



: 020-26133148

: 020-26052869

REGSDS / BY POST

Superintending Technical Examiner (SC)

PCDA (SC) Complex, No.1, Finance Road

Pune – 411 001

1143/401/ 08/Q/ADGTE

Dec 2018

Garrison Engineer
Bhuj-Kutch – 370 001

SITE VISIT : CEBZ/BHUJ-06 OF 2016-17

1. Refer inspection conducted by STE team on 28 & 29 Nov 2018.
2. The copy of factual statement of the work is held on your record. The obsns on account of above mentioned visit are enclosed as Appendix 'A'. The obsns apply to the entire work except where otherwise specially mentioned. No action for price adjustment/deviation has been initiated till date of insp.
3. Please take suitable action to get the defective work rectified as mentioned on factual notes/obsns and ensure compliance. If, however, the defects are not rectifiable and the defective work as executed is technically acceptable to you, please forward the details of overpayments invoiced for such defective work accepted.
4. Please ref to E-in-C's Branch letter No 41000/E4 dated 14 Oct 1981 and take necessary further action to ensure that the defects are not allowed in the current works in your area and remedial actions are taken. This should be taken in other cases also including financial recovery.
5. Please furnish your specific replies to obsns within 06 weeks failing which the matter may have to be reported to Higher Authorities. In this connection please ref to Sec 23 of Manual of Contracts, 2007.

(Satish Chander, IDSE)
STE SC, Pune

Encls : As above

Copy to :-

HQ ADGTE, New Delhi

.. For info & necessary action alongwith obsns.

HQ CE Bhopal Zone
Bhopal
PIN – 900 236
C/o 56 APO

1. For info & necessary action. Obsn may please be replied incl conditions.

CWE Ahmedabad
380 003

2. Please refer to Sec 23 of Manual of Contracts, 2007 and issue suitable instruction to all other GEs under you with a view to prevent acceptance of similar defective work in those divisions where such defects are suspected to be occurring. Financial recoveries as applicable may be effected in similar works also.

Station HQ
Bhuj-Kutch – 370 001

3. Systematic corrective measures be instituted in all units of your AOR (Area of Responsibility).

SUPERINTENDING TECHNICAL EXAMINER
(SOUTHERN COMMAND) PUNE
NO. 01 FINANCE ROAD, PCDA (SC) COMPLEX, PUNE - 411 001

TECHNICAL EXAMINATION OF CONTRACTS / WORKS / FINAL BILLS

CA No	CEBZ/BHUJ-06 OF 2016-17	Amount (in lakhs)	1512.19 lakhs	Location	Bhuj				
Name of Work	Provn of balance accn and Officer's Mess for certain units at Army area Bhuj.								
(a)	Contractor	M/s Roshan Lal Talwar							
(b)	Date of Commencement	26 Feb 2016							
(c)	Completion as per CA	16 Mar 2018							
(d)	Extended date of completion	28 May 2018							
(e)	Actual date of Completion	28 May 2018							
(f)	DV No & Date of final bill if paid	-							
(g)	Whether ADGTE visited project (if yes, date)	-							
(h)	Name of STE / TE	Name of MES Offrs Accompanying							
(j)	Shri Satish Chander, IDSE, STE SC Pune Lt Col Bhaskar Rautela, TE Shri Manish raj, IDSE, TE Lt Col Pankaj Jaswal, TE	Maj Gaurav Nayar, GE (A) Bhuj Shri A K Bhagia, AGE B/R-II Nb Sub JE Shailesh Shinde, AGE E/M							
(k)	Inspection Summary :								
	No Inspection	Ist Check		2nd Check		3rd Check			
(i)	Date of Check	09 Sep 2017		28-29 Nov 2018		-			
(ii)	Progress %	Actual	Target	Actual	Target	Actual	Target		
		45%	-	91%	-	-	-		
(iii)	Obsn Nos Raised	Ist	24	2nd	14	3rd	-		
(iv)	Total Obsn Raised								
(v)		<u>Minor</u>	<u>Maj</u>	<u>Adv</u>	<u>Minor</u>	<u>Maj</u>	<u>Adv</u>		
		-	27	-	-	-	-		
(vi)	Obsn Split	B/R		E/M		B/R		E/M	
(vii)		24		03		19		07	
(viii)	Total Settled	13		01		-		-	
(ix)	Outstanding Obsn	11		02		19		07	
(x)	Outstanding Obsn (Check wise)	11		02		19		07	
(xi)		IRNR		-		IRNR		26	
(xii)	Net Outstanding Obsns	13 (1 st Check) + 26 (2 nd Check) = 39							
(xiii)	Date of Expiry of DLP (where wk 100% completed)								

CA No : CEBZ/BHUJ-06 OF 2016-17
Name of Work : Provn of balance accn and Officer's Mess for certain units at Army area Bhuj.
Amount in lakhs : ` 1512.19 Lakhs

PART – A : REVIEW ON 1ST CHECK

General (Brief Scope of Work). CA No “CEBZ/BHUJ-06 OF 2016-17” :“ Provn of balance accn and Officer's Mess for certain units at Army area Bhuj”, for ` 1512.19 Nos of obsns raised during 1st check on 09 Sep 2017. During 29 Nov – 01 Dec 2018, previous check verified on ground and remarks appended against each obsns :-

No	Obsns	Present Status
1	2	3
1	<p><u>Obsn No 01 : Delay in Tendering and Slow Progress.</u> The work “Provn of Balance OTM Accn and Officers Mess for 2nd Battalion at Army Area Bhuj” was sanctioned for aprox. Cost of 1551.2 lakhs on 22 March 2013 with period of completion 156 weeks. Tender was issued on 02 June 2016 and accepted on 01 July 2016. Date of commencement of work was 15 July 2017 and date of completion 14 Oct 2017.</p> <p>(a) It took more than three years to issue tender. Revised A/A not obtained after one year in terms of para 2(c) of DWP 2007. You are requested to forward reasons for the same.</p> <p>(b) Present progress is 49%. Work is not likely to be completed by due date of completion if the present state of progress continues. You are requested to forward the specific reasons for the delay and action taken to expedite the completion of work.</p> <p>(c) It is observed that no action has been taken to enhance the job PDC from CFA which has already expired. Please take requisite action and ensure that the job PDC is enhanced before granting any extension of time to the contractor.</p> <p>(d) You are requested to identify the problem areas in execution of work and take remedial actions to expedite the progress of the work.</p> <p>(e) Since progress of the work is very slow, please intimate why requisite action has not been resorted to in terms of E-in-C's Branch policy letter No 16/2014 issued vide letter No A/37696/OSDPL/POL/E2(PPC) dt 13 Aug 2014 which states clearly that “Contracts having period of completion more than twelve months shall have performance evaluation meetings at intervals of every six months from the date of commencement indicated in work order No. 01. The present progress of wk and reasons for any delay shall be analysed and time-bound action plan to remove any encumbrances/bottlenecks will be discussed in detail. In case extension of time is contractually and circumstantially due, it shall be deliberated upon”.</p> <p>Forward your reply through AO.</p>	(a to d) Settled

1	2	3
2	<p>Obsn No 02 : Escalation. Escalation clause has been included in the contract though the period of completion is 15 months. This is in contravention to policy in vogue. You are requested to forward your justification through CE</p>	Settled .
3	<p>Obsn No 03 : Reinforced Cement Concrete.</p> <p>(a) Columns found casted for full height & subsequently beams and slabs are casted at most of the places. Sufficient anchorage length (development length) of bars from beam to column not maintained as per IS 456/13920. In OR institute bars of 25 mm dia bent only 20 to 25 cm into beam only. Bars not inserted into column for full development length (1225 mm). Work is in progress. Top of column should be broken. Bars should be taken into column up to full development length and columns should be re-casted along with beams and slabs. You are also requested to confirm that at all other places where slabs have been casted, bars of beams have been inserted unto column up to full development length as per IS 456/13920.</p> <p>(b) Curing found inadequate and stone chips are coming out with slight chiselling. Surface of concrete found undulating (MT garages) at places. You are requested to break such columns as slab has not been casted and re cast them intimating cost of rectification.</p> <p>(c) Columns found out of plumb in all garages at places. Top of columns found twisted & not in plumb (garages) at many places. You are requested to rectify the defect and intimate cost.</p> <p>(d) Dia of round columns found 50 to 60 mm more at top with one side offset. You are requested to forward reasons for the same.</p> <p>(e) Cover is not uniformly maintained for columns and is varying from 10 mm to 50 mm at places because of steel cage not being in plumb. You are requested to rectify defect where work is in progress and intimate cost. Also confirm that such defect does not exist at other places where casting has been done.</p> <p>(f) Accept penal recovery of Rs 25,000/- for above lapses. You are requested to forward your replies through CE.</p>	(a) to (e) Settled
4	<p>Obsn No 04 : Compressive Strength of Concrete.</p> <p>Compressive strength of RCC columns/beams has been randomly checked using rebound hammer. Following values recorded in N/MM².</p> <p>MT Garages: 18.5, 15, 10.5, 11.5, 21, 16, 15.5, 22, 24, 21.5, 23.</p> <p>Adm block, Religious Bldg: 24, 12.50, 22.5, 34, 38, 23.5.</p> <p>It has been observed that NDT values are less than required at places. You are requested to get core cut and tested at SEMT Wing of CME, Govt Engineering College or Govt approved lab and forward compressive strength through CE.</p>	Settled

1	2	3
5	<p>Obsn No 05 : Lintel Band.</p> <p>(a) Continuous RCC lintel band not found provided anywhere. At places where door/window openings are there, dowel bars found left out from columns for providing RCC lintel band (LBN). At places 3 No dowel bars of 10 mm found left out and other places 4 No-10 mm dia provided for casting of RCC lintel band later. You are requested to provide anchor reinforcement as per CA and confirm through CE along with cost. You are also advised to carry out monolithic casting in buildings where work is yet to be done.</p> <p>(b) Where no openings are there, no RCC bands (LBC) are provided at places. Lintel Bands (LBC) where provide are just resting over wall without reinforcement being inserted into columns. This has defeated the basic purpose of bands. This is a serious lapse as beams are to be tied to column for seismic strengthening as area is in earth quake Zone V. You are requested to rectify defect and intimate cost through CE.</p> <p>(c) No vertical band provided where unsupported wall length in perpendicular direction is more than 3 meter as per PS Clause No 7.20.14(b) on page 173 of CA. You are requested to provide vertical band at all places where unsupported length of wall (in perpendicular direction) exceeds 3 meter and intimate cost through CE.</p> <p>(d) Accept penal recovery of Rs.25,000/- for above lapses.</p>	Settled
	<p>Obsn No 06 : Reinforcement Bars. (Randomly checked in OR Institute where work is in progress).</p> <p>(a) Stirrups found bend in 90° instead of 135° at places. The hook length found 50 to 60 mm for 10 mm dia bar instead of 80 mm(10d). You are requested to rectify defect and intimate cost. Please confirm that that at all other places where casting of concrete has been done above defect does not exist.</p> <p>(b) Spacing of stirrups in confining portion (Zona A as per structure drawing) of column found 100 mm c/c in lieu of 75 mm as per CA. Rectify defect and intimate cost. Please confirm that that at all other places where casting of concrete has been done above defect does not exist.</p> <p>(c) No stirrups found provided in column at junction of column and beam.('U' shaped stirrups not provided). Form work completed. You are requested to provide the same and intimate cost. Please confirm that that at all other places where casting of concrete has been done above defect does not exist.</p> <p>(d) Main bars of beams are closely spaced and will obstruct the concrete flow into beam. You are requested to provide spacers to allow concrete to flow freely and intimate cost. Please confirm that that at all other places where casting of concrete has been done above defect does not exist.</p>	Settled

1	2	3
../6	<p>(e) Black colour grease found applied excessively on shuttering plates and oil found stucked on re bars at majority places. You are requested to clean bars and intimate cost. You are also advised to use proper oil instead of grease. Please confirm that that at all other places where casting of concrete has been done above defect does not exist.</p> <p>(f) Main column bars are bend with 300 mm length at bottom in footing in POL store. Please confirm through drawing actual length of bars.</p> <p>(g) Accept penal recovery of Rs.25,000/- for not following CA/IS specifications.</p>	Settled
7	<p><u>Obsn No 07 : PCC Blocks.</u> PCC blocks found casted at site. The size of block found 400x200x150 mm. Sump, PCC platform, drying shed not found at site. Curing is being done with pipe.</p> <p>(a) No trial mix carried out as per PS Clause No. 7.20.3 on page 170 of CA</p> <p>(b) No record maintained for casting.</p> <p>(c) No hard standing constructed for casting of blocks</p> <p>(d) No curing & drying records maintained.</p> <p>(e) No water tank curing is being done.</p> <p>(f) Curing done mainly by labour through pipe</p> <p>(g) No curing yard found at site</p> <p>(h) No drying shed provided. Blocks directly shifted to site after curing.</p> <p>(j) No testing facility available at site. No test carried out at site as per PS Clause 7.20.11 on page 172 of CA and IS 2185</p> <p>(k) Few testing carried out for density & water absorption only from outside lab.</p> <p>(l) No testing carried out for compressive strength, drying/shrinkage and moisture movements.</p> <p>It is not understood how quality control has been carried out and how blocks have been accepted without compressive strength and other tests. There is clear violation of CA specifications and IS 2185. You are requested to comply with all provisions of CA/IS 2185 and confirm that above mentioned discrepancies have been removed along with all test reports through CE. Accept penal recovery of Rs 25,000/- for such lapses.</p>	Settled
8	<p><u>Obsn No 08 : PCC Block masonry.</u></p> <p>(a) Joints of masonry found wider than 10 mm and not filled up properly.</p> <p>(b) Block course not found in one level. Layers of block found in curve instead of horizontal.</p> <p>(c) Dowel bars not found provided at junction of column & wall as required vide PS Clause number 7.20.13 on page number 173. This is required for seismic strengthening as area is in earth quake Zone V.</p> <p>(d) Same cement mortar found used for masonry and at junction of wall & column. As per CA (Note 20 on all structural drawings) cement mortar 1:4 is specified at junction of column and wall. You are requested to rectify above defects and intimate cost through CE. Accept penal recovery of Rs.10,000/- for above mentioned defects.</p>	Settled

1	2	3
9	<p><u>Obsn No 09 : Scaffolding.</u> (a) Wooden props with single scaffolding instead of steel double scaffolding found used (Refer PS Clause 7.2012(d) on page 172 of CA).Holes are made on walls to support scaffolding. You are requested to replace single scaffolding with double scaffolding and intimate replacement cost. Accept penal recovery of Rs 5000/- for lapse. (b) Steel shuttering found warped, bend and damaged. Lot of gaps observed between sheets, where shuttering work completed. You are requested to replace shuttering and intimate replacement cost. Accept penal recovery of Rs 5000/- for lapse.</p>	Settled
10	<p><u>Obsn No 10 : Plaster.</u> (a) 10mm thick internal plaster found provided. Grooves found provided on internal surfaces at junction of dissimilar materials (RCC and Block masonry). No uniformity maintained in grooves as width varying from 10 to 20mm & depth varying from 8 to 15mm. Cracks also observed parallel to grooves which indicates grooves have not been cut exactly at the junction of RCC work and block masonry. You are requested to rectify above mentioned defects and intimate cost. (b) 15mm thick external plaster with grooves found provided. The width of grooves found varying from 10 to 20mm & depth varying from 8 to 15mm. You are requested to rectify defect and intimate cost. (c) Accept Rs. 5000/- as penal recovery for poor workmanship.</p>	
11	<p><u>Obsn No 11 : Plinth protection.</u> (a) Grooves found cut at 4 to 5 m c/c in lieu of 3m c/c and no filler found filled. No groove found cut at junction of wall. Rectify defect and intimate cost. (b) Aggregates used for hard core of plinth protection found flaky. Replace flaky aggregates with properly graded aggregates and intimate cost. Please confirm that that at all other places where casting of plinth protection concrete has been done above defect does not exist.</p>	Settled
12	<p><u>Obsn No 12 : RCC Jali.</u> 300x300x50mm thick precast cement jali found provided in lieu of 100 mm thick jali as per CA. No reinforcement found in the jali. Quality of concrete found poor as jalis and are braking easily. You are requested to replace all jalis as per CA specifications and intimate cost. Accept penal recovery of Rs.10,000/- for not adhering to CA specifications.</p>	
13	<p><u>Obsn No 13 : Filling under floors.</u> Soil obtained from excavation at site found used in filling under floors. You are requested to confirm through tests that soil is suitable for filling and forward approval of GE as per PS Clause No. 4.4.2 on page 160 of CA.</p>	

1	2	3
14	<p>Obsn No 14 : Height of Bldgs. The plinth height of various bldgs checked and following values recorded.</p> <p>(i) Garages : 30cm above GL. (ii) MT Store : 40cm above GL PCC flooring yet to be carried out . (iii) Adm Bldg : (aa) In Garage portion: At ground level. (ab) Other Places: 40 to 45cm above GL (iv) Quarter Master bldg : 45cm, 39cm. (v) MT Garrage No 22 (2kl water bowser) : Kept at GL. Water stagnation will takes place.It has been observed that plinth height of above mentioned buildings is less than 45 cm at places. Please provide drainage around low lying buildings and forward cost.</p>	Settled
15	<p>Obsn No 15 : Drainage. No drainage network plan found prepared so far. Plinth levels of some bldgs are located at GL. This will lead to entry of water during rains. You are requested to provide proper drainage and forward cost along with complete lay out of drains of the entire area through CE.</p>	
16	<p>Obsn No 16 : Site Lab. Sit lab found located in a building (due for demolition). Following equipments found installed:-</p> <p>(a) Manually operated CTM (b) Set of sieves (c) Slump cone apparatus (d) Weighing scale (e) Oven (f) Set of moulds (g) Measuring jar</p> <p>It is found that site lab is not fully equipped to carry out all Type "A" tests as per Clause No. 31 on page No 149. Site lab is important for quality control. No importance has been given on this aspect. You are requested to establish fully equipped site lab and confirm through CE. Recover the amount for instruments not installed as per CA till yet for carrying out type "A" tests. Accept penal recovery of Rs 25,000/- for this lapse.</p>	Settled
17	<p>Obsn No 17 : Sleeves. As per CA, sleeves of higher size than plumbing pipes are to be provided in walls. No sleeves found provided in walls, wherever plumbing work is carried out. You are requested to provide sleeve in terms of para D on page 21 of CA and forward cost.</p>	
18	<p>Obsn No 18 : Stacking of Material.</p> <p>(a) Reinforcement bars found lying on the ground without any dunnage. Bars found rusted and cement slurry found applied at places. (b) Course aggregate and fine aggregate found stacked on ground without platform. You are requested to stack material properly and intimate cost. Accept penal recovery of Rs.2500/- for such lapse.</p>	Settled

1	2	3
19	<p>Obsn No 19 : Security Wall.</p> <p>(a) Security wall found constructed with RCC columns & PCC block work masonry wall. Compressive strength of columns randomly checked and found low value ranging from 7.5 to 11 N/mm² for M-30 grade concrete. The strength is not adequate. You are requested to get core cut and tested at SEMT Wing of CME, Govt Engineering college or Govt approved lab and forward compressive strength through CE.</p> <p>(b) 60 to 70 mm thick RCC band provided at middle level of wall in lieu of 100 mm band. The quality of RCC is very poor. Multiple cracks and severe honey combing observed on concrete surface. Curing not found done. At places, no reinforcement found provided and at some places one/two 8 mm dia bars provided at bottom most of band without links. You are requested to demolish bands and re cast with reinforcement as per structure drawings and forward cost of rectification.</p> <p>(c) The height of wall found very low compared to surrounding GL on civil side. Height need to be increased for security point of view. You are requested to take requisite action in consultation with local military authority and forward cost</p> <p>(d) Y shaped MS angle 40x40x6 mm found provided. Make & ISI mark are not found on MS sections. MS angles are not properly aligned and not properly fixed. You are requested to replace all angles as per CA specifications and make having ISI mark and intimate cost.</p> <p>(e) The size of column found 215x310 mm and cage of reinforcement found 130x220 mm. It is observed that uniformity not maintained in column sizes and placing reinforcement. You are requested to rectify defect and carryout proper hacking intimating cost.</p> <p>(f) Hacking not done on RCC columns before plastering. You are requested to carry out proper hacking and intimate cost. Confirm that all other places where plastering has been carried out hacking has been done.</p> <p>(g) At top of wall RCC band provided with two bars of 10 mm in lieu of 04 bars with 8 mm loops at 200 to 220 c/c instead of 180 mm c/c Thickness of band found varying from 75 mm to 100 mm instead of 100 mm. You are requested to demolish entire band and recast it with proper specifications as per CA intimating cost.</p> <p>(h) Accept penal recovery of Rs.25,000/- for poor workmanship. Forward your reply through CE.</p>	<p>(a to c) Settled</p> <p>(e to h) Settled</p>
20	<p>Obsn No 20 : CPM Chart. CPM Chart not found maintained using MS project/ Primavera as per Clause No. 6.4 on page 9 of CA. No technical person found employed as per Clause No 6.2 on page 09 of CA. Prepare CMP as per CA and employ technical staff. Make recovery for not employing technical staff till date of check. Accept penal recovery of Rs.5000/- for not maintaining CPM as per CA. Forward your reply through CE.</p>	<p>Settled</p>

1	2	3																				
21	<p>Obsn No 21 : ITI Qualified Tradesman. Number of ITI qualified tradesmen employed at site not found adequate as per clause No 23 on page 146. The CA clause stipulates that the number of ITI/NICMAR/NAC qualified tradesmen shall not be less than 25% of total skilled/semi-skilled tradesmen required in each trade. You are requested to forward your comments for such deviation from CA through CE along with minus DO on this account.</p>																					
22	<p>Obsn No 22 : Site Engineers. Following site engineers found deployed at site:-</p> <table border="0"> <tr> <td>(a)</td> <td>AK Mohanty</td> <td>BE (Civ)</td> <td>20 Yrs</td> </tr> <tr> <td>(b)</td> <td>Ratan C Davda</td> <td>BE (Civ)</td> <td>25 Yrs</td> </tr> <tr> <td>(c)</td> <td>Deepak Nagrani</td> <td>DCE (Civ)</td> <td>07 Yrs</td> </tr> <tr> <td>(d)</td> <td>Manish Mevani</td> <td>DCE (Civ)</td> <td>06 Yrs</td> </tr> <tr> <td>(e)</td> <td>Narendra Yadav</td> <td>BE (Civ)</td> <td>05 Yrs</td> </tr> </table> <p>It has been observed that electric engineers have not been deployed by contractor. You are requested to deploy electric engineer and forward credentials and payment details of all site engineers. Forward your reply through CE.</p>	(a)	AK Mohanty	BE (Civ)	20 Yrs	(b)	Ratan C Davda	BE (Civ)	25 Yrs	(c)	Deepak Nagrani	DCE (Civ)	07 Yrs	(d)	Manish Mevani	DCE (Civ)	06 Yrs	(e)	Narendra Yadav	BE (Civ)	05 Yrs	
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23	<p>Obsn No 23 : Plant and Machinery.</p> <p>(a) Particulars of Plant & machinery used at site not available [clause 28.1 on page 147.] Forward details of all plants and machinery as per CA clause 28.1.</p> <p>(b) Small mobile weigh batcher with three hoppers found at site for which no details have been produced. As per PS Clause No. 7.8(i) on page 168 semi-automatic plant of 12 and 15 Cum/hour is to be used. Because of three hoppers separate mixing of 12.5/20mm aggregates is not possible. You are requested to forward your justification. Accept penal recovery of Rs.25,000/- for not using proper weigh batcher. Forward your reply through CE.</p>	(a & b) Settled																				
24	<p>Obsn No 24 : Documents.</p> <p>(a) Cube testing. Only 03 cubes tested for 07 days & 28 days strength for any amount of concrete produced daily. This is clear violation of clause 15.2.2 of IS 456 which specifies number of samples required depending on concrete poured. You are requested to intimate how concrete has been accepted without proper testing of number of samples as per IS 456. You are advised to follow IS 456 in future. Please work out number of cubes required to be casted/tested as per IS 456 depending on concrete poured and recover amount for less cubes casted and tested. Accept penal recovery of Rs.10,000/- for lapse.</p> <p>(b) Batching report. No separate qty found mentioned in batching report for 12.5 mm & 20mm aggregates Combined weight recorded in report. You are requested to intimate how 12.5 mm/20mm aggregates have been mixed as per design mix.</p>																					

1	2	3
24	<p>(c) No standard deviation calculated at site for deciding accepting criterion for cube strength. This is violation of PS Clause No. 7.5.6© on page 166 of CA. You are requested to intimate how accepting criterion has been decided at site in absence of SD calculations based on concrete samples.</p> <p>(d) ATT.</p> <p>(i) No calculations done to arrive at quantities of chemical required for work Record of material as per special condition 11 not maintained. Please explain how quantity of ATT chemical has been poured at site without knowing them. Confirm through CE that quantity as per CA/IS has been utilized.</p> <p>(ii) Maghamani make chloropyriphos purchased from HPC Corporation. No make has been specified in CA. Please confirm through CE that Maghamani is approved make.</p> <p>(iii) 650 lit chemical (20x20=400lit, 5x50 =250 lit) purchased. As per PS Clause No. 5.6 on page 161 only 5 lit containers of chemical are to be accepted. You are requested to explain reasons for violation of CA clause through CE.</p> <p>(iii) ATT provided in garages also. As per Schedule "A" note 15(v) ATT is not to be done in garages. Confirm that no DO is paid.</p> <p>(iv) IPCA certificate & license not produced. Forward certificates.</p> <p>(v) Accept penal recovery of Rs.5000/- for above lapses.</p> <p>(e) PMG register. Only one entry made. Update register and confirm.</p> <p>(f) Hindrance register. Not maintained. Confirm that there is no hindrance at site.</p> <p>(g) No ring test carried out for steel reinforcement. Carry out test and forward results. Accept penal recovery of Rs 2500/- for such lapse.</p> <p>(h) Lot wise testing of steel not carried out for all parameter. It is not understood how quality of steel has been accepted. Accept penal recovery of Rs.10,000/- for such lapse.</p>	(b, c, e & h) Settled
25	<p>Obsn No 25 : Performance Evaluation Report. Performance evaluation report not provided. It is requirement as per special condition 40 on page 151 of CA. You are requested to forward the same through CE.</p>	
26	<p>Obsn No 26 : Rep of CE. Rep of Chief Engineer was not present during site check. This is violation of policy in vogue. You are requested to forward your reply through CE.</p>	Settled
27	<p>Obsn No 27 : Internal Wiring.</p> <p>(a) Clamping of conduit not found done. Provide clamping and intimate cost.</p> <p>(b) Single conduit of size 25 mm. This is against IE rules. You are requested to provide extra conduits and intimate cost.</p> <p>(c) MS sunken Box found of depth 45 mm instead of 65 mm. Replace all sunken boxes and intimate cost.</p>	

PART 'B'

OBSNS ON ADM APPROVAL, PLG & TS

- NIL -

OBSERVATION ON CONTRACT & SITE DOCUMENT

- NIL -

OBSERVATION ON SITE INSPECTION (MAJOR)

1. **Obsn No 28 : PCC Flooring.**

(a) Panel size of 203 x 195 mm found provided. The flooring is found undulating and the finish is not of good quality. Glass strips not visible at certain places. Please rectify the defects and intimate rectification cost.

(b) PCC. Flooring in MT store and FOL Store has been found done without providing glass strips. PI rectify the defects or accept appropriate recovery if technically acceptable. Also accept penal recovery of ` 5,000/- for not adhering to CA.

2. **Obsn No 29 : Almirah.** Alimirah doors and shelves found made up of 18mm thick both side laminated Particle board in lieu of 19 mm. The make & ISI mark of Particle Board could not be ascertained. Gaps observed between Almirah door and frames and have not been filled. Hinges found painted. In view of above please carry out the following:-

(a) Please replace pre laminated particle board with thickness as mentioned in CA or accept appropriate recovery if technically acceptable.

(b) Please identify defective area, fill the gap and fwd rectification cost.

(c) Please fwd PV & TC.

3. **Obsn No 30 : Window Cill.** Window cill of 30 mm thick kota stone found provided with end bearing of 40mm. Rounding of edges not carried out and polishing not proper. Please carry out polishing, rounding and intimate rectification cost.

4. **Obsn No 31 : Wooden Doors.** Door Handle of length 200 mm dia 11.5 mm of make 'Classic' ISI, Tower Bolt of length 150mm, dia 8.5 mm dia of make 'Classic' and Sliding Bolt of length 300mm, dia 15.5 mm of make 'Classic' ISI found Provided. Warping observed in certain doors. Certain doors found of improper size and have been fixed to frame by using extra wood and nails Dimension of shutter of doors found provided is as under:-

(i)	Top rail	-	88 mm in lieu of 100mm
(ii)	Middle Rail	-	97 mm in lieu of 100 mm
(iii)	Lock Rail	-	174 mm
(iv)	Bottom Rail	-	190 mm in lieu of 200 mm

In view of above carry out the following:-

- (a) Identify warped doors and replace the same. Fwd replacement cost.
- (b) Replace improper size doors with new doors of proper size & specification and fwd replacement cost.
- (c) Fwd PV & TC.

5. **Obsn No 32 : Kota Stone Flooring.** Kota stone tile of size 595 x 595 mm found provided. One more polishing of Kota stone required before handing over. Please confirm that the same has been done before handing over of the building.

6. **Obsn No 33 : Stair Case.** Staircase found with tread 300 mm & riser 150mm. Kota stone found provided on top. Stair case Railing of MS Pipe 50mm dia found provided. The railing is hanging at certain places and has not been fixed inside the Kota stone. Please identify defective area, redo the work of staircase railing and intimate cost along with photographs.

7. **Obsn No 34 : Bathroom Fittings.** Following bathroom fittings found provided:-

- (a) Urinal of Make - Parry ware.
- (b) Wash Hand Basin of Make - Parry ware.

Please fwd PV & TC

8. **Obsn No 35 : Tiles.** Ceramic Wall tile of Size of 450 x 300 mm and non-skid floor tile of size 300 x 300 mm found provided in bathroom, make of which could not be ascertained. Bull nosing not carried out at places. Undulation observed and gaps not properly filled. Please carry out rectification and fwd rectification cost. Also fwd PV & TC.

9. **Obsn No 36 : Floor Tiles.**

- (a) Vitrified floor tiles of size 600 x 600 mm x 8.45 mm in lieu of 9-10 mm found provided. Make could not be ascertained. Undulation observed at certain places and gaps not found provided properly filled.
- (b) PCC tiles of size 300 x 300 x 30 mm found provided. Make of which could not be ascertained.

In view of above, carry out the following:-

- (i) Please replace tiles with thickness as mentioned in SSR or accept appropriate recovery.
- (ii) Please rectify the defects & intimate rectification cost.
- (iii) Please fwd PV & TC.

10. **Obsn No 37 : Door Frame.** Vertical gap observed between door frame and the wall of the staircase in the ground floor toilet due to beam projection. The gap needs to be filled. Please rectify and intimate rectification cost along with photographs.

11. **Obsn No 38 : kitchen.** Kota Stone of thickness 25mm found provided for cooking platform . Rounding of Kota stone not found carried out .Kitchen Sink of Bowl Size - 450 x 160 mm in lieu of 410x330mm. Overall length 900mm in lieu of 915 mm, make 'Nirali', non – ISI, thickness 0.97 mm in lieu of 1mm. In view of above, carry out the following:-

- (a) Please carry out rounding of kota stone and intimate rectification cost.
- (b) Please replace kitchen sink with make and specification as mentioned in CA and intimate cost.
- (c) Please fwd PV & TC.

12. **Obsn No 39 : Rolling Shutters.** Two steel rolling shutters of Size 7.29 m x 4.6m having guide rail with thickness 2.8mm in lieu of 3 mm for a room of size 25.00 m x 18.00 m x 7.5 m found provided. Gap exists between top of rolling shutters and roof projection that needs to be closed from both inside and outside. Rolling shutter could not be opened as has been painted recently. In view of above carry out the following:-

- (a) Please fill the gaps that exist between rolling shutters and roof projection and intimate rectification cost.
- (b) Please replace guide rail with appropriate thickness and intimate cost or accept appropriate recovery if technically acceptable.
- (c) Please fwd a video confirming that all the rolling shutters are moving easily and freely.

13. **Obsn No 40 : Chain Link Fencing.** All around Adm building angle Iron post of size 65 x 65 x 6 mm, make 'Grace' ISI found provided. Round bar having dia 10 mm & flat plate 65 mm found provided to hold 6 mm dia Chain link fencing having aperture of 100 x100 mm. 1 ½ ft Gap exist between barbed wire and chain link fencing that needs to be plugged. Please plug the gap with appropriate no of barbed wires and fwd rectification cost along with photographs.

14. **Obsn No 41 : Roof Treatment.** APP Membrane of make 'IWL' with side overlap 100 mm and end overlap 140 to 150 mm, found provided. Torching not proper at places.

In view of above, carry out the following:-

- (a) Please rectify the defects & intimate rectification cost.
- (b) Please fwd ponding test report as per PS Clause No. 12.3.
- (c) Please fwd certificate of authorized applicator in terms of PS Clause No. 12.2.
- (d) Please fwd PV & TC.

15. **Obsn No 42 : Interlocking Tiles.** Interlocking tiles of thickness 62 mm, make 'Lucky', ISI mark found provided in front of Officer's Mess. Please fwd PV & TC.

16. **Obsn No 43 : Water Tanks.** Water tanks of 500 Ltr, make 'Sintex', ISI mark found provided. Over flow pipe not provided. Union near tank entry not found provided. Please identify the defective area, provide overflow pipe and union & intimate cost.

17. **Obsn No 44 : Three Track Al Window.** Three track Al Window found provided (as sample) in officer Mess, make of which could not be ascertained. The locking system is hindering the sliding of window shutters and needs to be replaced with better system. Please confirm the same along with photographs.
18. **Obsn No 45 : False Ceiling.** Gypsum Board of thickness- 12mm found provided. Make of which could not be ascertained. Please fwd PV & TC.
19. **Obsn No 46 : Garages.** Large Cracks found in ramp of garages. Also Cracks observed in the flooring of garages. Flooring has not been carried out in bays. In view of above carry out the following:-
- (a) Please identify all defective areas, carry out rectification and intimate rectification cost along with photographs.
 - (b) Please accept penal recovery of ` . 25,000/- for not adhering to CA.
20. **Obsn No 47 : GI Sunken Box.** GI Sunken box 50mm depth in lieu of 65mm 1mm in lieu of 1.6mm thick found provided. Replace sunken box and forward cost.
21. **Obsn No 48 : Hylem Sheet.** Hylem Sheet of no make non ISI mark of thickness 2.8 mm in lieu of 3mm found provided. Replace hylem sheet with ISI mark and as per CA thickness and forward cost.
22. **Obsn No 49 : Transformer.** Make 'Rajasthan Transformer & Switch Gear' 11 KV/440 V, 63 KVA, ISI mark found at site. Transformer yet to be commissioned. Forward PV, TC and SEI inspection report.
23. **Obsn No 50 : LT Cable.** LT cable of make 'Finolex' size 35 Sq mm and 16 Sq mm found in same duct at a distance of 8 cm in lieu of 25cm. Only one cable cover found provided.
- In view of above,
- (a) Rectify defects and forward cost.
 - (b) Forward PV and TC for all Lt Cables.
24. **Obsn No 51 : Step Regulator.** Make 'Anchor' non ISI mark 100 W found provided. Replace step regulator with ISI mark and forward cost.
25. **Obsn No 52 : HT Cable.** Make 'Finolex' 95 Sqmm ISI marked found provided. Forward PV and TC for HT cables.
26. **Obsn No 53 : HT Cable Cover.** Size 450 x 230 x 50 mm of no make, non ISI mark found provided. Replace HT cable cover with IS mark and as per CA makes. Forward cost.

MINOR OBSERVATION

CA No : CEBZ/BHUJ-06 OF 2016-17

Name of Work : Provn of balance accn and Officer's Mess for certain units at Army area Bhuj.

Amount in lakhs : ₹. 1512.19 Lakhs

Obsn No 01 : GI Pipe. Make 'Prakash Surya', ISI mark 20mm, dia found fitted directly on wall. Please provide wooden blocks and confirm alongwith rectification cost.

(Satish Chander, IDSE)
STE SC Pune

IMPORTANT OBSERVATION

CA No : CEBZ/BHUJ-06 OF 2016-17
Name of Work : Provn of balance accn and Officer's Mess for certain units at Army area Bhuj.
Amount in lakhs : ₹. 1512.19 Lakhs

1. **Obsn No 28 : PCC Flooring.**

(a) Panel size of 203 x 195 mm found provided. The flooring is found undulating and the finish is not of good quality. Glass strips not visible at certain places. Please rectify the defects and intimate rectification cost.

(b) PCC. Flooring in MT store and FOL Store has been found done without providing glass strips. Pl rectify the defects or accept appropriate recovery if technically acceptable. Also accept penal recovery of ₹. 5,000/- for not adhering to CA.

2. **Obsn No 31 : Wooden Doors.** Door Handle of length 200 mm dia 11.5 mm of make 'Classic' ISI, Tower Bolt of length 150mm, dia 8.5 mm dia of make 'Classic' and Sliding Bolt of length 300mm, dia 15.5 mm of make 'Classic' ISI found Provided. Warping observed in certain doors. Certain doors found of improper size and have been fixed to frame by using extra wood and nails Dimension of shutter of doors found provided is as under:-

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(Satish Chander, IDSE)
STE SC Pune