



འབྲུག་བཟང་ལག་ལྗོངས་ལྟེ་
TOURISM COUNCIL OF BHUTAN



INVITATION TO BID (ITB)

for

Name of the work: Construction of Restroom

Location: Tashichhodzong, Thimphu Dzongkhag

January 2017

NATIONAL COMPETITIVE BIDDING

Bid No.TCB/IPDD-10/2016-2017

Date: 16th January 2017

1. The **Tourism Council of Bhutan (TCB)** invites bids for the construction of works detailed in the table. The bidders may submit bids for any or all of the following works, for the package or for any of the slices.
2. Bidding documents (and additional copies) may be purchased from the office of **TCB** from **17th January 2017**, the tender documents can be downloaded be from TCB and CDB websites. Interested bidders may obtain further information at the same address.
3. Bids must be accompanied by a bid security of Nu 2% of quoted amount drawn in favour of the **The Chief, Infrastructure and Product Development Division, TCB, Thimphu**. The bid security will have to be in any one of the forms as specified in the bidding document and shall have to be valid for 60 days beyond the validity of the bid.
4. Bids must be delivered to **Office of the Chief, IPDD, TCB, Thimphu** on or before 16:00 hours on **15th February 2017** and will be opened on 16th February 2017at **10:00** hours, in the presence of the bidders who wish to attend.

INVITATIONS TO BIDS (ITB)

TCB/IPDD-10/2016-2017/

17th January, 2017

The Tourism Council of Bhutan, Thimphu invites sealed bids for small works: Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag.

Sale of Tender: 17th January to 15th February 2017

Submission of tender: 15th February 2017

Opening of Tender: 16th February 2017, 10 AM.

Venue: TCB Conference Hall B

A complete set of tender documents may be downloaded from TCB website- www.tourism.gov.bt and CDB websites from 17th January 2017 to 15th February 2017.

INVITATIONS TO BIDS (ITB)	2
Section 1: Instructions to Bidder (ITB)	5
A. General	5
1. Scope of Tender	5
2. Corrupt Fraudulent Collusive or Coercive Practices	5
3. Eligible Bidders	6
4. Site Visit	6
B. Content of Bidding Document	6
5. Contents of Bidding Documents	6
6. Clarification of Bidding Documents	7
7. Amendment of Bidding Documents	7
C. Preparation of Bids	7
8. One Bid per Bidder	7
9. Bid Preparation Costs	7
10. Language of Bid	7
11. Documents comprising the Bid	7
13. Alternative Bid	7
14. Bid Price and Discount	7
15. Currencies of Bid and Payment	8
16. Documents comprising the Technical Proposal	8
17. Documents establishing the Qualification of the Bidder	8
18. Bid Validity	8
20. Format and Signing of Bid	9
D. Submission and Opening of Bids	9
21. Sealing and Marking of Bids	9
22. Bid Submission Deadline	9
23. Late Bids	9
24. Modification, Substitution or Withdrawal of Bids	10
25. Bid Opening	10
26. Confidentiality	10
27. Clarification	10
28. Bidder: Contacting the Employer	10
29. Determination of Responsiveness	10
30. Non Conformities, Errors and Omissions	11
31. Evaluation and Comparison of Tenders	11
32. Employer's Right to Accept or Reject any or all	11
F. Contract Award	12
33. Award Criteria	12
34. Notification of Award	12
Section 2 - Bidding Data Sheet	Error! Bookmark not defined.
A. General	Error! Bookmark not defined.
B. Bidding Documents	Error! Bookmark not defined.
C. Preparation of Bids	Error! Bookmark not defined.
D. Submission and Opening of Bids	Error! Bookmark not defined.
F. Award of Contract	Error! Bookmark not defined.
Section 3 – Evaluation and Qualification Criteria	Error! Bookmark not defined.
Section 4: Forms of Bid, & Qualification Information	Error! Bookmark not defined.

Bank Guarantee for Bid Security.....	19
Section 5. General Conditions of Contract	20
1. Definitions	20
2. Interpretation & Documents forming the Contract.....	20
3. Corrupt, Fraudulent, Collusive or Coercive Practices	21
4. Governing Language and Law	21
5. Engineer's Decision.....	22
6. Delegation	22
7. Communications and Notices.....	22
8. Sub- Contracting	22
9. Contractor's Personnel.....	22
10. Welfare of Labourers & Child Labour.....	22
11. Safety, Security and Protection of the Environment	22
12. Access to the Site	22
13. Documents, Information.....	22
14. Property	22
15. Insurance	23
16. Possession of the Site	23
17. Commencement of Works	23
18. Completion of Works.....	23
19. Programme of Works	23
20. Early Warning.....	23
21. Compensation Events	23
22. Non-Scheduled Items of Works.....	23
23. Schedule of Works.....	23
24. Payment Certificates	23
25. Payments and Currency	24
26. Retention	24
27. Liquidated Damages	24
28. Performance Security	24
29. Price Adjustment.....	24
30. Completion	25
31. Correction of Defects.....	25
32. Taking Over.....	25
33. Final Account	25
34. Termination	25
35. Payment upon Termination.....	26
36. Release from Performance	26
37. Force Majeure.....	26
38. Settlement of Disputes.....	27
Section 6. Special Conditions of Contract.....	28
Section 7. Contract Forms.....	29
Form-1.....	30
Form-2.....	31
Contract Agreement	31
Form-3.....	32
Bank Guarantee for Performance Security.....	32
Bank Guarantee for mobilisation advance.....	33

Section 1: Instructions to Bidder (ITB)

A. General

- | | | |
|---|-----|--|
| 1. Scope of Tender | 1.1 | The Employer, as indicated in the BDS issues this Bidding Document for the procurement of Works as specified in Section 6 (Employer's requirement): The name, identification and identification of this bidding are provided in the BDS . |
| | 1.2 | The successful Bidder will be required to complete the Works within the Time for Completion stated in the Special Conditions of Contract (SCC). |
| | 1.3 | Throughout this Bidding Documents; <ul style="list-style-type: none">(a) The term "in writing means communicated in written form with proof of receipt;(b) If the context so requires, singular means plural and vice versa; and(c) "Day" means calendar day. |
| 2. Corrupt Fraudulent Collusive or Coercive Practices | 2.1 | The Royal Government of Bhutan requires that Employers and the Bidders shall observe the highest standard of ethics during the implementation of procurement proceedings and the execution of Contracts under public funds. |
| | 2.2 | In pursuance of this requirement, the Employer shall <ul style="list-style-type: none">(a) exclude the bidder from participation in the procurement proceeding concerned or reject a proposal for award; and(b) declare a bidder ineligible, either indefinitely or for a stated period of time, from participation in procurement proceedings under public funds; |
| | 2.3 | If it, at any time, determines that the bidder has engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Contract under the public funds. |
| | 2.4 | The Government defines, for the purposes of this provision, the terms set forth below as follows : <ul style="list-style-type: none">a) "corrupt practice"¹ is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;b) "fraudulent practice"² is any intentional act or omission including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefits or to avoid an obligation;c) "collusive practice"³ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly |

¹ 'Another party' refers to a public official acting in relation to the procurement process or contract execution.

² A 'party' refers to a public official; the term 'benefit' and 'obligation' relate to the procurement process or contract execution; and the 'act or omission' is intended to influence the procurement process or contract execution.

³ 'parties' refers to participations in the procurement process including public officials attempting to establish bid prices at artificial, non competitive levels.

the actions of another party;

- d) “**Coercive practice**” is impairing *or* harming or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
- 2.5 The bidder shall be aware of the provisions on fraud and corruption stated in GCC Clause 3 and GCC Sub-Clause 34.2(d).
- 2.6 The RGoB requires that the Employer’s personnel have an equal obligation not to solicit, ask for and/or use coercive methods to obtain personal benefits in connection with the said proceedings.
3. Eligible Bidders
 - 3.1 Bidders of the categories **specified in the BDS** are eligible to participate in this bidding process.
 - 3.2 The Employer shall invite Bids using the Open Tendering Method (National Competitive Bidding) or limited tender as applicable.
 - 3.3 The bidder shall meet the qualification requirement stated in the BDS
4. Site Visit
 - 4.1 The Bidders, at their own responsibility and risk, is encouraged to visit and examine the Site and obtain all information that may be necessary for preparing the bid and entering into a Contract for performance of the Works. The costs of visiting the Site shall be at the bidder’s own expense.

B. Content of Bidding Document

5. Contents of Bidding Documents
 - 5.1 The sections comprising the Bidding Document are listed below and should be read in conjunction with any Amendment issued in accordance with ITB Clause 7:

PART 1 Bidding Procedures

- Section 1: Instructions to Bidders (ITB)
 - Section 2: Bidding Data Sheet (BDS)
 - Section 3: Evaluation and Qualification Criteria
 - Section 4: Bidding forms
 - Section 5: General Conditions of Contract (GCC)
 - Section 6: Special Conditions of Contract (SCC)
 - Section 7: Contract Forms
 - Section 8: Bill of Quantities & Specifications
 - Section 9: Drawings
- 5.2 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.
 - 5.3 The Bidder is expected to examine all instructions, forms terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.

⁴ A ‘party’ refers to a participant in the procurement in the procurement process or contract execution.

- | | |
|---------------------------------------|---|
| 6. Clarification of Bidding Documents | 6.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS. |
| 7. Amendment of Bidding Documents | 7.1 At any time prior to the deadline for submission of Bid, the Employer may amend the Bidding Document by issuing addenda and extend the deadline for the submission of bids at its discretion. Any amendment issued shall become an integral part of the Bidding Document and shall be communicated in writing to all those who have purchased the Bidding Document. |

C. Preparation of Bids

- | | |
|----------------------------------|--|
| 8. One Bid per Bidder | 8.1 A Bidder shall submit only one (1) Bid. A Bidder who submits or participates in more than one (1) Bid shall cause all the proposals with the Bidder's participation to be disqualified. |
| 9. Bid Preparation Costs | 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bids, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process. |
| 10. Language of Bid | 10.1 All documents relating to the Bid shall be in the language specified in the BDS. |
| 11. Documents comprising the Bid | <p>11.1 The original and copy(ies) of Bid submitted by the Bidder shall comprise the following:</p> <ul style="list-style-type: none"> a) The Bid form (in the format indicated in Section IV – Forms of Bid, Qualification Information, Letter of Acceptance, and Contract); b) License and certificate c) Bid Security in accordance with Clause 19; d) Priced Bill of Quantities; e) And any other materials required to be completed and submitted by Bidders, as specified in the BDS. <p>11.2 The Instruction to Bidders, Bidding Data Sheet, General Conditions of Contract, Special Conditions of Contract, Specifications and drawings are for the information of the bidders and is not required to be submitted by the bidder.</p> |
| 12. Letter of Bid and Schedule | 12.1 The letter of Bid, Schedules, and all documents listed under Clause 11, shall be prepared using the relevant forms in Section 4 (Bidding Forms), if so provided in BDS. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. |
| 13. Alternative Bid | 13.1 Alternative Bid shall not be considered in small works. |
| 14. Bid Price and Discount | 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Schedules shall confirm to the requirements specified below; |

	14.2	The bidder shall submit a bid for the whole of the works described in ITB 1.1 by filling in prices for all items of the Works, as identified in Section 4, Bidding Forms. In case of admeasurements contracts, the Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Bill of Quantities.
	14.3	The Bid price shall take into account the cost of materials, transportation, labour, taxes, levies, overheads and profit and any other cost. The Bid price shall be fixed for the duration of performance of the Contract and shall not be subject to any adjustment on any account. The Bid price shall be applicable for the whole works described in the Drawings, Specifications and Schedule of Works.
15 Currencies of Bid and Payment	15.1	All prices shall be quoted in Bhutanese Ngultrum (BTN) and shall be paid in BTN.
16 Documents comprising the Technical Proposal	16.1	The bidder shall furnish a work plan in simple bar chart and other information if provided in BDS, to demonstrate the adequacy of the Bidders' proposal to meet the work requirements and the completion time.
17 Documents establishing the Qualification of the Bidder	17.1	To establish its qualification to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms).
18 Bid Validity	18.1	Bids shall remain valid for the period specified in the BDS . Any Bids which does not meet the validity requirement as per the BDS shall be rejected by the Employer as non-responsive.
19 Bid Security	19.1	The Bidder shall at their option furnish, as part of the Bid, a Bid Security as specified in the BDS issued by any reputed Financial Institutions in Bhutan and shall be valid thirty (30) days beyond the Bid validity period. <ul style="list-style-type: none"> a) Unconditional Bank Guarantee; b) A demand Draft; or c) Cash Warrant
	19.2	In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may solicit the Bidder's consent to an extension of the Bid validity period. The request and responses shall be made in writing. The validity of Bid Security shall be suitably extended promptly.
	19.3	The Bid Security may be forfeited: <ul style="list-style-type: none"> a) If the Bidder withdraws the Bid after Bid opening during the period of Bid validity. Further the bidder may be excluded from future participation for a period of two years. b) If the Bidder does not accept the correction of the Bid price, pursuant to clause 31; or

- c) In the case of a successful Bidder, if the Bidder fails within the specified time limit to sign the Agreement; or furnish the required Performance Security.

- | | | |
|----|---------------------------|--|
| 20 | Format and Signing of Bid | <p>20.1 The Bidder shall prepare one (1) original of the documents comprising the Bid as described in ITB Clause 11 and clearly mark it “ORIGINAL.” In addition, the Bidder shall prepare the number of copies of the Bid, as specified in the BDS and clearly mark each of them “COPY.” In the event of any discrepancy between the original and the copies, the original shall prevail.</p> <p>20.2 The original and each copy of the Bid shall be typed or written in indelible ink and shall be signed by the person duly authorized to sign on behalf of the Bidder.</p> <p>20.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person(s) signing the Bid.</p> |
|----|---------------------------|--|

D. Submission and Opening of Bids

- | | | |
|----|-----------------------------|--|
| 21 | Sealing and Marking of Bids | <p>21.1 The Bidder shall enclose the original in one (1) envelope and all the copies of the bid in another envelope, duly marking the envelopes as “ORIGINAL” and “COPY.” These two (2) envelopes shall then be enclosed in one (1) single outer envelope.</p> <p>21.2 The inner envelopes shall:</p> <ul style="list-style-type: none"> (a) Be signed across the seals by the person authorised to sign the Bid on behalf of the Bidder; (b) Be marked “ORIGINAL” and “COPY” and (c) Bear the name and address of the Bidder. <p>21.3 The outer envelope shall;</p> <ul style="list-style-type: none"> a. Be signed across the seals by the person authorised to sign the Bid on behalf of the Bidder; <p>21.4 be addressed to the Employer at the address specified in the BDS; bear a statement “DO NOT OPEN BEFORE.....” the time and date for Bid opening as specified in the BDS.</p> <p>21.5 If all or any envelopes are not sealed and marked as required by ITB Sub-Clause 21, the Employer shall not reject the bids but assume no responsibility for the misplacement or premature opening of the Bid.</p> |
| 22 | Bid Submission Deadline | <p>22.1 Bids must be received by the Employer at the address and no later than the date and time specified in the BDS.</p> <p>22.2 Bids may be hand delivered, posted by registered mail or sent by courier.</p> <p>22.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document in accordance with ITB Clause 7, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the new deadline as extended.</p> |
| 23 | Late Bids | <p>23.1 Late bids shall not be considered and shall be returned unopened</p> |

- | | | |
|---|------|---|
| 24 Modification, Substitution or Withdrawal of Bids | 24.1 | A Bidder may modify, substitute or withdraw their Bids after it has been submitted by sending a written notice before the deadline for submission of Bids. |
| 25 Bid Opening | 25.1 | The Employer shall open the Bids in the presence of the bidders who is attending the bid opening, including modifications or substitutions made pursuant to ITB Clause 24. Bidders or their representatives shall be allowed to attend and witness the bid opening and shall sign a register evidencing their attendance. |
| | 25.2 | The name of the Bidder, Bid modifications, substitutions or withdrawals, total amount of each Bid, number of corrections, discounts, and the presence or absence of requisite Bid Security, and such other details as the Employer, at its discretion, may consider appropriate, shall be read out aloud and recorded. |
| | 25.3 | The Employer shall prepare minutes of the Bid opening. The minutes shall include, as a minimum, the name of the Bidders and whether there has been a withdrawal, substitution or modification; the Bid Price including any discounts and the presence or absence of a Bid Security, if one was required. |
| | 25.4 | Bids not opened and read out at the Bid opening shall not be considered, irrespective of the circumstances, and shall be returned unopened to the Bidder. |
| | 25.5 | Bids shall be rejected at the Bid opening only on the following grounds; <ul style="list-style-type: none"> a) If the bid form is not complete and signed b) Non-signing of BOQ; and c) Insufficient amount of Bid Security and validity. |

E. Tender Opening and Evaluation

- | | | |
|---------------------------------------|------|--|
| 26 Confidentiality | 26.1 | After the opening of Bids, information relating to the examination, clarification, and evaluation of Bids and recommendations for award shall not be disclosed to Bidders or other persons not officially concerned with the evaluation process until after the award of the Contract is announced. |
| 27 Clarification | 27.1 | The Employer may ask Bidders for clarification of their Bids in order to facilitate the examination and evaluation of Bids. The request for clarification and the response shall be in writing, and any changes in the prices or substance of the Bid shall not be sought, offered or permitted, except to confirm the correction of arithmetical errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB Clause 31. |
| 28 Bidder:
Contacting the Employer | 28.1 | Following the opening of Bids and until the Contract is signed no Bidder shall make any unsolicited communication to the Employer or try in any way to influence the Employer's examination and evaluation of Bids which may result in the rejection of bids. If any Bidder wishes to contact the Employer on any matter related to the Bidding process, it should do so in writing |
| 29 Determination of | 29.1 | The Employer's determination of a bid's responsiveness is to be based on the |

Responsiveness		contents of the Bid itself without recourse to extrinsic evidence.
	29.2	A substantially responsive Bid is one that conforms in all respects to the requirements of the Bidding Document without material deviation, reservation or omission. A material deviation, reservation or omission is one that: <ul style="list-style-type: none"> (a) affects in any substantial way the scope, quality, or performance of the Works specified in the Contract; or (b) limits in any substantial way, or is inconsistent with the Bid Document, the Employer's rights or the Bidder's obligations under the Contract; or (c) If rectified would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
	29.3	If a Bid is not substantially responsive to the Bidding Document it shall be rejected by the Employer and shall not subsequently be made responsive by the Bidder by correction of the material deviation, reservation or omission.
	29.4	There shall be no requirement as to the minimum number of responsive Bids.
30 Non Conformities, Errors and Omissions	30.1	The Employer may regard a Bid as responsive even if it contains minor deviations that do not materially alter or depart from the characteristics, terms, conditions and other requirement set forth in the Bidding Document or if it contains errors or oversights that are capable of being corrected without affecting the substance of the Bid.
31 Evaluation and Comparison of Tenders	31.1	The Employer shall evaluate and compare only those Bids determined to be substantially responsive to the requirements of the Bidding Document. Substantially responsive Bids are those which fulfil the requirements of ITB Clauses 11 and 12.
	31.2	The evaluation will take into account corrected Bid Price and discounts (if any).
	31.3	The Employer will check substantially responsive Bids for any arithmetical errors. Where there is a discrepancy between the amounts in figures and words, the amount in words will govern. If a Bidder refuses to accept the correction, its Bids shall be rejected. The Employer shall correct arithmetical errors on the following basis: <ul style="list-style-type: none"> (a) if there is a discrepancy between the unit price and the line item total, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the total price, as quoted, shall govern and the unit price shall be corrected; and
32. Employer's Right to accept or Reject any or all	32.1	The Employer reserves the right to accept any Bid, to annul the Bid proceedings, or to reject any or all Bids, at any time prior to Contract award, without thereby incurring any liability to Bidders, or any obligation to inform Bidders of the grounds for the Employer's actions.

F. Contract Award

33. Award Criteria 33.1 The Employer shall award the Contract to the Bidders whose offer is substantially responsive to the Bidding Document and that has been determined to be the lowest evaluated Bid, provided that the Bidder is determined to be qualified to perform the Contract satisfactorily
34. Notification of Award 34.1 Prior to the expiration of the period of Bid validity, the Employer shall notify the successful Bidder, in writing that its Bid has been accepted. Until a formal contract is prepared and executed, the Notification of Award shall constitute a binding Contract.
- 34.2 Within fifteen (15) working days of the receipt of the Notification of Award from the Employer, the successful Bidder shall furnish the Performance Security, in the amount specified in the BDS.
- 34.3 The proceeds of the performance security shall be payable to the Employer unconditionally upon first written demand as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Contract
- 34.4 Within fifteen (15) working days of receipt of the notification of award, the successful Bidder shall sign, date and return it to the Employer.
- 35 Complaints 35.1 If there are any complaints both the parties shall submit the complaints as specified in BDS. The complaints if any shall be submitted within 10 working days from the date of notification of award.

Section 2 - Bidding Data Sheet

Instructions for completing the Bidding Data Sheet are provided, as needed, in the notes in italics mentioned for the relevant ITB Clauses

ITB Clause Amendment of, and Supplements to, Clauses in the Instructions to Bidders

A. General

- ITB 1.1** The Employer is *Tourism Council of Bhutan*.
The Work is **Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag.**
- ITB 3.2** **Option A: Open:**
- ITB 3.3** **The evaluation shall be based on the lowest price of the responsive bidder and base on previous work experience will be awarded to the lowest responsive bidder.**

B. Bidding Documents

- ITB 7.1** For **clarification of Tenders purposes** only, the Employer's address is:
Attention: Ms. **Dehcen Lhazom Chophel**,
Address: **Infrastructure and Product Development Division**), Telephone: **02-323251- ext-221**, Facsimile number: **02-323695**, Electronic mail address: (dechenlhazom@tourism.gov.bt)

C. Preparation of Bids

- ITB 15.1** The Bid validity period shall be **60** days.
- ITB 15.2** A Bid Security in the amount of Nu 2% of quoted amount will be required, in the form;
1. Unconditional Bank Guarantee
 2. Cash warrant; or
 3. Demand Draft
- ITB 16.1** Site supervisor 1 number (submit copy of CV with civil works background, Agreement, Qualification Certificate and Identity Card).
- ITB 19.1** In addition to the original, **one** copy shall be submitted.

D. Submission and Opening of Bids

- ITB 21.2** The inner and outer envelopes shall bear the following additional identification marks:
- **A bid shall be contained in an inner envelope sealed with adhesive or other sealant which will prevent re-opening;**
 - **Inner envelope shall be signed across the seal. The name of the bidder shall be written on the inner envelope.**
 - **The inner envelope shall be placed inside a further outer envelope similarly sealed. On this outer envelope, only the addressee, the words “ Confidential, “and any other relevant information in accordance with the bidding documents shall appear.**
 - **The bidders shall be advised to mark the outer envelope of the original document as “ORIGINAL” and the envelopes of the others as “COPY”)**
 - **Do not open before specific hours at mentioned date**

ITB 21.4 For **Bid submission purposes** only, the Employer's address is:
Attention: **Mr. Kinley Wangdi**,
Address: **The Chief, Infrastructure and Product Development Division, TCB, Thimphu**
The deadline for the submission of Tender is: **15th February 2017 on or before 4:00 PM.**

ITB 34.1 The Bid opening shall take place on **16th February 2017 at TCB Conference Hall B at 10:00 AM.**

F. Award of Contract

ITB 34.2 The amount of Performance Security shall be **Ten percent (10%)** of the Contract Price

ITB 35.1 The name and address of the office where complaints to the Procuring Entity is to be submitted **Mr. Kinley Wangdi Chief, Infrastructure and Product Development Division, TCB, Thimphu.**

Section 3 – Evaluation and Qualification Criteria

This section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and post qualifications are applied. Procuring Agency may apply basic minimum technical qualification requirement (manpower and equipment) only if there is a project specific need.

1. Evaluation

1.1 Evaluation shall be done to determine the responsiveness and the award shall be made to the lowest evaluated bidder.

Table of Standard Forms

Standard Form: Form of Bid

Standard Form: Letter of Acceptance

Standard Form: Bid security Bank Guarantee

Standard Form: Letter of Intent

(Letterhead paper of the Employer)

Notes on standard form of letter of Intent

This issuance of Letter of Intent(always before letter of acceptance) is the information of the selection of the bid of the successful bidder by the Employer and for providing information to other unsuccessful bidders who participated in the bid as regards the outcome of the procurement process

The Employer shall allow 10 days as described in ITB 34.2 between this letter of intent and letter of acceptance to allow aggrieved bidders to challenge your decision if they feel they have treated unfairly.

(Insert date)

To: ----- [Name and address of the Contractor]

This is to notify you that, it is our intention to award the contract for your Bid dated-----[Insert date] for execution of the-----
[Insert name of the contract and identification number, as given in the BDS/SCC] for the Contract Price of-----
----- [Insert amount in figure and words and name of currency] as corrected and modified[if any corrections] in accordance with the Instructions to Bidders.

Authorized Signature: -----

Name and Title of Signatory: -----

Name of Agency:-----

CC:

[Insert name and address of all other bidders who submitted the bid]

Section 4: Forms of Bid and Qualification Information

Standard Form: Form of bid

Notes on Form of Bid:

The Bidder shall fill in and submit this bid form with the Bid. If Bidders do not fill in the Contract Price and does not sign this Bid form, the bids will be rejected.

_____ [date]

To,
The Chief
Infrastructure and Product Development Division
TCB, Thimphu

We offer to execute the contract for construction of **“Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag”** in accordance with the Conditions of Contract accompanying this Bid for the Contract Price of _____

_____ [amount in figures] (_____) [amount in words] _____ [name of currency].

The contract shall be paid in Ngultrums (Nu)

This Bid and your written acceptance of it shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We hereby confirm that this Bid complies with the Bid validity and Bid Security required by the bidding documents and specified in the Bidding Data.



Authorized Signature: _____

Name and Title of Signatory: _____

Name of Bidder: _____

Address: _____

Standard Form: Qualification Information

Notes on Form of Qualification Information: The following information is to be filled in by bidders which will be used for purposes of evaluation.

1. Individual bidders

1.1 Constitution of legal status of Bidder [attach copy]
Place of registration: _____
Principal place of business: _____
Power of attorney of signatory of Bid [attach]

1.2 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Refer BDS. The supporting documents such detailed **CVs signed in original supported by certificates for qualification and experience, Contract agreement and Identity Card Photocopy.**

Position	Name & CID No.	Qualification & year of experience (civil works)	Year of experience in proposed position (min. 1 year)	Remarks (attached relevant documents)
Site Supervisor				Experience with civil works.

Standard Form: Letter of Acceptance

[Letter head paper of the Employer]

Notes on Standard Form of Letter of Acceptance

The Letter of Acceptance will be the basis for formation of the Contract as described in Clauses 31 and 32 of the Instructions to Bidders. This Standard Form of Letter of Acceptance should be filled in and sent to the successful Bidder only after evaluation of bids has been completed.

_____ [date]

To: _____
[name of the Contractor]

[address of the Contractor]

This is to notify that your Bid dated _____ for the execution of the contract for the construction of “_____ - _____” for the Contract Price _____ [amount in numbers] _____ [amount in words] _____ [name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency. The start date of the project is _____. The completion date for whole of the works shall be _____.

You are hereby instructed to precede with the execution of the said Works in accordance with the Contract documents.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Agreement

Bank Guarantee for Bid Security

[This is the format for the Bid Security to be issued by a financial institutions in Bhutan in accordance with ITB Clause 19]

Invitation for Bid No:

Date:

Bid Package No:

To:

[Name and address of Employer]

TENDER GUARANTEE No:

We have been informed that *[name of Bidder]* (hereinafter called “the Bidder”) intends to submit to you its Bid dated *[date of bid]* (hereinafter called “the Tender”) for the execution of the Works of (**“Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag”**) under the above Invitation for Bids (hereinafter called “the IFB”).

Furthermore, we understand that, according to your conditions Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we *[name of bank]* hereby irrevocably undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Nu *[insert amount in figures and words]* upon receipt by us of your first written demand accompanied by a written statement that the Bidder is in breach of its obligation(s) under the Bid conditions, because the Bidder:

- (a) has withdrawn its Bids during the period of Bid validity specified by the Bidder in the Form of Bid;
or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders ITB; or
- (c) having been notified of the acceptance of the Bid by the Employer during the period of Bid validity,
 - (i) fails or refuses to furnish the performance security in accordance with the ITT, or
 - (ii) fails or refuses to execute the Contract Form,

This guarantee will expire

- (a) if the Bidder is the successful Bidder, upon our receipt of a copy of the Performance Security and a copy of the Contract signed by the Bidder as issued by you; or
- (b) if the Bidder is not the successful Bidder, thirty days after the expiration of the Bidder's Tender validity period, being *[date of expiration of the Tender]*.

Consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

Signature

Signature

Section 5. General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meaning hereby assigned to them. Boldface type is used to identify the defined terms:

- (a) **Completion Certificate** means the Certificate issued by the Employer as evidence that the Contractor has executed the Works in all respects as per drawing, specifications, and Conditions of Contract.
- (b) The **Completion Date** is the date of completion of the Works as certified by the Engineer, in accordance with GCC Clause 18.
- (c) **Contract** means the Agreement entered into between the Employer and the Contractor to execute, complete and maintain the Works.
- (d) **Contractor** means the person or corporate body whose tender to carry out the Works has been accepted by the Employer and is named as such in the SCC.
- (e) **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract. The **Contractor's Bid** is the completed Bid Document including the priced offer submitted by the Contractor to the Employer.
- (f) **Days** mean calendar days.
- (g) A **Defect** is any part of the Works not completed in accordance with the Contract.
- (h) The **Employer** is the party named in the SCC who employs the Contractor to carry out the Works.
- (i) The **Engineer** is the person named in the SCC, who is responsible for supervising the execution of the works and administering the Contract.
- (j) The **Intended Completion Date** is the date specified in the SCC on which the Contractor shall complete the Works and may be revised if extension of time or an acceleration order is issued by the Engineer.
- (k) The **Site** is the area defined as such in the SCC.
- (l) The **Works** are what the Contract requires the Contractor to construct, install, and hand over to the Employer, as defined in the SCC.

2. Interpretation & Documents forming the Contract

2.1 In interpreting the GCC, singular also means plural, male also means female or neuter, and the other way around. Headings in the GCC shall not be deemed part thereof or be taken into consideration in the interpretation or contrivance of the Contract. Words have their normal meaning under the language of the Contract unless specifically defined.

2.2 The following documents forming the Contract shall be interpreted in the following order of priority:

- (a) The signed Contract Agreement.
- (b) The letter of Notification of Award.
- (c) The completed Bid form as submitted by the Bidder.
- (d) The Special Conditions of Contract.

- (e) The General Conditions of Contract.
 - (f) Specifications
 - (g) The Drawings.
 - (h) Any other document listed in the PCC as forming part of the Contract.
- 3. Corrupt, Fraudulent, Collusive or Coercive Practices
 - 3.1 The Government requires that Employers, as well as Contractors shall observe the highest standard of ethics during the implementation of procurement proceedings and the execution of Contracts under public funds.
 - 3.2 In pursuance of this requirement, the Employer shall
 - (a) exclude the Contractor from participation in the procurement proceedings concerned or reject a proposal for award; and
 - (b) declare a Contractor ineligible, either indefinitely or for a stated period of time, from participation in procurement proceedings under public fund;
 - 3.3 The Government defines, for the purposes of this provision, the terms set forth below as follows:
 - a) corrupt practice”⁵ is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value⁶ to influence improperly the actions of another party;
 - b) “fraudulent practice”⁷ is any intentional act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - c) “collusive practice”⁸ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party; and
 - d) “Coercive practice”⁹ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
 - 3.4 The Government requires that the Client’s personnel have an equal obligation not to solicit, ask for and/or use coercive methods to obtain personal benefits in connection with the said proceedings.
- 4. Governing Language and Law
 - 4.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Contractor and the Employer, shall be written in English unless otherwise stated in the SCC. The Contract shall be governed

⁵ “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes staff and employees of any organizations (including any institutions providing finance for the Works) taking or reviewing procurement decisions.

⁶ “anything of value” includes, but is not limited to, any gift, loan, fee, commission, valuable security or other asset or interest in an asset; any office, employment or contract; any payment, discharge or liquidation of any loan, obligation or other liability whatsoever, whether in whole or in part; any other services, favour or advantage, including protection from any penalty or disability incurred or apprehended or from any action or proceeding of a disciplinary or penal nature, whether or not already instituted and including the exercise or the forbearance from the exercise of any right or any official power or duty.

⁷ a “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

⁸ “parties” refers to participants in the procurement process (including public officials) and an “improper purpose” includes attempting to establish bid prices at artificial, non competitive levels.

⁹ a “party” refers to a participant in the procurement process or contract execution.

by and interpreted in accordance with the laws of the Kingdom of Bhutan.

- | | | |
|--|------|---|
| 5. Engineer's Decision | 5.1 | Except where otherwise specifically stated in the SCC, the Engineer will decide Contractual matters between the Employer and the Contractor in the role as representative of the Employer. |
| 6. Delegation | 6.1 | The Engineer may delegate any of his duties and responsibilities to his representative, after notifying the Contractor, and may cancel any delegation, without retroactivity, after notifying the Contractor. |
| 7. Communications and Notices | 7.1 | Communications between Parties pursuant to the Contract shall be in writing to the address specified in the SCC. A notice shall be effective when delivered or on the notice's effective date, whichever is later. |
| 8. Sub- Contracting | 8.1 | The Contractor shall not be permitted to subcontract any part of the Works in whole or in part. |
| 9. Contractor's Personnel | 9.1 | The Contractor shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the SCC, to carry out the functions stated in the Schedule, or other personnel approved by the Engineer. |
| 10. Welfare of Labourers & Child Labour | 10.1 | The Contractor shall provide proper accommodation to his labourers and arrange proper water supply, conservancy and sanitation arrangements at the site in accordance with relevant regulations, rules and orders of the government. |
| | 10.2 | The Contractor shall comply with the applicable minimum age, labour laws and requirements of (including applicable treaties which have been ratified by) the Government of Bhutan regarding hazardous forms of child labour. |
| 11. Safety, Security and Protection of the Environment | 11.1 | The Contractor shall throughout the execution and completion of the Works and the remedying of any defects therein :
<ul style="list-style-type: none">(a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site and the Works in an orderly state;(b) provide and maintain at the Contractors own cost all lights, guards, fencing, warning signs and watching for the protection of the Works or for the safety on-site; and(c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of the Contractors methods of operation. |
| 12. Access to the Site | 12.1 | The Contractor shall allow the Engineer and any person authorised by the Engineer access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out. |
| 13. Documents, Information. | 13.1 | The Contractor shall furnish to the Engineer all information, schedules, calculations and supporting documentation that may be requested of it. |
| 14. Property | 14.1 | If the contract is terminated by the Employer because of the contractors default, then, the contractor shall not be allowed to remove any materials on the Site, Plant, and Temporary Works until the matter is amicably resolved. |

15. Insurance	15.1	The Contractor shall provide insurance as stated in the SCC
	15.2	The Contractor shall deliver policies and certificates of insurance to the Engineer, for the Engineer's approval, before the Start Date.
	15.3	If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
16. Possession of the Site	16.1	The Employer shall give possession of the Site, or parts of the Site, to the Contractor on the date(s) specified in the SCC.
17. Commencement of Works	17.1	The Contractor may commence execution of the Works on the Start Date, or other such date as specified in the SCC, and shall carry out the Works in an expeditious manner.
	17.2	If the Contractor fails to commence the works within the above stated period, the Employer may, at his sole discretion, terminate the Contract and forfeit the Performance Security, if any.
18. Completion of Works	18.1	The Contractor shall complete the Works within the number of days stated in the SCC from the date of commencing the Works on the Site.
19. Programme of Works	19.1	Within the time stated in the SCC, the Contractor shall submit to the Engineer for approval a work program. The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the SCC.
20. Early Warning	20.1	The Contractor shall warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, result in increase to the Contract Price or delay in the execution of the Works.
21. Compensation Events	21.1	The following shall be Compensation Events: <ul style="list-style-type: none"> (a) the Employer does not give access to the Site or part of the Site by the Site Possession Date stated in the SCC; and (b) If the payment is delayed pursuant to Clause 25.1.
	21.2	If a Compensation Event would prevent the work being completed before the Intended Completion Date, the Intended Completion Date shall be extended, as appropriate, by the Engineer.
22. Non-Scheduled Items of Works	22.1	The Contractor shall be paid for non-scheduled items of works only when the Engineer approves such works and at the rates and in the manner stated in the SCC.
23. Schedule of Works	23.1	The Schedule of Works will contain rates for all items for the construction including temporary works, installation, testing, and commissioning work to be done by the Contractor.
	23.2	The Contractor shall be paid for the quantity of the work done at the rate in the Contract Agreement for each item.
	23.3	The Contractor shall be entirely responsible for all taxes, duties, license fees, and other such levies imposed outside and inside Bhutan.
24. Payment Certificates	24.1	The Contractor shall submit to the Engineer monthly statements of the

		estimated value of the work executed less the cumulative amount certified previously. The Engineer shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
	24.2	The value of work executed shall be determined by the Engineer.
	24.3	The value of work executed shall comprise the value of the quantities of the items in the Schedule of Works completed.
	24.4	The value of work executed shall include the valuation of Variations, Certified Day works and Compensation Events.
	24.5	The Engineer may exclude any item certified in previous certificates or reduce the proportion of any item previously certified in any certificate in the light of later information.
25. Payments and Currency	25.1	The Employer shall pay the Contractor the amounts certified by the Engineer within thirty (30) days of the date of each certificate.
	25.2	The Employer shall make Advance Payment (mobilization and secured advance) to the Contractor of the amounts and by the dates stated in the SCC against provision by the Contractor of an unconditional Bank Guarantee, (Form 4).
	25.3	The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilisation expenses required specifically for the execution of the Contract. The Contractor shall demonstrate that the advance payment has been used in this way by submitting copies of invoices or other documents to the Employer.
	25.4	The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, variations, claims or any amount payable due to failure to complete the works.
26. Retention	26.1	The Employer shall retain from each payment due to the Contractor the proportion stated in the SCC until the completion of the whole of the Works.
	26.2	On completion of the whole of the Works, half the total amount retained shall be repaid to the Contractor, the remaining half when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.
27. Liquidated Damages	27.1	The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion date for the works or for any part thereof.
28. Performance Security	28.1	Upon Notification of Award, a Performance Security shall be provided to the Employer in the amount and form stated in the Contract Forms (Form 3). The Performance Security shall be valid until a date thirty (30) days from the date of issue of the Certificate of Completion.
29. Price Adjustment	29.1	The rates and prices in the bill of quantities are fixed for the duration of the Contract and not subject to price adjustment during the performance of the Contract.

30. Completion	30.1	The Contractor shall request the Engineer to issue a Certificate of Completion of the Works, and the Engineer will do so upon deciding that the work is substantially completed.
31. Correction of Defects	31.1	The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as the Defects remain to be corrected.
	31.2	If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.
32. Taking Over	32.1	The Employer shall take over the Site and the Works within seven (7) days of the Engineer issuing a Certificate of Completion.
33. Final Account	33.1	The Contractor shall supply the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract. The Engineer shall certify any final payment that is due to the Contractor within twenty-one (21) days of receiving the Contractor's account if it is correct and complete.
	33.2	The Employer shall effect payment of the final account within thirty (30) days from the date of certification by the Engineer.
34. Termination	34.1	The Employer or the Contractor by giving thirty (30) days written notice of default to the other party, may terminate the Contract in whole or in part if the other party causes a fundamental breach of Contract.
	34.2	Fundamental breaches of the Contract shall include, but shall not be limited to, the following: <ul style="list-style-type: none"> a) The Contractor stops work for more than thirty (30) days when no stoppage of work is shown on the current Programme and the stoppage has not been authorised by the Engineer; b) The Engineer gives notice that failure to correct a particular defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer; c) The Contractor has delayed the completion of the Works by the number of days for which the maximum amount of Liquidated Damages can be paid; d) The Contractor, in the judgment of the Employer, has engaged in corrupt or fraudulent practices, as defined in GCC Clause 3, in competing for or in executing the Contract; and e) A payment certified by the Engineer is not paid to the Contractor by the Employer within sixty (60) days of the date of the Engineer's certificate.
	34.3	The Employer and the Contractor may at any time terminate the Contract by giving notice to the other party if either of the parties becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to any party provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue to the other party.

- 34.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 34.5 If the Contract is terminated, the Contractor is to stop work immediately, make the Site safe and secure and hand over the Site to the Employer as soon as reasonably possible.
35. Payment upon Termination
- 35.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done and Plant and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the SCC.. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
- 35.2 If the Contract is terminated for the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Contractor shall be entitled to payments for completed works and the materials that have been brought to the site for the purpose of the works, but not used as certified by the Engineer after adjusting any payments received by the Contractor.
36. Release from Performance
- 36.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible, after receiving this certificate. The Contractor shall be paid for all works carried out before stoppage of work and any work carried out afterwards to which a commitment was made.
37. Force Majeure
- 37.1 For the purposes of this Contract, "Force Majeure" means an exceptional event or circumstance:
- a) which is beyond a Party's control,
 - b) which such Party could not reasonably have provided against before entering into the Contract,
 - c) which, having arisen, such Party could not reasonably have avoided or overcome, and
 - d) Which is not substantially attributable to the other Party.
- 37.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:
- a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
 - b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
 - c) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
 - d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-

- activity, and
- e) Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

37.3 However, force majeure shall not include the following;

- i. rainfall
- ii. snowfall
- iii. strikes in other countries
- iv. non-availability of labourer and materials such as timbers, boulders, sand, and other materials
- v. Difficulty and risky terrain and remoteness of site.

38. Settlement of Disputes

38.1 The Employer and the Contractor shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

38.2 Any dispute between the parties to the Contract that may not be settled amicably will be referred to Arbitration at the initiative of either of the parties.

38.3 The Arbitration shall be conducted in accordance with the Arbitration Rules of the Kingdom of Bhutan in force.

Section 6. Special Conditions of Contract

Instructions for completing the Special Conditions of Contract are provided, as needed, in the notes in italics mentioned for the relevant GCC Clauses.³

Clause Ref.	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 1.1 (d)	The Contractor is <i>[name, address and name of authorised representative]</i> .
GCC 1.1 (i)	The Employer is <i>Tourism Council of Bhutan, Thimphu, Bhutan</i> .
GCC 1.1 (j)	The Engineer: Sugan Pradhan .
GCC 1.1 (k)	The Intended Completion Date for the whole of the Works shall be <i>90 days</i> .
GCC 1.1 (l)	The Site is located at Tashichhodzong, near Department of Agriculture Office .
GCC 1.1 (m)	The Work is “Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag” .
GCC 2.2 (i)	The additional documents forming part of this Contract are: <i>“CDB, previous work experience certificate, trade license, CDB registration certificate and Tax clearance certificate”</i> .
GCC 4.1	The Language governing the Contract shall be <i>English language</i> .
GCC 5.1	The Engineer shall obtain specific approval of the Employer before taking any of the following actions:
GCC 7.1	The addresses for Communications shall be: For the Employer: The Chief, Infrastructure and Product Development Division, TCB
GCC 9.1	The Key Personnel of the Contractor are: <i>specify</i> .
GCC 15.1	For insurance purposes the type of cover required shall be: The contractor shall be responsible for the insurance- <i>NA</i> .
GCC 16.1	Possession of the site shall be within seven days from the date of signing of the Contract.
GCC 17.1	Commencement of work shall be immediately from the date of handing over possession of the site.
GCC 18.1	Completion of works shall be within 90 days from the date of commencing the works on the site.
GCC 25.2	An advance payment of 10% of the Contract Price will be made to the Contractor within (14) days of Contract signing date.
GCC 26.1	The Retention shall be 10% of the Contract Price.

GCC 27.1	The liquidated damages for the whole of the Works are <u>0.1%</u> per day. The maximum amount of liquidated damages for the whole of the Works is 10% percent of the final bill amount.
GCC 31.1	The Defects Liability Period shall be 12 months.
GCC 35.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is NA.

Section 7 – Contract Forms

This section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after Contract award.

Contract Forms

Forms	Title
Form -1	Notification of Award
Form -2	Contract Agreement
Form -3	Bank Guarantee for Performance Security
Form -4	Bank Guarantee for Advance Payment

Notification of Award

Contract No:

Date:

To:

[name and address of Contractor]

This is to notify you that your Bid dated *[insert date]* for the execution of the Works for (**“Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag”**) for the Contract Price of Nu *[amount in figures and in words]*, as corrected and modified in accordance with the Instructions to bidder is hereby accepted by *[name of the Employer]*.

You are requested to proceed with the execution of the Works on the basis that this Notification of Award shall constitute the formation of a Contract, which shall become binding upon you furnishing a Performance Security within fourteen (14) days, in accordance with ITB Clause 32, and the signing the Contract Agreement within twenty-one (21) days, in accordance with ITB Clause 33.

We attach the Contract Agreement and Special Conditions of Contract for your perusal and signature.

Signed

Duly authorised to sign for and on behalf of
[name of Procuring Entity]

Date:

Agreement

THIS AGREEMENT, made the [day] of [month] [year] between [Mr. Kinley Wangdi, Tourism Council of Bhutans *as Employer* (hereinafter called “the Employer”) of the one part and [name and address of Contractor] (hereinafter called “the Contractor”) of the other part.

WHEREAS, the Employer invited Tenders for certain Works, viz, **(“Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag”)** and has accepted a Tender by the Contractor for the execution of those works in the sum of Ngultrum [insert amount in figures and words], hereinafter called “the Contract Price.

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract hereinafter referred to.
2. The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) The signed Contract Agreement;
 - (b) The letter of Acceptance;
 - (c) The completed Bid form as submitted by the Bidder;
 - (d) The Special Conditions of Contract;
 - (e) The General Conditions of Contract;
 - (f) Specifications
 - (g) The Drawings; and
 - (h) Any other document listed in the SCC as forming part of the Contract..
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and to remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the Parties thereto have caused this Agreement to be executed in accordance with the laws of Bhutan on the day month and year first before written.

For the Employer

For the Contractor

Signature

Print Name

Title

In the presence

of (Name)

Address

Bank Guarantee for Performance Security

*[this is the format for the Performance Security to be issued by any financial institute in Bhutan in accordance with **ITB** Clause 35]*

Contract No:

Date:

To:

[Name and address of Employer]

PERFORMANCE GUARANTEE No:

We have been informed that *[name of Contractor]* (hereinafter called “the Contractor”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”), the execution of works **“Construction of Restroom at “Tashichhodzong, Thimphu, Dzongkhag”** under the Contract.

Furthermore, we understand that, according to your conditions, Contracts must be supported by a performance guarantee.

At the request of the Contractor, we *[name of bank]* hereby irrevocably undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Nu *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Contractor is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

Signature

Signature

Bank Guarantee for Mobilisation Advance

[This is the format for the Advance Payment Guarantee to be issued by a financial institutions in Bhutan in their letter pad in accordance with SCC Clause 25.2]

Contract No:

Date:

To:

[Name and address of Employer]

ADVANCE PAYMENT GUARANTEE No:

We have been informed that *[name of Contractor]* (hereinafter called “the Contractor”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”), the execution of works (**“Construction of Restroom at Tashichhodzong, Thimphu Dzongkhag”**) under the Contract.

Furthermore, we understand that, according to your conditions, Advance Payments must be supported by a bank guarantee.

At the request of the Contractor, we *[name of bank]* hereby irrevocably undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Nu *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Contractor is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

We further agree that no change, addition or other modification of the terms of the Contract to be performed, or of any of the Contract documents which may be made between the Employer and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

Signature

Signature

Tourism Council of Bhutan

Thimphu

Name of Work: Construction of ~~lounge~~ Restroom at Trashichhodzong, Thimphu Dzongkhag

INTEGRITY PACT STATEMENT

1 General

Whereas, **Chief, Infrastructure and Product Development Division**, representing the **Tourism Council of Bhutan, Thimphu**, Royal Government of Bhutan, hereinafter referred to as the Employer on one part and the **Mr/Miss.** representing **M/s... .. CDB No.** on the other part hereby execute this agreement as follows.

This agreement should be a part of the tender document, which shall be signed and submitted along with the tender document. The head of the employing agency/or his authorized representative should be the signing authority. For the bidders, the bidder himself or his authorized representative must sign the Integrity Pact (IP). If the winning bidder had not signed during the submission of the bid, the tender shall be cancelled.

2 Objectives

Now, therefore, the Employer and the Bidder agree to enter into this pre-contract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

- 2.1 Enabling the Employer to obtain the desired contract at a reasonable and competitive price in conformity to the defined specifications of the works, goods and services;
- 2.2 Enabling bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices and the Employer will commit to prevent corruption, in any form by their officials by following transparent procedures.

3. Commitments of the Employer:

The Employer Commits itself to the following:-

- 3.1 The Employer hereby undertakes that no official of the Employer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.
- 3.2 The Employer further confirms that its officials has not favored any prospective bidder in any form that could afford an undue advantage to that particular bidder during the tendering stage, and will further treat all Bidders alike.
- 3.3 All the officials of the Employer shall report to the head of the employing agency or an appropriate Government office any attempted or completed violation of clauses 3.1 and 3.2.



- 3.4 Following report on violation of clauses 3.1 and 3.2 by official (s), through any source, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Employer and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Employer the proceedings under the contract would not be stalled

4 Commitments of Bidders

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following :-

- 4.1 The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 4.2 The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other contract with the Government for showing or forbearing to show favor or disfavor to any person in relation to the Contract or any other contract with the Government.
- 4.3 The Bidder will not collude with other parties interested in the contract to preclude the competitive bid price, impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4.4 The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Employer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

5 Sanctions for Violation

Any breach of the aforesaid provisions or providing false information by employers, including manipulation of information by evaluators, shall face administrative charges and penal actions as per the existing relevant rules and laws. The breach of the Pact or providing false information by the Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one, employed by him or acting on his behalf, shall be dealt with as per the provisions of the Bhutan Penal Code 2004, and the Anti-Corruption Act, 2006.

The Employer/relevant agency shall also take all or any one of the following actions, wherever required:-

- 5.1 To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.
- 5.2 To immediately cancel the contract, if already awarded/signed, without giving any compensation to the Bidder.

- 5.3 To recover all sums already paid by the Employer.
- 5.4 To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the Bidder, in order to recover the payments, already made by the Employer, along with interest.
- 5.5 To cancel all or any other Contracts with the Bidder.
- 5.6 To debar the Bidder from entering into any bid from the government of Bhutan as per the Debarment Rule.
- 6. Conflict of Interest**
- 6.1 A conflict of interest involves a conflict between the public duty and private interests (for favor or vengeance) of a public official, in which the public official has private interest which could improperly influence the performance of their official duties and responsibilities. Conflict of Interest would arise in a situation when any concerned members of both the parties are related either directly or indirectly, or has any association or had any confrontation. Thus, conflict of interest of any tender committee member must be declared in the prescribed form (attached).
- 6.2 The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any committee member, and if he does so, the Employer shall be entitled forthwith to rescind the Contract and all other contracts with the Bidder.
- 7. Examination of Books of Accounts**
- 7.1 In case of any allegation of violation of any provisions of this Integrity Pact or payment of commission, the Employer/authorized persons or relevant agencies shall be entitled to examine the Books of Accounts of the Bidder and the Bidder shall provide necessary information of the relevant financial documents and shall extend all possible help for the purpose of such examination.
- 8. Monitoring and Arbitration**
- 8.1 The respective procuring agency shall be responsible for monitoring and arbitration of IP as per the Procurement Rule.
- 9. Legal Actions**
- 9.1 The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.
- 10. Validity**
- 10.1 The validity of this Integrity Pact shall cover the tender process and extend until the completion of the contract to the satisfaction of both the Employer and the Bidder.
- 10.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.



We hereby declare that we have read and understood the clauses of this agreement and the information provided in this agreement are true and correct to the best of our knowledge and belief. In case any information is found incorrect, we assume full responsibility thereof and shall be liable for penalties as per clause 5 of this agreement.

The parties hereby sign this Integrity Pact at _____ on _____

EMPLOYER

BIDDER

(Affix Legal Stamp)



Witness: 

1. Dechen Chazom Chhephrel
(Name and CID No.) (10805001725)
Tourism Council of Bhutan

(Affix Legal Stamp)

Witness:

1. _____
(Name and CID No.)

TASHICHHO DZONG PUBLIC RESTROOMS

Architectural construction drawings



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

LIST OF DRAWINGS
SPECIFICATIONS

NOTES:

- revision content
-
-
-
-

ARCHITECT :

DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

-

CHECKED BY:

-

APPROVED BY:

-

REVISION:

-

DATE:

-

REVISION:

-

DATE:

-

REVISION:

01

DATE:

20/10/2016

REVISION:

00

DATE:

6/10/2016

SCALE:

N/A

DRAWING NO:

A-01

LIST OF ARCHITECTURAL DRAWINGS

PAGE	DESCRIPTION	PAGE	DESCRIPTION
A-01	LIST OF DRAWINGS, SPECIFICATIONS	A-08	LEFT & RIGHT ELEVATIONS
A-02	FLOOR PLAN	A-09	SECTION A, SECTION B
A-03	WALL PLAN	A-10	SANITARY WARE PLAN
A-04	CEILING PLAN	A-11	DOORS DETAILS
A-05	LIGHTING PLAN	A-12	WINDOWS DETAILS
A-06	ROOF PLAN	A-13	DETAILS - 01, 02, 03
A-07	FRONT & BACK ELEVATIONS		

FLOOR - FINISHING SPECIFICATION

F1	NON-SLIP BROWN HOMOGENEOUS FLOOR TILES FINISHING / 300X300 MM.
F2	POLISHED CEMENT FINISHING
F3	BLACK GRANITE COUNTER TOP

CEILING - FINISHING SPECIFICATION

C1	SOLID TIMBER CEILING WITH TIMBER EDGE 1" (PAINTED WITH GLOSSY PRESERVATIVE COATING)
C2	PLYWOOD SHEETS CEILING WITH TIMBER EDGE 1"

WALL - FINISHING SPECIFICATION

1. BRICK WALL WITH CEMENT PLASTER
PAINTED WITH DARK GRAY, WHITE & RED COLOR
AS PER THE PERSPECTIVE (SAME AS TICKET BOOTH COLOR)
2. BRICK WALL WITH LIGHT BROWN CERAMIC TILES 12"x12"
3. LIGHT BROWN PRE-LAMINATE CUBICLE WALL (WATER PROOF)
4. SOLID TIMBER
PAINTED WITH COLOR (SAME AS TICKET BOOTH COUNTER)
5. STEEL HARD NET (SAME AS THE EXISTING OFFICE BUILDING NET)
- INSTALLED BEHIND THE WINDOW TRADITIONAL FRAME
TO PROTECT THE WINDOW GLASS FROM GOLF BALL)
6. ALUMINUM SOFT NET (TO PREVENT BIRDS ABOVE THE CEILING)
7. POLISH CEMENT FINISHING

- TRADITIONAL PATTERNS MUST BE PAINTED AS SAME AS THE TICKET BOOTH.
- PLEASE SEE THE MATERIAL DESCRIPTION IN THE BOQ



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL:+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
PUBLIC RESTROOMS

DRAWING TITLE

FLOOR PLAN

NOTES:

- revision columns size
-
-
-
-

ARCHITECT :

DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

-

CHECKED BY:

-

APPROVED BY:

-

REVISION:

-

DATE:

-

REVISION:

-

DATE:

-

REVISION:

01

DATE:

20/10/2016

REVISION:

00

DATE:

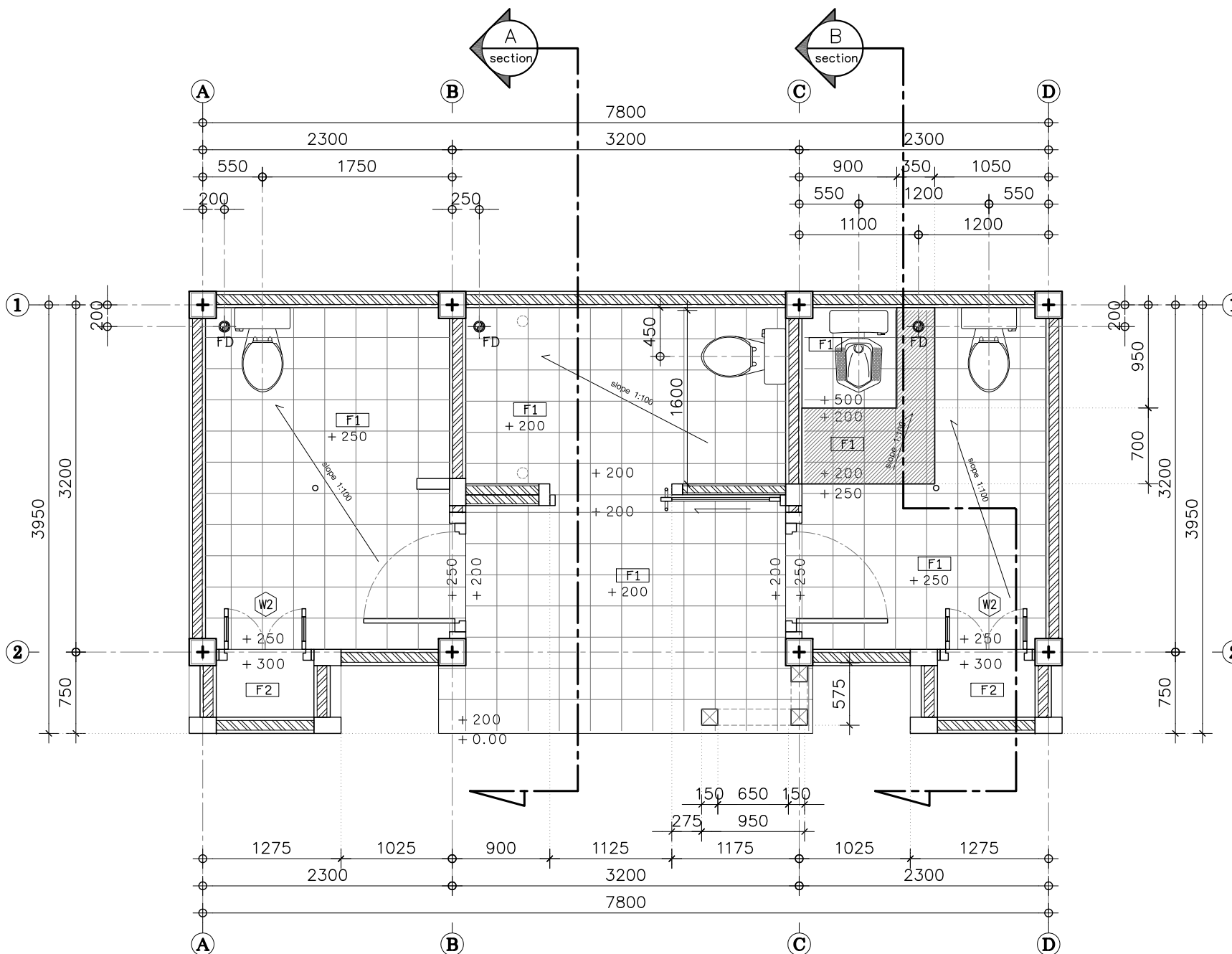
6/10/2016

SCALE:

1 : 50

DRAWING NO:

A-02



Floor plan

Scale 1 : 50 (A4)



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
PUBLIC RESTROOMS

DRAWING TITLE

WALL PLAN

NOTES:

- revision columns size
-
-
-
-

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

-

CHECKED BY:

-

APPROVED BY:

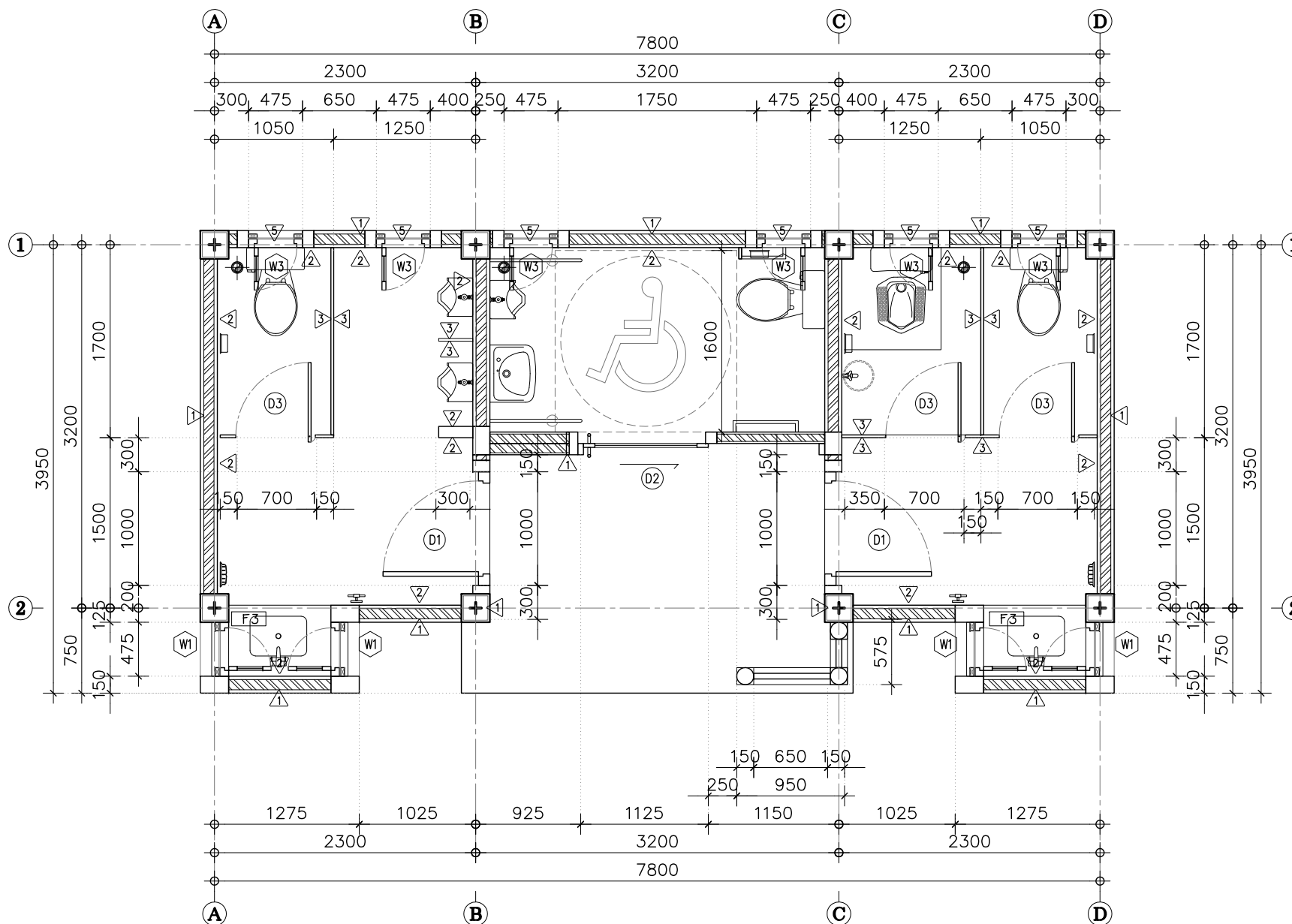
-

REVISION:	DATE:
-	-
REVISION:	DATE:
-	-
REVISION:	DATE:
01	20/10/2016
REVISION:	DATE:
00	6/10/2016

SCALE:
1 : 50

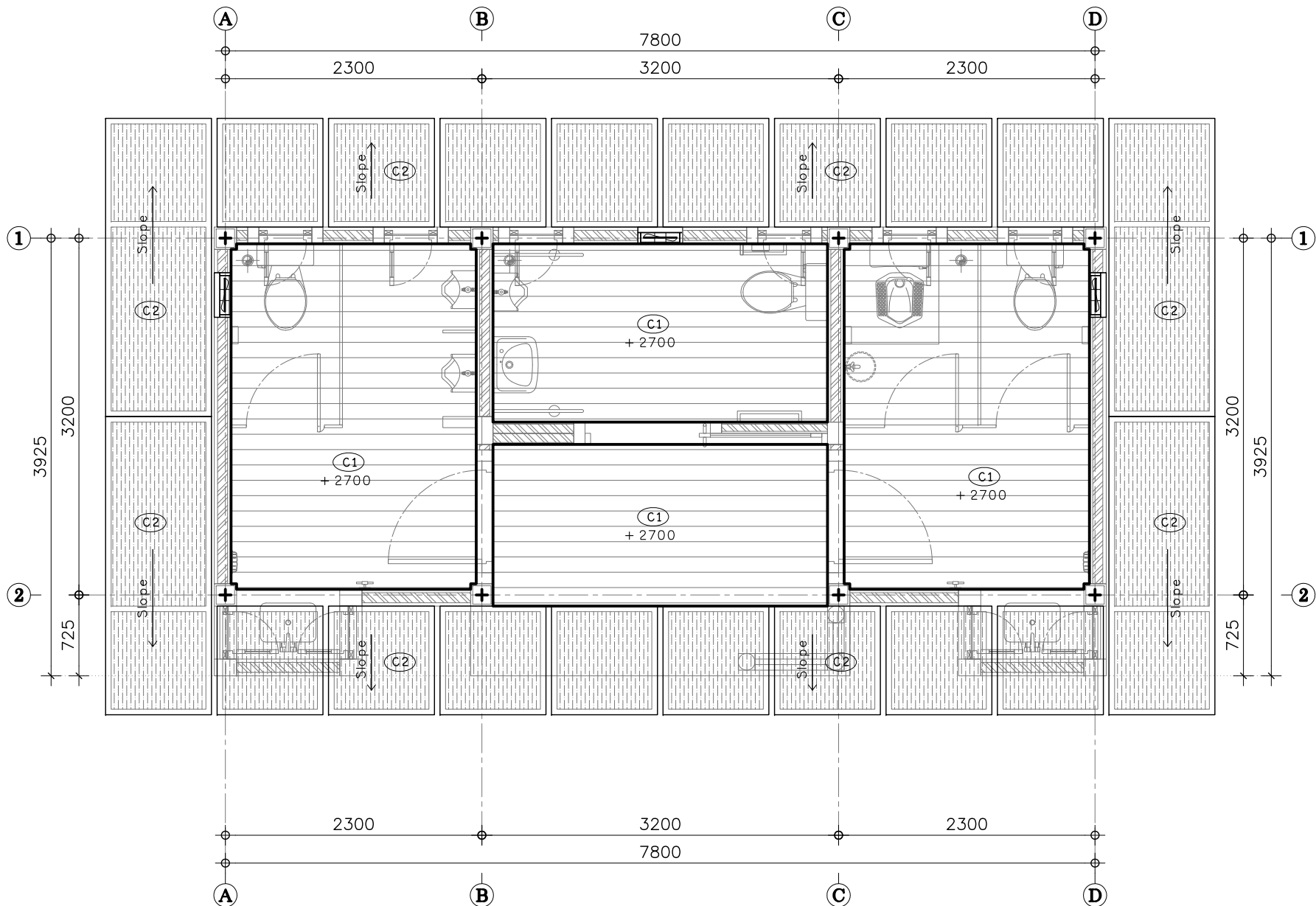
DRAWING NO:

A-03



Wall plan

Scale 1 : 50 (A4)



Ceiling plan
Scale 1 : 50 (A4)



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHO DZONG
PUBLIC RESTROOMS

DRAWING TITLE

CEILING PLAN

NOTES:

—
—
—
—
—

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

—

REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: 00	DATE: 6/10/2016

SCALE:
1 : 50

DRAWING NO:

A-04



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
PUBLIC RESTROOMS

DRAWING TITLE

LIGHTING & SOCKET PLAN

NOTES:

- added ventilation fan
- added hand dryers
-
-

ARCHITECT :

DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

—

REVISION:

—

DATE:

—

REVISION:

—

DATE:

—

REVISION:

01

DATE:

20/10/2016

REVISION:

00

DATE:

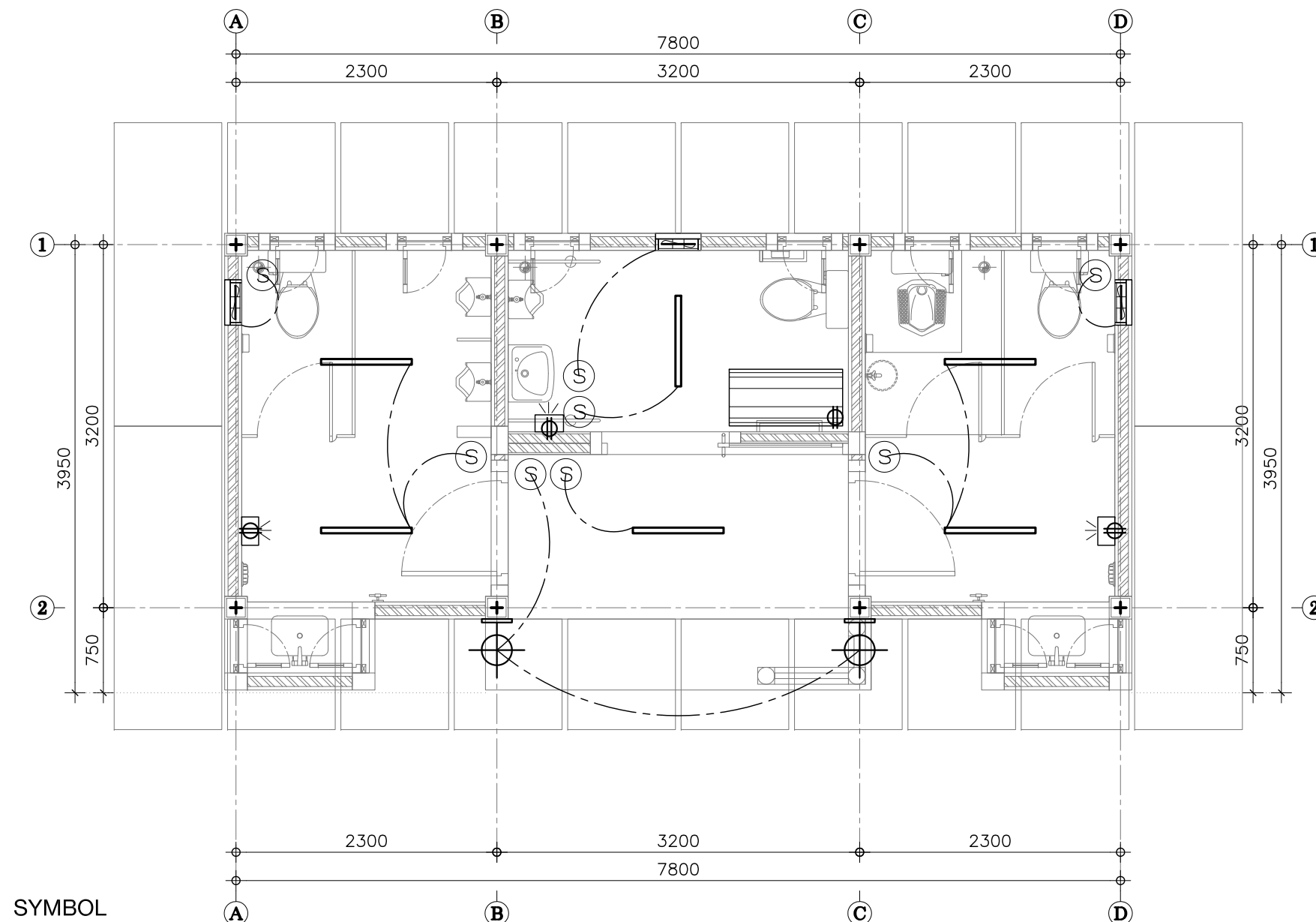
6/10/2016

SCALE:

1 : 50

DRAWING NO:

A-05



SYMBOL

— FLUORESCENT LAMP

⊕ WALL LAMP
(Warm white)
2200mm from
finishing floor



Ⓢ SWITCH
1100mm from
finishing floor

⊖ POWER SOCKET

VENTILATION FAN



HAND DRYER



GEYSER

Lighting & power socket plan

Scale

1 : 50 (A4)



P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

FLOOR PLAN
WALL PLAN

NOTES:

— 188 —

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

1.

CHECKED BY:

1

APPROVED BY:

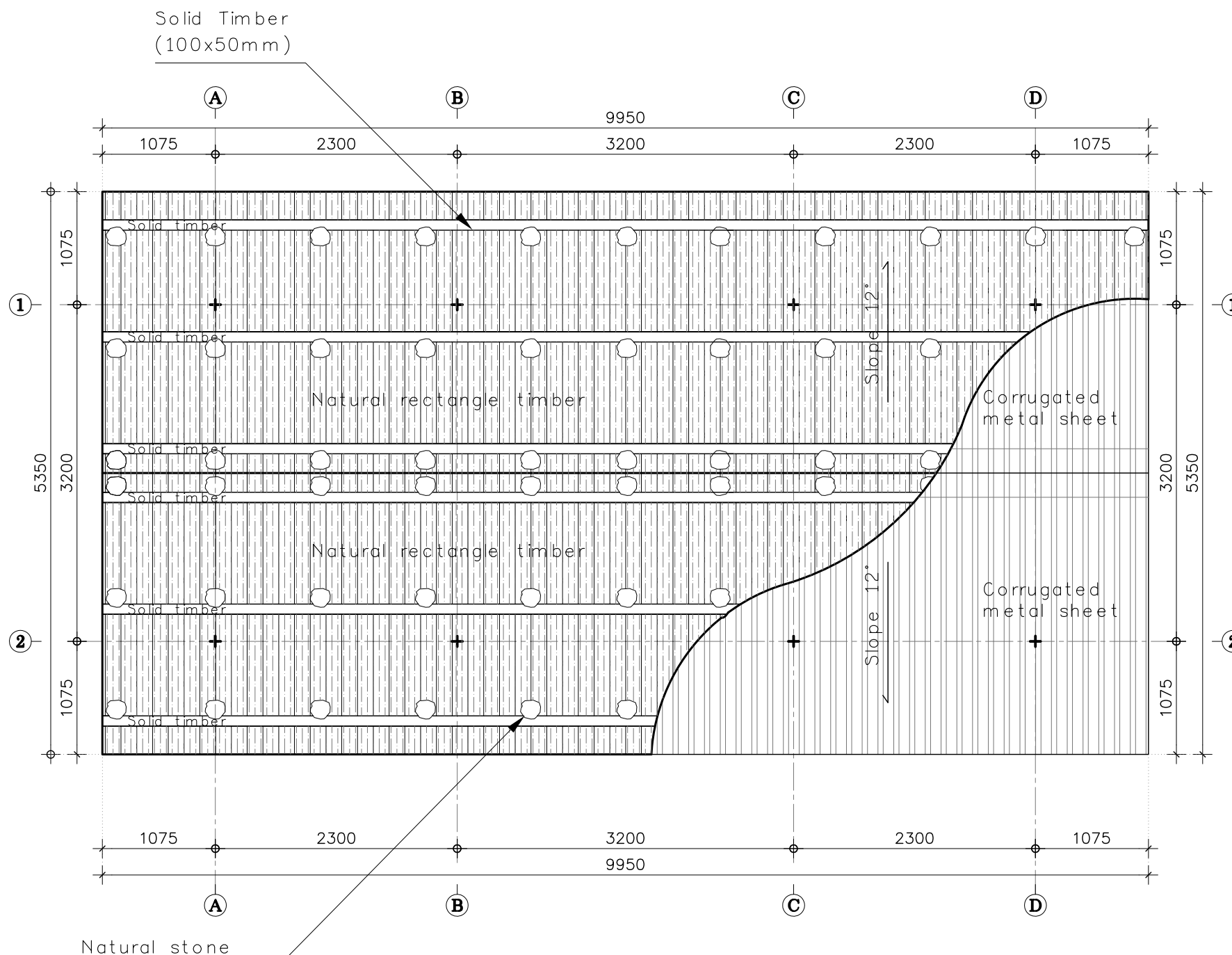
1

REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: 00	DATE: 6/10/2016

SCALE:
1 : 50

DRAWING NO:

A-06



Roof plan

Scale 1 : 50 (A4)



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

FRONT ELEVATION
BACK ELEVATION

NOTES:

—
—
—
—
—

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

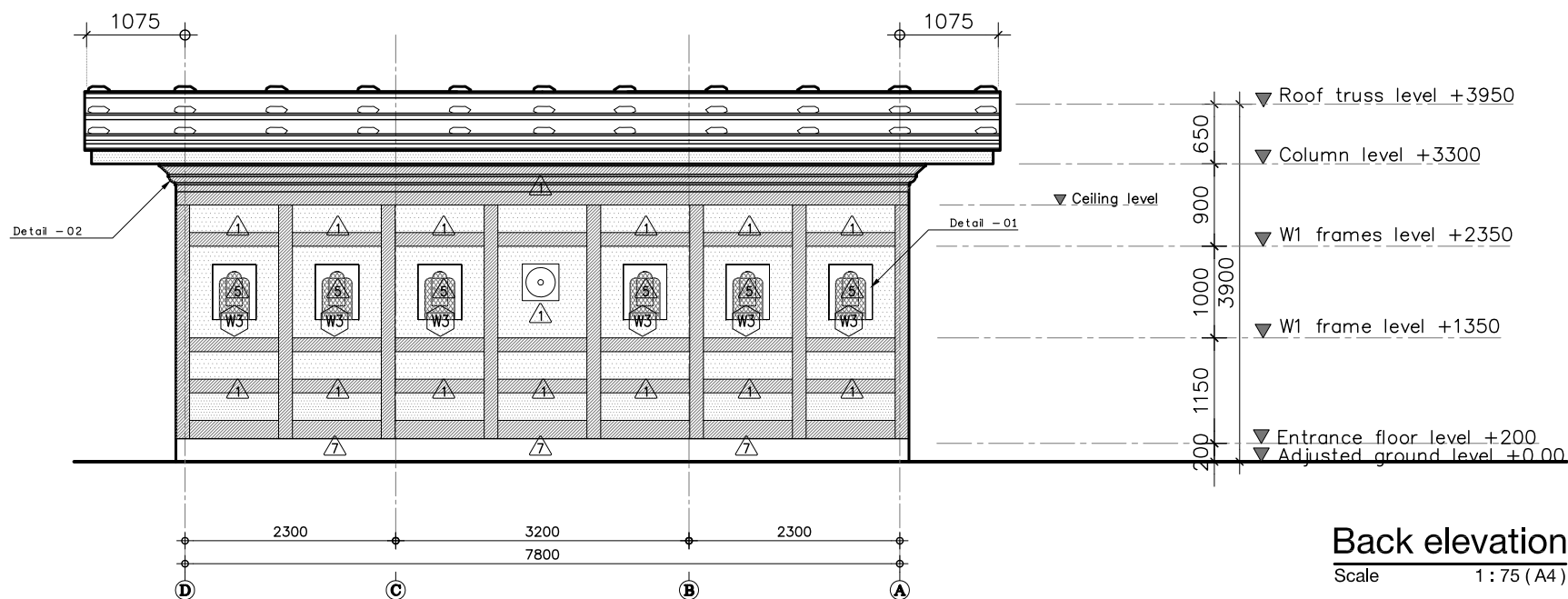
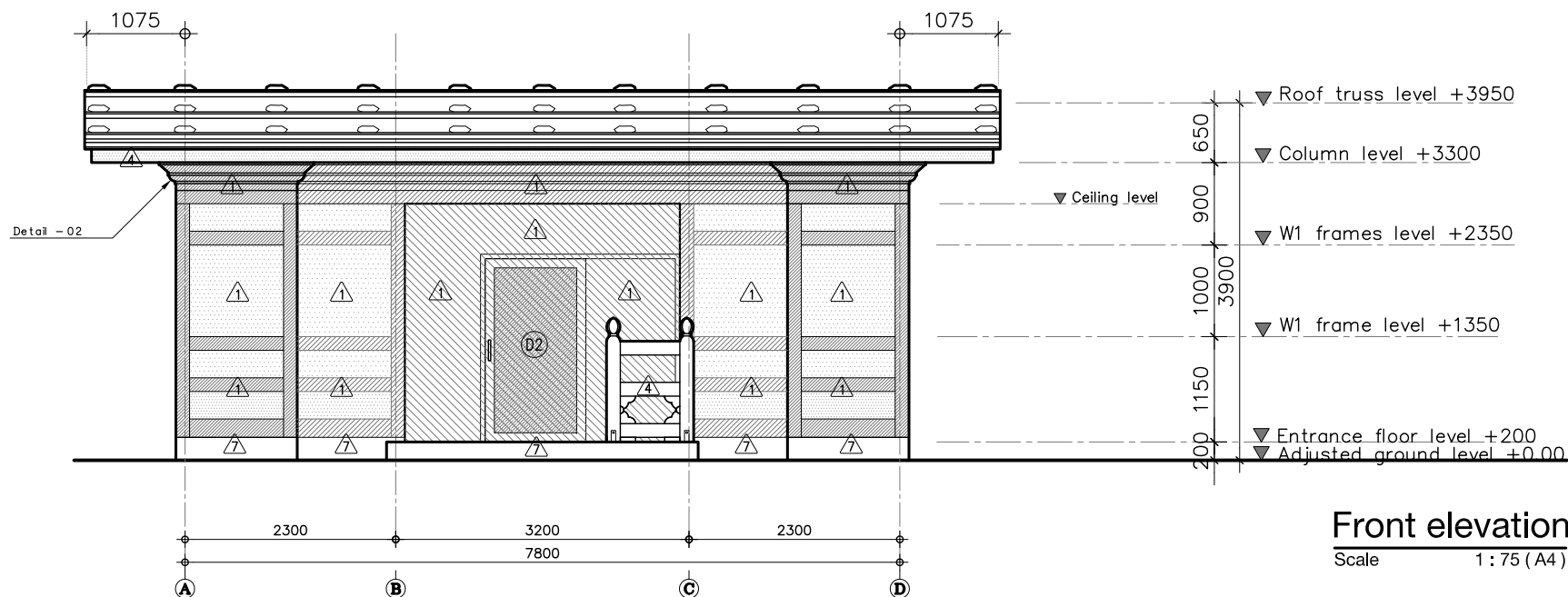
—

REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
00	6/10/2016

SCALE:
1 : 75

DRAWING NO:

A-07





TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL:+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

LEFT ELEVATION
RIGHT ELEVATION

NOTES:

—
—
—
—
—

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

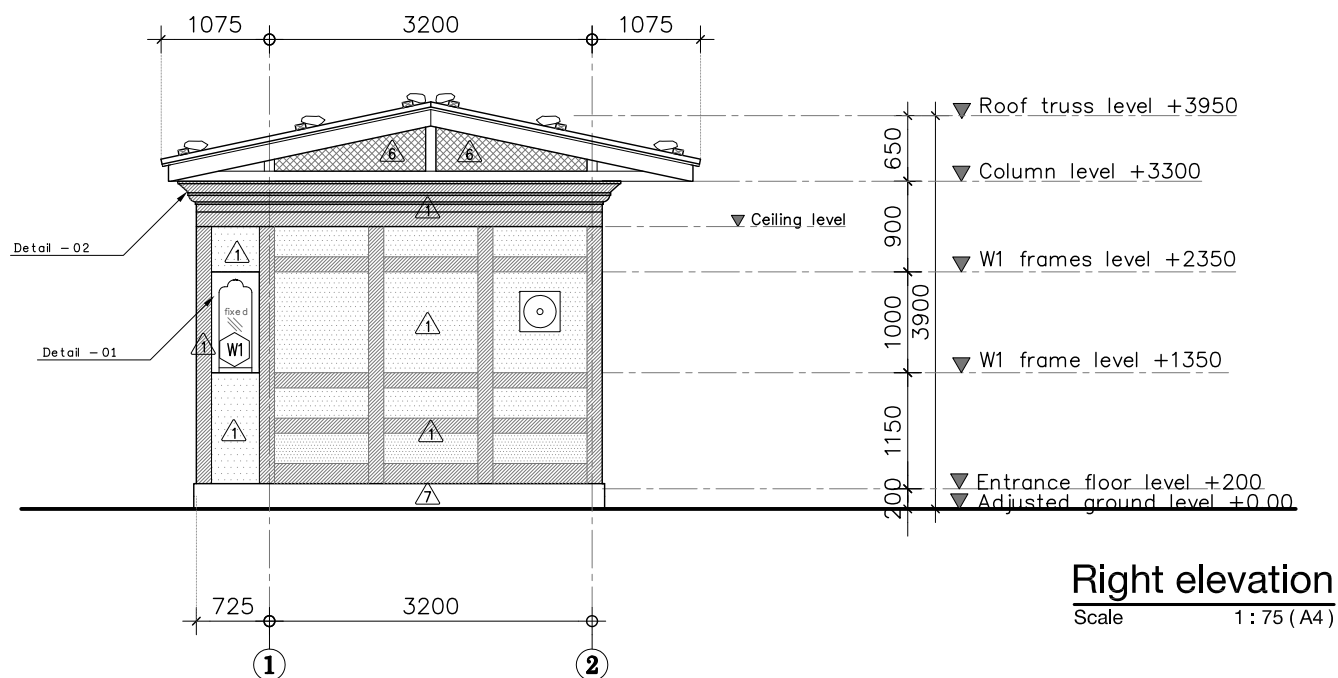
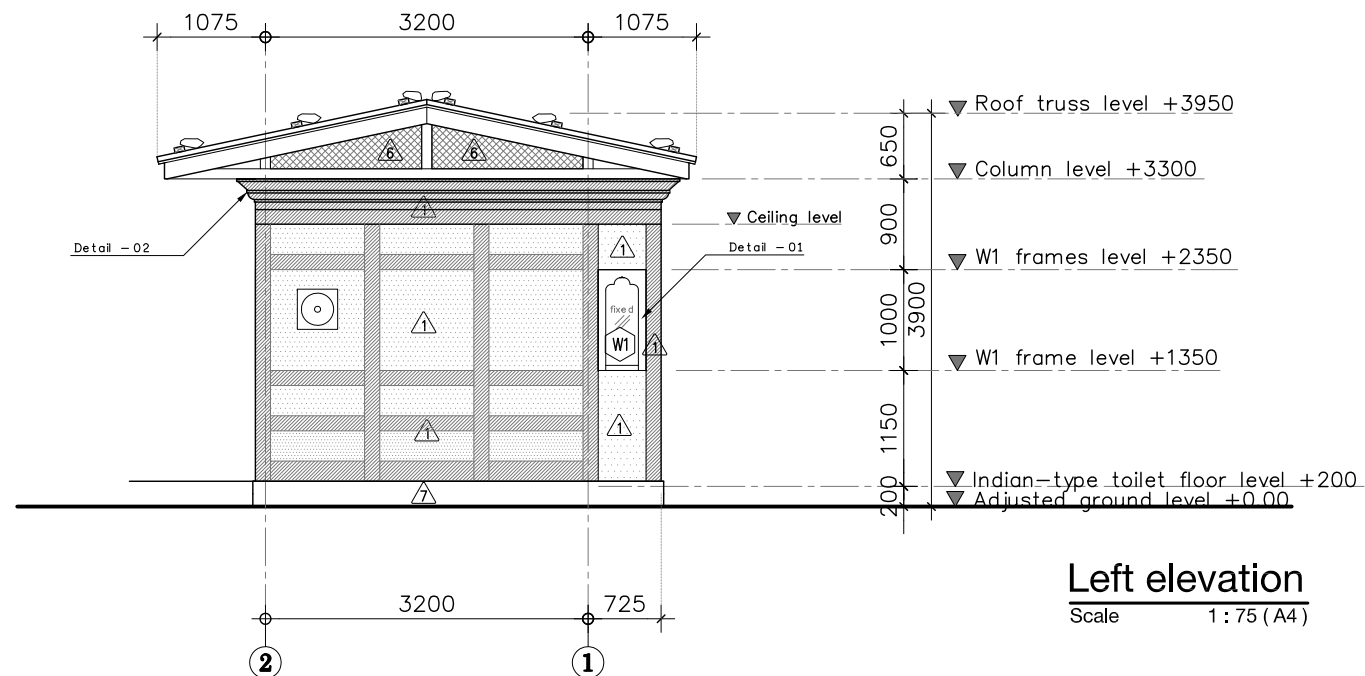
—

REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
00	6/10/2016

SCALE:
1 : 75

DRAWING NO:

A-08





**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

SECTION A
SECTION B

NOTES:

—
—
—
—
—

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

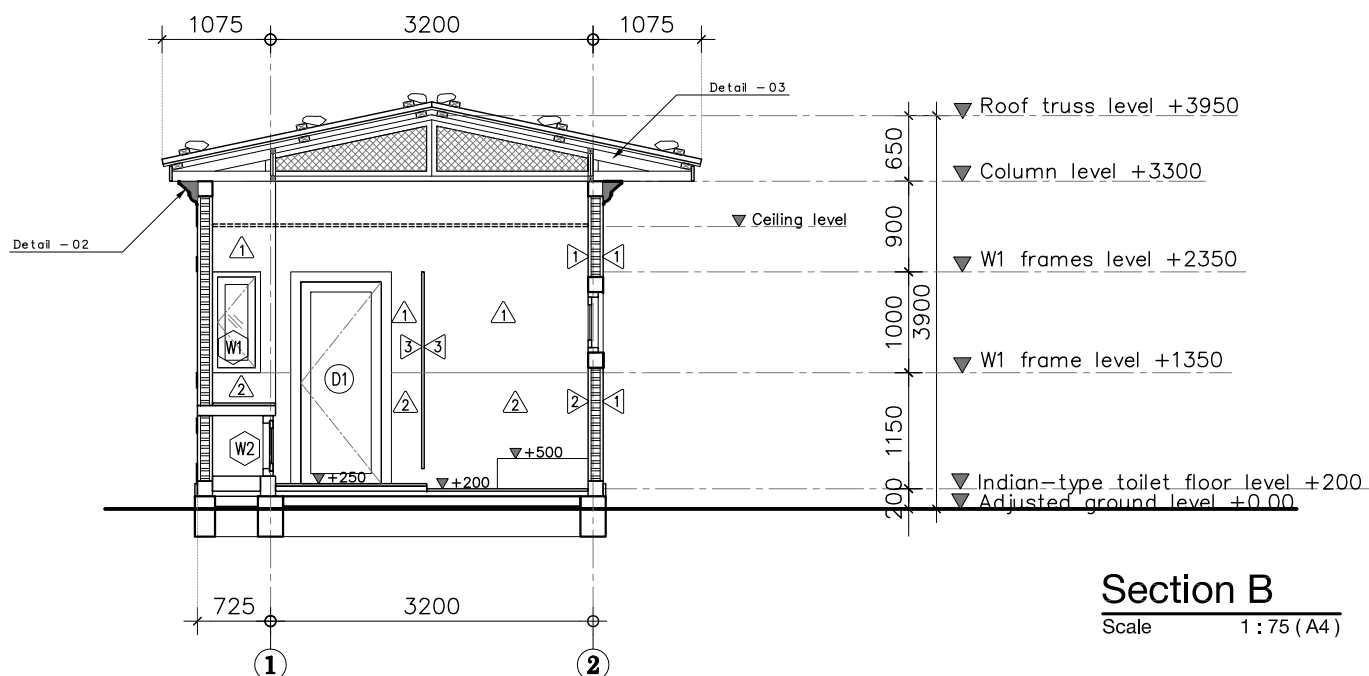
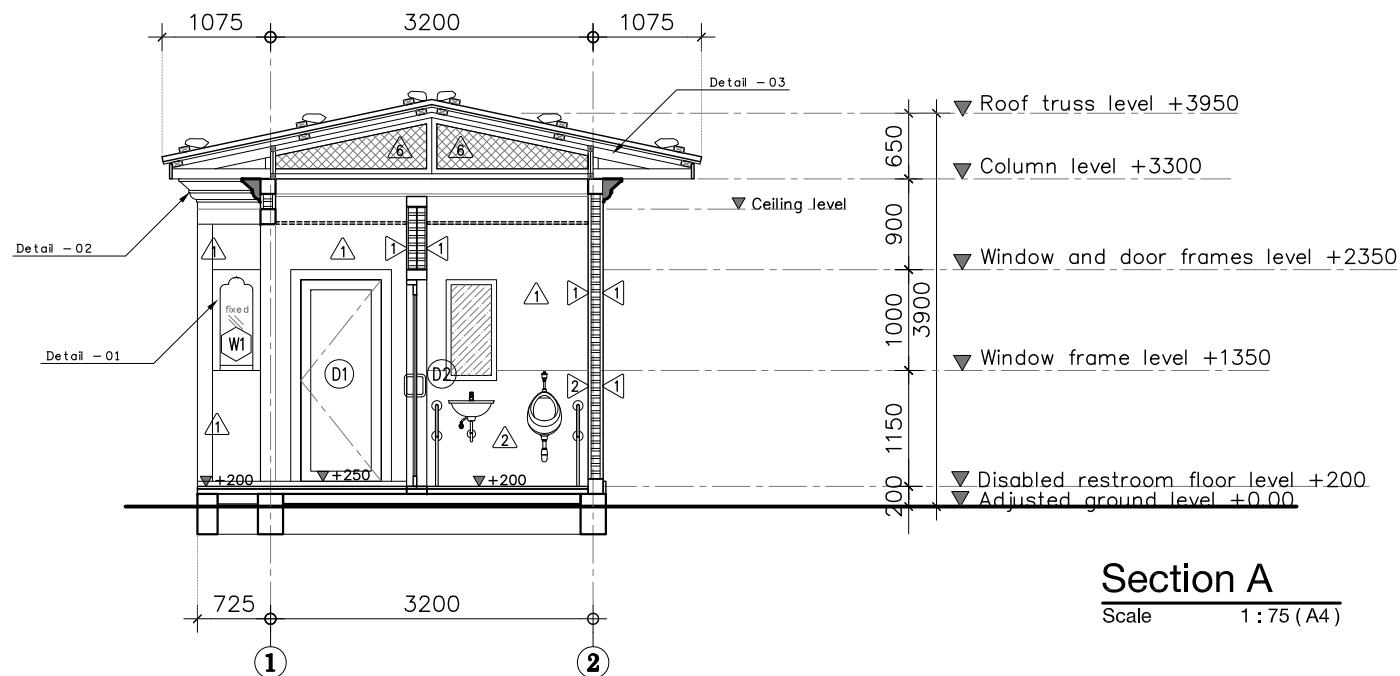
—

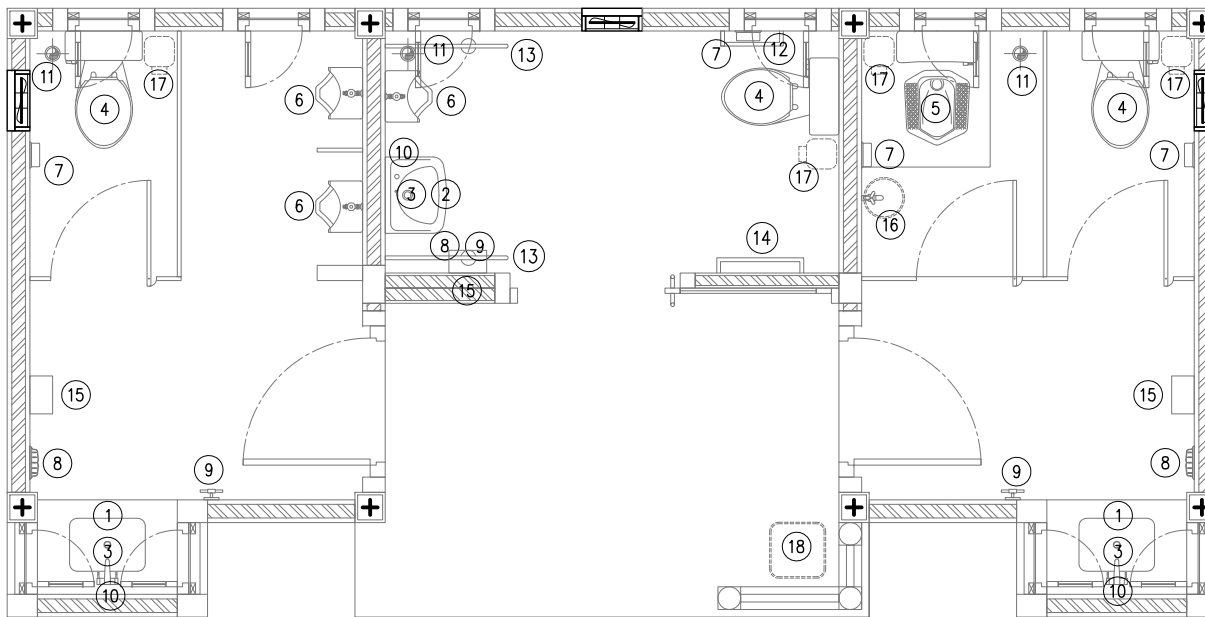
REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
—	—
REVISION:	DATE:
00	6/10/2016

SCALE:
1 : 75

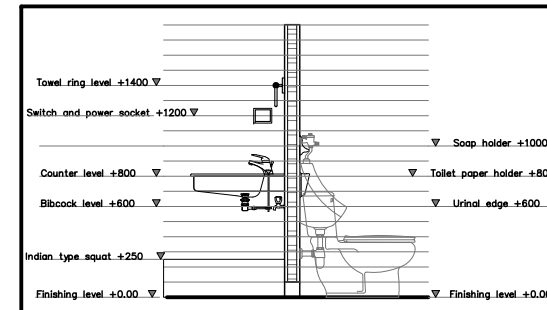
DRAWING NO:

A-09





Sanitary ware level



Sanitary ware plan

Scale 1 : 50 (A4)

	SANITARY VARE	DESCRIPTION	QTY.	
①	WASH BASIN	DROP-IN COUNTER TYPE	2	
②	WASH BASIN	FLAT-BACK TYPE	1	
③	WATER TAP + STOP VALVE	WARM WATER - Censer type	3	
④	FLUSH TOILET + STOP VALVE	EUROPEAN TYPE BUILD-IN WATER TANK	3	
⑤	FLUSH TOILET + STOP VALVE	INDIAN TYPE WITH TANK	1	
⑥	URINAL	- Censer type	3	
⑦	TOILET PAPER HOLDER	With cover	4	
⑧	SOAP HOLDER	-	3	
⑨	TOWEL RING	-	3	

	SANITARY VARE	DESCRIPTION	QTY.	
⑩	MIRROR 1.00x1.20m	TIMBER FRAME	3	
⑪	FLOOR DRAIN	WITH COVER	3	
⑫	DISABLED HANDLE BAR	L-shape(for flush toilet) 400x600 mm	1	
⑬	DISABLED HANDLE BAR	U-shape(for wash basin) 800x800 mm	2	
⑭	DISABLED HANDLE BAR	i-shape(for common wall) 550 mm	1	
⑮	HAND DRYER	-	3	
⑯	BIBCOCK + BUCKET & BOWL	-	1	
⑰	TRASH BIN WITH FOOT PEDAL	Maximum size 200x200mm	4	
⑱	TRASH BIN WITH FOOT PEDAL	Maximum size 400x400mm	1	



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
 GPO THIMPHU BHUTAN
 TEL.+975 2 323251/323252
 FAX:+9752323695
 DOT@TOURISM.GOV.BT
 WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
 PUBLIC RESTROOMS

DRAWING TITLE

SANITARY WARE PLAN

NOTES:

-
 -
 -
 -
 -

ARCHITECT :
 DONCHAI MANASPHROM
 DECHEN LHAZOM CHHOPHEL

ENGINEER :

-

CHECKED BY:

-

APPROVED BY:

-

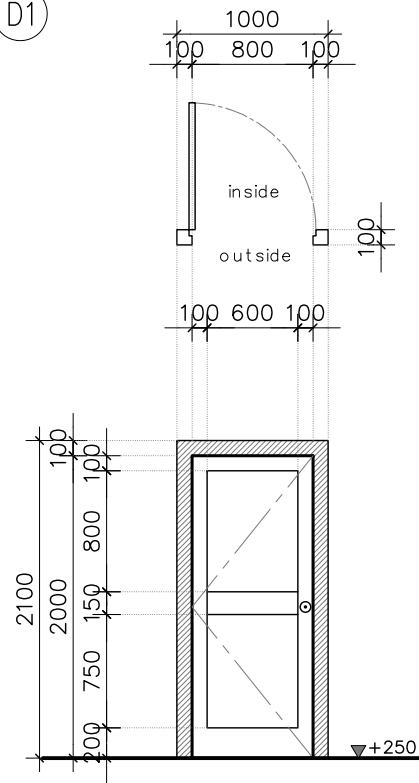
REVISION: -	DATE: -
REVISION: -	DATE: -
REVISION: -	DATE: -
REVISION: 00	DATE: 20/10/2016

SCALE:
 1 : 50

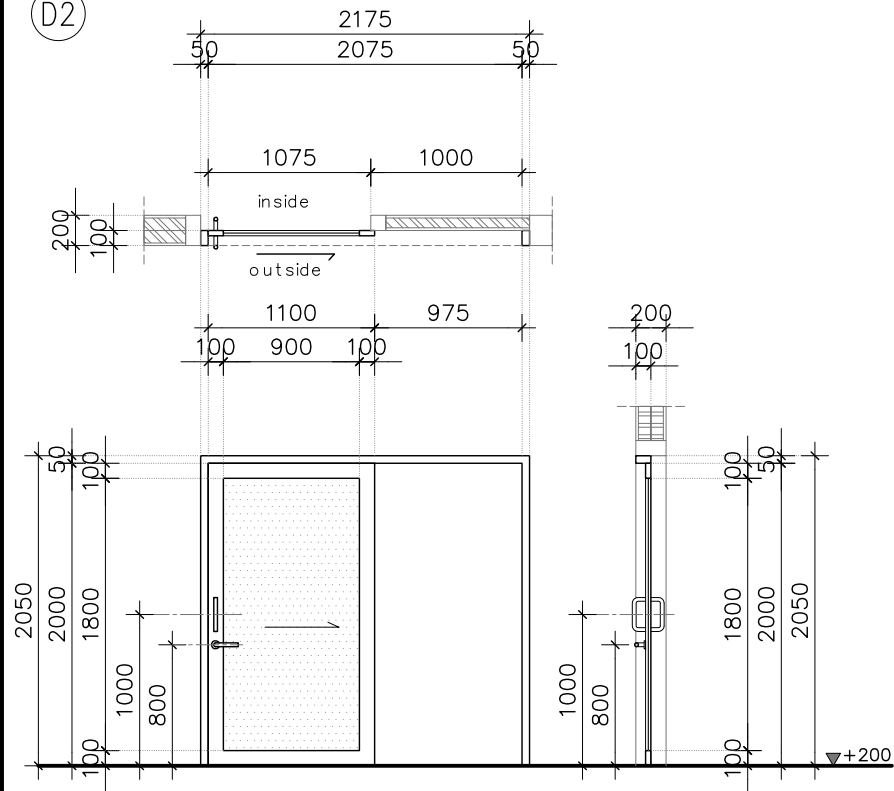
DRAWING NO:

A-10

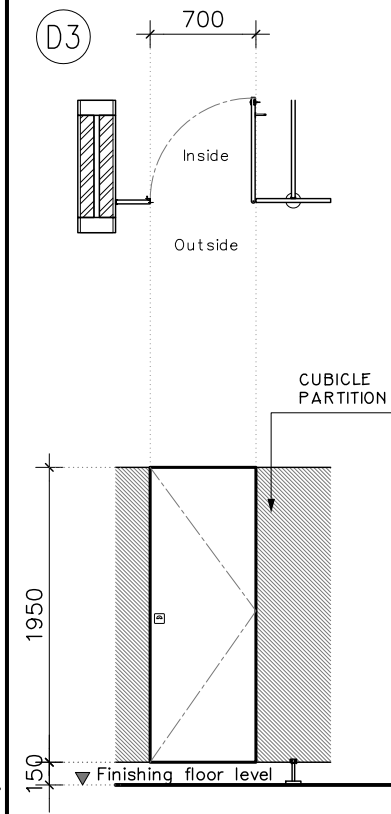
D1



D2



D3



TYPE	Single-leaf door
FRAME	Solid timber / 100x100 mm
PANEL FRAME	Solid timber / 100x35 mm, 150x35 mm, 200x35 mm
INNER PANEL	Solid timber / 25mm THK.
HINGES	Stainless hinges / 75mm x4/panel
HANDLE	Stainless keyed-entry knob
DOOR BOLT	-
QUANTITY	2

TYPE	Aluminum sliding door
FRAME	Aluminum / 50x100 mm
PANEL FRAME	Aluminum / 100x35 mm
INNER PANEL	Frosted glass / 10mm THK.
RAIL & ROLLER	Standard fitting for aluminum sliding door
HANDLE	Stainless bar handle
DOOR BOLT	-
QUANTITY	1

TYPE	Single-leaf cubicle door
FRAME	-
PANEL	Particle board laminate finishing
INNER PANEL	-
HINGES	Standard fitting for cubicle door
HANDLE	Standard fitting for cubicle door
DOOR BOLT	Standard fitting for cubicle door
QUANTITY	3



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

DOORS DETAILS

NOTES:

-
-
-
-
-

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

-

CHECKED BY:

-

APPROVED BY:

-

REVISION: DATE:

-

-

REVISION: DATE:

-

-

REVISION: DATE:

-

-

REVISION: DATE:

00

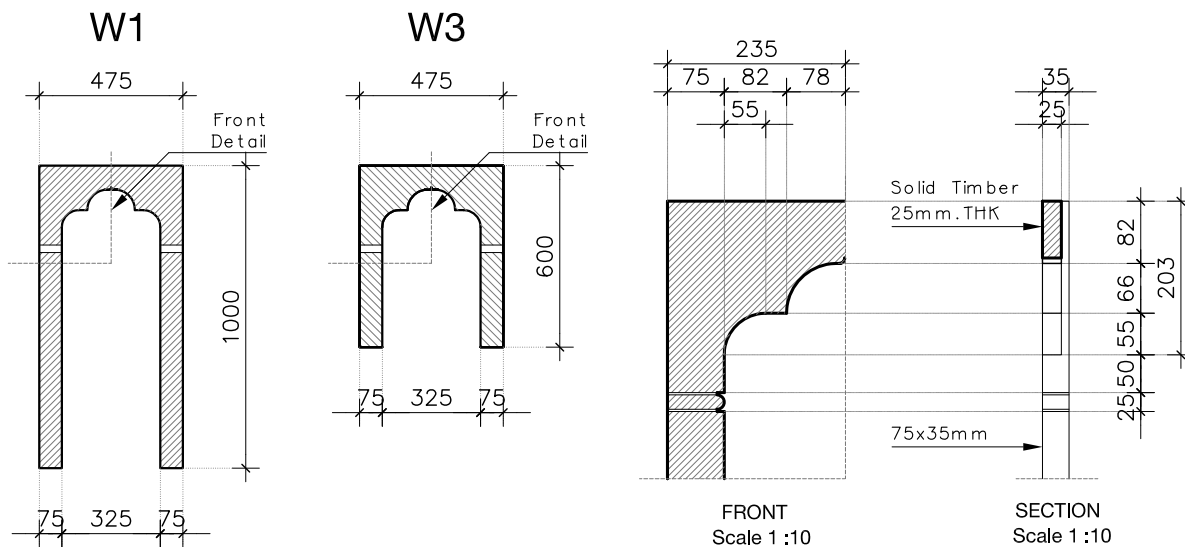
20/10/2016

SCALE:
1 : 50

DRAWING NO:

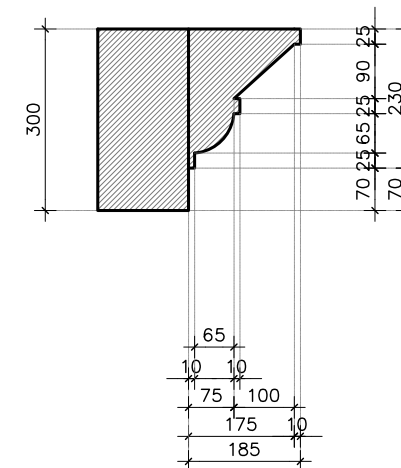
A-11





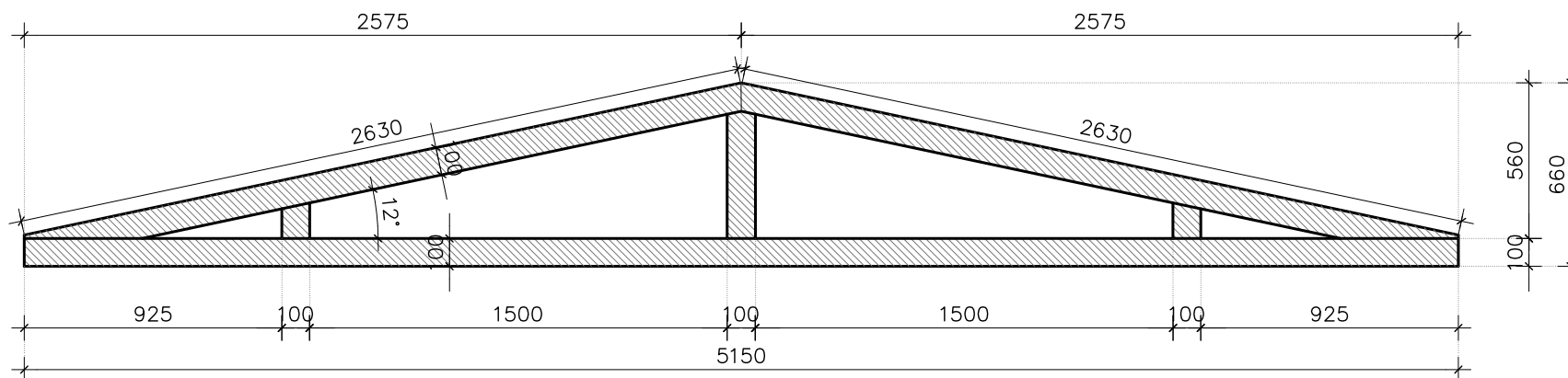
Detail - 01 (Traditional timber frame)

Scale 1 : 25 (A4)



Detail - 02 (Cement cornice)

Scale 1 : 10 (A4)



Detail - 03 (Roof truss)

Scale 1 : 25 (A4)



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT

TASHICHHO DZONG
TICKET LOUNGE

DRAWING TITLE

DETAIL -01, 02, 03

NOTES:

—
—
—
—
—

ARCHITECT :
DONCHAI MANASPHROM
DECHEN LHAZOM CHHOPHEL

ENGINEER :

—

CHECKED BY:

—

APPROVED BY:

—

REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: —	DATE: —
REVISION: 00	DATE: 20/10/2016

SCALE:
1:25 , 1:10

DRAWING NO:

A-13

STRUCTURAL DESIGN NOTES & COMPLIANCE:

A.GENERAL:

- ✓ Read the drawings in conjunction with the architectural drawings.
- ✓ All dimensions are in mm (millimeters) unless specified.
- ✓ Dimensions mentioned/specified refers to the unfinished surfaces of all structural components.
- ✓ Dimensions shall be read & not be scaled/measured from the drawings.
- ✓ All dimensions shall be verified before commencing any work
- ✓ Refer any discrepancy to design engineer/architect before proceeding with the work
- ✓ Material and workmanship shall comply with the relevant standards included herein that are applicable to this works.
- ✓ Contractors/Builders (site engineer) shall familiarize themselves with the entire drawings before proceeding with the construction & shall refer to designer for any clarifications.

B.DESIGN CODES:

- ✓ IS 456:2000, Code of Practice for Plain and Reinforced Concrete.
- ✓ IS 875:1987, Code of Practice for Design load for Buildings and Structures.
- ✓ IS 13920:1993, Ductile Detailing of Reinforced Concrete Structures subjected to Seismic Forces
- ✓ IS 1893:2002, Seismic Resistant Design of Structures
- ✓ Building Code of Bhutan - 2003
- ✓ Manual for Timber Engineering (NUDC)
- ✓ PWD (1997) Seismic Design Guideline.

C.DESIGN LOADS:

1. Dead loads:

 - Unit weight of stone masonry: 23.5 kN/m³
 - Unit weight of brick masonry: 19.6 kN/m³
 - Unit weight of reinforced concrete (RCC): 25 kN/m³
 - Unit weight of plain concrete: 24 kN/m³
 - Floor from finish: 1 kN/m²
 - Unit weight of timber 6.0 kN/m³
2. Imposed/Live loads

 - Live load on all floors 2kN/m²
 - Snow load on roof. 1 kN/m²
 - Imposed load on staircase 3 kN/m²
 - Imposed load on inaccessible roof 0.75 kN/m²
3. Wind load

 - Basic wind speed 45 m/s.
 - Building class A
 - Terrain category II
4. Earthquake load

 - Earthquake load in accordance with IS1893 (part-1): 2002.
 - Importance factor (I) of building: 1.5
 - Response Reduction factor (R) of building 5

D. FOUNDATION:

- Footings are designed for an allowable safe bearing capacity of 150 KPa (Assumed) and has to be verified before placing concrete.
- Compacted fill material should consist of clean granular material free of organic or decomposable matter.
- RRM walls shall be constructed between the columns irrespective of exterior or interior grids.
- The soil/earth under the concrete base slab shall be compacted thoroughly and a minimum of 150mm layer of course aggregate shall be placed over the compacted earth and sealed with 100 mm thick layer of binding concrete.
- Backfill shall be done only after construction of walls.

E. CONCRETE

- Concrete quality shall comply with IS 456:2000.
- Grade of concrete shall be **M20 or as per BOQ** for all RCC works. The Competent Engineer shall design the mix and result should be satisfactory as per the code prior to concreting.
- Water fit for drinking shall be used for mixing the concrete ingredients and curing.
- Curing of concrete shall be in compliance to the IS 456:2000.
- Only mechanical vibration is advised and care should be taken to avoid segregation of ingredients. The vibration time at each spot is approximately five seconds.
- Concrete section as drawn are minimum and does not include applied finishes.
- Do not make any unspecified holes or chisels without engineers' approval. Do not place conduits, pipes etc. through the structural members.
- Placement and removal of form works shall be in accordance to IS 456:2002.

F. REINFORCEMENT STEEL

- Grade of steel for all RCC works shall be Fe500. List of approved brands by BSB shall be preferably used.
- Lap reinforcement are only at locations shown in the drawings. Lap length shall not be less than the development length in tension.
- All reinforcements shall be firmly supported on concrete blocks of M20 grade of concrete at 750mm center for beam and columns, 450mm centers for slabs in both ways to prevent displacement of reinforcement by workmen or equipment during fixing and subsequent concrete placement within the tolerance given in above.
- The minimum cover to the outermost main reinforcement from the concrete surface shall not be less the following except where specified otherwise:
 - a. Foundation..... 50 mm
 - b. Column 40 mm
 - c. Beam 25 mm
 - d. Slab 20 mm
 - e. Staircase 20 mm
- Bending of reinforcement shall comply with the requirements of IS 456:2000
- In order to avoid unintended location of splices, bar scheduling should be done prior to placement of reinforcement.
- The bar bending schedule as per the IS Code shall be followed strictly.

G. TIMBER:

- All structural timber shall conform to the IS 883.
- Moisture content of the structural timber member shall not exceed 12%.
- All structural timber shall have a minimum allowable bending stress 'fb' of 7MPa, a minimum allowable horizontal shear stress 'fv' of 0.6 MPa, a minimum modulus of elasticity 'e' of 9800 MPa

H. MASONRY WORKS:

- Mortar for masonry works shall be CM 1:4 or richer.
- RCC bands at lintels of openings and at T- and L-junctions of projected walls shall be connected properly with the RCC frame elements (column, beam & slab).
- All exterior masonry walls shall be prevented from out of -plane failures by providing reinforcement shown in the details.

I. FORMWORK

- Quality of formworks shall be in accordance with IS 456:200
- Formworks shall be properly held in positions and must not allow any kind of movements during placement or labouaring.
- Stripping of formworks shall also comply with clause 11.3 of IS 456:2002.
- The concrete receiving face of the formwork shall be very smooth and firmed.
- No burnt mobil shall be used at formworks. If used, only formwork oil to be used.

J. DIMENSIONS

- All Dimensions are in millimeters (mm) unless specified in the drawings.
- The dimensions shall be read, not measured.

IMPORTANT NOTIFICATIONS:

THE CLIENT AND ENGINEER HAS RIGHT TO REJECT, DISMANTLE, ASK FOR REPLACEMENT, ETC. AT ANY TIME OF OF WORK DURING CONTRACT PERIOD IF THE WORK, MATERIALS OR WORKMANSHIP IS FOUND NOT SATISFACTORILY DONE OR PROVIDED AT SITE AT THE CONTRACTOR'S OWN COST.



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT
TOILET & RESTROOM

DRAWING TITLE
NOTES

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

SCALE:
NTS
DRAWING NO:
CV-01



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

**PROJECT
TOILET & RESTROOM**

**DRAWING TITLE
PLAN**

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

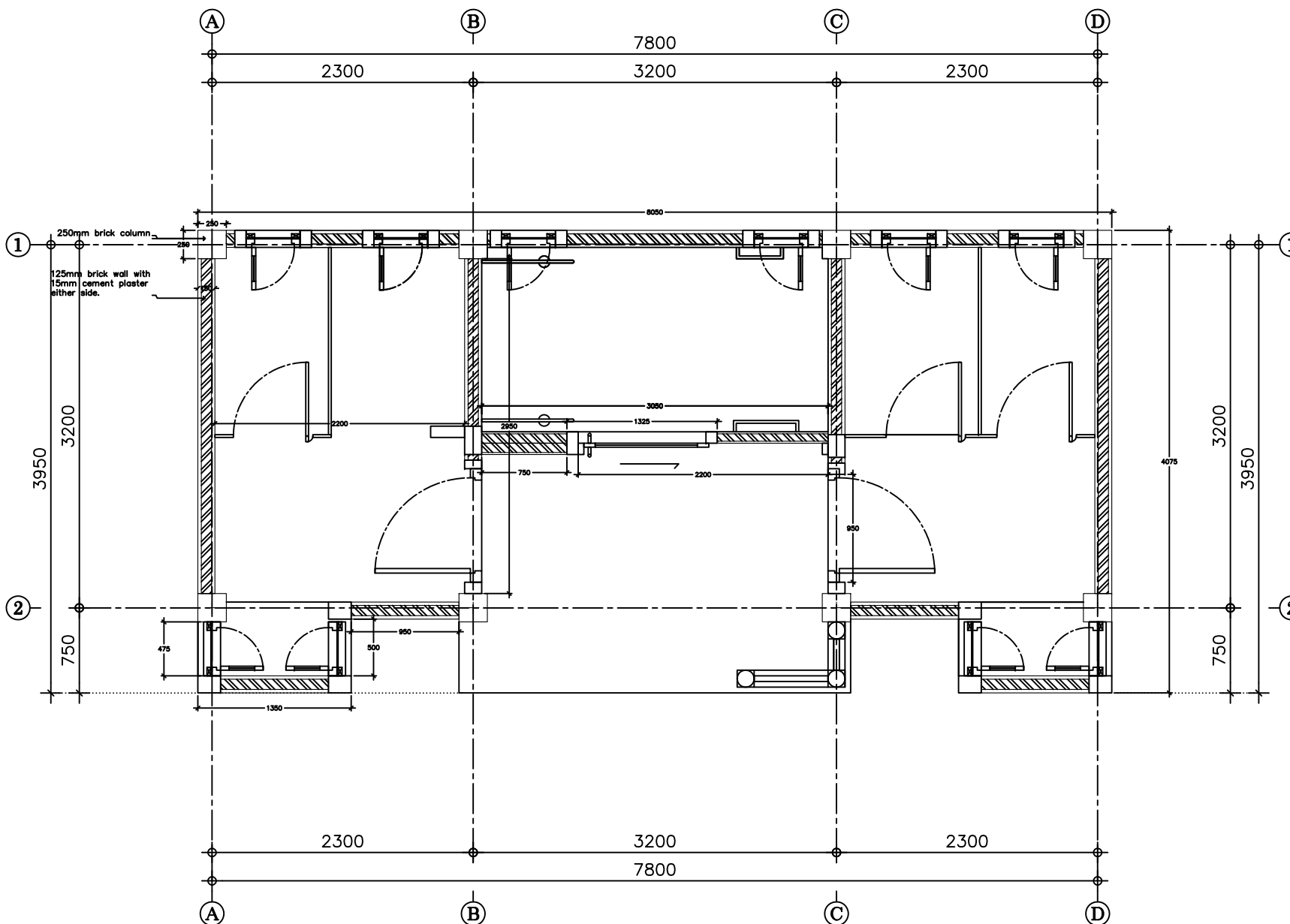
REVISION: DATE:

SCALE:

NTS

DRAWING NO:

CV-02





**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

**PROJECT
TOILET & RESTROOM**

**DRAWING TITLE
FOUNDATION LAYOUT**

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

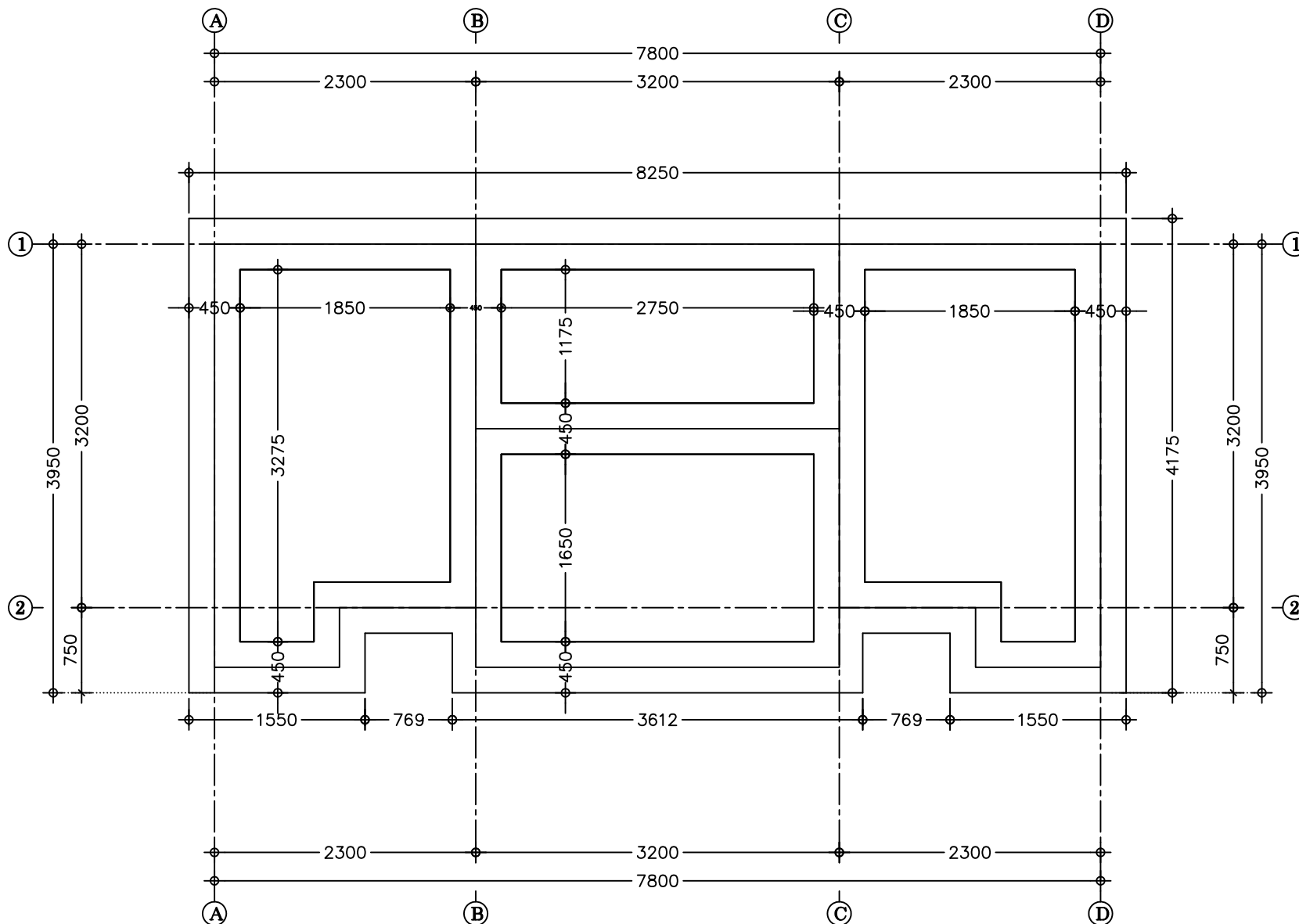
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

SCALE:

NTS

DRAWING NO:

CV-03





**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

**PROJECT
TOILET & RESTROOM**

**DRAWING TITLE
SECTION**

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

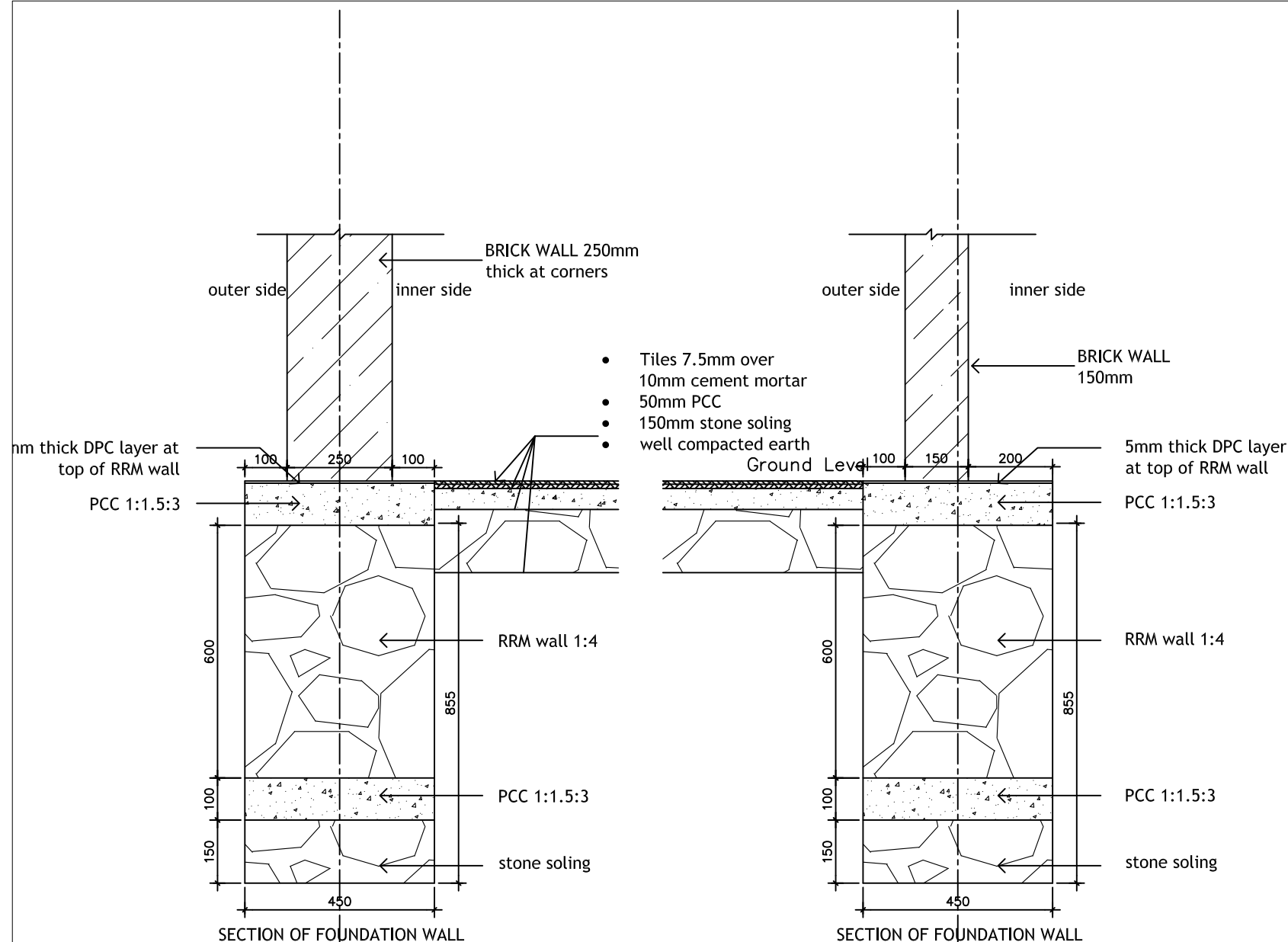
REVISION: DATE:

SCALE:

NTS

DRAWING NO:

CV-04





TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT TOILET & RESTROOM

DRAWING TITLE TRUSS SECTION & DETAILS

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

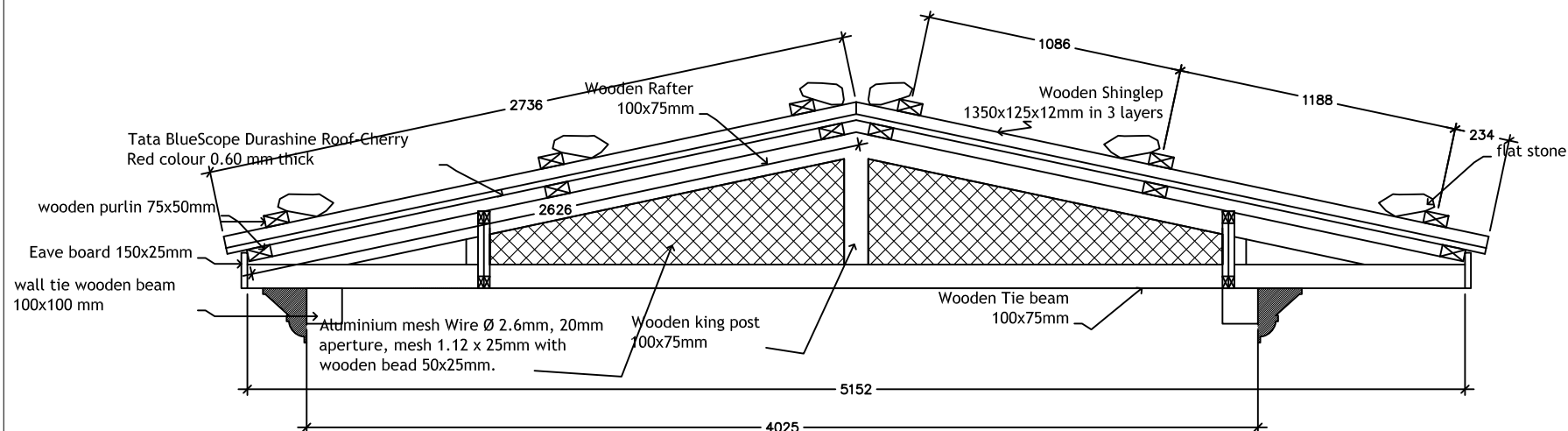
REVISION: DATE:

SCALE:

NTS

DRAWING NO:

CV-05



Note:

1. C1 joist size=75x50mm
2. C2 joist size=100x75mm

In C1 areas, 1"x0.5" wooden beading is fixed with screws to fix 6mm commercial plywood.

In C2 areas, the 25.4 mm half-lapped wooden ceiling is laid under the joist. The 2 joist in horizontal direction is fixed on brick walls and 3 joist in vertical direction (1 in middle) of 100x75mm.



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

**PROJECT
TOILET & RESTROOM**

**DRAWING TITLE
TRUSS SECTION & DETAILS**

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

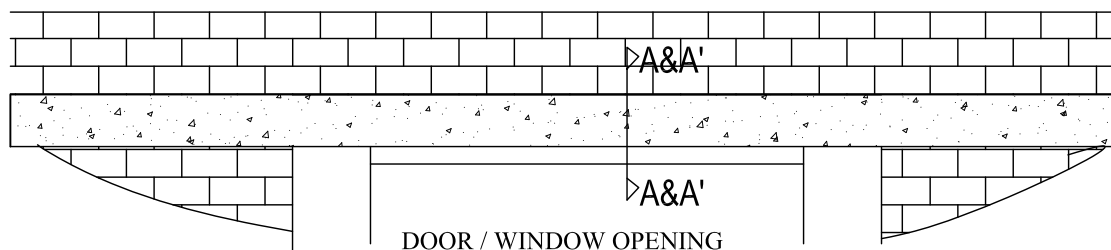
REVISION: DATE:

SCALE:

NTS

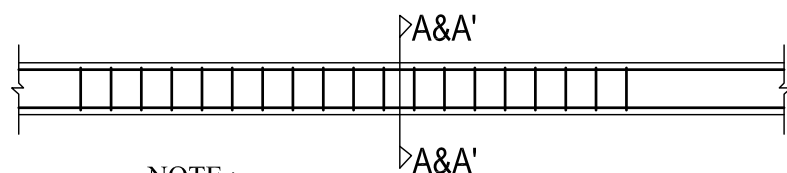
DRAWING NO:

CV-06



LINTEL BAND OVER OPENINGS

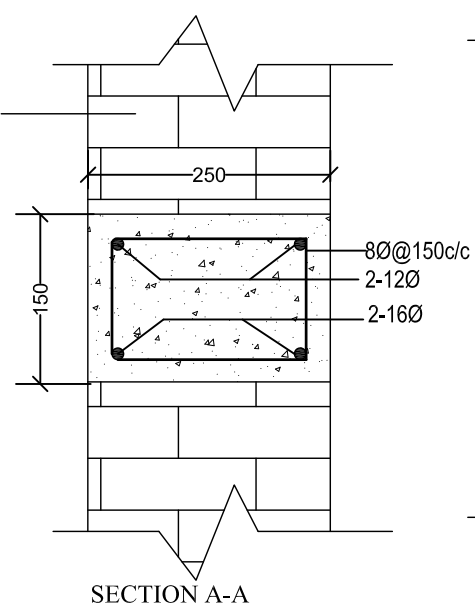
LINTEL BAND OVER OPENINGS



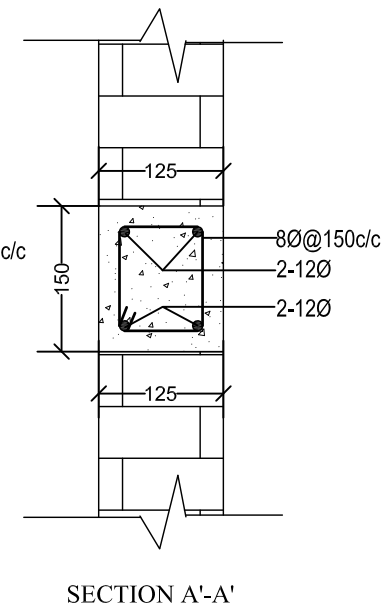
NOTE :

1. Lintel band 150mm height is continuous all around and concreted in 1 day.
2. Same lintel band details shall be adopted for all lintels.
3. RCC works shall be vibrated with vibrator 25mm rod
4. RCC Grade 1:1.5:3, 20mm aggregates

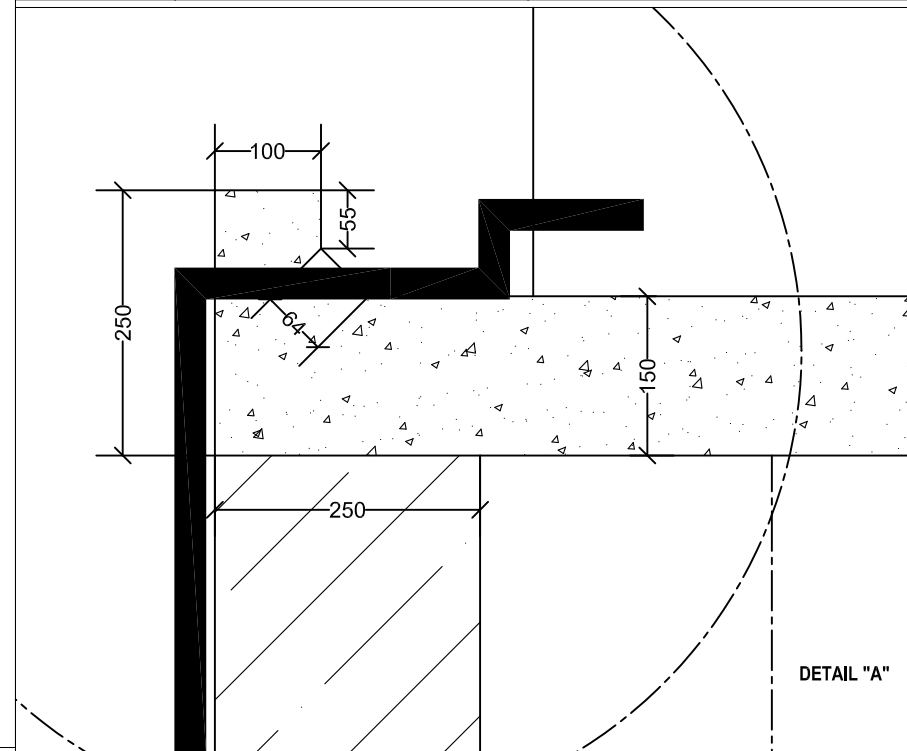
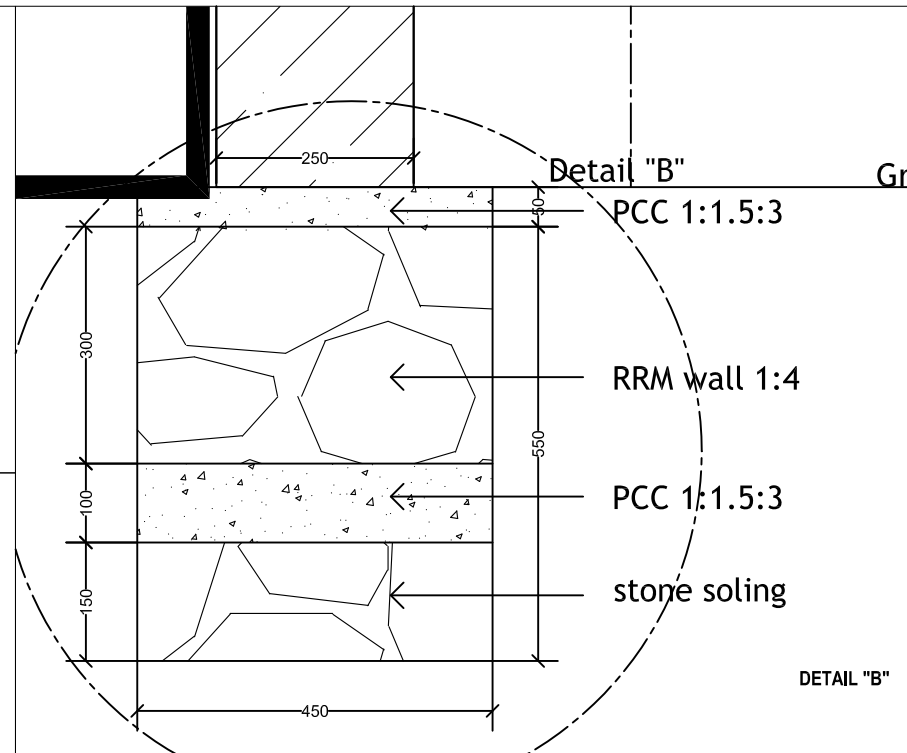
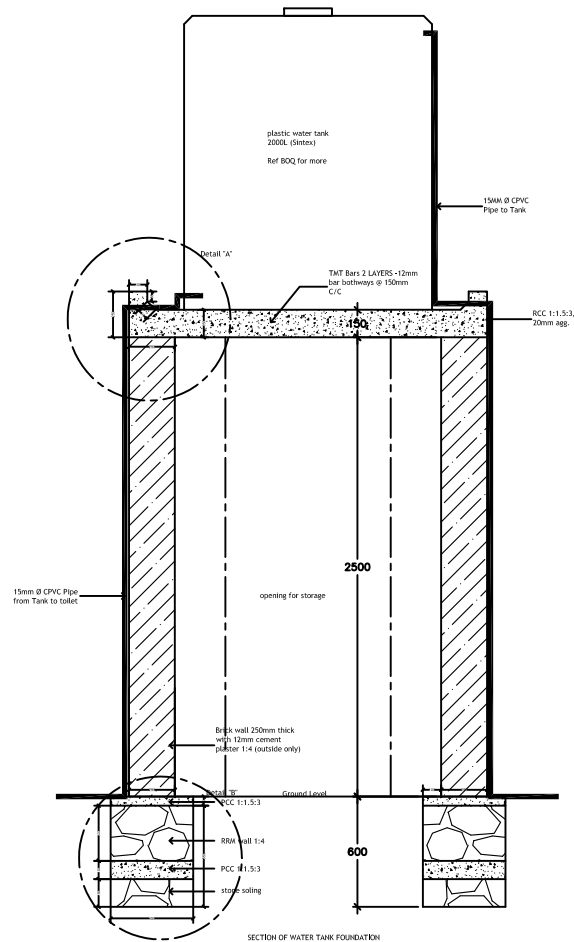
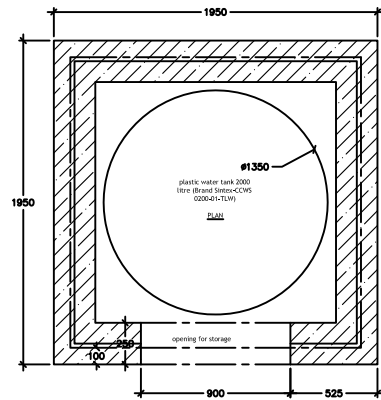
Masonry Wall



SECTION A-A



SECTION A'-A'



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT
TOILET & RESTROOM

DRAWING TITLE
TRUSS SECTION & DETAILS

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

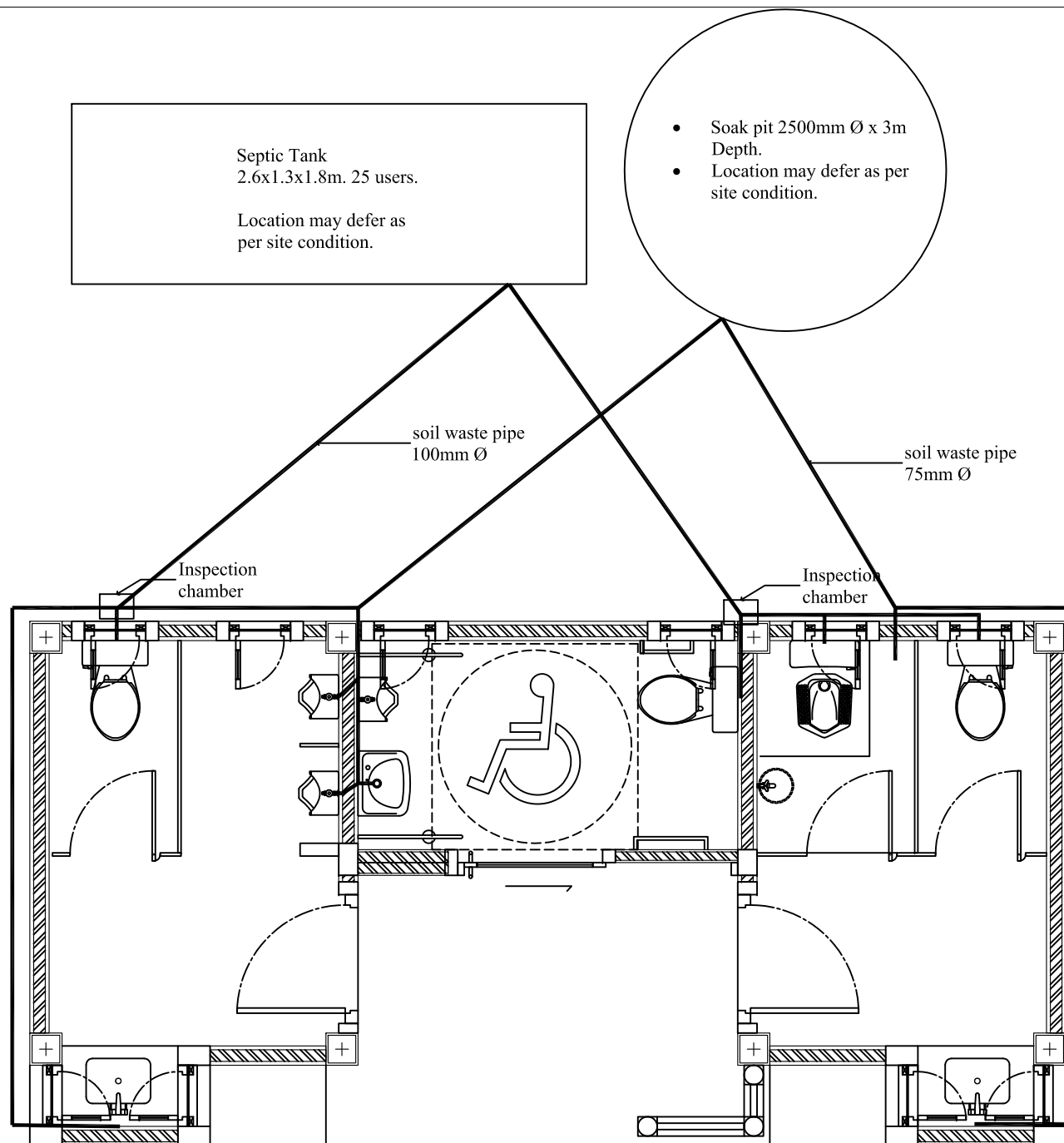
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

SCALE:

NTS

DRAWING NO:

CV-07



Septic Tank
2.6x1.3x1.8m. 25 users.

Location may defer as
per site condition.

- Soak pit 2500mm Ø x 3m Depth.
- Location may defer as per site condition.



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT
TOILET & RESTROOM

DRAWING TITLE
SEWERAGE LINE

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

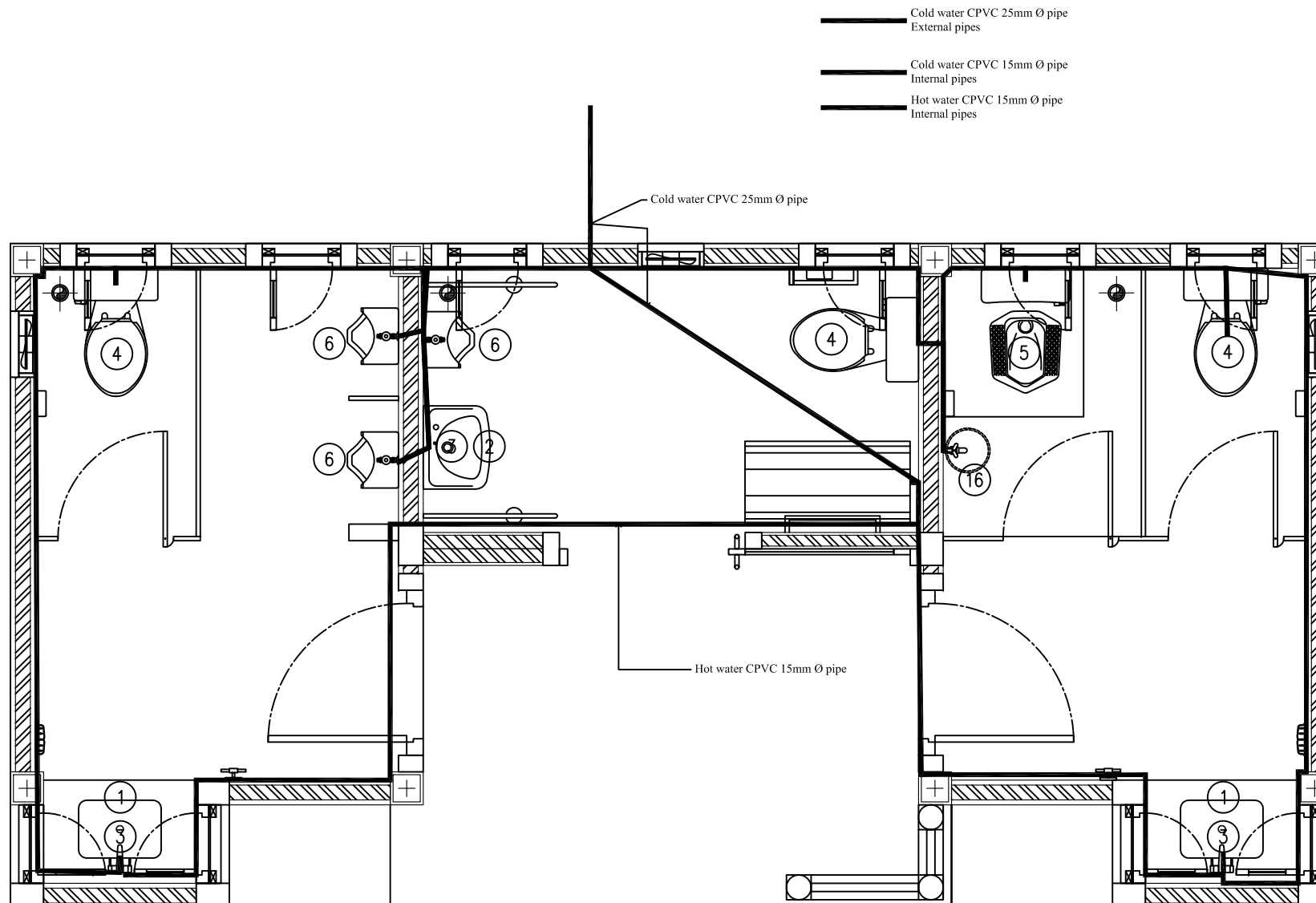
CHECKED BY:

APPROVED BY:

REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

SCALE:
NTS

DRAWING NO:
CV-08



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT
TOILET & RESTROOM

DRAWING TITLE
SEWERAGE LINE

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

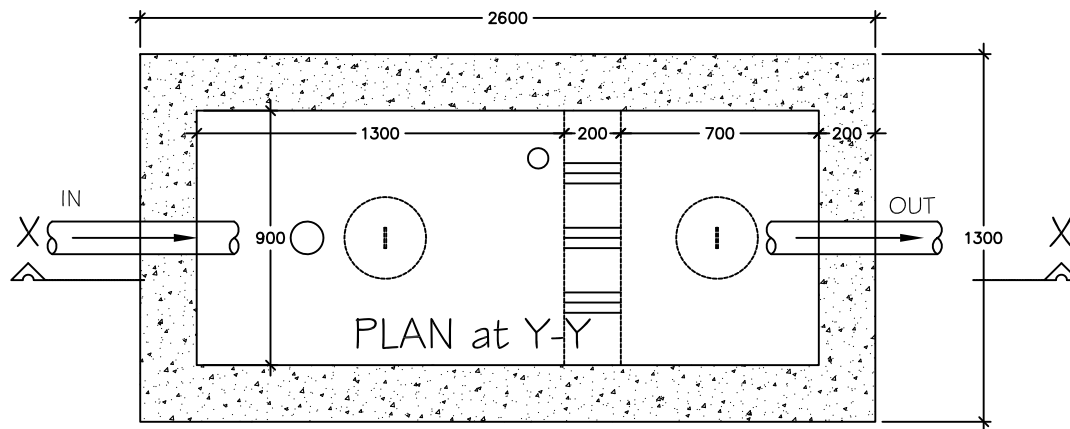
REVISION: DATE:

SCALE:

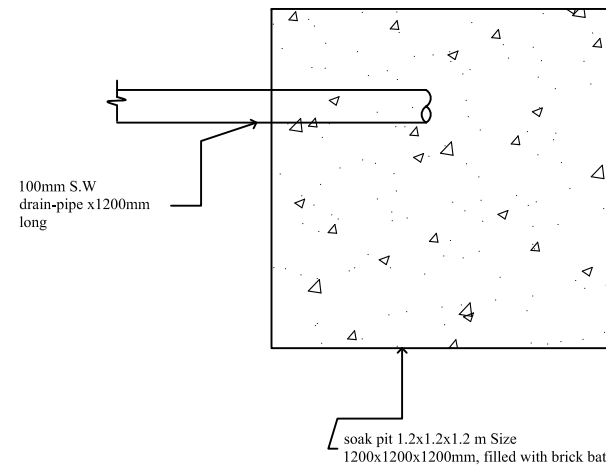
NTS

DRAWING NO:

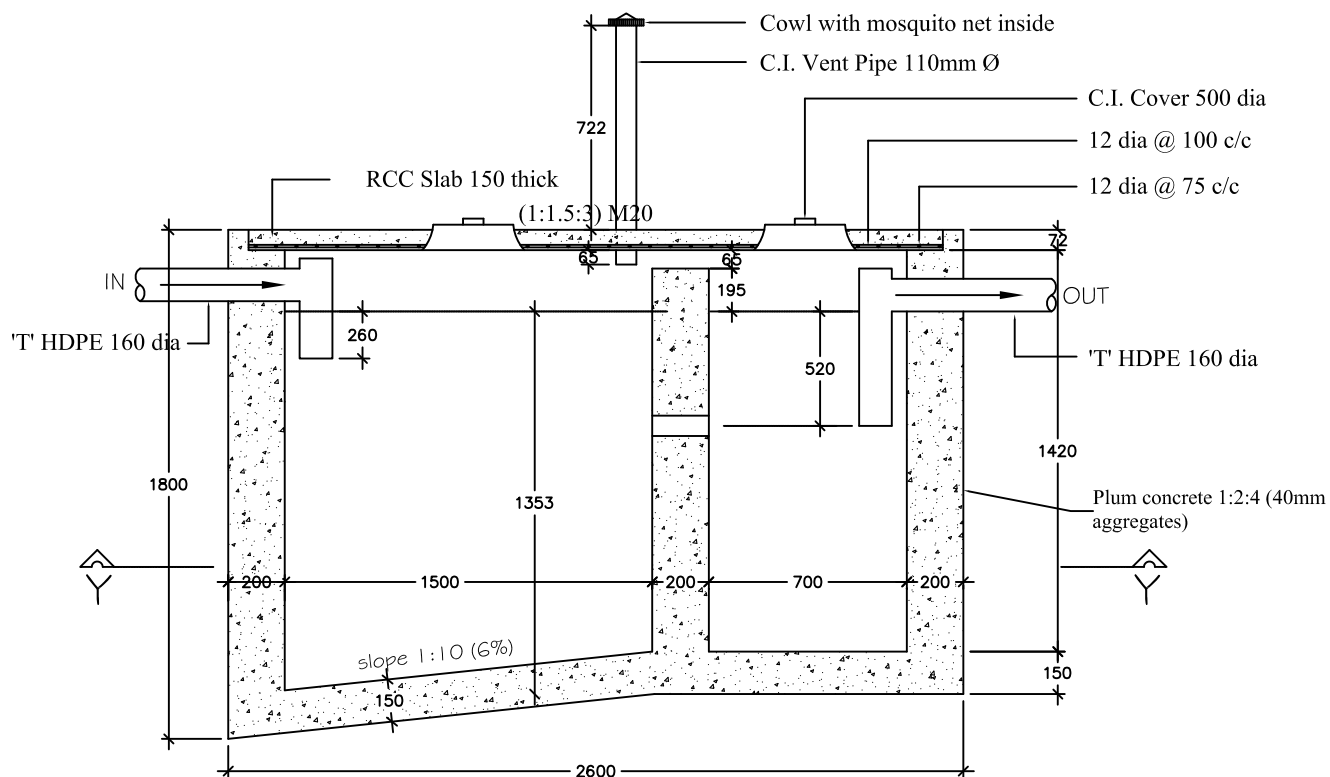
CV-09



SEPTIC TANK -25 USERS



SOAK PIT



SECTION AT XX



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

**PROJECT
TOILET & RESTROOM**

**DRAWING TITLE
SEPTIC TANK-25 USERS
& SOAK PIT**

NOTES:

ARCHITECT :

ENGINEER :
S. PRADHAN

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

NTS

DRAWING NO:

CV-09

SPECIFICATIONS FOR ELECTRICAL WORKS

1. All Light Point Wiring Shall Be Of 1.5 sq. mm PVC Insulated copper conductor 1.1 kVG
2. All Light Circuit Wiring Shall Be Of 2.5 sq. mm PVC Insulated copper conductor 1.1 kVG
3. All Power Point Wiring Shall Be Of 4 sq. mm PVC Insulated copper conductor 1.1 kVG
4. All The Light Switch Board Shall Be At 1.2 m From Finished Level
5. All Power Point Shall be At 0.4 m From Finished Floor Level Except For Kitchen and Toilet
6. All Power Point Shall Be At 1.6 m From Finished Floor Level For Kitchen And Toilet
7. All Wall Fixtures Shall be At 2.1-2.3 m From Finished Floor Level
8. No Phase Difference Is Permitted In The Same Conduit
9. All 16 A, 5 Pin Socket Outlet At 0.4 m From Finished Floor Level
10. Main Control Panel Board at 0.2 m From Finished Floor Level
11. Lighting Circuit With 25 mm Dia. HDPE Conduit
12. Power Point Circuit With 25 mm Dia. HDPE Conduit
13. Telephone Circuit With 25 mm Dia. HDPE Conduit
14. Television Circuit With 32 mm Dia. HDPE Conduit
15. Some Assumptions Are As Follows
 - i. Power Factor = 0.8
 - ii. Load Factor = 0.6
16. Sub Distribution Board at 2 m From Finished Floor Level

1. Telephone Cable Conduit Shall Be Of 25 mm Dia. HDPE Conduit
2. Telephone Cable Duct/Conduit Must Be Separated By 0.5 m Away From Electrical Conduits
3. Telephone Terminal Cabinet (TTC) 0.5 m From the Finished Ground Floor Level
4. Telephone Socket Outlet At 0.4 m Above Finished Floor Level [Finished Floor to Bottom of The Socket]

C Television Networks

1. TV Cable Conduit/Duct Shall Be Of 32 mm Dia. HDPE Conduit
2. TV Terminal Cabinet (TvTC) Shall Be Placed .5 m From the Finished Ground Floor Level
3. TV Socket Outlet At 0.4 m Above Finished Floor Level [Finished Floor to Bottom of The Socket]

D On Completion of the Installation The Following Test Result Shall be Satisfied

- | | |
|--------------------------|--|
| 1. Polarity Test | : All Switches Must Be on the Live Conductor |
| 2. Insulation Test | : Minimum Test Result Should Not Be Less Than One Mega Ohm |
| 3. Earth Continuity Test | : Low Voltage Test Lamp Should Satisfy the Installation |
| 4. Earthing Test | : Test Result Should Be Within Five Ohms |



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:

SPECIFICATIONS

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION:	DATE:
-----------	-------

REVISION:	DATE:
-----------	-------

REVISION:	DATE:
-----------	-------

REVISION:	DATE:
-----------	-------

SCALE:

DRAWING NO:
EI-001



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:

LIGHT POINTS LAYOUT

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

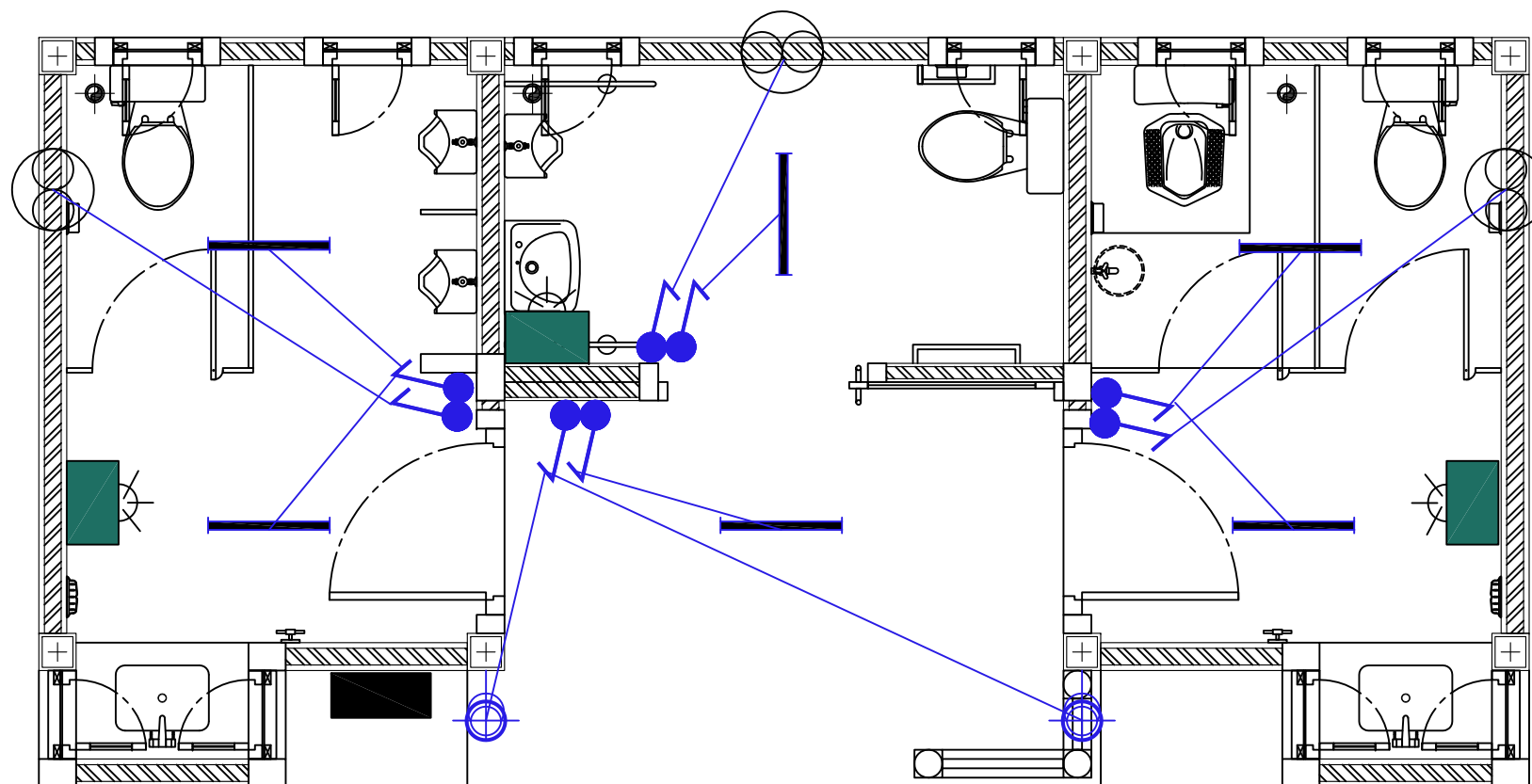
REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-002



LIGHT POINT LAYOUT



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:

LIGHT CONDUITS LAYOUT

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

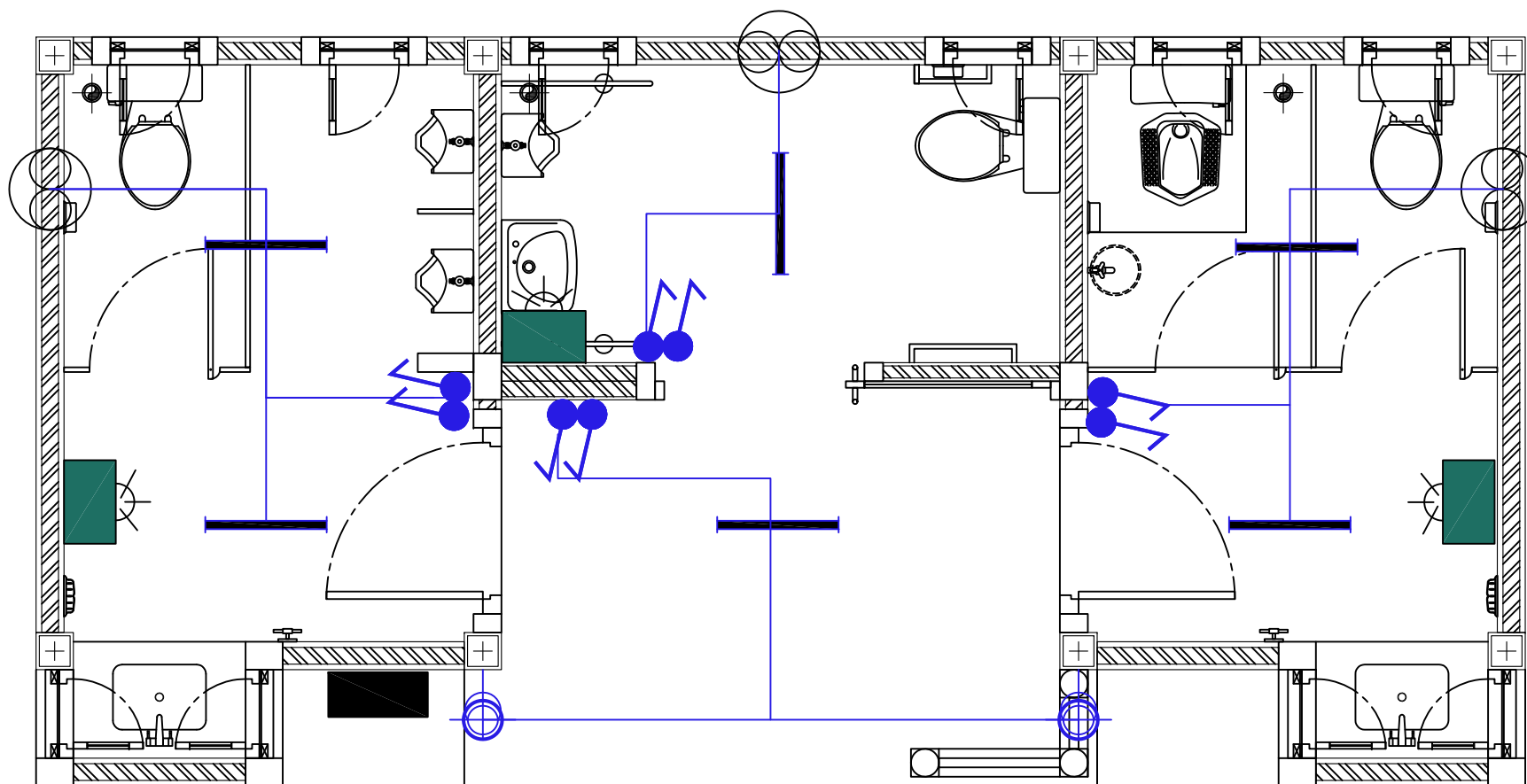
REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-003



LIGHT CONDUIT LAYOUT



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:
SWITCH BOARD CONDUITS
LAYOUT

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

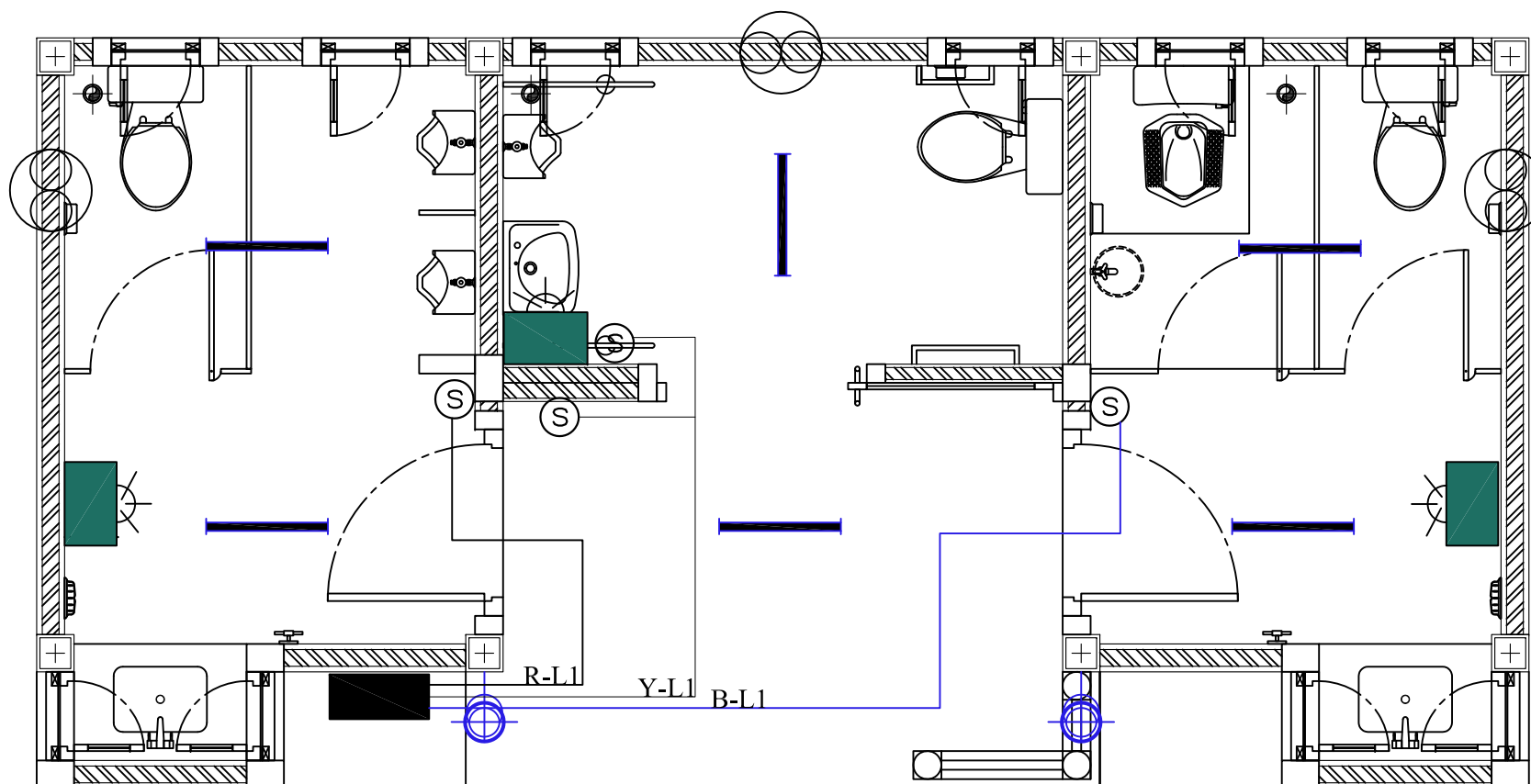
REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-004



SWITCH BOARD CONDUIT LAYOUT



**TOURISM COUNCIL
OF BHUTAN**

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:
POWERPOINT CONDUITS
LAYOUT

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

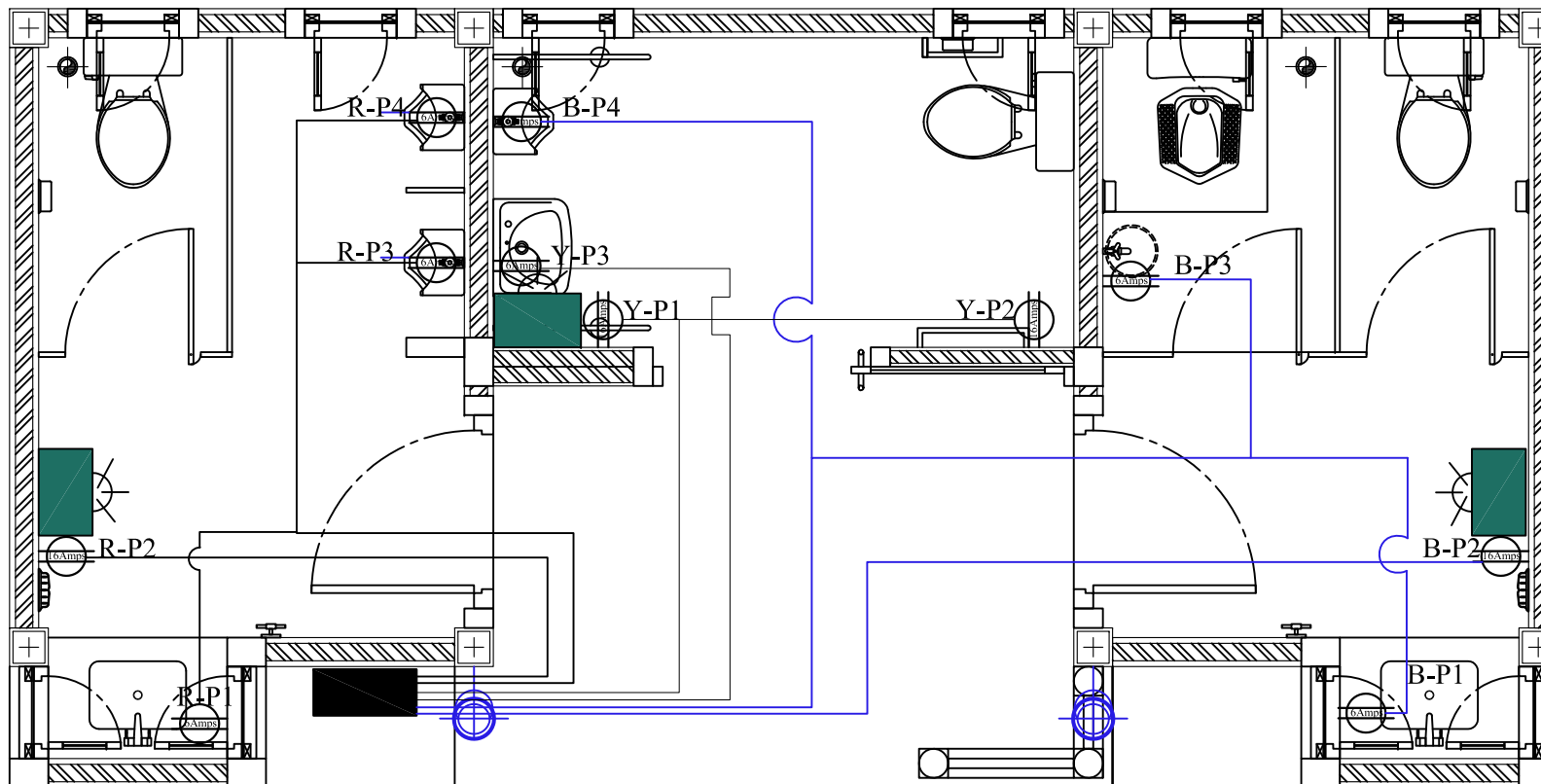
REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-005



POWER POINT CONDUIT LAYOUT

Ground & Electro Enhancement (GEE) Slab Earthings:

A. SPECIFICATIONS:

1. Earthing Product - GEE slab
2. Product Dimension-5'x1'x1.5" (Length includes 6" GI flat protrusion at two sides).
3. Product weight: 25kg +/-1kg per slab
4. Bolting provision- a hole of 12 mm Ø in GI flat at each ends
5. Bolts & Nuts: 12mm x1" GI Bolt with one GI nut and 2 washers per bolt.

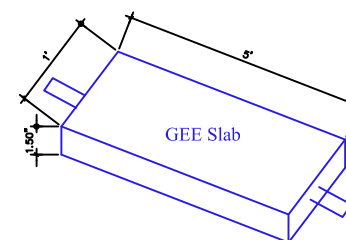
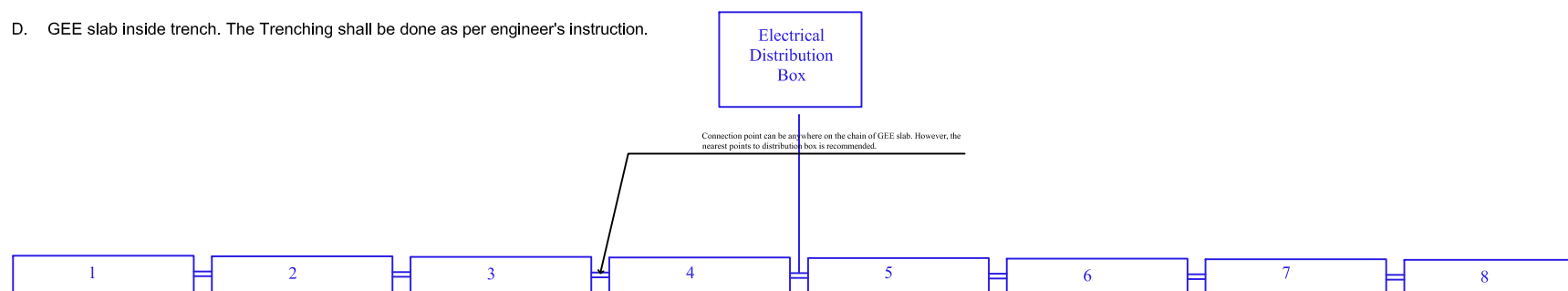
B. INSTALLATION GUIDE:

1. Dig a trench 700-750mm deep and 500mm wide
2. if trench is very rocky or sandy, spread a layer of salt (50kg) at the bottom. This is to lower the soil transitivity. However, if the trench is not rocky/sandy, no salt.
3. Spread 7-8" of good soft soil (preferable sieved)
4. Soak or drench the GEE slab in the water and lay the slab as shown in diagram.
5. Connect the GEE slabs end to end and bolt securely (joint may also be welded)
6. Cover all the joints and bare conductor with cement mortar (after connecting securely the earthing conductor from distribution box).
7. Now cover the GEE slabs with 7-8" of good soft soil and tamp down gently with feet.
8. Complete the installation by backfilling the rest of the trench with excavated soil.
9. Add water to expedite soil compaction (preferably the next day to avoid the damage to the fresh cement mortar).

C. Advantage over Conventional Earthings

1. The earthing resistance will continue to drop as the soil slowly compacts firmly around the GEE slab (This may take few weeks).
2. The Number of GEE slabs required per earthing installation will depend on the site soil condition but generally 8 nos. has been found to be adequate for one building.
3. Salt based plate and pipe/rod earthing installation deteriorates due to corrosion by salt in span of 3-4 years but GEE slab earthing estimated life span is about 30-40 years.
4. Its simple and effective.

- D. GEE slab inside trench. The Trenching shall be done as per engineer's instruction.



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:

EARTHING DETAILS

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-006



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:

POWER DISTRIBUTIONS

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-007

TOTAL POWER DISTRIBUTION

Single line dia. for SDB 1

TP&N DB 6 ways-1NO

Incoming:

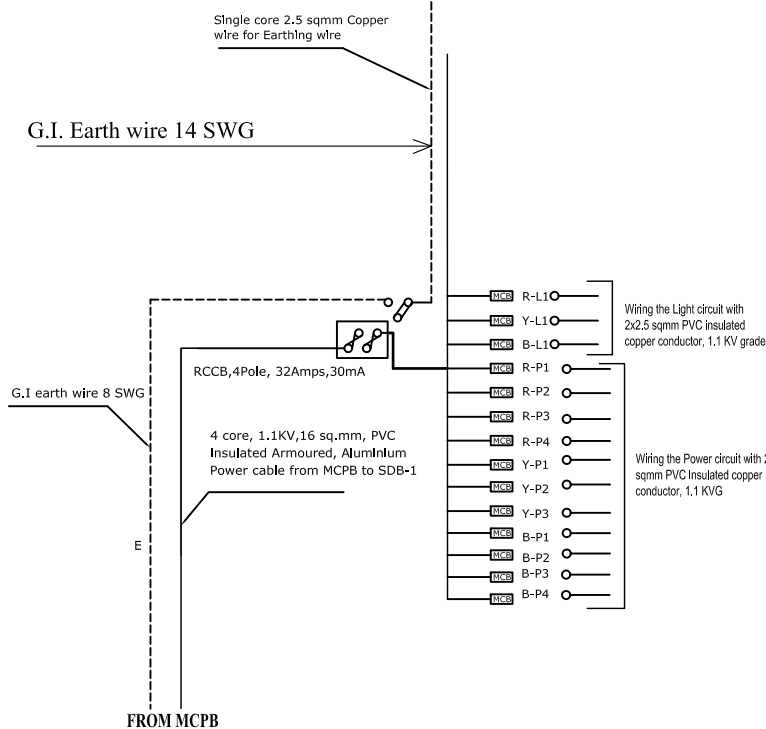
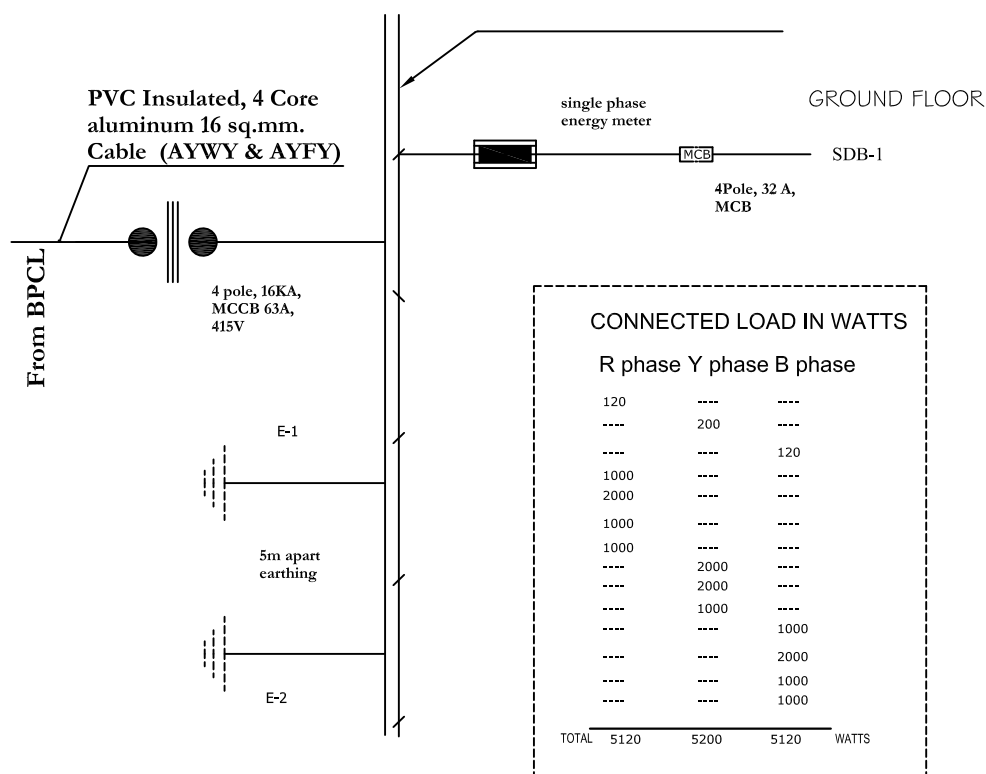
RCCB 40 Amps, 4 pole =1 no.

Outgoing:




















SP MCB 16 Amps =4nos

SP MCB 6 Amps =7nos.

Bus Bar Aluminium Alloy 100 Amps,
300 mm length



LEGENDS

SL.NO	SYMBOL	DESCRIPTION
1		ENERGY METER 3 PHASE
2		WALL LAMP (WARM WHITE)
3		1x40W Tube light
4		TL BOX TYPE fitting philips opalite TCS PHILIPS/MES CAB 19/136 HPF 1x40WFL
5		5/6PIN 16A SWITCH SOCKET SHUTTERED COMBINED WITH FUSE AND INDICATOR LAMP, ANCHOR AT 450MM FFL.
6		5/6 PIN 6A SWITCH SOCKET SHUTTERED COMBINED WITH FUSE AND INDICATOR LAMP, ANCHOR AT 450 MM FFL 1000W.
7		ONE WAY SWITCH 1.2M ABOVE FFL, 250mm from edge of door
8		SWITCH 1100mm from finishing floor
9		MCPB AT 2 M FROM FFL.
10		TELEPHONE TERMINAL CONNECTION FOR 4 WAYS.
11		CEILING LIGHTS 1X 100W
12		CEILING FAN 1400 RPM. (40 TO 80 W)
13		EXHAUST FAN: 1x40W connected to 6 Amps switch
14		HAND DRYER 1 X2000 W with 16 Amps Power Socket
15		SUB DISTRIBUTION BOX.
16		TVTC (TELEVISION TERMINAL CABINET)
17		TV SOCKET
18		TELEPHONE SOCKET
19		BELL 1X 40W

TOTAL LOAD CALCULATION IN WATTS

CIRCUIT	SINGLE PHASE
LIGHT POINT -1	440
POWER POINT -1	2000
POWER POINT -2	2000
POWER POINT -3	2000
POWER POINT -4	2000
POWER POINT -5	1000
POWER POINT -6	1000
POWER POINT -7	1000
POWER POINT -8	1000
POWER POINT -9	1000
POWER POINT -10	1000
POWER POINT -11	1000
TOTAL	15440W

TOTAL LOAD ON SINGLE PHASE (WATTS)	15440
LOAD FACTOR	60%
POWER FACTOR	85%
VOLTAGE	415
LOAD IN AMPERE	26Amps



TOURISM COUNCIL OF BHUTAN

P.O.BOX NO 126,
GPO THIMPHU BHUTAN
TEL.+975 2 323251/323252
FAX:+9752323695
DOT@TOURISM.GOV.BT
WEB: WWW.TOURISM.GOV.BT

PROJECT:

REST ROOM

DRAWING TITLE:
LEGENDS & LOAD CALCULATION

NOTES:

ARCHITECT :

ENGINEER :
R.N. Pradhan

CHECKED BY:

APPROVED BY:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

REVISION: DATE:

SCALE:

DRAWING NO:
EI-008

Project : Construction of Public Restroom
 Location : Tashichho Dzong, Thimphu
 Work : CIVIL Cost Estimate

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
1	CG0001	Clearing grass including removal of rubbish within 50m of site (If any).	60.00	m ²		
2	EW0001	Surface dressing of ground, including removal of vegetation and inequalities < 150 mm deep, disposal of rubbish within 50 m lead and 1.5 m lift.	10.00	m ²		
3	EW0031	Earth work in excavation over areas, depth >300mm, width >1.5m, area >10 m ² on plan, including disposal of excavated earth within 50m lead and 1.5m lift and disposed soil to be neatly dressed. Hard soil.	18.31	m ³		
4	EW0197	Providing and laying dry earth bedding including consolidating each deposited layer by watering, ramming and dressing.	5.59	m ³		
5	SM0072	Providing and laying Hand packed stone filling or soling with stones.	7.68	m ³		
6	SM0005	Providing and laying Random Rubble Masonry with hard stone in foundation and plinth. In cement mortar 1:4.	11.22	m ³		
7	RC0018	Providing & laying in position reinforced cement concrete work in beams, lintels, bands, plain window sills, staircases, spiral staircases upto floor five level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size)	3.52	m ³		
8	RC0083	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C. work including cutting, bending, binding and placing in position complete.	416.63	kg		
9	RC0090	Providing and fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork. Foundation and plinth etc. for PCC works.	15.67	m ²		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
10	RC0092	Providing and fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork. Lintels, beams, slab, girders, bresummers, cantilevers etc.	17.01	m ²		
11	DP0015	Applying a coat of hot bitumen (maxphalt) 80\100 as Damp Proofing Course using 1.7 kg per m ² including the surface cleaning. At floor and walls.	15.64	m ²		
12	CW0002	Providing and laying in position plain cement concrete excluding the cost of centering and shuttering - All work up to plinth level. 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size)	6.65	m ³		
13	WW0001	Providing and fixing in position dressed wood work in frames of doors, windows, clerestory windows and other frames, wrought and framed. Blue Pine wood. <i>The finishes should be machine finished, not manual finish.</i>	0.34	m ³		
14	WW0046	Providing and fixing traditional wooden tshegay for windows, railing, etc. as per standard design. In blue pine wood. <i>The finishes should be machine finished, not manual finish.</i>	0.50	m ²		
15	WW0211	Providing and fixing 35 mm thick panelled or glazed doors and windows shutters etc. complete including SS Hinges excluding other door fittings. Blue pine wood as per drawing A11 and A12 for D1, W1, W2, W3. <i>The finishes should be machine finished, not manual finish.</i>	7.49	m ²		
16	WW0211	Providing and fixing Aluminium sliding Door D2 with frame and shutter, frosted glass 10mm thick, rolling system, etc. complete excluding other door fittings as per drawing. Brand Jindal Aluminium.	2.26	m ²		
17	WW0060	Providing and fixing roof framing, in trusses, purlins, rafters, posts, post plates including hoisting, etc. Mixed Conifer.	1.86	m ³		
18	WW0055	Providing and fixing Mixed Conifer undressed joists in walls, frames, etc.	0.83	m ³		
19	WW0030	Providing and fixing eaves board 150x25 mm with moulding fitted and fixed with necessary screws. Mixed Conifer.	30.32	m		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
20	WW0035	Providing, making and fixing woodwork dressed in traditional cornices complete as per standard design in Mixed Conifer, including applying wood preservative on unexposed surfaces, excluding decorative painting (Measurement to be taken along the cornice and wall junction line). At floor one level including lhanglag.	29.96	m		
21	WW0132	Providing and fixing Plywood lining with necessary screws etc. including 1"x½" timber edge (trapezoidal shaped) beading around the egde of walls complete (excluding cost of frame) well finished. 8 mm, commercial. (C2).	26.03	m²		
22	WW0665'	Providing & fixing for Disabled person SS handle L shaped for flush toilet with necessary screws etc. complete. 400x600 mm.	1.00	set		
23	WW0665'	Providing & fixing for Disabled person SS handle U shaped for wash basin with necessary screws etc. complete. 800x800 mm.	2.00	set		
24	WW0665'	Providing & fixing for Disabled person SS handle I-shaped for common wall with necessary screws etc. complete. 550 mm.	1.00	set		
25	WW0665'	Providing & fixing hand dryer speedflow Brand Jaquar Cat. HDR-SAP-M06ACS material: AISI 304 stainless steel finish: satin. 270x100x290mm	3.00	set		
26	WW0695	Providing & fixing 40x3 mm MS hold fast 400mm long, fixing to frame with 10mm bolts & nuts, plugs, concrete blocks 300x100x150mm with 1:3:6, 20mm aggregate. At D1, W1, W2 & W3.	56.00	each		
27		Providing & fixing modular toilet cubicles with compact grade laminates including doors D3, frames, hardware SS fittings, etc. complete as per drawing A-11.	12.87	m²		
28	WW0555'	Providing & fixing Stainless Steel handle with necessary screws etc. complete. (Godrej brand SS Tube Lever Handle D-type with Round rose, code 6864) for D1.	2.00	each		
29	WW0647	Providing & fixing Stainless Steel tower bolt (barrel type) with necessary screws etc. complete. 150mm. (Godrej brand, code no. 8576) for W3.	24.00	each		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
30	WW0261	Providing & fixing Wire-gauze Shutters 35mm for windows W3 using galvanized M.S wire gauze 2 mm Ø wire as per drawings (5). Mixed Conifer.	2.55	m ²		
31	WW0556	Providing & fixing Godrej SS handle with necessary screws etc. complete SS Pull Handle - D type (22 dia. X 200 mm) Code 7261 for Door D1, D2 & D3.	12.00	each		
32	WW0556	Providing & fixing SS handle with necessary screws etc. complete SS Pull Handle for W3. 125mm	6.00	each		
33	WW0545'	Providing and fixing Godrej brand Cylindrical stainless steel locking system Code 5329.	2.00	each		
34		Providing and fixing Ebco Sliding Door Lock - 1 Way Key, code SLDL-A21, plated finish for sliding door.	1.00	each		
35	RF0003	Providing and fixing Pre-Painted Galvanized Steel Corrugated Roofing sheets, including bolts, hooks and nuts 8mm Ø with bitumen and GI limpet washers filled with white lead for connection, excluding the cost of purlins, rafter and trusses. Brand Tata BlueScope Durashine Roof-Cherry Red colour 0.60 mm thick.	54.75	m ²		
36	RF0007	Providing and fixing 600 mm ridges or hips in Pre-Painted Galvanized Steel sheets, including bolts, hooks and nuts 8mm Ø G.I limpet and bitumen washers for connection. Brand Tata BlueScope-Cherry Red colour 0.60 mm thick.	9.99	m		
37	RF0130	Providing and fixing shinglep roofing with shinglep of size 1350x125x12mm in 3 layers including tying, uplift protection complete.	54.53	m ²		
38		Providing and placing/fixing the flat type natural stone on the shinglep as per roofing detail of >5 kg weight at 1m spacing.	102.00	each		
39	BW0002	Providing & laying Second-Class Brick work in Foundation & Plinth. 250mm thick. In cement mortar 1:4.	5.34	m ³		
40	BW0010	Extra for brick work in square or rectangular pillars.	1.65	m ³		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
41	BW0021	Providing & laying Second-Class Half-brick Masonry (125 mm) in superstructure below floor 2 level. CM 1:4.	86.29	m ²		
42	PL0031	Providing & laying 15mm cement plaster on rough side of single or half-brick wall. C.M 1:4.	211.39	m ²		
43	PL0110	Extra for POP plastering-Neat POP punning over cement plastering in internal walls.	98.00	m ²		
44	PL0110	Extra for Birla wall putty over cement plastering in external walls.	81.17	m ²		
45	FL0201	Providing and fixing mixed conifer flooring as ceiling including fixing with iron screws etc. complete, excluding the cost of frame with timber edge 1" width (½" thick) around the room corner. half-lapped joints. (C1).	23.32	m ²		
46	FL0150'	Providing & laying 20mm thick black granite stone flooring over 20mm thick base of cement mortar 1:4, jointed with grey cement slurry mixed with pigment where necessary, rubbing & polishing complete. (F3)	1.13	m ²		
47	GL0001	Providing & fixing Brand Somany light brown ceramic tiles 300x300mm in skirting, step risers, dado, finished with flush-pointing in white cement (2).	45.29	m ²		
48	GL0009	Providing & fixing Brand Somany Corsa Brown slip shield tiles SKU Code: T3030303 in flooring, treads of steps and landings laid on bed of 12 mm thick cement mortar 1:3 finished with flush pointing in brown pigment mixed in white cement for 300x300 mm. F1.	26.71	m ²		
49	PI0041'	Providing & fixing Indian-type vitreous china WC squatting pan, including fittings, repair walls. Jaquar CNS-WHT-451 Orissa Pan and Wall Hung Cistern with Installation Kit SKU: WHC-WHT-184BT. (5).	1.00	set		
50	PI0050'	Providing & fixing European-type vitreous china WC pedestal including seat and lid with CP brass hinges, 6 litre white vitreous china low level cistern, fittings, brackets, repair walls white, with plastic seat & lid. WC Model Jaquar Solo SLS-WHT-6751P/S with SLS-WHT-6201 cistern. (4)	3.00	set		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
51	PI0066'	Providing & fixing Jaquar brand Sensor Operated Urinal including fittings, brackets, G.I./CPVC flush pipe & spreaders, brass unions, G.I. clamps, painting, repair walls. Jaquar Urinal URS-WHT-13255 and Sensotronic Sens Flushing Valve for Urinal with complete Kit SNR-CHR-51097.	3.00	set		
52	PI0066'	Providing & fixing Urinal divider/partition standard design 400x900mm two round and SS clamps and other accessories.Plain colour solid phenolic black core panel Surface of glass Matt Fine Texture 12mm thick.	1.00	set		
53	PI0085'	Providing & fixing Jaquar brand Wash basin with full pedestal SKU: ARS-WHT-39801, including with fixing accessories set, Sensotronic Sensor Faucet For Wash Basin. SKU: SNR-CHR-51021, CP chain & rubber plug, 32mm plc. waste, 32mm Ø. Bottle Trap (with Internal Partition) 32mm Size with 300mm & 190mm Long Wall Connection Pipes & Wall Flange SKU: ALD-CHR-769L300x190 & union, repair walls complete.	1.00	set		
54	PI0085'	Providing & fixing Jaquar brand Wash basin counter top basin SKU: ARS-WHT-39601, including with fixing accessories Set, Sensotronic Sensor Faucet For Wash Basin. SKU: SNR-CHR-51021, CP chain & rubber plug, 32mm plc. waste, 32mm Ø Bottle Trap (with Internal Partition) 32mm Size with 300mm & 190mm Long Wall Connection Pipes & Wall Flange SKU: ALD-CHR-769L300x190 & union, repair walls complete.	2.00	set		
55	PI0260	Providing & fixing toilet Paper Holder with Flap Recessed Type. C.P. brass. Brand Jaquar AHS-1553.	4.00	set		
56	PI0275	Providing & fixing Soap Dish Recessed Type (Stainless Steel). C.P. brass. Brand Jaquar AHS-1531.	3.00	set		
57	PI0255	Providing & fixing CP Towel Ring Round with Round Flange. Brand Jaquar ACN-1121BN.	3.00	set		
58	PI0250	Providing & fixing 0.9x1.2m with blue pine timber frame 1"x½" bevelled edge mirror including 4mm A.C. sheet base fixed to plastic cleats. Saint Gabion or equivalent.	2.00	set		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
59	PI0250	Providing & fixing 0.5x1m with blue pine timber frame 1"x½" bevelled edge mirror including 4mm A.C. sheet base fixed to plastic cleats. Saint Gabion or equivalent.	1.00	set		
60	PI0010	Providing & fixing CPVC pipes including clamps accessories & repair walls etc. complete. 20mm	60.00	m		
61	PI0011	Providing & fixing CPVC pipes including clamps accessories & repair walls etc. complete. 25mm	180.00	m		
62	PI0033	Providing & fixing plastic tank including all accessories complete. 2000 litre capacity. Brand Sintex-CCWS 200.01	1.00	each		
63	PI0207	Providing & fixing Jaquar Bib Cock (Straight Line Model) with Wall Flange SKU: SOL-CHR-6047	1.00	set		
64		Providing & placing SS bucket of 20l and Plastic Jug 1l. (sample to be approved by TCB)	1.00	set		
65	PI0185	Providing & fixing Jaquar Angular Stop Cock Code: CQT-23059 Angular Stop Cock with Wall Flange, SKU: CQT-CHR-23053.	11.00	set		
66	PI0162	Providing & fixing Electric water heater including necessary fittings. 25 litre. Jaquar ELENA (Horizontal) : Volume (L) 25	1.00	set		
67	PO0360	Providing & fixing SS floor drain/trap with cover. 100mm inlet & 75mm outlet	3.00	set		
68	PO0370	Providing & fixing PVC soil waste and vent pipes, single or double socketed, including pipe clip and PVC fittings complete. 75mm Ø	30.00	m		
69	PO0372	Providing & fixing PVC soil waste and vent pipes, single or double socketed, including pipe clip and PVC fittings complete. 110mm Ø	45.00	m		
70	PO0600	Constructing Soak Pit. Size 1200x1200x1200mm, filled with brick bats including 100mm SW drain pipe X 1200mm long and excavation, backfilling, etc.	1.00	each		

Sl. No.	Code No.	Descriptions	Quantity	Unit	Rate	Amount
71	PO0631	Constructing Septic Tanks in plum concrete 1:2:4 (40mm aggregates) including fittings, C.I cover with frame, 40mm thick concrete flooring (40mm aggregates) cement plaster concrete base in C.C 1:4:8 etc. formwork, excavation, backfilling, etc. complete as per standard design. 25 users.	1.00	each		
72		Providing & fixing SS 11L foot pedal metal Trash Bin with SS Lid. King Trader brand	4.00	set		
73		Providing & fixing SS 20L foot pedal metal Trash Bin with SS Lid. King Trader brand	1.00	set		
74	PT0042	Providing and applying finishing coats. Acrylic washable distemper, two coats on new work, including cement primer coat.	62.00	m ²		
75	PT0012	Providing and applying one coat of primers. Wood work - pink primer	18.00	m ²		
76	PT0111	Providing, preparing and applying Sumdang washable painting. Ding	26.60	m ²		-
77	PT0130	Providing, preparing and applying Yutshon painting (plain). Washable	57.20	m ²		
78	PT0047	Providing and applying finishing coats. Synthetic enamel, for steel and wood work, two coats on new work.	18.00	m ²		
79	RW0210	Providing & fixing Aluminium mesh as per drawings at ceiling to protect birds of 2mm Ø . The Outer edge of mesh should be level with outer edge of frame, screwed continuous and sandwiched between two frames 50x25mm.	3.32	m ²		
80	SW0080	Providing and fixing MS round hold-down bolts with nuts and washer plates. at wooden tie beams and walls. 16mmØ.	25.60	kg		
81	SW0090	Providing, making and fixing MS straps, flats, sole plates etc. for trusses.	56.00	kg		
		Total Amount at Thimphu			Nu	
		Add Cost Index	10%		Nu	
		Grand Total for Civil Works:			Nu	

Project : Construction of Restroom/toilet
Location : Tashichho Dzong, Thimphu
Work : ELECTRICAL Cost Estimate

Sl. No.	Code No.	Descriptions	Unit	Total	TH Rate	Amount
A		Wiring and Accessories				
1		Wiring for light, fan, call bell and 2 pin socket outlet with 1.5 mm ² 1.1 kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required.				
a	WC0300	Short Point	pt.	1		
b	WC0301	Medium point	pt.	10		
2		Wiring for 3/5 pin, 6A plug point with 2.5 mm ² 1.1 kV grade, PVC insulated copper conductor cable in recessed HDPE pipe with providing and fixing 3/5 pin, 6A socket outlet and switch including earthing the third pin, connections, painting, testing and commissioning etc. as required.				
a	WC0320	Short Point	pt.	7		
3		Wiring for lighting circuit with 1.1 kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required.				
a	WC0391	2 x 2.5 mm ²	m	60		
4		Supply and fixing of HDPE pipe on recessed including all accessories such as screws, bends, elbows, Tees, corners, etc., complete as required.				
a	CD0221	25 mm Ø	m	45		
5		Wiring for 3/5 pin, 6/16A plug point with 4 mm ² 1.1 kV grade, PVC insulated copper conductor cable in recessed HDPE pipe with providing and fixing 3/5 pin, 6/16A socket outlet and switch including earthing the third pin, connections, painting, testing and commissioning etc. as required.				
c	WC0342	Long point	pt.	4		
		Subtotal A:			Nu.	
B		Lighting Fixtures and Accessories				
1	IL0158	Supply of pre wire indoor fluorescent lamp luminaries housing of CRCA sheet steel rail, end with lamp holders, copper wound ballast , starter, starter holder, terminal block, etc. but without lamp, LPF/HPF suitable for wall and ceiling. Strip rail 36/40/ watt	each	6		

Project : Construction of Restroom/toilet
Location : Tashichho Dzong, Thimphu
Work : ELECTRICAL Cost Estimate

Sl. No.	Code No.	Descriptions	Unit	Total	TH Rate	Amount
2	IL0066	Supply of Wall bracket down lighter projection 160mm, height 135mm width or base Ø 320mm finish-painted, glass frosted, 1x60W	each	2		
3		Lamps-Supplying of fluorescent lamp 250V AC				
a	LS0126	TL lamp 36/40 watt	each	6		
b	LS	CFL lamp	each	2		
4	FN0045+ FN0030	Supplying of exhaust fan with Aluminium louvers 240 volt A.C 1400 rpm with all accessories such as frame with arm 3 Nos. sweep 3 Nos., condenser and fan body etc. complete as required, 300mm sweep	each	3		
		Subtotal B:			Nu.	
C		CONTROL GEAR AND PROTECTIONS				
1	GB0165	Supplying of panel moulded case circuit breaker (MCCB) with electronic release, breaking capacity 16KA, 4 pole 415 volt AC complete with all accessories etc. as required. 63 A	each	1		
2	GB0002	Supplying of pre-fabricated MS busbar chamber with copper busbar complete with all accessories etc. as required. 4 strips, 300mm bar, 100A	each	1		
3	GB0540	Supply of TPN distribution board (DIN type, horizontal) with metal door, 415 volt AC complete with all accessories without MCB/isolator/RCCB out going or incoming etc. as required. 6 way	each	1		
4		Supplying of miniature circuit breaker (MCB) triple pole. 415 volt AC complete with all accessories suitable to fix on a din-bar etc. as required.				
a	GB0330	6A	each	7		
b	GB0332	16A	each	4		
5	GB0352	Supply of miniature circuit breaker (MCB) triple pole & neutral, 415 volt AC complete with all accessories suitable to fix on a din-bar etc. as required. 32A	each	1		
6	GB0472	Supply of residual current circuit breaker (RCCB) 4 pole, sensitivity 30mA, 415 volt AC complete with all accessories suitable to fix on a din-bar etc. as required. 32A	each	1		

Project : Construction of Restroom/toilet
Location : Tashichho Dzong, Thimphu
Work : ELECTRICAL Cost Estimate

Sl. No.	Code No.	Descriptions	Unit	Total	TH Rate	Amount
7	PC0179	Supplying of 4-core 1.1kV grade XLPE aluminium armoured power cable. 16 mm ²	m	35		
8	WM0355	Wiring for sub-main with 1.1kV grade, PVC insulated copper conductor cable in recessed MS conduit including connections, painting, testing and commissioning etc. as required, 4X 16 mm ²	m	10		
9	PC0278	Supplying of heavy duty brass double compression gland for 4 core 1.1kV grade PVC insulated and sheathed copper/aluminium conductor armoured/un-armoured power cables. 27mm Ø, 16mm ²	each	1		
10	LS	Providing and fixing of wooden frame structure appropriate with wire mesh duly approved by engineer in-charge for enclosing the MCB DB Box (Sub distribution board) locking arrangement etc. as required.	each	1		
11	LS	Providing and fixing of metallic enclosure made from reputed panel manufacturer for housing switchgears such as main switch, copper bus bar, energy meter, pilot lamps, etc. having locking arrangements as approved by the engineer or client (Main distribution panel)	each	1		
12	LS	Supply and install 3 phase energy meter as per the BPC specification.	each	1		
		Subtotal C:			Nu.	
D		ERECTION AND INSTALLATION				
1	EI0002	Erection of all indoor/outdoor surface type wall bracket (single or double) surface ceiling fitting GLS lamp/bulkhead GLS lamp/ all type call bell/ all type picture or mirror lighting luminaries fitting with all accessories, fixing of lamp, testing etc. as required including connection with PVC insulated copper conductor. 1.5 mm ² single core cable 1.1 kV grade	each	2		
2	EI0041	Installation testing and commissioning of pre wired fluorescent fittings of all surface type complete with all accessories and tubes directly on ceiling/wall as required including connection with PVC insulated copper conductor. 1.5 mm ² single core cable 1.1 kV grade	each	6		

Project : Construction of Restroom/toilet
Location : Tashichho Dzong, Thimphu
Work : ELECTRICAL Cost Estimate

Sl. No.	Code No.	Descriptions	Unit	Total	TH Rate	Amount
3	EI0411	Installation, testing and commissioning of four pole moulded case circuit breaker (DIN type) breaking capacity 16/25K complete with all accessories to accommodate on/in prefabricated MS surface/MS cubical control panel board including drilling holes, connections etc. as required. 63A, 415V	each	1		
4	EI0337	Installation, testing and commissioning of TPN/four pole residual current circuit breaker (RCBO) (DIN type) complete with all accessories to accommodate on/in prefabricated MS surface/MS cubical control panel board including drilling holes, connections etc. as required. 32A	each	1		
5	EI0337	Installation, testing and commissioning of TPN/four pole miniature circuit breaker (DIN type) complete with all accessories to accommodate on/in prefabricated MS surface /MS cubical control panel board including drilling holes, connections etc. as required. 32A, 415V	each	1		
6	EI0171	Installation, testing and commissioning of prefabricated bus bar chamber with copper bus bar complete with all accessories including connections etc. as required. 4 strips, 300mm bar, 100A	each	1		
7	EI0535	Installation, testing and commissioning of TPN DB (DIN type, horizontal/vertical) with no door, metal door or acrylic door (double/single door) complete with all accessories to accommodate incoming RCCB FP 40/63A sensitivity. 6 way	each	1		
8	CL0002	Laying of one number PVC insulated and sheathed power cable copper/aluminium, armoured/un-armoured 1.1kV single core to four core direct in the ground including excavation, sand Cushing protective covering and refilling the trenches etc. as required. Above 6mm ² to 25mm ²	m	25		
9	CL0110	Installation, testing and commissioning of end termination with single/double compression gland for PVC insulated and sheathed aluminium/copper conductor cable of 1.1kV grade including connections etc. as required. 20/22/25mm Ø	each	1		
		Subtotal D:			Nu.	
E		EARTHING				
1	AR	Providing & placing/fixing of Ground & Electrode Enhancement (GEE) Slab for building earthing, including trenching, backfilling, salt (if required), jointing, compaction, etc. complete.	each	8		

Project : Construction of Restroom/toilet
 Location : Tashichho Dzong, Thimphu
 Work : ELECTRICAL Cost Estimate

Sl. No.	Code No.	Descriptions	Unit	Total	TH Rate	Amount
2	ET0121	Providing and laying wire for loop earthing in existing surface/recessed PVC/MS/steel conduit or casing capping or wooden batten along with other wires as required. 2.032mm (14 SWG) Copper earth wire.	m	20		
3	LG0002	Providing and fixing lightning arrester including holes etc. complete as required - 25mm Ø 900mm, long copper tube four prong at top with 85mm Ø 3mm thick copper base plate	each	1		
4	LG0045	Providing and fixing metal strip on parapet or surface of wall/roof for lighting conductor as required horizontal/vertical run as required. 25x4 mm GI strip	m	15		
		Subtotal E:			Nu.	
		Total (A+B+C+D+E):			Nu.	
		Add Cost Index: 10%			Nu.	
		Grand Total:			Nu.	