria have been met.

20. Award Criteria

- 20.1 Subject to Clause 22, the Employer will award the contract to the Bidder whose bid has been determined to be substantially responsive to the bidding documents and who has offered the lowest evaluated bid price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4.

21. Employer's Right to Accept Any Bid and to Reject Any or All Bids

- 21.1 The Employer reserves the right to accept or reject any Bid and to cancel the bidding process and reject all bids at any time prior to the award of contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

22. Notification of Award and Signing of Agreement

- 22.1 The Bidder whose bid has been accepted will be notified of the award by the Employer prior to the expiration of the Bid validity period in writing. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the contract (hereinafter and in the contract called the "Contract Price").
- 22.2 The notification of award will constitute the formation of the contract.
- 22.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and sent to the successful Bidder within five (5) days following the notification of award. Within two (2) days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.
- 21.4 Upon commencement of works, the Employer will promptly notify the other Bidders that their bids have been unsuccessful.

23. Liability for Damage to Property Before Taking-over

- 23.1 The Contractor shall be liable for any damage to property that occurs before the risk has passed to the Employer. This applies irrespective of the cause of the damage unless the damage has been caused by the Employer or anyone for whom he is responsible. Even if the Contractor is not liable for damage to the Works in accordance with this clause, the Employer may require the Contractor to remedy the damage at the Employer's cost.
- 23.2 The Contractor shall be liable for damage to the Employer's property occurring before taking-over of the Works only if it is proved that such damage was caused by negligence on the part of the Contractor or anyone for whom he is responsible in connection with the performance of the contract. The Contractor shall, however, under no circumstances be liable for loss of production, loss of profit or any other consequent economic loss.

24. Liability for Defects

- 24.1 Pursuant to the provisions of Clause 25, the Contractor shall remedy any defect in the Works resulting from faulty materials or workmanship.

SCHEDULE OF PRICES

Bid #2023-1893 Construction of Ferro-concrete Indoor Switchgear Building

Magazine Road Compound

Fill out all worksheets in the Price Schedule linked [here](#) and submit this file and the Appendix B3 – Bidding Form [here](#) to bidsubmittal@bel.com.bz on or before deadline.



Price schedule.xlsx



APPENDIX B 3 -
Bidding Forms.docx

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
	B.E.L. Indoor Switchgear Building				
	The project consists of construction of roughly 2000-square foot structure made of masonry and reinforced concrete, reinforced concrete roofs with parapet wall, and reinforced concrete floor slabs. The site works are to include a chain link perimeter fence, trenching and site filling as required.				
1.0	PRELIMINARIES				
	<u>Mobilization and Demobilization</u>				
1.1	Allow for mobilization and demobilization.	1.00	LS		
	<u>Temporary Structures & Utilities</u>				
1.2	Allow for temporary structures such as storage and site office, etc. c/w allowance for all necessary water and electricity supply for the project.	1.00	LS		
1.3	<u>Site Security</u>				
	Allow for the provision of security to site including watching, lighting and protection by day and night (including Sundays and holidays) over the construction period until completion and handing-over of the Works.	1.00	LS		
	-				
	<u>Insurances</u>				
1.4	Allow for required all risk contractor's insurance, which includes ALL RISK COVERAGE, EQUIPMENT COVERAGE, THIRD PARTY PROPERTY COVERAGE, THIRD PARTY PERSONS COVERAGE, AND	1.00	LS		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
	CONTRACTOR'S EMPLOYEE COVERAGE as stated in contract documents.				
	<u>Performance Guarantee</u>				
1.5	Allow for required PERFORMANCE GUARANTEE .	1.00	LS		
	<u>Advance Guarantee</u>				
1.6	Allow for required ADVANCE PAYMENT SECURITY .	1.00	LS		
	<u>Works Setting-out</u>				
1.7	Allow for the provision of all necessary personnel, materials, labor, tool and equipment and the like for the proper setting out of the works and keeping in place until the completion of works or until instructed by the Engineer.	1.00	LS		
	<u>Material Testing</u>				
1.8	Allow for testing of concrete and masonry blocks in accordance with the Specifications for the duration of the Project. Testing shall be performed by an independent laboratory approved by the Engineer, and sample taking shall be observed by the Engineer.	1.00	LS		
2.0	SITE WORKS				
	<u>Fence</u>				
2.1	Construct fence comprised of plastic coated 12-gauge chain link on 2" galvanized pipe columns spaced on 10' on center 6' high, with 1 3/4" galvanized pipe horizontal uppers and lowers and 1 1/2" galvanized pipe bracing at corners, c/w as necessary fittings and fixing as shown in the drawing.	200.00	LF		
	<u>Pedestrian Gate</u>				
2.2	Construct 4ft wide chain link pedestrian gate. Complete with fittings and accessories as shown in the drawings.	1.00	No.		
	<u>Vehicular Access Gate</u>				
2.3	Construct 20ft wide vehicular access gate complete with fittings and accessories as shown in the drawings.	1.00	No.		
2.4	Allow for site finish as shown, with 3/4-inch crushed limestone, to finish grade level as indicated.	10.00	CY		
3.0	FOUNDATION				
	<u>Piling</u>				

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
3.1	Supply and drive 12-inch square prestressed concrete piles to refusal (Soil boring results included in drawings). Allow to cut off piles at required elevation in accordance with the drawings. Prestressed piles to be supplied and driven by an approved piling subcontractor. Pile specifications, driving criteria and driving procedures shall be submitted to the Engineer for approval prior to purchase.	22.00	No.		
	<u>Pile caps</u>				
3.2	Excavate for pile caps average depth 2'-0" below existing ground level OR AS DETERMINED ON SITE AND APPROVED BY ENGINEER. Allow for de-watering of trenches in the event ground water is encountered and for the demolition of sub-surface rock if encountered.	10.50	CY		
3.3	Dispose of surplus excavated material as directed fby the Client	10.50	CY		
3.4	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for pile caps. Allow for overlapping and wastage.				
	Steel # 4	353.00	lb		
	Steel # 5	796.00	lb		
3.5	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for pile caps.	10.50	CY		
3.6	Foundation provisional sum	1	LS	\$20,000.00	\$20,000.00
4.0	GROUND FLOOR BEAMS				
	<u>Ground Floor Beams</u>				
4.1	Provide and place edge and soffit formwork required for ground floor beams. Allow for cleats, struts, and any other necessary bracing.	110.00	SY		
4.2	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for ground floor beams. Allow for overlapping and wastage.				
	Steel #3	791.00	LBS		
	Steel #5	2100.00	LBS		
4.3	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for ground beam.	19.00	CY		
5.0	GROUND FLOOR COLUMNS				
5.1	Supply and place formwork for ground floor columns. Allow for cleats, struts, and any other necessary bracing.	77.00	SY		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
5.2	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for ground floor columns. Allow for overlapping and wastage.				
	Steel #3	365.00	LBS		
	Steel #6	2213.00	LBS		
5.3	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for ground floor columns.	6.50	CY		
6.0	GROUND FLOOR WALLS				
	<u>Shear Walls</u>				
6.1	Supply and place reinforcement to block walls as specified in drawings.				
	Steel #4	428.00	LBS		
6.2	Supply 8" blocks and erect ground floor block walls complete with grouting and reinforcement as detailed in drawings.	47.50	SY		
	<u>Stair Walls</u>				
6.3	Supply and place reinforcement to block walls as specified in drawings.				
	Steel #4	23.00	LBS		
6.4	Supply 6" blocks and erect ground floor block walls complete with grouting and reinforcement as detailed in drawings.	3.50	SY		
	-				
7.0	FIRST FLOOR SLAB AND BEAMS				
	<u>First Floor Beams</u>				
7.1	Provide and place edge and soffit formwork required for first floor beams. Allow for cleats, struts, and any other necessary bracing.	100.00	SY		
7.2	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for first floor beams. Allow for overlapping and wastage.				
	Steel #3	747.00	LBS		
	Steel #4	60.00	LBS		
	Steel #5	1178.00	LBS		
	Steel #6	1472.00	LBS		
7.3	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for first floor beams.	10.00	CY		
	<u>First Floor Slabs</u>				
7.4	Provide and place edge and soffit formwork required for first floor slab. Allow for cleats, struts, and any other necessary bracing.	192.00	SY		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
7.5	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for first floor slab. Allow for overlapping and wastage.				
	Steel #3	4562.00	LBS		
	Steel #4	634.00	LBS		
7.6	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for first floor slab.	41.00	LS		
8.0	FIRST FLOOR COLUMNS				
8.1	Supply and place formwork for first floor columns. Allow for cleats, struts, and any other necessary bracing.	66.00	SY		
8.2	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for first floor columns. Allow for overlapping and wastage.				
	Steel #3	356.00	LBS		
	Steel #6	1037.00	LBS		
8.3	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for first floor columns.	5.50	CY		
9.0	FIRST FLOOR WALLS				
	<u>Exterior Walls</u>				
9.1	Supply and place reinforcement to exterior block walls as specified in drawings.				
	Steel # 3	190.00	LBS		
	Steel # 4	752.00	LBS		
9.2	Supply 6" blocks and erect ground floor exterior block walls complete with grouting and reinforcement as detailed in drawings. Also allow for concrete stiffeners where deemed necessary on site and concrete window sills as per drawings.	157.00	SY		
	<u>Interior Walls</u>				
9.3	Supply and place reinforcement to interior block walls as specified in drawings.				
	Steel # 3	75.00	LBS		
	Steel # 4	170.00	LBS		
9.4	Supply 4" blocks and erect ground floor interior block walls complete with grouting and reinforcement as detailed in drawings. Also allow for concrete stiffeners where deemed necessary on site.	26.00	SY		
	<u>Lintels</u>				
9.5	Allow to construct RC lintels as shown, c/w formwork and reinforcement, less than 4 feet in clear span. TYPE 1	16.50	LF		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
9.6	Allow to construct RC lintels as shown, c/w formwork and reinforcement, greater than 4 feet but less than 8 feet in clear span. TYPE 1	7.00	LF		
	<u>Verandah & Stairs Railing</u>				
9.7	Construct 3-ft 4-in high METAL verandah railing as shown in drawings	105.00	LF		
	-				
10.0	ROOF SLAB AND BEAMS				
	<u>Roof Beams (Downturns included)</u>				
10.1	Provide and place edge and soffit formwork required for roof beams. Allow for cleats, struts, and any other necessary bracing.	136.00	SY		
10.2	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for roof beams. Allow for overlapping and wastage.				
	Steel #3	1008.00	LBS		
	Steel #4	492.00	LBS		
	Steel #5	2139.00	LBS		
10.3	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for roof beam.	13.00	CY		
	<u>Roof Slabs (Parapet included)</u>				
10.4	Provide and place edge and soffit formwork required for roof slab. Allow for cleats, struts, and any other necessary bracing.	214.00	SY		
10.5	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for roof slab. Allow for overlapping and wastage.				
	Steel #3	2853.00	LBS		
	Steel #4	1999.00	LBS		
10.6	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for roof slab. Allow for slopes as shown.	38.00	LS		
11.0	ROOF DRAINAGE				
11.1	Supply and install 4" PVC downpipe as shown, mounted along the building columns from the roof to the ground level.	46.00	LF		
11.2	Supply and install 6" PVC downpipe as shown, mounted along the building columns from the roof to the ground level.	23.00	LF		
11.1	Supply and install 4" PVC roof drain as shown, mounted under the roof. Allow for Collector pipes with drain grill as shown.	28.00	LF		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
11.2	Supply and install 6" PVC roof drain as shown, mounted under the roof. Allow for Collector pipes with drain grill as shown.	55.00	LF		
11.3	Provide and place concrete splash pad on the ground level where shown next to the building to receive runoff from downpipes as shown.	3.00	No.		
12.0	STAIRS				
	<u>Stairs</u>				
12.1	Provide and place exterior stairs 5'-0" wide from ground floor level to first floor level with 7 3/4" riser height and 12" thread depth. Allow for compacted fill, formwork, reinforcement steel, and concrete as specified in drawings. Allow for surface finish as indicated.	2.00	No.		
13.0	FINISHES				
13.1	Provide and place 3/8" scratch coat and 1/2" thick finish coat 1:3 cement/sand/bonding agent mortar to interior and exterior walls, ring beams, lintels, sills, and etc. Allowing for hacking concrete, fair joints and edges and making good around all doors and windows.	463.00	SY		
13.2	Supply and install application of one coat primer and two coats of approved exterior grade emulsion paint to exterior walls, roof beam, eaves, lintels, sills, and etc. Allow for provision of scaffolding and painting equipment.	224.00	SY		
13.3	Supply and install application of one coat primer and two coats of approved interior oiled based paint to interior walls, roof beam, ceiling, eaves, lintels, and etc. Allow for provision of scaffolding and painting equipment.	412.00	SY		
13.4	Supply and install 2-component EPOXY, to entire First Floor (verandah included) surface for heavy abrasion exposure in accordance with manufacturer's recommendations	203.00	SY		
13.5	Supply and install 2 coats of elastomeric sealant, snow roof type or equivalent to entire roof surface in accordance with manufacturer's recommendations	223.00	SY		
14.0	DOORS & WINDOWS				
	<u>Doors</u>				
14.1	D1 Doors. Supply and install (2) 3'-0" wide x 8'-0" high full metal double door complete with all accessories as shown.	1.00	No.		
14.2	D2 Doors. Supply and install 3'-6" wide x 8'-0" high full metal door complete with all accessories as shown.	2.00	No.		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
14.3	D3 Doors. Supply and install 3'-6" wide x 8'-0" high full metal door with 1 glass panel complete with all accessories as shown.	1.00	No.		
	<u>Windows</u>				
14.4	W1 Windows. Opening 2'-0" wide x 2'-0" for exhaust fan as shown	1.00	No.		
15.0	ELECTRICAL				
15.1	Supply and install all required conduits, wires, and detailed accessories within the proposed building as shown in drawings allowing for fittings and all accessories up to the point of service (to be instructed by the EMPLOYER) and to the buildings main distribution panel to ensure electricity connection in compliance with BEL and PUC regulations. Work to be done by a LICENSED ELECTRICIAN who will provide as built drawings to the PUC and Client prior to electricity connection.	1.00	LS		
15.2	Supply and install single 40" 40W electronic start recessed LED light fixtures complete with flush diffusers.	22.00	No.		
15.3	Supply and install exterior grade wall mounted reflector type LED light fixtures (ES-LED / 3600) or equivalent.	2.00	No.		
15.4	Supply and install DC lights	9.00	No.		
15.5	Supply and install 3 way flush mounted wall switches unit mounted 4'-6" above ffl..	4.00	No.		
15.6	Supply and install HVAC units	2.00	No.		
15.7	Supply and install Exhaust fan	1.00	No.		
15.8	Supply and install Double Duplex Receptacle	6.00	No.		
			No.		
16.0	FIRE EQUIPMENT		No.		
16.1	Supply and install 10 lbs rechargeable dry chemical CLASS (ABC) fire extinguisher on columns as shown in drawings at max height 48" above ffl.	3.00	No.		
16.2	Supply and install photoelectric ceiling mounted smoke detector (85 decibels) complete with silence test button and blinking LED light.	2.00	No.		
17.0	TRENCHING				
	<u>Excavation and Earthworks</u>				
17.1	Excavate for trench average depth 3'-6" below existing ground level OR AS DETERMINED ON SITE AND APPROVED BY ENGINEER . Allow for de-watering in the event ground water is encountered and for the demolition of sub-surface rock if encountered.	99.00	CY		

Bills of Quantities

ITEM	DESCRIPTION	QTY.	UNIT	RATE	TOTAL
17.2	Return, fill and ram around trench selected material from the excavation in layers not exceeding 6" thick.	9.00	CY		
17.3	Spread surplus excavated material on site as directed for landscape and drainage purposes.	4.00	CY		
17.4	Provide, place and compact fill (Type 2) for trench base as shown.	33.50	CY		
	<u>Concrete Works</u>				
17.5	Supply, cut, bend and fix required high yield strength steel reinforcement (60,000 PSI) for pad foundations. Allow for overlapping and wastage.				
	Steel #3	999.00	LBS		
	Steel #4	451.00	LBS		
17.6	Provide and place concrete minimum 4375 psi (cube test) or 3500 psi (cylinder test) with maximum size aggregates 3/4" crushed stone required for trench base slab, walls and covers as shown.	22.50	CY		
17.7	Supply and place formwork for trench base slab, walls and covers as shown. Allow for cleats, struts, and any other necessary bracing.	154.50	SY		
17.8	Supply and Install 2'-7" wide Metal Cover (Type 2 trench details) as shown. Complete with all accessories.	65.00	LF		
				Sub-total	
				12.5% G.S.T.	
				TOTAL VALUE OF WORKS¹	
	CONTINGENCY SUM				
	The application of the Contingency Sum is subject to the discretion and approval of the Engineer and only to be used as directed by the Engineer.	1.00	CS	\$20,000.00	\$20,000.00

¹ Note 1: Any contract exceeding \$3,000.00 is subject to GCPW tax and the employer's portion will be deducted at 3%.

SITE PLAN



CODE OF CONDUCT

1. Contractor and his workers must wear safety equipment such as steel toe boots, hardhats, traffic vests, dust mask and gloves while works are ongoing.
2. The Contractor and his workers must adhere to BEL's Security Measures, afford respect to BEL workers, customers, visitors and authorities of the company and maintain good order and discipline.
3. Contractor and his workers must adhere to BEL's Environment Protection Policy and confirm to standards common in this business.
4. The Contractor must not employ minors and must make random inspections of his/her workers.
5. While on duty, contractor's personnel will not entertain, persons visiting them except in an emergency.

Company/ Contractor Name: _____

Authorized Signature: _____

Contact #: _____

*Note: Fill in attached bid schedule sheet and submit along with all required documentation.

ADMINISTRATIVE INFORMATION

Bids will be evaluated using the criteria below:

1. Price - 40%
2. General Experience - 15% (5 construction projects 3% each)
3. Specific Experience - 15% (3 construction projects 5% each)
4. Financial Resources - 15% (credit 50% and finance 50%)
5. Current Contract Commitment - 5% (1-5 projects)
6. Time – 10%

LIST OF ATTACHMENTS

1. [Appendix B1 – Indoor Switchgear Building Specifications](#)
2. [Appendix B2 – BEL Indoor Switchgear Building Construction Drawings](#)
3. [Appendix B3 – Bidding Forms](#)
4. [Appendix B4 – Contract Forms](#)
5. [Appendix B5 – BEL Contractor Safety Policy 2018](#)
6. [Appendix B6 – Pricing Notes](#)