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Dated: 2nd March 2022

2nd PROJECT LIE REPORT (FOR QUARTER ENDING DECEMBER 2021)

OF

INTEGRATED CEMENT PLANT UNIT (IU) AND CLINKER GRINDING UNIT (GU)

INTEGRATED UNIT SITUATED AT

VILLAGES HARDUWA KEN, PURAINA, MADDIAN AND SOTIPURA, TEHSIL
AMANGANJ, DISTRICT PANNA, MADHYA PRADESH

GRINDING UNIT SITUATED AT

DISTRICT HAMIRPUR, UTTAR PRADESH

IMPLEMENTED BY

■ Corporate Valuers

■ Business/ Enterprise/ Equity Valuation

■ Lender's Independent Engineers (LIE)

■ Techno Economic Viability Consultants (TEV)

■ Agency for Specialized Account Monitoring (ASM)

■ Project Techno-Financial Advisors

■ Chartered Engineers

■ Industry/ Trade Rehabilitation Consultants

■ NPA Management

■ Panel Valuer & Techno Economic Consultants for PSU
Banks

JAYKAYCEM (CENTRAL) LIMITED SUBSIDIARY OF



JKCement

REPORT PREPARED FOR

BANK OF BARODA, INTERNATIONAL BUSINESS BRANCH, THE MALL,

KANPUR-208 001

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PART A

REPORT SUMMARY

- 1. Name of Project:**
Project 1- To Set Up a Greenfield Integrated Cement Plant of Capacity 8000 TPD Clinker and 2MI. TPA Cement Capacity which includes setting up of Waste Heat recovery System (WHRS) with estimated capacity of 22 MW
Project 2- To Set Up A Greenfield Clinker Grinding Unit (GU) of 2.0 MI. TPA Cement Production Capacity.
- 2. Project Location:**
Project 1: Villages Harduwa Ken, Puraina, Maddian and Sotipura, Tehsil Amanganj, District Panna, Madhya Pradesh
Project 2: District Hamirpur, Uttar Pradesh
- 3. Name of the Borrower:** M/s. Jaykaycem (Central) Limited a wholly owned subsidiary of JK Cement Limited
- 4. Director's**
Mr. Madhavkrishna Sighania
Shri Ajay Kumar Saraogi
Shri Anil Kumar Agarwal
Shri Krishna Behari Agarwal
- 5. Prepared for Bank:** Bank of Baroda, International Banking Branch, Kanpur
- 6. LIE Consultant Firm:** M/s. R.K. Associates Valuers & Techno Engineering Consultants (P) Ltd.
- 7. Date of Survey:** 23th February 2022 (Grinding unit) and 24th February 2022 (Integrated Unit)
- 8. Date of Report:** 02/03/2022



9. Purpose of the Report: To provide fair detailed analysis report to the Bank based on the "in-scope points" mentioned below for facilitating them to take appropriate credit decision on the Project.

10. Scope of the work provided by the Lender:

- a. To conduct site reviews, document reviews and study progress reports on continuous basis specially vis-à-vis Original timelines to avoid sudden shocks of overrun.
- b. To determine the progress achieved and appropriateness of related transactions. The consultant shall also flag any issue which is resulting in Nonperformance/ under performance by the contractor. All payments to related parties should be closely monitored and highlighted to the consortium.
- c. Deviations in project progress vis-à-vis timelines and amount disbursed. High value payment/ dues to be clearly monitored and highlighted to the consortium.
- d. Periodical review of invoices and submission of exception report to the consortium.
- e. Fortnightly review of production/ supplies (quantities of works certified) vi-a-vis inventory consumption records, cash flow to contractor, sub-contractor and vendors, wastages, extent of work and quality non conformities raised by borrower and highlight exceptions. A single review report will be released each fortnight for invoices raised and inventory consumed in that period.
- f. Suggestions, if any for improving the project management practices.



- g. Perform such other services as request by the lenders and mutually agreed to by the party and lenders.

- 11. Documents perused for Proposal:**
- a. Techno economic feasibility report
 - b. Pending Project Statutory approvals
 - c. CA certificate
 - d. List of contractors/Suppliers
- 12. Annexure with the report:**
- 1. Pending Project Statutory approvals
 - 2. CA Certificate
 - 3. List of Contractors/ Suppliers



PART B

INTRODUCTION

1. THE PROJECT:

Jaykaycem (Central) Limited (JCL) is setting up a Greenfield Integrated Cement Plant (IU) of 8,000 TPD clinker and 2.0 million output TPA cement capacity at village Devra, Hardua, Puraina, Sotipura and Madaiyan, tehsil Amanganj, district Panna, Madhya Pradesh with a Split located Grinding Unit (GU) of 2 million TPA capacity in district Hamirpur, Uttar Pradesh. The project also envisages setting up of Waste Heat Recovery System (WHRS) based power plant, along with the integrated cement plant. A part of Clinker produced shall be consumed at integrated cement plant and balance shall be supplied to **JCL's** Grinding Unit (GU) in Hamirpur, Uttar Pradesh.



2. ABOUT THE BORROWER:

Jaykaycem (Central) Limited (JCL) is a wholly owned subsidiary of JK Cement Limited, which in turn, is the Cement vertical of the industrial conglomerate JK Organisation. **JCL**, thus, is an affiliate of the flagship JK Organisation. The primary set of directors of JCL as on date are:

- Mr. Madhavkrishna Singhanian: Deputy Managing Director & CEO
- Shri Ajay Kumar Saraogi
- Shri Anil Kumar Agarwal
- Dr. Krishna Behari Agarwal

JCL is setting up a Greenfield grey cement manufacturing unit of 8,000 TPD clinker capacity in Panna district of Madhya Pradesh, and a Greenfield split grinding unit in Hamirpur district of Uttar Pradesh.

'Jaykaycem' is an affiliate of the multi-disciplinary industrial conglomerate- JK organisation. JK Cement limited acquired 100 Percent shares, whereupon Jaykaycem became its wholly owned subsidiary. Jaykaycem is being granted the mining lease of cement grade lime stone in Panna District of Madhya Pradesh state and letter of intent in this regard has already been issued by Madhya Pradesh government. It started the process of acquisition of land from villagers falling under mining and under construction plant area. It has plans to set up grey cement manufacturing unit of appropriate capacity in phased within the periphery of mining area.

JK cement deals in production of grey cement, white cement, wall putty, gypsum plaster, tile adhesives and grouts and wood finishes.

JK Cement is having following units

1. JK Cement works, Nimbahera
2. JK White cement works, Gotan
3. JK Cement works, Muddapur
4. JK cement works, Mangrol
5. JK cement works, Jhajjar
6. JK cement works, Aligarh
7. JK Cement works, Balasinor
8. JK White, Katni
9. Besides above listed plants, JK Cement is also having a step down subsidiary in UAE i.e. J.K. Cement works (Fujairah) FZA.



3. PROJECT LOCATION:

3.1 LOCATION OF INTEGRATED UNIT (IU)

Details of Location of Integrated unit is as below:

Particulars	Description
Latitude	N 24° 19' 14"
Longitude	E 79° 58' 40"
Connectivity Systems	
Road	<p>The project site of the subject under construction plant is well connected by road network and is on State Highway 49. The Project site is on Village Road leading to Amanganj town and Nagar panchayat which is can be easily accessed via State Highway SH-49 towards panna national park. It is around 53 Km from main district Panna. District Panna is around 285 Km far away from Lucknow State Capital.</p> <p>The project site can be approached from by traveling on National Highway – 75 (NH-75) up to Panna and then traveling on Madhya Pradesh State Highway SH-49 towards Damoh. The approximate distance of the site from NH-75 is about 48 km and about 12 km from Amanganj.</p>
Rail	Railway network is not available in the near vicinity of the under construction cement plant. The nearest railway station is at Damoh at a distance of about 85 km in South direction.
Air	The nearest domestic airport is at Khajuraho at about 100 km distance from the plant site. The nearest international airport is at Lucknow at a distance of about 350 km from the project site.

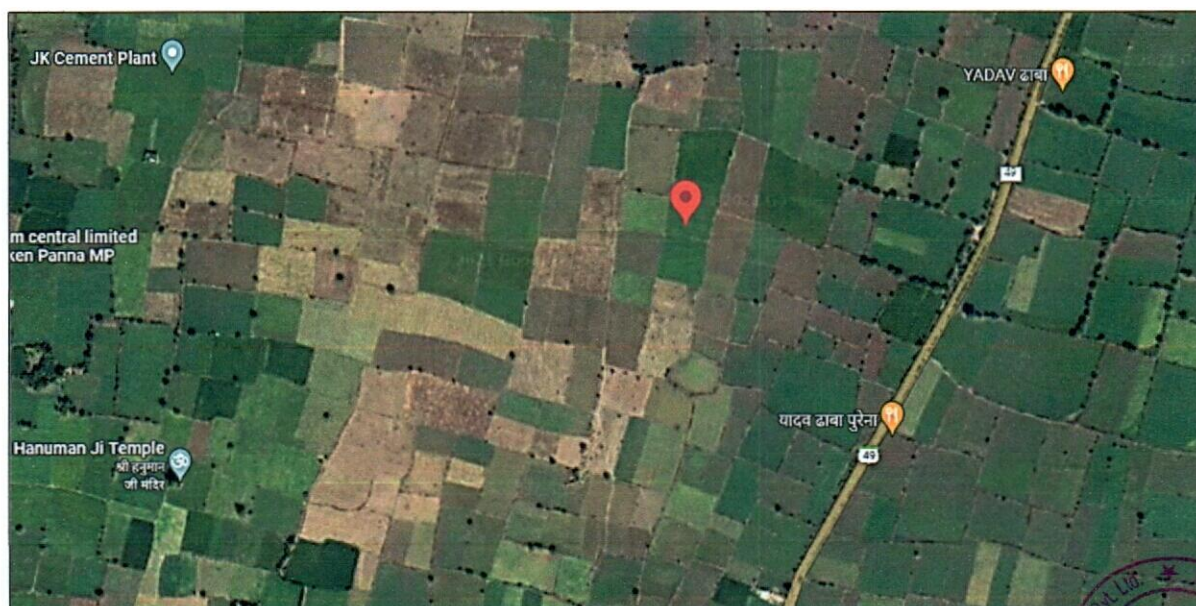


Figure 1: Location of under construction Integrated Unit

3.2 LOCATION OF GRINDING UNIT

Details of Location of Grinding unit is as below:

Particulars	Description
Latitude	N 25° 46' 16"
Longitude	E 80° 07' 40"
Connectivity Systems	
Road	The considered location of the cement manufacturing unit is well connected with major cities and town, and the markets of interest. The approximate road distances of the project site from the major towns and cities are: Kanpur : 85 km, Lucknow : 170 km, Prayagraj : 220 km, Panna (Amanganj) : 240 km, Varanasi : 350 km
Rail	The nearest railway station from the plant site is at Ingotha at a distance of about 2.5 km. The other nearest railway station is at Bharuwa Sumerpur located about 9 km from the site.
Air	The nearest domestic airport is at Kanpur at a distance of about 90 km from the under construction cement manufacturing unit. The nearest international airport is at Lucknow at a distance of about 157 km from the project site.

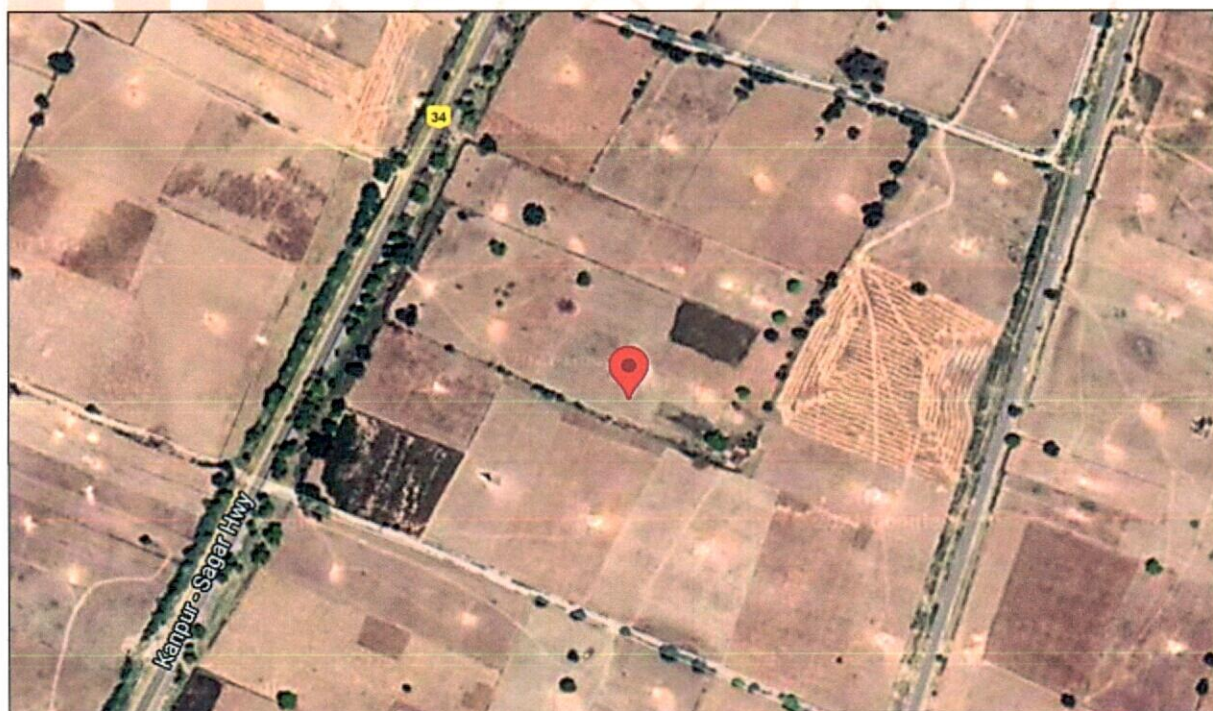


Figure 2: Project Location of Grinding Unit



4. PROJECT OVERVIEW:

Jaykaycem (Central) Limited (JCL) a wholly owned subsidiary of JK Cement Limited is setting up a Greenfield Integrated Cement Plant (IU) of 2.64 MTPA (8,000 TPD) of clinker and 2.0 Million output TPA of cement at village Devra, Hardua, Puraina, Sotipura and Madaiyan, tehsil Amanganj, district Panna, Madhya Pradesh with a Split located Grinding Unit (GU) of 2 Million TPA capacity at district Hamirpur, Uttar Pradesh.

The total proposed Project cost sums approx. Rs.2970 crores out of which Rs.2187.50 cr. is proposed for Integrated Cement Plant (IU) at Panna, MP and Rs.322.98 cr. at Hamirpur, Uttar Pradesh. In addition to this Rs.459.82 cr. is proposed for common expenses taken in Total Project Cost for pre-operative, IDC and finance expenses.

The proposed completion date for the Project and both these Plants are envisaged by 30th April, 2023 as per BOB Sanction Letter. As per TEFR, 24 months' period is envisaged for Integrated Unit and 18 months for Grinding Unit from the date of start of the construction. As per the site inspection and information provided by the borrower, construction at IU, Panna started on July, 2021 and at GU, Hamirpur from September, 2021. Presently as per our site inspection in February, the construction work is going on in full swing at both the sites and the project is anticipated to start the commercial production by April 2023.

The borrower has appointed reputed and well established contractors/Suppliers for completing this project. As per the information available in public domain for these suppliers/Contractors they are having good track record in completion such type of works.



4.1 INTEGRATED CEMENT PLANT OF CAPACITY 8000 TPD CLINKER AND 2 MILLION OUTPUT TPA CEMENT CAPACITY:

Integrated Cement Plant of Capacity 2.64 MTPA (8000 TPD) of Clinker and 2 Million output TPA of Cement is located at Villages Harduwa Ken, Puraina, Maddian and Sotipura, Tehsil Amanganj, District Panna, Madhya Pradesh. This project is proposed on about total land area about 480 acres and the same is also approved in Environment clearance.

As per Environment Clearance from Ministry of Environment, Forest and Climate Change and Industrial Entrepreneur Memorandum from Ministry of Commerce & Industry, Integrated unit situated at Panna is having approval for setting up of 5.28 MTPA of clinker unit and 6.0 MTPA of Cement Unit having 2 units each in clinker and cement production. However as per present plan borrower has decided to setup single unit each in clinker and cement units with production capacity of 2.64 Million output TPA (8000 TPD) of Clinker production and 2 Million output TPA of Cement production which will be around 50% & approx. 33.33% of clinker and cement unit respectively of the approved capacity. In addition to this borrower also has approval for setting up CPP of 80 MW and WHRS of 30 MW out which borrower has currently planned to setup only 22 MW WHRS. Presently in the subject project, borrower has not planned Captive Power Plant (CPP) and Railway siding at both the locations.

The under construction plant will be sustained through Kakra-Panna Limestone mining lease admeasuring 1594.34 Hectare out of which 75.754 ha. Is Govt. leased land and 1518.586 ha is private land planned to be obtained by JKL. The northern boundary of proposed site of the plant adjoins the southern boundary of granted Limestone mining lease.

As per TEFRR prepared by HOLTEC, JCL has estimated that Kakra mine area has about 237.27 million output ton of cement grade limestone, 58.20 million output ton of blend able grade limestone, and 27.32 million output ton inferior grade probable limestone reserves which shall meet the requirement of clinkerisation plant for about 80 years for the envisaged production capacity of 2.64 million output TPA clinker.



In this regard out of the total available capacity, borrower has got Consent to Establish from M.P Pollution Control Board for mining at following capacities:

Activity/Product	Quantity/Year
Mining of Limestone	4.08 Million TPA
Mine Waste	0.18 Million TPA
Mining of Sub Grade Lime stone	0.58 Million TPA
Mining of Inter Burden	1.51 Million TPA
Mining of Soil/Alluvium	1.26 Million TPA

In Cement unit, JCL has proposed to produce OPC and PPC as per relevant BIS Standards:

Sr. No.	Product Type	Proportion	Cement Volume	Relevant IS
1.	OPC	40%	2424 TPD	IS 12269-1987
2.	PPC	60%	3636 TPD	IS 1489-1991

In the subject Plant borrower has opted clinker dry process kiln system of 8,000 TPD capacity. This process will include limestone Crushing and transport, correctives & additive crushing, transport, pre-blending stockpiles, Closed Circuit Roller Press (CCRP) for raw material grinding, a vertical roller mill for coal grinding, 6-stage double string preheater with in line calciner, Waste Heat Recovery System (WHRS), coal fired rotary kiln with 3 roller stations, storing & dozing of fuel, clinker cooler, clinker storage silo, clinker extraction system, Vertical Roller Mill (VRM) for clinker grinding, clinker bulk loading via trucks, cement silos, packing and loading equipment.

A part of clinker produced at Panna Plant shall be consumed at integrated cement Plant and balance shall be supplied to JCL's Grinding unit in Hamirpur, Uttar Pradesh.

In addition to above clinkerisation process, JCL has planned setting up pyro processing section with 8,000 tpd nominal capacity and 10,000 tpd potential capacity to produce 2 Million output TPA of Cement.



Main machineries to be installed in integrated Cement unit is as below:

- i. Limestone Crusher
- ii. Corrective/Additive Crusher
- iii. Coal Crusher
- iv. Raw material Grinding
- v. Kiln
- vi. Cooler
- vii. Coal mill
- viii. Cement Grinding
- ix. Packing machine

The water requirement for plant, colony and WHRS has been estimated as about 2500 m³/Day. Details of water requirement is as below:

- **Cement Plant:** 2,100 m³/Day
- **Drinking, Sanitation and Plantation:** 100 m³/Days
- **Mines:** 150 m³/Day
- **Waste heat Recovery System (WHRS):** 150 m³/Day

Water requirement is envisaged to be primarily met from mines pits, check dams, rain harvesting etc. beside Ken River. For domestic purposes, water requirement may be augmented by utilizing underground sources.

The maximum power demand for the under construction plant and mines has been estimated as about 34MW which is proposed to be met through a combination of Grid and Waste heat recovery system (WHRS) based thermal power plant.

Geographical Conditions on the site:

- i. The area has generally hot climate. The maximum temperature is around 45 Degree Celsius while the minimum is 8 Degree Celsius.
- ii. The average annual rainfall of this area is about 800 mm.
- iii. The annual relative humidity varies from 30% to 90%.
- iv. The above plant site area falls in Seismic Zone III.



4.2 CLINKER GRINDING UNIT (GU) OF 2 Million Output TPA CEMENT PRODUCTION CAPACITY

Grinding unit of Capacity 2 Million output TPA of Cement is located at District Hamirpur, Uttar Pradesh. As estimated by JCL, the under construction project will require about 27 Acres which translates to approx. 11 Hectares of land for the purpose of setting up the under construction Grinding unit. The same area is also approved as per environment clearance.

Clinker grinding unit (GU) is located at Hamirpur district, Uttar Pradesh. The district falls under Chitrakoot Division. **As per the product mix details provided by the borrower, they have planned to manufacture 100% Portland Pozzolona Cement (PPC).** The plant technical concept conceptualizes use of modern energy efficient and environment friendly material transport, handling, storage, grinding, packing and dispatch systems. The core grinding circuit is envisaged to constitute of inbound material unloading and handling through bulk receiving units with truck tipping systems; optimized and just sufficient material storages; vertical roller mill for grinding; rotary packing machines with truck & bulk loading systems, and a suitable hot gas generator for moisture mitigation and mill operations. The plant technical concept envisages to have suitable and adequate infrastructure along with stipulated green belt provisions.

Main machineries envisaged for the project area:

- i. Cement grinding mill
- ii. Cement Mill hoppers
- iii. Cement dispatch packing machine and loading machines
- iv. Hot air generator

As per Environment clearance (EC) issued to the project by Ministry of Environment, Forest and Climate Change (MoEFCC) and Industrial Entrepreneur Memorandum (IEM) from Ministry of Commerce & Industry the project has been granted approval for manufacturing of 2 million TPA of PPC. In addition to the environment clearance the project has also obtained Consent to Establish (CTE) from UP Pollution Control Board for Production of PPC up to 1,50,000 MT per month which translates to 1.8 Million TPA, OPC up to 16,600 MT per month which translates to 0.2 Million TPA apart from other products like PSC (16,600 MT per month) and Cement composites (16,600 MT per month).

The total water requirement for the project is envisaged to be about 300m³/Day, which is planned to be met from underground sources and secondary sources like rainwater harvesting etc.

The total maximum power demand for the under construction plant has been estimated as about 12MW, which is envisaged to be met from the sumerpur grid substation of UP Power transmission corporation limited (UPPTCL) located at about 6Km from the under construction plant.

Geographical Conditions on the site:

- i. The terrain of the location/area is generally flat and The Plant site area falls at the cusp of Seismic Zone II and Seismic Zone III.
- ii. The average annual temperature is about 25 Degree Celsius. The average minimum and maximum temperature recorded in the past few decades has been 18 Degree Celsius and 32 Degree Celsius respectively while the record minimum and maximum temperatures have been 0 Degree Celsius and 47 Degree Celsius.
- iii. The area witnesses a dry winter Humid Subtropical Climate.

5. SCOPE OF WORK DURING PROJECT DURATION:

- I. To Conduct Site reviews, document reviews and study progress reports on continuous basis specially vis-à-vis Original timelines to avoid sudden shocks of overrun.
- II. To determine progress achieved and appropriateness of related transactions. The consultant shall also flag any issue which is resulting in Non-performance/ under performance by the contractor. All payments to related parties should be closely monitored and highlighted to the consortium.
- III. Deviations in project progress vis-à-vis timelines and amount disbursed. High value payment/dues to be clearly monitored and highlighted to the consortium.
- IV. Periodical review of invoices and submission of exception report to the consortium.
- V. Fortnightly review of production/supplies (quantities of works certified) vi-a-vis inventory consumption records, cash flow to contractor, sub-contractor and vendors, wastages, extent of work and quality non conformities raised by borrower and highlight exceptions. A single review report will be released each fortnight for invoices raised and inventory consumed in that period.
- VI. Suggestions, if any for improving the project management practices.



VII. Perform such other services as request by the lenders and mutually agreed to by the party and lenders.

Note:

1. The scope of work is for the complete duration and not for a specific report.
2. Carrying out the scope of work will depend on the details/ information/ data provided to us by the borrower from time to time.
3. As per our discussion with the lead lender during meeting on 23rd February 2022, it has been informed that the lender is taking proper due diligence measures for all the parties involved in construction works of integrated unit as well as grinding unit. The payment process of the lender was also physically verified during the meeting.

6. PURPOSE OF THE REPORT: To provide fair detailed analysis report to the Bank based on the "in-scope points" mentioned above for facilitating them to take appropriate credit decision on the Project.

7. METHODOLOGY ADOPTED:

- a. Study of Project Planning documents/ reports to know about the Project.
- b. Additional information, data, documents collection the borrower.
- c. Study and analysis of the documents and information obtained from the borrower.
- d. Research about the Project/ sector from the sources in the public domain.
- e. Correlation of the provided information against Industry/ sector benchmarks/ trend.
- f. Information compilation, analysis and reporting.



PART C

**PLANT INFRASTRUCTURE SECTIONS & FACILITY DETAILS WITH
ACTUAL PROGRESS**

1. LAND DETAILS:

1.1 PROJECT 1: INTEGRATED UNIT (IU)

As per TEFR of the project, the borrower has proposed an expenditure amounting to Rs.474.95 Crore towards land and site development. Breakup of Rs.474.95 Crore is below:

(Amount in Rs. Crore)

Sr. No.	Particular	Amount
1.	Land cost for Plant (Govt. Land)	424.20
2.	Land cost for plant (Private Land)	
3.	Land cost for mining area (Govt land)	
4.	Land cost for mining area (Private Land)	
5.	Mines development expenses	1.24
6.	Site preparation, levelling and grading	1.50
7.	Geo technical, hydrological investigation and topographic	0.60
8.	Boundary wall	7.33
9.	Gates, security pickets etc.	0.30
10.	Approach road	6.27
11.	Plant internal roads	13.41
12.	Truck parking, logistics offices and other semi paved areas	11.09
13.	Plant drainage	8.61
14.	Landscaping and provision of green belt	0.40
	Grand total	474.95

As per TEFR Prepared by HOLTEC, Jaykaycem (Central) Limited plans to acquire about 480 acres of land for setting up of the Integrated cement plant. Fresh update on status of purchase of land was sought from the borrower. Accordingly, the borrower has informed that they have already acquired the land required for construction of integrated unit. As per present status based on our site inspection, land has been acquired and borrower is in possession of the land where construction works are going on in full swing.

As per TEFR prepared by HOLTEC, JCL has proposed 1060 Acres (429.14 ha.) of land for mining purpose. However, the borrower has already obtained Environment clearance form Ministry of Environment, Forest and Climate for 1594.34 Hectare (3938 Acres). As per HOLTEC report, borrower has planned to initially purchase 621.075 ha.



As per our discussion with the lender regarding unavailability of some documents from the borrower's end, it was informed by the lender that a consortium meeting was held on 25th March 2022 in which our findings in First LIE Report and Second Draft LIE Report were discussed. Accordingly, the company has informed to the lender that there are high number of title deeds which are currently under legal scrutiny. As soon as the legal scrutiny process is finished the company will provide the title deeds directly to the lender. Therefore, we have relied simply on CA certificate dated 22nd January 2022 with UDIN. 22424004AAAABX4556 for cost incurred towards purchase of land and no further analysis is done from our end to verify the cost incurred for acquiring the land.

1.2 PROJECT 2: GRINDING UNIT (GU)

As per TEFR of the project the borrower has proposed an expenditure amounting to Rs.22.70 Crore towards Land and Site Development. Breakup of Rs.22.70 Crore is as below:

(Amount in Rs. Crore)

Sr. No.	Particular	Amount
1.1	Capital Cost of procured land for setting up the plant	9.00
1.2	Site preparation & development	0.50
1.3	Site enabling investigations (Topographical, Geotechnical & Hydrological)	0.50
1.4	Boundary Wall	1.25
1.5	Gates, Security Pickets, etc.	0.30
1.6	Approach Road to Plant	1.90
1.7	Plant Internal Roads	4.00
1.8	Truck Parking & Logistics Office	3.70
1.9	Plant Drainage	1.35
1.10	Landscaping and Provision of Green Belt	0.20
	Sub-total (1.0)	22.70

As per TEFR JCL was in process of procuring a land patch of about 27 Acres area for the purpose of setting up of grinding unit at the time of TEFR preparation. Similar area admeasuring 26.33 acres is also approved by Ministry of Environment, Forest and Climate Change. Fresh update on status of purchase of land was sought from the borrower. Accordingly, the borrower has informed that they have already acquired the land required for construction of grinding unit. As per present status based on our site inspection, land has been acquired and borrower is in possession of the land where construction is going on in full swing.

As per our discussion with the lender regarding unavailability of some documents from the borrower's end, it was informed by the lender that a consortium meeting was held on 25th March 2022 in which our findings in First LIE Report and Second Draft LIE Report were discussed. Accordingly, the company has informed to the lender that there are high number of title deeds which are currently under legal scrutiny. As soon as the legal scrutiny process is finished the company will provide the title deeds directly to the lender. Therefore, we have relied simply on CA certificate dated 22nd January 2022 with UDIN. 22424004AAAABX4556 for cost incurred towards purchase of land and no further analysis is done from our end to verify the cost incurred for acquiring the land.

2. BUILDING & STRUCTURAL DETAILS:

2.1 PROJECT 1: INTEGRATED UNIT (IU)

JCL has planned following Building/ structures as per the requirement of the Plant:

STRUCTURE OF EQUIPMENTS	CAPACITY OF STRUCTURES
Lime stone Crusher	Crusher Capacity: 1300 TPH (Proposed) Wobbler Feeder capacity: 1600 TPH (Proposed)
Limestone pre blending stockpile	Storage Capacity: 2 X 40,000 t (Proposed) Limestone stacker capacity: 1600 TPH (Proposed) Limestone reclaimer capacity: 900 TPH (Proposed)
Corrective/Additive crushing	Capacity: 1 X 300 TPH (Proposed)
Corrective/Additive & Blending Material storage	Bauxite Corrective storage: 7500 t (Proposed) Iron Ore Corrective storage: 7500 t (Proposed) Gypsum storage: 2100 t (Proposed) Limestone Storage: 1000 t (Proposed) Pond ash: 5000 t (Proposed)
Fuel handling, storage and transport	Fuel storage: 2 X 10,000 t (Indian coal) (Proposed) and 2 X 3000 t (Pet Coke) (Proposed) Fuel stacker: 1 X 300 TPH (Proposed) Fuel side scraper: 1 X 200 TPH (Proposed)
Fuel crushing and transport	Capacity: 1 X 300 TPH (Proposed)
Fuel drying and grinding	-
Raw material drying and Grinding	Closed Circuit Ball mill capacity: 2 X 375 TPH (Proposed)

Raw material Blending and Kiln Feed	Raw mill blending silo capacity: 10000 t (Proposed)
Waste heat recovery System (WHRS)	22 MW
Cement Grinding system	Vertical Raw mill (VRM) capacity: 300 TPH@3600 Blaine (Proposed)
Cement storage	Cement storage capacity: 3 X 5000 t (Proposed)
Cement packing and dispatch:	Capacity: 2 X 240 TPH (Proposed)
Preheater, Pre-Calcliner, Kiln and Cooler	-
Fuel firing system	-
Limestone handling and transportation to stockpile	-

As per HOLTEC report, for development of above listed sections, JCL has estimated Rs.378.63 Crore in Building/ structures out of total project cost amounting to Rs.2970.29 Crore. Bifurcation of Rs.378.63 Crore is as below:

(Amount in Rs. Crore)

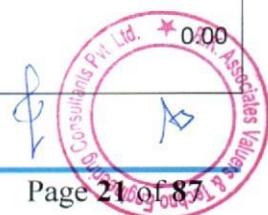
Sr. No.	Particular	Amount
1.	Main factory Buildings	85.65
2.	Silos, Hoppers, Storages, Covered Gantry etc.	69.45
3.	Auxiliary services	28.64
4.	Office/Non factory buildings and mine building	7.52
5.	Residential Colony	64.05
6.	Equipment foundations cost	29.85
7.	Deep foundations cost provisioning on account of possibility of weaker soil bearing capacity	33.40
8.	Indicative GST on Civil works	60.07
	Total	378.63

→ Detailed breakup of above building sections is below:

(Amount in Rs. Crore)

Sr. No.	Description	Building Cost	Equipment foundation Cost out of Building Cost
1. Main Factory Building			
1.1	Limestone crusher complex (including retaining wall, ramp, stone pitching, etc.)	10.90	1.35
1.2	Correctives & Additive crusher house (including short ramp, pitching, etc.)	1.00	0.25
1.3	Raw mills complex	10.40	2.10

1.4	Raw mill bag house & stack support structure	7.20	0.90
1.5	Preheater tower (Six stage, Double string)	24.15	0.35
1.6	Rotary Kiln Piers, Walkways, TA duct support	1.85	4.10
1.7	Clinker cooler house (including De-dusting structures & Stack supporting structure)	7.70	1.80
1.8	Coal Crusher House (incl. short retaining wall, ramp, stone pitching, etc.)	0.60	0.35
1.9	Coal mill house	7.45	2.05
1.1	HAG supporting structure	2.25	0.25
1.11	Cement mill house (including De-dusting structures & Stack supporting structure)	6.75	2.25
1.12	Packing plant, truck & bulk loading, bags godown	5.40	0.05
	SUB TOTAL (1.0)	85.65	15.80
2. Silos, Hoppers, Storages, Covered Gantry etc.			
2.1	Limestone pre blending stockpile (linear, covered, with S/R foundations)	3.50	4.50
2.2	Correctives storage (linear, covered, with S/R foundations)	1.55	1.95
2.3	Solid fuel storage (linear, covered, with S/R foundations)	1.85	4.65
2.4	Raw mill hoppers & building	3.40	0.10
2.5	Blending (Raw Meal) silo	6.30	0.20
2.6	Clinker silo & transport supporting structure	21.75	0.20
2.8	Clinker load-out silos (4nos.)	2.95	0.15
2.9	Gypsum, pond ash and sweetener storage (linear, covered)	2.90	0.00
2.10	Cement mill hoppers & building	3.40	0.10
2.11	Fly ash silo	4.00	0.10
2.12	Cement silos	13.85	0.15
2.13	AFR Storage	4.00	0.15
	SUB TOTAL (2.0)	69.45	12.25
3. Auxiliary Services			
3.1	Switch yard	0.45	0.61
3.2	Main indoor substation	1.45	0.20
3.3	CCR, including Lab, Technical Offices, etc.	5.42	0.05
3.4	Load centres & MCC rooms	5.30	0.20
3.5	Electrical/ Mechanical Workshop & Yard	0.72	0.10
3.6	Compressor house & rooms	0.75	0.11
3.8	Belt conveyors, TTs, etc. (plant internal; partly with gallery & partly locally covered)	7.15	0.00
3.9	Water Storage (UG+OH)	2.65	0.05
3.10	Weigh Bridges & Weigh Rooms	0.35	0.25
3.11	Overhead cable galleries	2.50	0.00
3.12	Dump hoppers & Truck tippler foundations	1.30	0.20
3.13	Cable Tunnels, Trenches, etc.	0.60	0.00
	SUB TOTAL (3.0)	28.64	1.77
4. Office/ Non factory buildings, etc.			
4.1	Administrative & Services building	2.10	
4.2	Gate house, Time & Security office	0.30	
4.3	Sales, Dispatch & Logistics offices	0.45	



4.4	General store & yard	0.95	
4.5	Canteens (Executive, Workers, Truckers, etc.)	0.35	
4.6	Shift units/ washrooms (in general/common areas)	0.40	
	SUB TOTAL (4.0)	4.55	
5. Mines offices, buildings, services, etc.			
5.1	Mines offices & basic workshop (Basic provisioning only)	2.17	0.00
5.2	Mines load centre	0.35	0.05
5.3	Magazine building	0.40	0.00
	SUB TOTAL (5.0)	2.92	0.05
6. Residential Colony & Social Amenities			
7.1	Unit Head's Villa - 1 no. of ~250 sqm	0.65	0.00
7.2	TH/CH House - 02 nos of ~225 sqm	1.10	
7.3	Type A Quarters - 8 nos. of ~200 sqm each	3.25	
7.4	Type B Quarters - 16 nos. of ~150 sqm each (Multi Storey)	4.75	
7.5	Type C Quarters - 32 nos. of ~125 sqm each (Multi Storey)	9.00	
7.6	Type D Quarters - 40 nos. of ~100 sqm each (Multi Storey)	8.00	
7.7	Type E Quarters - 120 nos. of ~80 sqm each (Multi Storey)	0.00	
7.8	Bachelor Executives' Hostel - 1 no.	1.75	
7.9	Workers' Dormitories - 2 nos.	0.70	
7.10	Occupational Health Centre	.80	
7.11	Temple complex	2.50	
7.12	Community hall, playground, shops, etc.	1.50	
7.13	Guest house	4.00	
7.14	Club, gymnasium, recreation, etc	1.25	
7.15	School building & allied facilities	10.00	
7.16	Other services (STP, WTP, roads, drains, water supply, green areas, etc.)	14.80	
	SUB TOTAL (7.0)	64.05	0.00
8.	Total (1.0+2.0+3.0+4.0+5.0+7.0)	255.26	29.89
9.	Deep foundations cost-provisioning (Indicative 10% lumpsum provisioning considered as Geotechnical investigations at proposed plant site are at preliminary level only)	30.40	3.00
10.	Indicative GST component on Civil works (average approx.18% of total civil cost considered for TEFR formulation purpose)	54.70	5.37
11.	Total Civil Works Cost (7.0+8.0+9.0)	340.36	38.26
	Grand Total	378.63	

Source: TEFR prepared by HOLTEC Consultancy

Notes:

- The above estimation of cost is as per the TEFR prepared by HOLTEC consultancy. HOLTEC consultancy is very well established consultancy for such type of works and have greatly established themselves in this sphere.
- Building Plans have been prepared by HOLTEC consultancy only.



3. Building Plans has not been sanctioned yet from the concerned Govt. authority. Accordingly, the company has informed that approval the building plan has been submitted to the competent authority through hierarchy structure and it will take at least one-month time for the approval of a building plan. The same information is also confirmed by the lender to us. However, the company has not provided us the application copy for Building plan approval.
4. The concerned building plans provided to us doesn't have individual measurements of various structures.

As per Layout Plan provided by the borrower following buildings are proposed to be constructed at site:

Layout plan submitted by the Borrower during 1st LIE Report:

S.NO.	GENERAL PLANT DESCRIPTION	
1.	LIMESTONE CRUSHER	
2.	BRU FOR CORRECTIVE	
3.	LIMESTONE STOCKPILE	
4.	IRON ORE STOCKPILE	
5.	BAUXITE STOCKPILE	
6.	BRU FOR COAL/PETCOKE	
7.	RAW MATERIAL HOPPERS	
8.	RAW MILL HOUSE	
9.	RAW MILL BAG HOUSE AND LC-103	
10.	BLENDING SILO	
11.	PREHEATER	
12.	KLN & TA DUCT	
13.	COOLER	
14.	COOLER ESP	
15.	C.C.R. & LAB	
16.	CLINKER SILO	
17.	CLINKER TRUCK LOADING	
18.	ADDITIVE SHED	
19.	CEMENT MILL HOPPERS	
20.	FLYASH SILO	
21.	CEMENT MILL HOUSE	
22.	CEMENT SILOS	
23.	PACKING PLANT AND EMPTY BAGS GODOWN	
24.	TRUCK LOADING	
25.	COAL STOCKPILE	
26.	PETCOKE STOCKPILE	
27.	RAW COAL/PETCOKE HOPPER	
28.	COAL/PETCOKE MILL	
29.	SWITCHYARD & LC-108	
30.	LIMESTONE CRUSHER SUB-STATION	
31.	LC-108	
32.	LC-102	
33.	LC-107	
34.	LC-105	
35.	COMPRESSOR HOUSE -1	
36.	COMPRESSOR HOUSE -2	
37.	AFR SHED	
38.	RAW WATER RESERVOIR (100000 M3)+PUMP HOUSE	
39.	RAW WATER RESERVOIR (50000 M3)+PUMP HOUSE	
40.	MECHANICAL & ELECTRICAL WORKSHOP	
41.	GENERAL STORE	
42.	PROJECT OFFICE	
43.	GATE COMPLEX	
44.	ADMINISTRATION BUILDING	
45.	WORKS/RAW MATERIAL/PACKING ENTRY AND EXIT GATE	
46.	RAW MATERIAL WEIGH BRIDGE WITH CABIN	
47.	PACKING PLANT WEIGH BRIDGE WITH CABIN	
48.	STG	
49.	TRUCK PARKING	
50.	RAW AND TREATED WATER TANK + WTP	

Layout plan submitted by the Borrower for 2nd LIE Report (There has been a revision in the Map):

S.NO.	GENERAL PLANT DESCRIPTION	
1.	LIMESTONE CRUSHER	
2.	BRU FOR CORRECTIVE	
3.	LIMESTONE STOCKPILE	
4.	IRON ORE STOCKPILE	
5.	BAUXITE STOCKPILE	
6.	BRU FOR COAL/PETCOKE	
7A.	RAW MATERIAL HOPPERS I	
7B.	RAW MATERIAL HOPPERS II	
8A.	RAW MILL HOUSE I	
8B.	RAW MILL HOUSE II	
9.	RAW MILL BAG HOUSE AND LC-103	
10.	BLENDING SILO	
11.	PREHEATER + COMPRESSOR HOUSE	
12.	KLN & TA DUCT	
13.	COOLER	
14.	COOLER ESP	
15.	C.C.R. & LAB	
16.	CLINKER SILO	
17.	CLINKER TRUCK LOADING	
18.	ADDITIVE SHED	
19.	CEMENT MILL HOPPERS	
20.	FLYASH SILO	
21A.	CEMENT MILL- RE-CIRCULATION BLDG.	
21B.	CEMENT MILL- VRM	
21C.	CEMENT MILL- BAGHOUSE	
22.	CEMENT SILOS	
23.	PACKING PLANT AND EMPTY BAGS GODOWN	
24.	TRUCK LOADING	
25.	COAL STOCKPILE	
26.	PETCOKE STOCKPILE	
27.	RAW COAL/PETCOKE HOPPER	
28.	COAL/PETCOKE MILL	
29.	SWITCHYARD & LC-107	
30.	LIMESTONE CRUSHER LOAD CENTER LC-101	
31.	LC-105	
32.	LC-102	
33.	LC-106	
34.	TRUCK BULK LOADING CONTROL ROOM	
35.	RAW AND TREATED WATER TANK + WTP	
35A.	RE-CIRCULATION WATER TANK	
36.	LDO STORAGE	
37.	AFR SHED	
38.	RAW WATER RESERVOIR (50000 M3)	
39.	RAIN WATER HARVESTING TANK (100000 M3)	
40.	MECHANICAL & ELECTRICAL WORKSHOP	
41.	GENERAL STORE	
42.	PROJECT OFFICE	
43.	GATE COMPLEX	
44.	ADMINISTRATION BUILDING	
45.	WORKS/RAW MATERIAL/PACKING ENTRY AND EXIT GATE	
46.	RAW MATERIAL WEIGH BRIDGE WITH CABIN	
47.	PACKING PLANT WEIGH BRIDGE WITH CABIN	
48.	TRUCK PARKING	
49.	CONSTRUCTION POWER SY & SUB STATION	
50.	OXYGEN PLANT	
51.	SECURITY BARACK	
52.	DUST SUPPRESSION ROOM	

Progress of Building and Civil Structures as per site visit dated 24th February 2022 to Integrated Unit.:

Sr. No.	DESCRIPTION	December 2021 Building Progress (%)	September 2021 Building Progress (%)	December 2021 Foundation progress (%)	September 2021 Foundation Progress (%)
1	Main Factory Building				
1.1	Limestone crusher complex (including retaining wall, ramp, stone pitching, etc.)	0%	0%	0%	0%
1.2	Correctives & Additive crusher house (including short ramp, pitching, etc.)	0%	0%	0%	0%
1.3	Raw mills complex	90%	70%	90%	90%
1.4	Raw mill bag house & stack support structure	80%	40%	80%	80%
1.5	Preheater tower (Six stage, Double string)	85%	55%	90%	90%
1.6	Rotary Kiln Piers, Walkways, TA duct support	80%	30%	80%	45%
1.7	Clinker cooler house (including Dedusting structures & Stack supporting structure)	25%	0%	50%	45%
1.8	Coal Crusher House (incl. short retaining wall, ramp, stone pitching, etc.)	60%	0%	90%	0%
1.9	Coal mill house	85%	40%	85%	85%
1.1	HAG supporting structure	90%	50%	90%	65%
1.11	Cement mill house (Including Dedusting structures & Stack supporting structure)	85%	70%	85%	85%
1.12	Packing plant, truck & bulk loading, bags godown	95%	80%	95%	90%
2	Silos, Hoppers, Storages, Covered Gantry, etc.				
2.1	Limestone preblending stockpile (linear, covered, with S/R foundations)	0%	0%	0%	0%
2.2	Correctives storage (linear, covered, with S/R foundations)	0%	0%	0%	0%
2.3	Solid fuel storage (linear, covered, with S/R foundations)	0%	0%	0%	0%
2.4	Raw mill hoppers & building	85%	70%	85%	85%
2.5	Blending (Raw Meal) silo	95%	85%	95%	90%
2.6	Clinker silo & transport supporting structure	85%	60%	85%	85%
2.8	Clinker load-out silos (4 nos.)	95%	60%	95%	85%
2.9	Gypsum, pond ash and sweetener storage (linear, covered)	75%	45%	75%	75%
2.1	Cement mill hoppers & building	95%	75%	95%	90%
2.11	Flyash silo	90%	90%	90%	90%
2.12	Cement silos	90%	90%	90%	90%
2.13	AFR Storage	0%	0%	0%	0%
3	Auxiliary Services				
3.1	Switch yard	90%	60%	90%	70%
3.2	Main indoor substation	0%	0%	0%	0%
3.3	CCR, including Lab, Technical Offices, etc.	95%	70%	95%	95%
3.4	Load centres & MCC rooms	55%	40%	55%	55%
3.5	Electrical/ Mechanical Workshop & Yard	90%	50%	90%	90%
3.6	Compressor house & rooms	0%	0%	0%	0%
3.8	Belt conveyors, TTs, etc. (plant internal; partly with gallery & partly locally covered)	90%	15%	90%	15%
3.9	Water Storage (UG+OH)	80%	80%	80%	80%
3.1	Weigh Bridges & Weigh Rooms	80%	0%	0%	0%
3.11	Overhead cable galleries	0%	0%	0%	0%
3.12	Dump hoppers & Truck tippler foundations	0%	0%	0%	0%
3.13	Cable Tunnels, Trenches, etc.	20%	20%	20%	20%

4	Office/ Non factory buildings, etc				
4.1	Administrative & Services building	90%	70%	90%	90%
4.2	Gate house, Time & Security office	90%	75%	90%	90%
4.3	Sales, Dispatch & Logistics offices	0%	0%	0%	0%
4.4	General store & yard	90%	0%	90%	0%
4.5	Canteens (Executive, Workers, Truckers, etc.)	0%	0%	0%	0%
4.6	Shift units/ washrooms (in general/common areas)	0%	0%	0%	0%
5	Mines offices, buildings, services, etc.				
5.1	Mines offices & basic workshop (Basic provisioning only)	0%	0%	0%	0%
5.2	Mines load centre	0%	0%	0%	0%
5.3	Magazine building	0%	0%	0%	0%
5.4	Mines garage (Future)	0%	0%	0%	0%

Note:

1. Nomenclature of December 2021 and September 2021 is only for illustration purposes. However the actual site visits were conducted In December 2021 for Financial Quarter ending September 2021 and February 2022 for Financial Quarter ending December 2021.
2. The Physical progress captured in above table is based on approximate observations of status of structures constructed on site during our site inspection and our subsequent discussions held with the engineers with whom the site visit was conducted. Thus the above progress is on approximate basis which may vary from 5%-10%.
3. We have received the list of machineries delivered to the site up to 20th February 2022. The list was randomly verified on site with the help of Package Material Numbers since the machineries were packed in the delivery boxes or casings. To summarise, the project is working on full swing and satisfactory progress was observed during site visit and the project is anticipated to start the commercial operations by April 2023.



3.2 PROJECT 2: GRINDING UNIT (IU)

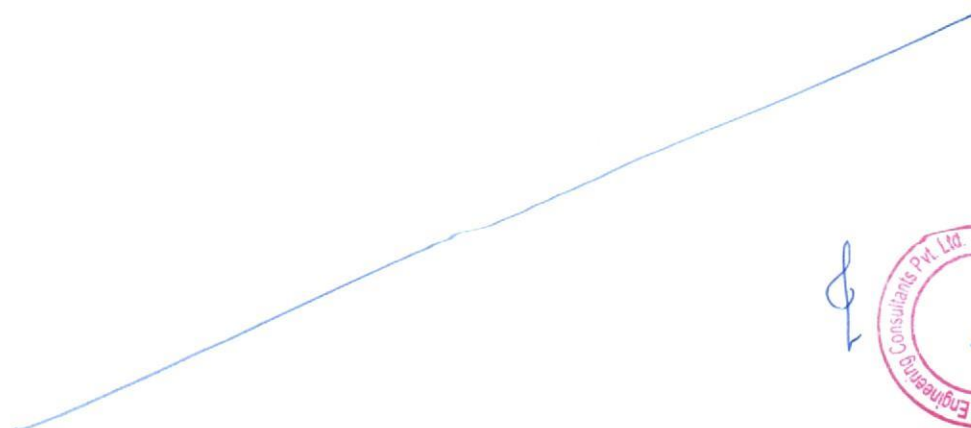
JCL Envisages setting up of below mentioned units/Sections in the Project:

STRUCTURE OF MACHINERIES	CAPACITY OF MACHINERIES
Clinker, Gypsum and Coal/Handling, Transport and Storage	Storage Capacity: 300 TPH
Fly ash and pond ash/Handling, Transport and storage	Storage Capacity: 5000 t
Cement grinding system	Cement mill capacity: 300 TPH
Hot Air generator	-
Cement storage	Silos Capacity: 2 X 5000 t
Cement packing, loading and dispatch	Packing capacity: 2 X 240 TPH
Clinker, Gypsum and Coal/Handling, Transport and Storage	-

For setting up/ development of above listed sections, JCL has estimated Rs.82.05 Crore out of Total project cost amounting to Rs.2970.29 Crore. Bifurcation of Rs.82.05 Crore is as below:

(Amount in Rs. Crore)

Sr. No.	Particulars	Amount
1.	Main factory buildings	17.85
2.	Silos, Hoppers, Storages, Covered Gantry etc.	31.00
3.	Auxiliary services	12.20
4.	Office/Non factory buildings and mine building	2.50
5.	Deep foundations cost provisioning on account of possibility of weaker soil bearing capacity	4.00
6.	Indicative GST on Civil works	14.50
	Total	82.05



→ Details of Rs.82.05 Crore is as below:

(Amount in Rs. Crore)

Sr. No.	Description	Building Cost	Equipment foundation Cost out of Building Cost
1. Main Factory Building			
1.1	HAG supporting structure	2.20	0.30
1.2	Cement mill house & De-dusting building	10.25	2.25
1.3	Packing plant, truck loading, bags godown	5.40	0.05
	SUB TOTAL (1.0)	17.85	2.60
2. Silos, Hoppers, Storages, Covered Gantry, etc.			
2.1	Foundation network for linear & covered storage sheds for Gypsum, Pond ash & Coal	1.10	0.00
2.2	Clinker silo & transport supporting infrastructure	13.65	0.20
2.3	Support structure for cement mill hoppers (hoppers excluded)	2.10	0.10
2.4	Dry Fly ash silo	4.60	0.10
2.5	Cement silos (2nos. RCC silos)	8.50	0.10
2.6	Cement silo (1no. Steel silo)	1.05	0.05
	SUB TOTAL (2.0)	31.00	0.55
3. Auxiliary Services			
3.1	Switchyard & Main receiving substation	0.90	0.30
3.2	CCR, Technical office, Laboratory, etc.	3.80	0.00
3.3	MCC rooms & Load centres	2.10	0.10
3.5	Compressor house	0.45	0.08
3.6	Foundations & pedestals for belt conveyor galleries & transfer towers	1.50	0.00
3.7	Water storage (UG+OH) & Water treatment plant	1.10	0.10
3.8	Weigh bridges & Weigh rooms	0.05	0.15
3.9	BRU & truck tippler foundations with common ramp for receiving clinker & gypsum	1.65	0.35
3.1	Foundations & pedestals for Overhead cable galleries	0.45	0.00
3.11	Cable tunnels & trenches, etc.	0.20	0.00
	SUB TOTAL (3.0)	12.20	1.08
4. Office/ Non factory Buildings, etc.			
4.1	Administration & services office block	0.65	0.00
4.2	Time, security & dispatch offices block	0.20	
4.3	Executives' & workers' canteens	0.65	
4.4	General store & yard	0.80	
4.5	Shift units/ washrooms (in general/common areas)	0.20	
	SUB TOTAL (4.0)	2.50	0.00
7.	Total civil cost (1.0+2.0+3.0+4.0)	63.55	4.23

8.	Deep foundations cost-provisioning (Indicative 5% lumpsum provisioning considered; Geotechnical investigations at proposed plant site not carried out yet)	3.80	0.20
9.	Indicative GST component on Civil works (average approx.18% of total civil cost considered for TEFR formulation purpose)	13.75	0.75
10.	Total Civil Works Cost (7.0+8.0+9.0)	81.10	0.95
Grand Total		82.05	

Notes:

1. The above estimation of cost is as per the TEFR prepared by HOLTEC consultancy. HOLTEC consultancy is very well established consultancy for such type of works and have greatly established themselves in this sphere.
2. Building Plans have been prepared by HOLTEC consultancy only.
3. Building Plans has not been sanctioned yet from the concerned Govt. authority. Clarification was sought from the company regarding the same. Accordingly, the company has informed that approval of a building plan the company officials shared in a consortium meeting under reference that building plan has been submitted to the competent authority through hierarchy structure and it will take at least one-month time for the approval of a building plan. The same information is also confirmed by the lender to us. However we have not received the application copy of the same.
4. The concerned building plans provided to us doesn't have individual measurements of various structures.



As per Layout Plan provided by the borrower following buildings are proposed to be constructed at site:

Layout plan Legends submitted by the Borrower during 1st LIE Report:

S.NO.	GENERAL PLANT DESCRIPTION
1.	BULK RECEPTION UNIT FOR CLINKER/ADDITIVE
2.	CLINKER SILO
3.	GYPSUM/ POND FLYASH & COAL STORAGE YARD
4.	CEMENT MILL HOPPERS
5.	CEMENT MILL BUILDING
6.	CEMENT MILL BAGHOUSE
7.	HOT AIR GENERATOR (HAG)
8.	FLYASH SILO
9.	CEMENT SILOS
10.	PACKING PLANT
11.	EMPTY BAGS GODOWN
12.	TRUCK LOADING PLATFORM
13.	COMPRESSOR ROOM (BELOW C/MILL BAG HOUSE)
14.	WATER TANK AND PUMP ROOM
15.	CCR & ADMIN BLDG. (INCL. LAB & LOAD CENTER)
16.	DOZER ENTRY
17.	CANTEEN
18.	GATE HOUSE
19.	ROAD WEIGH BRIDGE
20.	WEIGH BRIDGE CABIN
21.	TRUCK PARKING
22.	RECEIVING SUBSTATION & METERING ROOM
23.	SANITARY BLOCK
24.	AIR QUALITY MONITORING STATION
25.	GROUND WATER RECHARGING POINT
26.	CEMENT MILL BAGHOUSE STACK
27.	STORE
28.	COAL CRUSHER (FUTURE PROVISION)

Layout plan Legends submitted by the Borrower for 2nd LIE Report (There has been a revision in the Map):

LEGEND		IF IN DOUBT ASK
S.NO.	GENERAL PLANT DESCRIPTION	REMARKS
1.	BOX FEEDER FOR CLINKER	120.800M
2.	CLINKER SILO	120.800M
3.	STORAGE SHED	120.800M
4.	CEMENT MILL HOPPERS	120.800M
5.	CEMENT MILL BUILDING	120.800M
6.	CEMENT MILL BAGHOUSE	120.800M
7.	COAL DUMP HOPPERS AND CRUSHER	120.800M
8.	SPARE	120.800M
9.	HAG BUILDING	120.800M
10.	FLYASH SILO	120.800M
11.	CEMENT SILOS	120.800M
12.	PACKING PLANT	120.800M
13.	EMPTY BAGS GODOWN	120.800M
14.	TRUCK LOADING PLATFORM	120.800M
15.	CCR + LOAD CENTER + LAB + ADMIN BLDG.	120.800M
16.	DOZER ENTRY	120.800M
17.	EMERGENCY DUMP HOPPER	120.800M
18.	GATE HOUSE	120.800M
19.	ROAD WEIGH BRIDGE	120.800M
20.	WEIGH BRIDGE CABIN	120.800M
21.	WEIGH BRIDGE MATERIAL HANDING	120.800M
22.	RECEIVING SUB STATION & METERING ROOM	120.800M
23.	COMP. ROOM BELOW CM BAG HOUSE	120.800M
24.	AIR QUALITY MONITORING	120.800M
25.	STORE	120.800M
26.	SANITARY BLOCK	120.800M
27.	CALCINED CLAY PLANT	120.800M
28.	OIL STORAGE TANK	120.800M
29.	GROUND WATER RECHARGING POINT	120.800M
30.	WATER TANK AND PUMP ROOM	120.800M
31.	PROJECT OFFICE	120.800M
32.	OUTGOING LOGISTIC OFFICE	120.800M
33.	TARPAULIN SHED PACKING PLANT	120.800M
34.	TRUCK PARKING	120.800M
35.	TRANSPORTER OFFICE	120.800M
36.	DRIVERS CANTEEN AND REST ROOM	120.800M
37.	SPACE FOR DG	120.800M



Progress of Building and Civil Structures as per site visit dated 23rd February 2022 to Grinding Unit at Hamirpur:

Sr. No.	Description	December Building Progress %	December Foundation Progress %
1 Main Factory Building			
1.1	HAG supporting structure	0%	0%
1.2	Cement mill house & dedusting building	60%	90%
1.3	Packing plant, truck loading, bags godown	60%	90%
2 Silos, Hoppers, Storages, Covered Gantry, etc.			
2.1	Foundation network for linear & covered storage sheds for Gypsum, Pond ash & Coal	20%	85%
2.2	Clinker silo & transport supporting infrastructure	5%	100%
2.3	Support structure for cement mill hoppers (hoppers excluded)	40%	95%
2.4	Dry Flyash silo	60%	100%
2.5	Cement silos (2nos. RCC silos)	50%	90%
2.6	Cement silo (1no. Steel silo)	0%	0%
3 Auxiliary Services			
3.1	Switchyard & Main receiving substation	0%	0%
3.2	CCR, Technical office, Laboratory, etc.	85%	95%
3.3	MCC rooms & Load centres	45%	50%
3.5	Compressor house	90%	90%
3.6	Foundations & pedestals for belt conveyor galleries & transfer towers	10%	70%
3.7	Water storage (UG+OH) & Water treatment plant	25%	30%
3.8	Weigh bridges & weigh rooms	70%	90%
3.9	BRU & truck tippler foundations with common ramp for receiving clinker & gypsum	0%	50%
3.1	Foundations & pedestals for Overhead cable galleries	0%	50%
3.11	Cable tunnels & trenches, etc.	20%	25%
4 Office/ Non factory Buildings, etc			
4.1	Administration & services office block	0%	0%
4.2	Time, security & dispatch offices block	0%	0%
4.3	Executives' & workers' canteens	0%	0%
4.4	General store & yard	0%	0%
4.5	Shift units/ washrooms (in general/common areas)	0%	0%

Note:

1. Nomenclature of December 2021 and September 2021 is only for illustration purposes. However the actual site visits were conducted for Financial Quarter ending September 2021 report was carried on in December 2021 and for Financial Quarter ending December 2021 report on February 2022.
2. The Physical progress captured in above table is based on approximate observations of status of structures constructed on site during our site inspection and our subsequent discussions held with the engineers with which the site visit was conducted. Thus the above progress is on approximate basis which may vary from 5%-10%.
3. Since the borrower has not provided us the breakup of expenditure in separate heads and in the absence of quantity constructed we have only given the general analysis of status of construction that was observed during site visit. However we have received the list of machineries delivered to the site up to 20th February 2022. The list was randomly verified on site with the help of PM No. since the machineries were packed in the delivery boxes or casings. To summarise, the project is working on full swing and satisfactory progress.



was observed during site visit and the project is anticipated to start the commercial operations by April 2023.

4. PLANT MACHINERY & EQUIPMENT:

3.1 PROJECT 1: INTEGRATED UNIT (IU)

JCL proposes to install below mentioned machineries/Equipment at the project site:

- Crushers
- Stockpile stackers and reclaimers
- Clinker extraction system,
- Steel for duct/chute/hoppers/chimneys
- Plant belt conveyors
- 4 no's of passenger lifts
- Compressors and dries
- HT motors
- LT motors
- Fire detection system
- Air conditioning
- Misc. electrical

For installing above listed machinery/Equipment, JCL has estimated Rs.1,285.24 Crore out of Total project cost amounting to Rs.2970.29 Crore. Bifurcation of Rs.1,285.24 Crore is as below:

(Amount in Rs. Crore)

Details of Mechanical and Electrical Equipment's		
Sr. No.	Description	F.O.B.
1.	Total Cost of Mechanical and electrical equipment's	895.11
2.	Equipment for distribution of Power	148.63
3.	Waste heat recovery system (WHRS) based power plant	200.00
4.	Mining Machinery	41.50
	Total	1285.24



Detailed breakup of **Mechanical and Electrical equipment's** and **Equipment for Distribution of power** is as below:

(Amount in Rs. Crore)

Details of Mechanical and Electrical Equipment's			
Sr. No.	Description	F.O.B.	F.O.R.
1.0	Mechanical Equipment		
1.1	Crushers		
1.1.1	Limestone crushing and wobbler	-	20.00
1.1.2	Coal Crushing	-	1.00
1.1.3	Additive/ Corrective Crusher	-	1.50
1.2	Stockpiles stackers & Reclaimers including the following:		
1.2.1	Limestone Storage, Stacker & Reclaimer including shed	-	26.66
1.2.2	Corrective Storage Stacker & Reclaimer including shed	-	17.01
1.2.3	Coal storage stacker and reclaimer including shed	-	15.73
1.3	Material Grinding and Pyro Processing including the following:		
1.3.1	Raw Material and Coal Drying and Grinding including Baghouse	23.15	92.60
1.3.2	Blending Silo feed B/El, Silo, kiln feed, Clinkerisation (upto clinker silo extraction), Fine coal firing from silo extraction including ESP	25.00	100.00
1.3.3	Clinker transport to mill through DPC, Clinker drying & grinding (Up to cement silo feed B/E) including Bag house	28.00	42.00
1.4	Cement Silo's and packing plant		
1.4.1	Clinker extraction system	-	1.50
1.4.2	Cement extraction from cement silo up to rotary packers including steel cement silo		7.64
1.4.3	Packing, truck loaders and bulk loading.		8.60
1.4.4	Clinker loading to trucks		2.50
1.4.5	AFR system with Shed		20.77
1.4.6	Fly ash Silo	-	1.50
	Sub-total of Main Machinery (1.0)	76.15	359.01
2.0	MECHANICAL AUXILIARY EQUIPMENT(S)		
2.1	Steel for Duct/ Chute/hoppers/chimneys 8,000 t @ Rs.46200/ t	-	36.96
2.2	Plant belt conveyors including belting 3,500 m @ Rs.45,000/ m	-	15.75
2.3	Over Land belt conveyor (OLBC) 000 m @ Rs.55,000/ m	-	
2.5	Refractory & Castable 8,000 t @ Rs.5,000/ t	-	28.00
2.6	Insulation 70,000 m2 @ Rs.1130/ sq. m	-	7.91
2.7	Lubricants	-	1.60
2.8	Passenger Lifts (4 nos)	-	1.50
2.9	Roots Blowers	-	
2.10	Compressors & Driers including piping	-	3.50
2.11	Misc. items like Water Tank, Water Pump, Water Piping, Compressed Air Piping, etc.	-	4.62
2.12	BRU & Truck Tippler (4 nos.)		2.80

2.13	Cranes/Hoists and other misc. items including HAG, N2 system etc.	-	6.50
	Sub-total of Mechanical Auxiliary Equipment (2.0)	0	109.14
	Total of Mechanical Equipment (1.0 + 2.0)	76.15	468.15
3.0	Electrical and Instrumentation		
3.1	HT Motors	-	9.60
3.2	LV & MV AC variable Speed Drives	-	15.05
3.3	LT Motors	-	6.27
3.4	Cross Belt Analyser, XRF, XRD, etc	2.50	4.81
3.5	Control & Automation and Field Instruments & Robo Lab	-	24.57
	Total Electrical and Instrumentation (3.0)	2.50	60.30
	Total Mechanical and Electrical equipment (1.0+2.0+3.0)	78.65	528.45
4.0	Landed cost of equipment		
4.1	Imported equipment		
4.1.1	F.O.B Cost		78.65
4.1.2	Ocean Freight, Insurance, etc. @ 6 % of (4.1.1)		4.72
4.1.3	Basic import duty @ 7.5 % of (4.1.1 + 4.1.2)		6.25
4.1.4	IGST @ 18 % of (4.1.1 to 4.1.3)		16.13
4.1.5	Clearing/ Loading/ Inland freight, etc. @ 5 % of (4.1.1 + 4.1.2)		4.17
	Sub-total of imported equipment (4.1)		109.92
4.2	Indigenous Equipment		
4.2.1	F.O.R cost		528.45
4.2.2	GST @ 18 % on F.O.R.		95.1201
4.2.3	Freight, handling, insurance, etc. @ 5 % of 4.2.1		26.42
	Sub-total of indigenous equipment (4.2)		649.99
	Total landed cost of equipment (4.1 + 4.2)		759.91
5.0	Spare parts @ 5 % of F.O.B. + F.O.R.		30.35
6.0	Fabrication of Duct/ Chute/hoppers/chimneys 8,000 t @ Rs 20,000/ t		16.00
7.0	Erection, commissioning & supervision charges @ 12 % of (F.O.R. + F.O.B)		72.85
8.0	GST @18% on (6.0+7.0)		15.99
	Total cost of Mechanical and Electrical equipment		895.11
	TOTAL COST OF EQUIPMENT (4.1+ 4.2+5.0+6.0+7.0+8.0)		895.11



(Amount in Rs. Crore)

Equipment's for Distribution of Power		
Sr. No.	DESCRIPTION	F.O.R.
1.	Power distribution equipment	
1.1	132 kV Transmission line ~45 Km	22.50
1.2	132 kV yard at sub-station	1.00
1.3	Development charges/Security deposit	4.90
1.4	Supervision charges SEB (10% of line cost)	2.25
1.5	Incomer switchyard and power transformer	5.87
1.6	11 KV Switch board with Capacitor Bank	6.61
1.7	11/0.433 kV , Distribution transformer with bus duct	5.44
1.8	LT switchboards and bus trunkings	4.45
1.9	MCC & Push button Station	7.09
1.10	LV Capacitor	1.80
1.1	Capacitor and Reactor for 11 KV HT motors	1.80
1.12	LRS/GRR/GRS	1.80
1.13	Earthing, cable trays & Erection hardware	6.00
1.14	Cables - Power, Control & Instrumentation	18.18
1.15	Plant Illumination with LDB	3.72
1.16	Battery and Battery Charger with LRS	0.83
1.17	Ventilation System for Electrical Building	1.43
1.18	Air Conditioning	1.85
1.2	Fire Detection System	0.74
1.2	PA system for intercom and Telephone exchange	0.45
1.2	Mine Power Distribution	0.00
1.2	DG Sets for Construction (2 MW)	1.13
1.2	Construction Power	2.61
1.24	EMS/Synchronisation/load shedding	0.75
1.25	Non-plant buildings electrification	0.85
1.26	Misc. Electricals	0.50
	Sub total	104.55
2.0	Landed cost of equipment	
2.1	F.O.R cost	104.55
2.2	GST @ 18 % on F.O.R.	18.82
2.5	Freight, handling, insurance, etc. @ 5 % of 4.2.1	5.23
	Total landed cost of equipment	128.60
3.0	Spare parts @ 5 % of FOR cost	5.23
4.0	Erection, commissioning & supervision charges @ 12% of F.O.R.	12.55
5.0	GST @18% of 4.0	2.26
	Total cost of power distribution equipment	148.63

Apart from the above expenditure the borrower has also envisaged Waste heat recovery system (WHRS) amounting to Rs.200.00 Crore and mining machineries amounting to Rs.41.50 Crore.

Physical Progress of Plant and Machineries as per site visit dated 24th February 2022 to Integrated Unit.:

1. We have received the list of machineries delivered to the site up to 20th February 2022. As per the said list about 1300 machineries including small components have been delivered to the site. Therefore we have randomly verified the machineries delivered to the site with the help of Package material Nos. since the machineries were packed in the delivery boxes or casings.
2. Following machineries were randomly verified during site visit to the Integrated unit:
 - Structural steel used in hoppers
 - Components of Cement mill
 - Components of Coal mill
 - Structural steel works in pre heater building
 - Fan blades
 - Fan casings
 - Coal mill ring
 - Rails in coal stacker and Reclaimer area
 - Stack pieces for Gas Duct
 - Shell ground works
 - Smoke chamber works in pre heater section
 - Bag filter works
 - EOT Crane against PM-600
 - Spiral Chute against PM-111
 - Drive Base frame against PM-729
 - Cooler Fan against PM-572
 - Centrifugal Blower against PM-1163
 - Rotary Air Lock Valve against PM-1207
 - Shaft casing against PM-203, PM-204
 - Lines for Bulk Loading Bin against PM-496
 - Air receiver against PM-156
 - Parts of conveyor against PM-902
 - Magnetic separator against PM-918
 - Tube Sheet against PM-945
 - Chain guide bending portion against PM-358
 - Other miscellaneous machinery and other structural steel fabrication works.



3. During site visit we have asked the borrower to open few packed boxes to have a sample verification of machineries. Accordingly following machineries were verified on site after opening of boxes/Plastic Packing.

- EOT Crane against PM-600
- Spiral Chute against PM-111
- Drive Base frame against PM-729
- Cooler Fan against PM-572
- Centrifugal Blower against PM-1163
- Rotary Air Lock Valve against PM-1207
- Shaft casing against PM-203, PM-204
- Lines for Bulk Loading Bin against PM-496
- Air receiver against PM-156
- Parts of conveyor against PM-902
- Magnetic separator against PM-918
- Tube Sheet against PM-945
- Chain guide bending portion against PM-358

4. Detailed Package Number verified during site visit are as below:

PM-600	PM-923	PM-551	PM-647	PM-1244	PM-203	PM-800	PM-988	PM-1416	PM-511	PM-1125
PM-1247	PM-759	PM-446	PM-63	PM-586	PM-201	PM-272	PM-854	PM-1327	PM-950	PM-950
PM-111	PM-1163	PM-458	PM-710	PM-1202	PM-651	PM-1335	PM-768	PM-572	PM-848	PM-848
PM-1117	PM-1207	PM-1278	PM-551	PM-1031	PM-601	PM-945	PM-1345	PM-30	PM-1240	PM-1240
PM-62	PM-1277	PM-902	PM-446	PM-966	PM-593	PM-853	PM-798	PM-251	PM-156	PM-156
PM-889	PM-744	PM-988	PM-458	PM-721	PM-635	PM-1045	PM-800	PM-1246	PM-718	PM-718
PM-457	PM-345	PM-516	PM-1278	PM-876	PM-637	PM-358	PM-272	PM-1151	PM-710	PM-710
PM-1108	PM-734	PM-768	PM-1350	PM-22	PM-495	PM-918	PM-1335	PM-1152	PM-1350	PM-1350
PM-1115	PM-1399	PM-1345	PM-902	PM-1187	PM-496	PM-10	PM-945	PM-1045	PM-42	PM-42
PM-729	PM-204	PM-798	PM-516	PM-1133	PM-494	PM-11	PM-853	PM-358	PM-647	

4.2 PROJECT 2: GRINDING UNIT (GU)

JCL proposes to install below mentioned Machineries/Equipment:

- Material conveying system
- Material receiving system
- Passenger lifts
- Compressors and dryers
- HT Motors
- LT motors
- Auxiliary bag filters
- LT Switchboard and trunking
- UPS, Battery and Battery charger
- Air conditioning system
- DG Set
- Other misc. electrical

For installing above listed machineries/Equipment, JCL has estimated Rs.211.63 Crore out of total project cost amounting to Rs.2970.29 Crore. Bifurcation of Rs.211.63 Crore is as below:

(Amount in Rs. Crore)

Details of Mechanical and Electrical Equipment's		
Sr. No.	Description	F.O.B.
1.	Total Cost of Mechanical and Electrical equipment (Net of GST)	149.30
2.	GST Component on P&M	24.50
3.	Equipment for Distribution of Power (Net of GST)	25.60
4.	GST component on power distribution equipment	4.20
5.	Equipment foundations	4.23
6.	Secondary equipment	
6.1	Laboratory equipment and Setup	0.85
6.2	Firefighting equipment and hydrant system	0.40
6.3	Water treatment system	0.50
6.4.	Multi utility equipment	1.30

6.5	Weighbridges	0.75
	Grand Total	211.63

Detailed breakup of **Mechanical and Electrical equipment's** and **Equipment for Distribution of power** is as below:

(Amount in Rs. Crore)

Details of Mechanical and Electrical Equipment's			
Sr. no.	Description	F.O.B.	F.O.R.
1.0	Mechanical Equipment		
1.1	Gypsum & Pond ash handling, storage and transport to mill feed hoppers	-	0.75
1.2	Dry Fly Ash handling, transport, storage & feeding to mill	-	1.50
1.3	Coal handling, storage, feeding and transport (including HAG system)	-	2.05
1.4	Clinker transport, handling, storage, extraction & feeding system	-	2.25
1.5	Clinker grinding circuit & feeding to cement silos	24.00	36.00
1.6	Cement mill de-dusting	-	6.00
1.7	Cement extraction from silos up to packers	-	3.10
1.8	Packing, loading & dispatch (2 packers, 6 truck loaders and 1 bulk loader)		8.10
	Sub-total of Main Machinery (1.0)	24.00	59.75
2.0	MECHANICAL AUXILIARY EQUIPMENT(S)		
2.1	Structural Steel for sheds, hoppers, conveyors, ducts, chutes, etc. (approx. 2,250 t @Rs.50,000/ t)	-	11.25
2.2	Material conveying system (approx.1200m @Rs.40,000/ m)	-	4.80
2.3	Insulation (approx.8,500sqm @Rs.1000/ sqm)	-	0.85
2.4	Auxiliary bag filters (approx. 12nos.)	-	0.60
2.5	Lubricants	-	0.15
2.6	Material receiving system (Bulk receiving units with truck tippler facility, 2 nos.)	-	2.10
2.7	Passenger lift (for CCR)	-	0.25
2.8	Roots blowers	-	0.35
2.9	Compressors & dryers	-	0.60
2.10	Misc. items like water pump & pipeline, compressed air piping, etc.	-	0.60
2.11	Cranes/Hoists and other miscellaneous items, etc.	-	1.00
	Sub-total of Mechanical Auxiliary Equipment (2.0)	0.00	22.55
	Total of Mechanical Equipment (1.0 + 2.0)	24.00	82.30
3.0	Electrical and Instrumentation		
3.1	HT motors	-	2.35
3.2	LV & MV AC variable Speed Drives	-	1.65
3.3	LT motors	-	1.05
3.4	Table-top XRF	-	0.70
3.5	Control & Automation	-	2.60
	Total Electrical and Instrumentation (3.0)	0.00	8.35
	Total Mechanical and Electrical equipment (1.0+2.0+3.0)	24.00	90.65
4.0	Landed cost of equipment		

4.1	Imported Equipment	
4.1.1	F.O.B. Cost	24.00
4.1.2	Provisioning for Ocean Freight, Insurance, etc. (approx.@6% of 4.1.1)	1.45
4.1.3	Basic Import Duty provision (approx. @7.5% of 4.1.1 & 4.1.2)	1.90
4.1.4	GST (all taxes assumed to be clubbed under GST, approx.@18% of 4.1.1 to 4.1.3)	4.90
4.1.5	Clearing/ Loading/ Inland Freight, etc. (approx.@5% of 4.1.1 + 4.1.2)	1.25
	Sub-total of Imported Equipment (4.1)	33.50
4.2	Indigenous Equipment	
4.2.1	F.O.R. cost	90.65
4.2.2	GST provisioning on F.O.R. cost (@18% of 4.2.1)	16.30
4.2.3	Provisioning for freight, handling, insurance, etc. (approx.@5% of 4.2.1)	4.55
	Sub-total of Indigenous Equipment (4.2)	111.50
	Total Landed Cost of Equipment (4.1 + 4.2)	145.00
5.0	Provisioning for Spares (approx. @5% of F.O.B. & F.O.R. landed cost)	7.25
6.0	Fabrication of Str. Steel as in 2.1 above (2,250 t @Rs.20,000/ t)	4.50
7.0	Erection, Commissioning & Supervision Charges (approx.@12 % of F.O.R. + F.O.B.)	13.75
8.0	GST on Fabrication, erection & supervision charges (approx.@18% on (6.0+7.0))	3.30
	Total cost of Mechanical and Electrical equipment	173.80
A	Total landed cost of equipment	173.80
C	GST component on Plant & Machinery (approx. provisioning)	24.50
B	Total landed cost of equipment (Net of GST)	149.30



(Amount in Rs. Crore)

(Details of Power Distribution Equipment's)			
Sr. no.	Description	F.O.B.	F.O.R.
1.	Power distribution equipment		
1.1	Transmission line from Grid substation (33kV, approx.6 km)	-	3.60
1.2	Incomer switchyard & power transformer	-	2.00
1.3	6.6 kV switchboard	-	1.80
1.4	6.6 /0.433 kV distribution transformer	-	1.00
1.5	LT switchboard & trunking	-	1.20
1.6	MCC & push button Station	-	2.10
1.7	LV capacitors & control panel	-	0.35
1.8	Lighting transformer & main lighting distribution board	-	0.60
1.9	Cables (Power, Control & Instrumentation)	-	3.75
1.10	Construction power cables	-	0.35
1.11	Earthing, lighting protection & erection hardware		1.50
1.12	Plant Illumination	-	0.15
1.13	UPS, battery & battery charger	-	0.25
1.14	Ventilation system for electrical buildings	-	0.20
1.15	Air conditioning	-	0.20
1.16	PA system for intercom	-	0.05
1.17	Fire detection system	-	0.15
1.18	DG set for construction & emergency power supply	-	1.25
1.19	Miscellaneous electrical	-	0.25
	Sub-total (1.0)	-	20.75
2.0	Landed cost of equipment		
2.1	Imported Equipment		
2.1.1	F.O.B. Cost		0.00
2.1.2	Ocean Freight, Insurance, etc. (approx.@6% of 2.1.1)		0.00
2.1.3	Basic Import Duty (@7.5% of 2.1.1 & 2.1.2)		0.00
2.1.4	GST (all taxes assumed to be clubbed under GST, approx.@18% of 2.1.1 to 2.1.3)		0.00
2.1.5	Clearing/ Loading/ Inland Freight, etc. (approx.@5% of 2.1.1 + 2.1.2)		0.00
	Sub-total of Imported Equipment (2.1)		0.00
2.2	Indigenous Equipment		
2.2.1	F.O.R. cost		20.75
2.2.2	GST provisioning on F.O.R. cost (@18% of 2.2.1)		3.75
2.2.3	Provisioning for freight, handling, insurance, etc. (approx.@5% of 2.2.1)		1.05
	Sub-Total (2.0)		25.55
	Total Landed Cost of Equipment (2.1 + 2.2)		25.55
3.0	Provisioning for Spares (approx. @5% of total landed cost)		1.30
4.0	Erection, Commissioning & Supervision Charges (approx.@12 % of 2.1.1 + 2.2.1)		2.50
5.0	GST on erection & supervision charges (approx.@18% of 4.0)		0.45

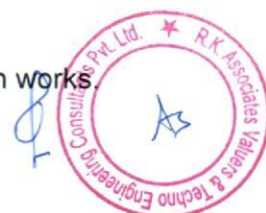


A.	Total landed cost of Power Distribution Equipment (2.0+3.0+4.0+5.0)	29.80
B.	GST component on Power distribution (approx. provisioning)	4.20
C.	Total landed cost of Power Distribution Equipment (Net of GST)	25.60

Note: Due to confidentiality factor cited by the borrower, borrower has not shared with us any PO/Quotations/ Invoices of suppliers of above-mentioned machineries. However, we have physically verified some major contracts signed by them at borrower's registered office located in Kanpur during our first site visit dated 8th December 2021. Copies of the same have not been availed to us.

Progress of Plant and Machineries as per site visit dated 23rd February 2021 to Grinding Unit.:

1. We have received the list of machineries delivered to the site up to 20th February 2022. As per the said list approx. 1000 machineries have been delivered to the site including small components. Therefore we have randomly verified the machineries delivered to the site with the help of Package material Nos. since the machineries were packed in the delivery boxes or casings.
2. Following machineries were randomly verified during site visit to the Integrated unit:
 - Weigh Bridges
 - 11KV construction power Transformer
 - Fabrication works of Cement silo bin, packing plant bin, fly ash bin and truck loading bin cylindrical part rolling and fit up completed.
 - Fabrication of Cement silo bin under progress
 - Mixing bin
 - UPS, Snub pulleys, Rollers, Frame. Tail pulley with Plummer block bearing against PM No. 98
 - Bag filter capsule assembly with casing and hopper assembly, inspection shaft casing against PM No. 71
 - Truck loading machine, filter bag against PM No. 32
 - Pneumatic butterfly valve against PM no. 109
 - Auxiliary power distribution board against PM No. 100
 - Cooling tower, Motor against PM No. 89
 - Power transformer accessories against PM No. 163
 - Other miscellaneous machinery and other structural steel fabrication works.



3. During site visit we have asked the borrower to open few packed boxes to have a sample verification of machineries. Accordingly following machineries were verified on site after opening of boxes/Plastic Packing:

- UPS, Snub pulleys, Rollers, Frame. Tail pulley with Plummer block bearing against PM No. 98
- Bag filter capsule assembly with casing and hopper assembly, inspection shaft casing against PM No. 71
- Truck loading machine, filter bag against PM No. 32
- Pneumatic butterfly valve against PM no. 109
- Auxiliary power distribution board against PM No. 100
- Cooling tower, Motor against PM No. 89
- Power transformer accessories against PM No. 163

4. Detailed Package Number verified during site visit are as below:

PM-4	PM-56	PM-116
PM-9	PM-58	PM-120
PM-11	PM-62	PM-125
PM-25	PM-63	PM-127
PM-32	PM-66	PM-128
PM-36	PM-70	PM-131
PM-38	PM-92	PM-136
PM-39	PM-94	PM-143
PM-42	PM-96	PM-156
PM-44	PM-101	PM-159
PM-46	PM-102	PM-168
PM-48	PM-103	PM-174
PM-49	PM-109	PM-176
PM-52	PM-110	PM-177
PM-53	PM-114	PM-182
PM-55	PM-115	--

5. In the absence of quantity constructed for both the units we have only given the general analysis of status of construction that was observed during site visit and as per our observations the project is working on full swing and satisfactory progress was observed during site visit and the project is anticipated to start the commercial operations by April 2023.



PART D

PROJECT CONSULTANTS, CONTRACTORS & SUPPLIERS

The borrower has provided the list of Contractors hired in the project for project site at Hamirpur, Uttar Pradesh and Project site at Panna, Madhya Pradesh. As per the list of contractors provided to us the borrower has signed agreements amounting to Approx. Rs.1066 Crore which includes agreements signed for Hamirpur project amounting to approx. Rs.89 Crore and agreements signed for Panna project amounting to Rs.977 Crore. Details of vendors is as below:

(Amount in Rs. Crore)

AGREEMENTS FOR GRINDING UNIT AT HAMIRPUR, UTTAR PRADESH		
Description	Vendor	Agreement Amount
LOI For environment Clearance for GU at Hamirpur	Environment and technical Research centre, Lucknow	0.09
Preparation of TEFR for Under construction GU At Hamirpur, UP	Holtec consulting Pvt. Ltd.	0.08
Engg. Consultancy	Holtec consulting Pvt. Ltd.	1.55
Raw mill and Cement mill for Hamirpur	Loesche (India Part)	39.38
Raw mill and Cement mill for Hamirpur	Loesche (Foreign Part)	28.91
Boundary wall construction	M/s Vishal Enterprises	1.45
Packing plant for Hamirpur	Beumer	14.91
Engg. Services	Loesche, India	2.94
Grand Total as During 1st LIE Report		89.31

(Amount in Rs. Crore)

AGREEMENTS FOR INTEGRATED UNIT AT PANNA, MADHYA PRADESH		
Description	Vendor	Agreement Amount
Boundary wall construction	Apex Precast	0.74
Topographical Wall Construction	RK Consultants and Contractors	0.24
Consultancy for Water lifting from ken river	Vexl Environ Project private limited	0.43
Master plan , architectural , landscape design and interior design services for panna colony	R+D Studio	0.61
3.15 MVA 33.0.433 KVA Transformer	Voltamp	0.32
Supply of TMT Bar	TATA Steel	1.69
500 KVA DG Set	Sudhir Power limited	0.29
Brick masonry Boundary wall work at panna site	Jay shree mahakal contractor	0.60
Crushing system	L&T	23.64
WHRS	Thermax	99.50
ESP and Bag hOuse	Himenviro	21.25
Crushing system 2 years spare	L&T	0.96
Weigh Bridge 100 MT-4Nos.	Rice lake weighing systems India Limited	0.56
Engg. services	Loesche	4.07

Civil stacker, reclaimers, Pyro, blending and clinker silo, mech. Staker reclaimers	KEC International limited	97.71
TMT supply-4000MT/PMC Services	KEC International limited	20.64
Mechanical fabrication erection for Pyro	Hajee AP Bava	53.50
PMC services	Hajee AP Bava	1.50
Civil and structural work, WHRS, Cement Mill, packing plant, Cement mill silo and Fly ash silo	Buildwell roject india pvt. Limited	29.99
Site grading and levelling work at panna	Karni Construction	2.27
Civil consultancy order	SecMec	2.75
Road and Drainage work	Karni construction	12.83
Mech. & E&I Consultancy	Holtec	6.15
Civil work for workshop, Project office and Weighbridge	Shree ram associates	2.53
Piling works	Parul foundation	2.66
Pre-Cast Boundary wall work at panna site	Tirupati Cement articles	0.89
Cooler for Pyro	IKN engineering India Pvt. Ltd.	28.95
Raw mill and pyro	Thyssen	143.81
Raw mill and cement mill for Panna	loesche (India Part)	73.13
Raw mill and cement mill for Panna	loesche (Foreign Part)	25.97
Packing plant for Panna	Beumer	21.99
Pre-cast boundary wall work at panna site	RKB Enterprise	0.81
Precast boundary wall	Maharishi parashar Buildtech LLP	0.44
Precast boundary wall	Mohira precast Narsingpur	0.45
stacker and reclaimers	Takraf	34.55
Precast boundary wall	Tiranag precast	0.34
Construction cable	Havells india Limited	0.57
Construction of guest house and hostel block	M/s Asiatic	4.59
Civil piling work	M/s KEC	97.71
Mineral exploration in Kakra block	M/s GDS India	1.97
Procurement of steel	SAIL Jabalpur	15.22
Boundary wall construction	Amit singh Construction Borrower	0.50
BLS type ambulance	CK Motor	0.18
Water lifting arrangement from ken river	M/s aanjana pump services	3.15
hiring of hydraulic drilling rig	M/s National infra projects	0.27
Hiring of 2nd Hydraulic drilling rig	M/s National infra projects	0.27
Supply of 28mm TMT	JSPL	2.64
Supply of MS Plate	Shakti steel	0.79
Oxygen/Nitrogen plant capacity 80 Cu. M	Sanghi organisation, Mumbai	1.02
Rain protection cover	M/s ARDEE engineering	40.00
Service contract for steel procurement	Shree Ganpatlal omkarlal agarwal and borrower	1.95
Supply of Dry Fly Ash	Ramesh chand grover	0.43
Civil structural work-Plant buildings	M.s kamal Builders	15.25

Civil structural work-Crusher section	M/s Karni	9.23
Bought out items	Beumer	8.31
Bought out items	Mahindra tsubaki	5.65
Bought out items	Tsubaki	2.32
Bought out items	Beumer Germany	4.83
132 KV Transmission line	Suresh techno (India) LLP	21.00
Turbine for WHRS	Siemens	12.90
Steel supply	SAIL Indore	3.37
Site grading and levelling works	M/s Amit singh construction	0.70
Construction of Service road	M/s Amit singh construction	0.43
Supply and installation for pre-fabricated security barrack	M/s tinny Craft	0.63
Security services	SIS	1.98
Grand Total as During 1st LIE Report		976.60

Note: The above information has been incorporated on the basis of details provided by the borrower. However, due to confidentiality factor cited by the borrower, we have not received PO/ Quotations of the above listed vendors and have relied on the duly certified information provided by the borrower only. We have also physically verified some major contracts signed by them at borrower's registered office located in Kanpur on 8th December 2021. Also, as informed by the borrower, they have not signed any major agreement after the first LIE Report.



PART E

PROJECT COST & MEANS OF FINANCE

- 1. TOTAL PROJECT COST:** Jaykaycem (Central) Limited has estimated the Total Project Cost amounting to Rs.2970.29 Crore which has been proposed to be funded in DER of 1.30 i.e. approx. 43% Equity and 57% Debt. Details of Rs.2970.29 Crore is as below:

(Amount in Rs. Crore)

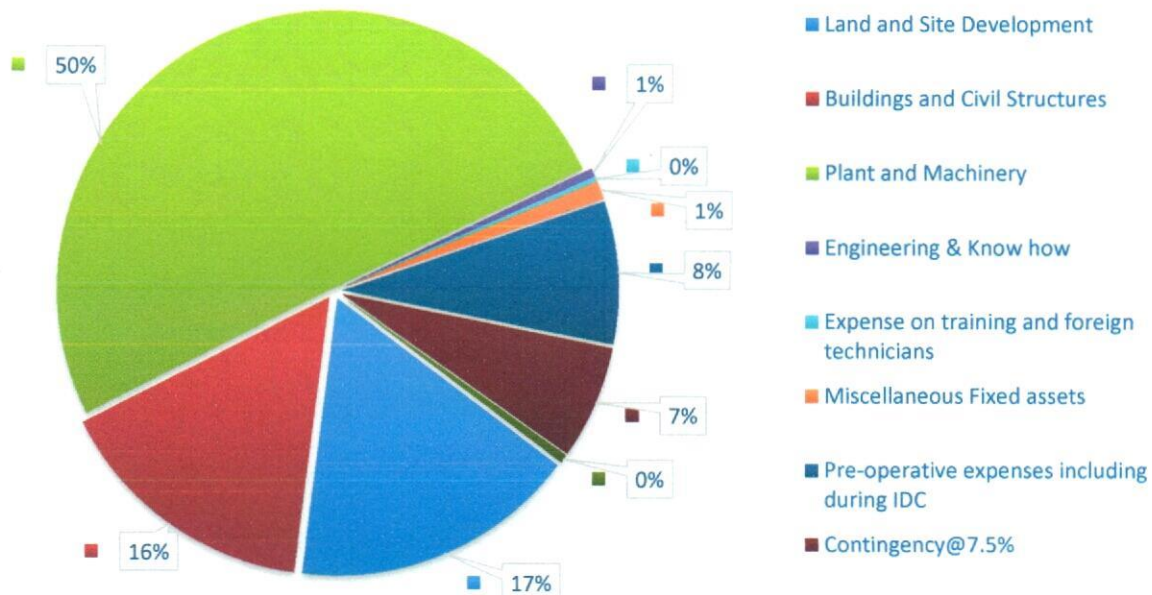
Sr. No.	Particulars	Integrated Unit	Grinding Unit	Common expenses	Amount
1.	Land and Site Development	474.95	22.70	-	497.65
2.	Buildings and Civil Structures	378.63	82.05	-	460.68
3.	Plant and Machinery	1285.24	211.63	-	1496.87
4.	Engineering & Know how	11.00	4.00	-	15.00
5.	Expense on training and foreign technicians	7.50	0.50	-	8.00
6.	Miscellaneous Fixed assets	30.17	2.10	-	32.27
7.	Pre-operative expenses including during IDC	-	-	247.78	247.78
8.	Contingency@7.5%	-	-	197.10	197.10
9.	Margin money for working capital	-	-	14.94	14.94
	Total Project Cost	2187.50	322.98	459.82	2970.29

Observations & Comments:

1. The basis of the above estimated cost of Project is as per the estimates provided by the Jaykaycem (Central) Limited and TEFR prepared by HOLTEC Consultancy.
2. Details of Project cost are covered in PART C of this report.
3. Details of Land Purchased is not provided by the borrower.



COST OF PROJECT (Rs. 2970.29 Crore)



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2. CURRENT STATUS & TOTAL EXPENDITURE INCURRED TILL DATE: Details of the expenditure in the Table below is recorded for the expenditure incurred up to 31st December 2021.

SR. NO.	PARTICULARS	TOTAL ESTIMATED COST	INCURRED TILL 31.12.2021	CURRENT STATUS OF WORK AND REMARKS
		(All figures in cr.)		
1.	Land & Site Development	Allocated Amount	497.65	The borrower has estimated an expenditure amounting to Rs.497.65 Crore towards Land and site development. As per the CA certificate dated 20 th January 2022 with UDIN. 22424004AAAABX4556 the borrower has made an expenditure amounting to Rs.259.13 Crore towards land and site development. Details of expenditure were sought from the borrower. However the same is awaited because of which we are unable to analyse the cost incurred towards Land and have relied on CA certificate provided by the borrower for the expenditure incurred towards land and site development.
		Expenses incurred up to last LIE report	208.49	
		Incurred up to period ending December 2021	259.13	
		Expenditure approved under his head	NA	
2.	Building & Civil Structures	Allocated Amount	460.68	The borrower has estimated an expenditure amounting to Rs.460.68 Crore towards Building and civil structures. However as per the breakup of expenditure mentioned in CA certificate prepared by RK parmathi & Co. Chartered accountants dated 20 th January 2022 with UDIN. 22424004AAAABX4556, no separate expenditure has been shown towards Building and Civil structures and Plant and Machineries. Therefore, we have relied on the expenditure given by CA for the
		Expenses incurred up to last LIE report	432.34	
		Incurred up to period ending December 2021	664.63	
		Expenditure approved under his head	NA	

				expenditure incurred towards Building & civil cost and purchase/Fabrication of machineries.
3.	Plant and Machinery	Allocated Amount	1496.87	The borrower has estimated an expenditure amounting to Rs.1496.87 Crore towards Plant and machinery However as per CA certificate and our subsequent discussion with the borrower the cost incurred towards plant and machinery has been clubbed in Building and civil structures only.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	
		Expenditure approved under this head	NA	
4.	Engineering and Now How	Allocated Amount	15.00	The borrower has estimated an expenditure amounting to Rs.15.00 Crore towards Engineering know how. As per CA certificate dated 20 th January 2022 with UDIN. 22424004AAAABX4556 the borrower has incurred Rs.37.23 Crore towards engineering know how which also includes expenses towards training and foreign technicians. The same is considered as per CA Certificate only.
		Expenses incurred up to last LIE report	27.10	
		Incurred up to period ending December 2021	37.23	
		Expenditure approved under his head	NA	
5.	Expense on training and foreign technicians	Allocated Amount	8.00	The expenditure towards the same is already included in expenses shown towards engineering know how.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	



		Expenditure approved under his head	NA	
6.	Miscellaneous Fixed assets	Allocated Amount	32.27	The expenditure towards the same is already included in expenses shown towards Building and civil cost.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	
		Expenditure approved under his head	NA	
7.	Pre-operative expenses including during IDC	Allocated Amount	247.78	The expenditure towards preoperative expense is already included in expenses shown towards engineering know how. However as per CA certificate the borrower has paid Rs.1.06 Crore towards Interest During Construction.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	
		Expenditure approved under his head	NA	
8.	Contingency@ 7.5%	Allocated Amount	197.10	No expenditure has been incurred towards this head.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	
		Expenditure approved under his head	NA	
9.	Margin money for working capital	Allocated Amount	14.94	No expenditure has been incurred towards this head.
		Expenses incurred up to last LIE report	NA	
		Incurred up to period ending December 2021	NA	



		Expenditure approved under his head	NA	
5.	Total	Allocated Amount	2970.29	<p>Details of expenditure, Copies of Invoices/PO's/WO's are not provided to us citing confidentiality factor by the borrower. Therefore, we have not analysed the cost incurred on the project till date. We have given a general overview of the project based on expenses shown by chartered accountant in their CA certificate dated 20th January 2022 with UDIN. 22424004AAAABX4556 and construction progress observed during site visit.</p> <p>Based on construction progress observed during site visit the project is progressing in full swing with good progress. Sufficient number of labours were observed to be working during site visit and project is anticipated to start the commercial operations by April 2023.</p>
		Expenses incurred up to last LIE report	667.93	
		Incurred up to period ending December 2021	960.99	
		Expenditure Approved	NA	

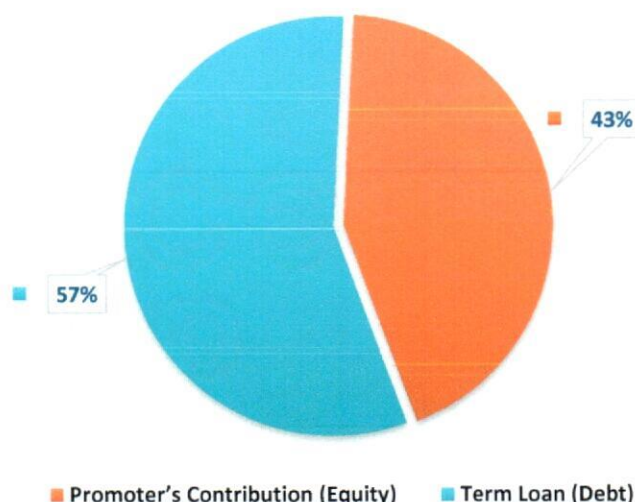


SOURCES OF FINANCE & UTILIZATION OF FUNDS: The Project cost mentioned above has been planned to be covered from following resources:

(Amount in Rs. Crore)

PARTICULARS	ENVISAGED MEANS OF FINANCE
Promoter's Contribution (Equity)	1,290.29
Term Loan (Debt)	1,680.00
TOTAL	2,970.29

MEANS OF FINANCE (Rs.2970.29 Crore)



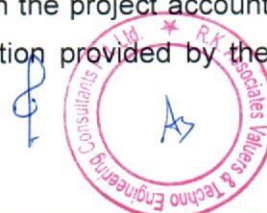
(Amount in Rs. Crore)

PARTICULARS	PLANNED AMOUNT	AMOUNT INFUSED UP TO 31.12.2021	BALANCE
Promoter's Equity	1,290.29	815.65	474.64
Term Loan from Bank	1,680.00	208.00	1472.00
TOTAL	2,970.29	1023.65	1946.64

Source: As per CA Certificate dated 20th January 2022 with UDIN: 22424004AAAABX4556.

Comments:

As per CA Certificate the borrower has made an expenditure on the project amounting to Rs.960.99 Crore. However, as per means of finance Rs. 1023.65 Crore has been infused in the project. As informed by the borrower, balance amount is available in the project account as cash and bank balance. For the same we have relied on information provided by the company only.



PART F

STATUTORY & REGULATORY APPROVALS, CLEARANCES & NOC

INTEGRATED UNIT (IU) PROJECT SITE, PANNA, MADHYA PRADESH				
Sr. No.	NAME OF LICENSE/ REGISTRATION	PURPOSE	DATE OF ISSUE	Current Status
	ISSUING AUTHORITY		LICENCE NO.	
1.	Building Plan Approval Letter	Approval of building plans	-	As informed by the borrower, application works for approvals of building plan are under progress and the borrower is optimistic to obtain the same by approx. April 2022 end.
	State PWD		-	
2.	Environment Clearance	Approval as per environment guidelines in the area	14/10/2020	As on date the clearance is valid and will be valid up to 13/10/2027
	Ministry of Environment, Forest and Climate Change		F. No. IA-J-11011/224/2016-IA.II(I)	
3.	Consent to Establish	Approval as per Pollution norms applicable in that area	17/12/2020	As on date the clearance is valid and will be valid up to 30/09/2025
	MP State Pollution control board		CTE-52637	
4.	Provisional Fire NOC	Approval of fire protection technique in the project	-	Will be obtained before starting the commercial operations in the project.
	State Fire authority		-	
5.	Groundwater Abstraction Clearance	Approval for groundwater abstraction for construction purpose	05/02/2020	As on date of CA certificate the NOC is active and was valid up to 30/01/2022. The company has applied for the renewal of approval vide application No. 21-4/863/MP/IND/2019.
	Central Groundwater Authority		CGWA/NOC/IND/ORIG/2020/7350	
6.	IEM Certificate		05/08/2021	

	Ministry of Commerce and Industry	Industrial Entrepreneurs memorandum	1407/SIA/IMO/2016	As on date IEM Certificate is valid.
7.	Power Connection	Power connection for construction works	-	Borrower is currently using DG sets for power supply.
	State Power Authority		-	They have already applied for 35MVA of power supply from Patera Sub station and transmission lines for the same are in their nascent stage.

Observations & Comments:

- Approvals to be obtained by the Jaykaycem (Central) Limited-All approvals including approvals/consents required under local regulations, building codes and approvals required from the Distribution Utility etc. relating to installation of integrated unit are listed above.
- The borrower has not yet obtained Building plan approval and Provisional Fire NOC. On clarification on status of approvals the borrower has informed that the building plan approval is under process and is optimistic to obtain the same by April end. Regarding the provisional Fire NOC the company has informed that they will obtain the Fire NOC before the commissioning of the plant.



GRINDING UNIT (GU) PROJECT SITE, HAMIRPUR, UTTAR PRADESH

Sr. No.	NAME OF LICENSE/ REGISTRATION	PURPOSE	DATE OF ISSUE	CURRENT STATUS
	ISSUING AUTHORITY		LICENCE NO.	
1.	Building Plan Approval Letter	Approval of building plans	-	As informed by the borrower, application works for approvals of building plan are under progress and the borrower is optimistic to obtain the same by approx. April 2022 end.
	State PWD		-	
2.	Environment Clearance	Approval as per environment guidelines in the area	29/09/2021	As on date the clearance is valid and will expire on 28/07/2028
	Ministry of Environment, Forest and Climate change		202/Parya/SEIAA/6109/2021	
4.	Consent to Establish	Approval as per Pollution norms applicable in that area	01/09/2021	As on date the NOC is valid and will expire on 29/08/26.
	UP State pollution control board		133698/UPPCB/Banda(UPPCBRO)/CTE/Hamirpur/2021	
3.	Provisional Fire NOC	Approval of fire protection technique in the project	-	Will be obtained before starting the commercial operations in the project.
	State fire Authority		-	
4.	Groundwater Abstraction Clearance	Approval for groundwater abstraction for construction purpose	Dated 08/01/2022	As on date the NOC is active and will be valid up to 15/12/2026
	Central Groundwater Authority		NOC No.: NOC031442	
5.	IEM Certificate		13/01/2021	



	Ministry of Commerce and Industry	Industrial Entrepreneurs memorandum	54/SIA/IMO/2021	As on date the IEM Certificate is valid
6.	Power Connection	Power connection for construction works	13/04/2021	Borrower has obtained temporary Power connection for 20 KW load.
	State Power Authority		-	

Observations & Comments:

1. Approvals to be obtained by the Jaykaycem (Central) Limited: All approvals including approvals/consents required under local regulations, building codes and approvals required from the Distribution Utility etc. relating to installation of grinding unit are listed above.
2. The borrower has not yet obtained Building plan approval and Provisional Fire NOC. On clarification on status of approvals the borrower has informed that the building plan approval is under process and is optimistic to obtain the same by April end. Regarding the provisional Fire NOC the company has informed that they will obtain the Fire NOC before the commissioning of the plant.



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PART G

PROJECT SCHEDULE & CURRENT STATUS

IMPLEMENTATION SCHEDULE OF INTEGRATED UNIT (IU), PANNA, MADHYA PRADESH

Sr. No.	Particulars	Start	End	Current Status
1.	Land and Site Development	Land allotment done		As per the discussion with the borrower, it has been verbally informed that the land allotment has been done.
2.	Project Statutory Approvals	During Project tenure		Majority of preliminary statutory approvals are in place
3.	Building and Civil works	Sep-21	Feb-23	Building and civil works are currently in progress and are anticipated to complete by December 2022. Building wise site progress is already shown above and as per visual observation site progress was good and project was progressing in full swing.
4.	Order of Plant and Machinery	Apr-21	May-21	As per our discussion with the borrower, they have already ordered the major machineries required for the project. However, due to confidentiality factor cited by the borrower we have not been Provided with the copies of purchase orders.
5.	Delivery of Machineries	Oct-21	Jul-22	Delivery of machineries has started in the project.
6.	Installation of Machinery	Dec-21	Mar-23	Fabrication of machineries is started in the project.
7.	Trial runs and Commissioning of Plant	Feb-23	Apr-23	As per pace of work observed during site visit the Project is anticipated to start the Commercial operations in April 2023.

**IMPLEMENTATION SCHEDULE - IU
PROJECT ACTIVITIES AFTER MAIN MACHINERY ORDER PLACEMENT**

Sn	Project Activity	Months																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	PROJECT ACTIVITIES AFTER MAIN MACHINERY ORDER																								
2	Main machinery order																								
3	Load data/ GA from suppliers (main machinery)																								
4	Procurement of auxiliary equipment																								
5	Load data/ GA for auxiliary equipment																								
6	Departmental GA drawings																								
7	Civil design and construction drawings																								
8	Civil construction																								
9	Inspection/ delivery main machinery																								
10	Inspection/ delivery auxiliary equipment																								
11	Mechanical erection																								
12	Electrical erection																								
13	Instrumentation erection																								
14	Trial runs and commissioning of plant																								

LEGENDS

Summary
Task
Milestone



IMPLEMENTATION SCHEDULE OF GRINDING UNIT (GU), HAMIRPUR, UTTAR PRADESH			
Particulars	Start	End	Current Status
Land and Site Development	Land allotment done		As per the discussion with the borrower, it has been verbally informed that the land allotment has been done.
Project Statutory Approvals	During Project tenure		Majority of statutory approvals are in place
Building and Civil works	Sep-21	May-22	Building and civil works are currently in progress and are anticipated to complete by December 2022.
Order of Plant and Machinery	Apr-21	May-21	As per our discussion with the borrower, they have already ordered the major machineries required for the project. However, due to confidentiality factor cited by the borrower we have not been Provided with the copies of purchase orders.
Delivery of Machineries	Sep-21	May-22	Delivery of machineries has started in the project.
Installation of Machinery	Oct-21	Jul-22	Installation of machineries is started in the project.
Trial runs and Commissioning of Plant	Feb-23	Apr-23	Project is anticipated to achieve Commercial operations date in April 2023.

INDICATIVE PROJECT IMPLEMENTATION SCHEDULE
(PROJECT ACTIVITIES AFTER MAIN MACHINERY ORDER PLACEMENT)

Sn	Project Activity	Months																	
		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18
1	PROJECT ACTIVITIES AFTER MAIN MACHINERY ORDER																		
2	Main plant and machinery order																		
3	Load data/ GA drawing from suppliers (main plant and machinery)																		
4	Procurement of auxiliary equipment																		
5	Load data/ GA drawing for auxiliary equipment																		
6	Departmental GA drawings																		
7	Civil design and construction drawings																		
8	Civil construction																		
9	Inspection/ delivery of main plant and machinery																		
10	Inspection/ delivery of auxiliary equipment																		
11	Mechanical erection																		
12	Electrical erection																		
13	Instrumentation erection																		
14	Trial runs and commissioning of plant																		

Summary
Task
Milestone



PART H

OBSERVATIONS & COMMENTS

1. The estimation of cost considered in the report is as per the TEFR prepared by HOLTEC consultancy. HOLTEC consultancy is very well established consultancy for such type of works and have greatly established themselves in this sphere.
2. The Physical progress captured in the report is based on approximate observations of status of structures constructed on site during our site inspection and our subsequent discussions held with the engineers with which the site visit was conducted.
3. The physical progress of the machineries has been tracked as per random verification of based on the package material (PM) number mentioned in the list of machineries delivered to the site provided by the borrower. However during site visit majority of the machineries were in packed condition since they were to be used in due course and required protection. Therefore, we were unable to verify the equipment's/machineries from inside in those packages and the Physical progress captured is based on approximate visual observations and taking reference from the list of machineries provided by the borrower and our subsequent discussions held with the engineers with whom the site visit was conducted. Thus the above progress may vary from 5%-10%.
4. Appropriateness of progress comparison vis-à-vis with the expenditure made and appropriateness of related transactions couldn't be verified at our end because of unavailability of key information/ data/ inputs in terms of break-up of expenditure head wise, unavailability of vendor wise payments made, vendor contracts & agreements, unavailability of RA Bills for quantity estimates citing confidentiality factor by the borrower. However as per discussion with the lender all the payments are being released by the lender only after proper due diligence of the parties involved. Sample of payment process being followed by the lender was also physically verified in meeting with the bank dated 23rd February 2022.
5. As per CA certificate dated 22nd January 2022 with UDIN. 22424004AAAABX4556 the borrower has made an expenditure on the project amounting to Rs.960.99 Crore. However as per the breakup of expenditure mentioned in CA certificate no separate expenditure has been shown towards plant and machinery.



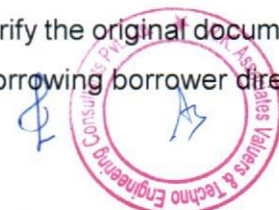
6. Copies of Invoices/PO's/WO's is not provided to us by the borrower citing confidentiality factor. Therefore, we have not analysed the cost incurred on the project till date and have given a general overview of the project based on expense shown by chartered accountant in their CA certificate dated 22nd January 2022 with UDIN. 22424004AAAABX4556. However, based on construction progress observed during site visit the project is progressing in full swing with good progress. Sufficient number of labours were also observed to be working during site visit and the project is anticipated to start the commercial operations by April 2023.
7. As per our discussion with the lender regarding unavailability of some documents from the borrower's end, it was informed by the lender that a consortium meeting was held on 25th March 2022 in which our findings in First LIE Report and Second Draft LIE Report were discussed. Accordingly, it has been informed to us by the lender that the company has conveyed in the meeting that the bifurcation of the total incurred cost in various components will be done only during final capitalisation process as they are unable to bifurcate the cost at this moment since the project is still under construction and many parallel civil construction and machinery works are in progress. Also, in regard to the cost incurred towards land, the company has informed to the lender that there are high number of title deeds which are currently under legal scrutiny. As soon as the legal scrutiny process is finished the company will provide the title deeds directly to the lender. Lender to take note of this.
8. This is the 2nd LIE Report of the project and as per CA certificate showing expenditure in the project up to 31st December 2021, Term loan amounting to Rs.208.00 Crore has been disbursed by the lender up to 31st December 2021.
9. The borrower has not yet obtained Building plan approval and Provisional Fire NOC. On clarification on status of approvals the borrower has informed that the building plan approval is under process and is optimistic to obtain the same by April 2022 end. Regarding the provisional Fire NOC the company has informed that they will obtain the Fire NOC before the commissioning of the plant. However other important approvals that are required to start construction works in the project are in place.
10. As per pace of work observed during site visit the Project is anticipated to start the Commercial operations in April 2023.



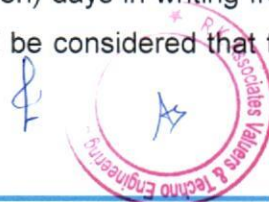
PART I

DISCLAIMER

1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
2. This report is prepared based on the copies of the documents/ information which the Bank/ Borrower has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. The client/owner and its management/representatives warranted to us that the information they supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. I/We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the owner, borrower, its directors, employee, representative or agents. Verification or cross checking of the documents provided to us from the originals or from any Govt. departments/ Record of Registrar has not been done at our end since this is beyond the scope of our work. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
3. Legal aspects for eg. investigation of title, ownership rights, lien, charge, mortgage, lease, sanctioned maps, verification of documents, etc. have not been done at our end and same has to be taken care by legal expert/ Advocate. It is assumed that the concerned Lender/ Financial Institution has satisfied them with the authenticity of the documents, information given to us and for which the legal verification has been already taken and cleared by the competent Advocate before requesting for this report. I/ We assume no responsibility for the legal matters including, but not limited to, legal or title concerns.
4. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document, DPR or Techno feasibility study. All the information gathered is based on the facts seen on the site during survey, verbal discussion & documentary evidence provided by the client and is believed that information given by the borrower is true best of their knowledge.
5. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
6. Bank/FII should ONLY take this report as an Advisory document from the Financial/ Chartered Engineering firm and its specifically advised to the creditor to cross verify the original documents for the facts mentioned in the report which can be availed from the borrowing borrower directly.



7. In case of any default in loans or the credit facility extended to the borrowing borrower, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
8. The documents, information, data provided to us during the course of this assessment by the client is reviewed only upto the extent required in relation to the scope of the work. No document has been reviewed beyond the scope of the work.
9. This report only contains general assessment & opinion as per the scope of work evaluated as per the information given in the copy of documents, information, data provided to us and/ and confirmed by the owner/ owner representative to us at site which has been relied upon in good faith. It doesn't contain any other recommendations of any sort including but not limited to express of any opinion on the suitability or otherwise of entering into any transaction with the borrower.
10. We have relied on data from third party, external sources & information available on public domain also to conclude this report. These sources are believed to be reliable and therefore, we assume no liability for the truth or accuracy of any data, opinions or estimates furnished by others that have been used in this analysis. Where we have relied on data, opinions or estimates from external sources, reasonable care has been taken to ensure that such data has been correctly extracted from those sources and /or reproduced in its proper form and context, however still we can't vouch its authenticity, correctness or accuracy.
11. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
12. This is just an opinion report and doesn't hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.
13. All Pages of the report including annexures are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.
14. Though adequate care has been taken while preparing this report as per its scope, but still we can't rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within 15 (Fifteen) days in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the



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18. This Lender's Independent Engineer report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.
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Place: Noida

Date: 2nd March 2022

Note: Report contains 87 pages

**For R.K. Associates Valuers and Techno
Engineering Consultants Pvt. Ltd.**

FOR INTERNAL USE

SURVEYED BY: Er. Tejas Bharadwaj and Er. Abhishek Sharma

PREPARED BY: PE Team



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ENCLOSURE 1: CA CERTIFICATE DATED 22nd JANUARY 2021

R. K. PARMARTHI & CO.
CHARTERED ACCOUNTANTS



518, "Kalpana Plaza", Birhana Road, Kanpur - 208 001
(M) 9839085297, 9415128481
E-mail - parmardidurgesh@gmail.com
parmardidurgesh@yahoo.co.in

The Board of Directors
Jaykaycem (Central) Limited
Kamla Tower
Kanpur

We, M/s. R.K. Parmarthi & Co., Chartered Accountants have been requested by M/s. Jaykaycem (Central) Ltd. ("Company") to certify infusion of promoters' equity, disbursement of loans (fund based and non-fund based) from Lenders, utilization of funds and debt to equity ratio in respect of 4.0 Mn.tpa. Grey Cement Project at Panna and Hamirpur as mentioned in Common Loan Agreement dated 18th November, 2021.

14. Based on our examination of books of accounts of the Company and other records produced before us, we hereby certify the source of funds and utilization of funds till 31st December, 2021 is as follows:

(A) Source of Funds:

Particulars	Rs.(in Crores)
Utilisation of Equity Capital with Premium*	815.65
Utilization of Loan Disbursed**	131.93
Others (Project Creditors)	13.41
Total	960.99

*JK Cement Ltd. has infused amount aggregating Rs. 819.09 Crores in Jaykaycem (Central) Ltd. up to 31st December, 2021, out of which cash outflow towards expenses was Rs. 815.65 Crores and the balance amount is lying in banks & FDR with Jaykaycem (Central) Ltd.

**The Company has availed disbursement of Rs 208.00 Crores till 31.12.2021. However, Rs. 131.93 Crores has been utilized in Project till 31.12.2021 and balance is lying in Project Account.

(B) Utilization of Funds / Total Investment cost (Rs in Crore):

Item	Expenses incurred	Estimated Project Cost as per Holtec Report
Land and Site Development	259.13	497.65
Plant & Machinery / Building & Civil Structures / Miscellaneous Fixed Assets	664.63	1989.83
Pre-Operative Expenses / Engineering & Knowhow / Training & Foreign Technician Expenses.	36.17	140.46
Interest during Construction Period	1.06	130.31
Contingency	-	197.10



Margin Money for Working Capital	-	14.94
Total Cost	960.99	2970.29

15. We hereby confirm that Debt Equity Ratio is as under (considering funds infused by the Company till 31st Decemeber, 2021):

Particulars	Amount (Rs. / Crores)
Debt	208.00
Equity contribution	815.65
Debt Equity Ratio	0.26

We further confirm that the aforesaid Promoters' Contribution has been utilized by the Company towards setting up the Project mentioned in Common Loan Agreement dated 18th Nov, 2021.

UDIN: 22424004AAAAABX4556

For **R.K. Parmarathi & Co.**
Chartered Accountants
Firm Regn. No. 001121C

(Arvind Awasthi)
Partner
(Membership No. 424004)

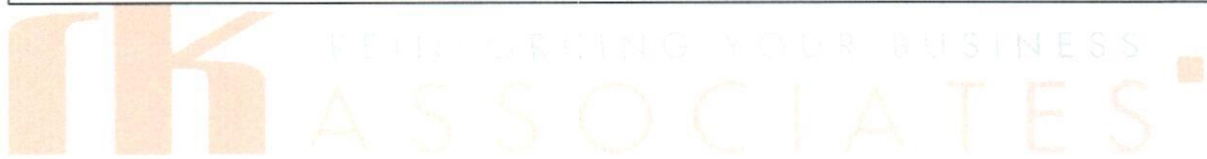
Date: 20.01.2022
Place: Kanpur



DOCUMENT DETAILS

Verification Date/Time:	10-03-2022 08:11:33
UDIN Generation Date/Time:	21-01-2022 08:39:10
Unique Document Identification Number (UDIN):	22424004AAAAABX4556
Member Details:	ARVIND AWASTHI (424004)
Firm Details:	
Document Type:	Certificates
Type of Certificate:	Others
Date of signing of Document:	20-01-2022
Figures/Particulars:	1. Utilization of funds upto 31.12.2021: 960.99 Crs 2. -- 3. --
Document Description:	Certificate for utilization of funds till 31.12.2021
Status:	Active

Print



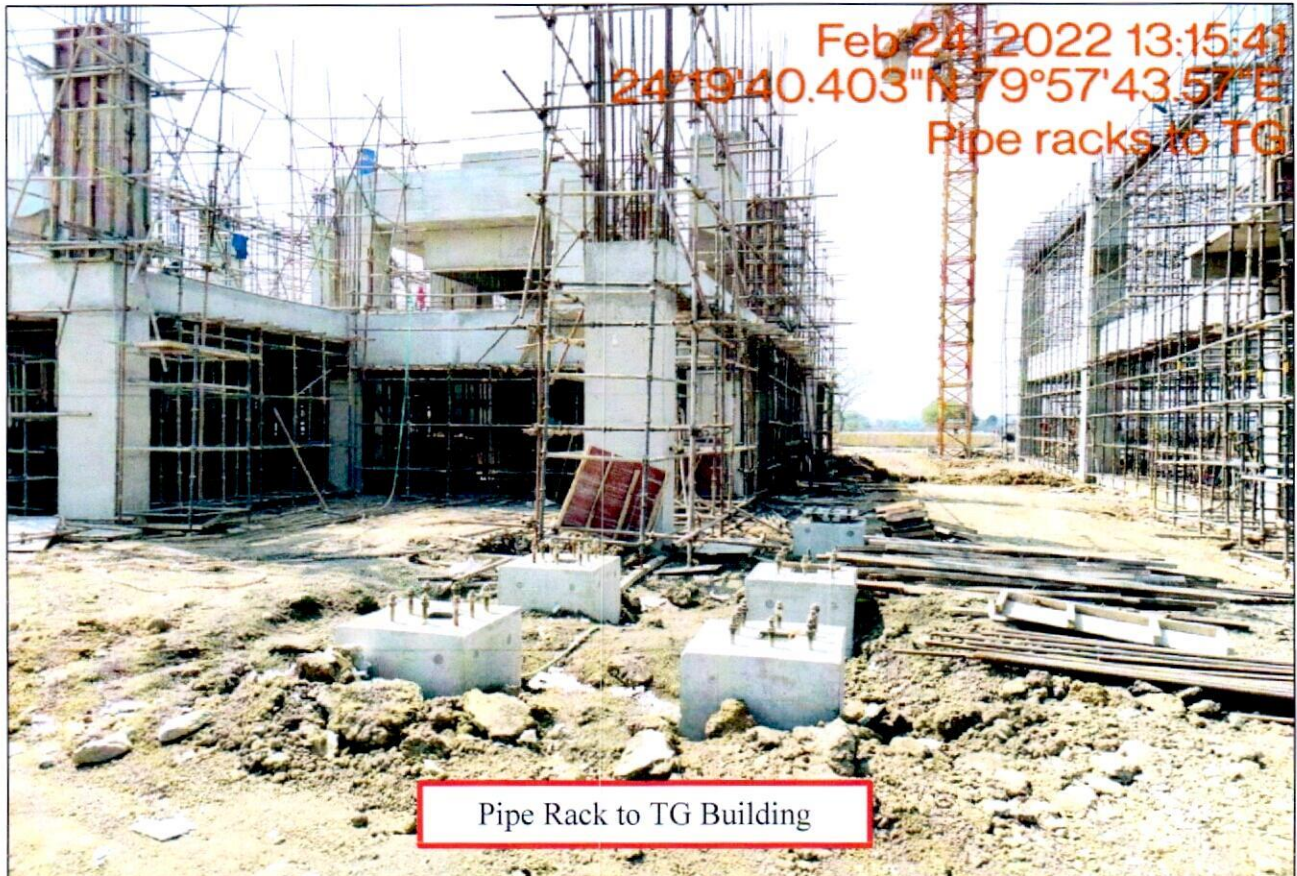
SITE PHOTOGRAPHS

INTEGRATED UNIT-PANNA











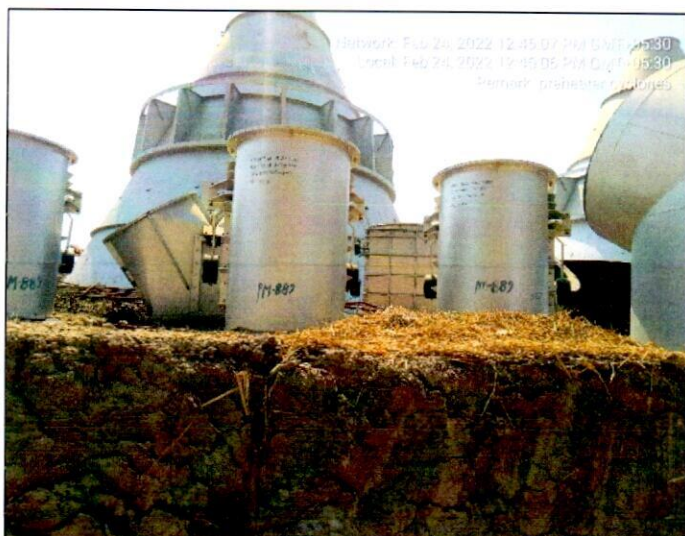
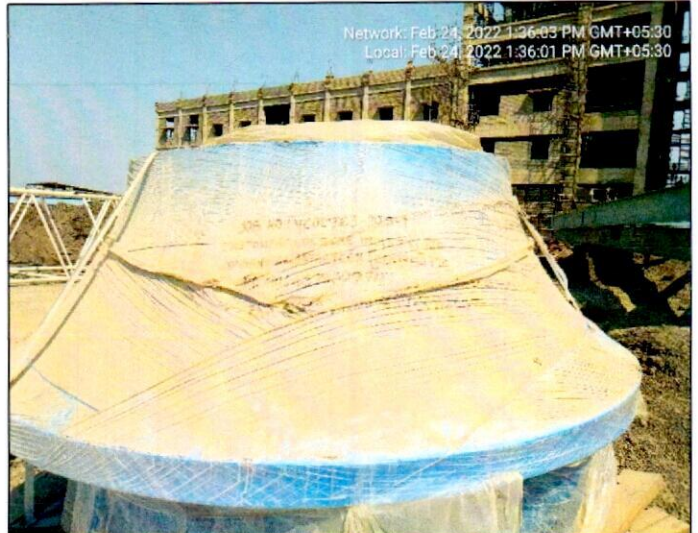


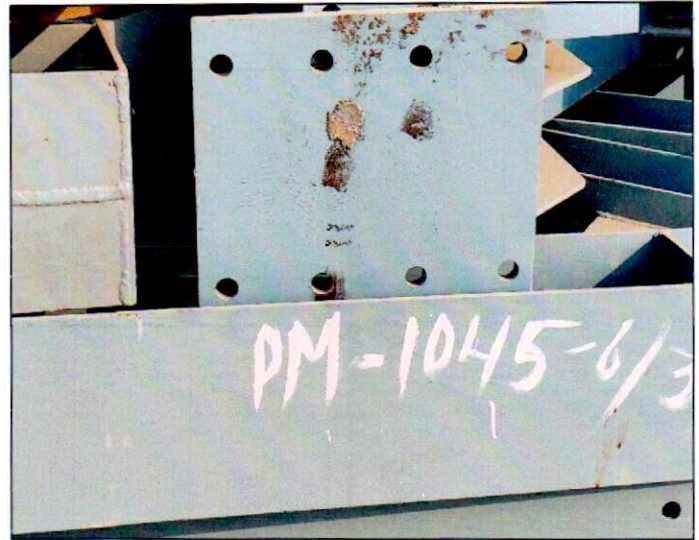
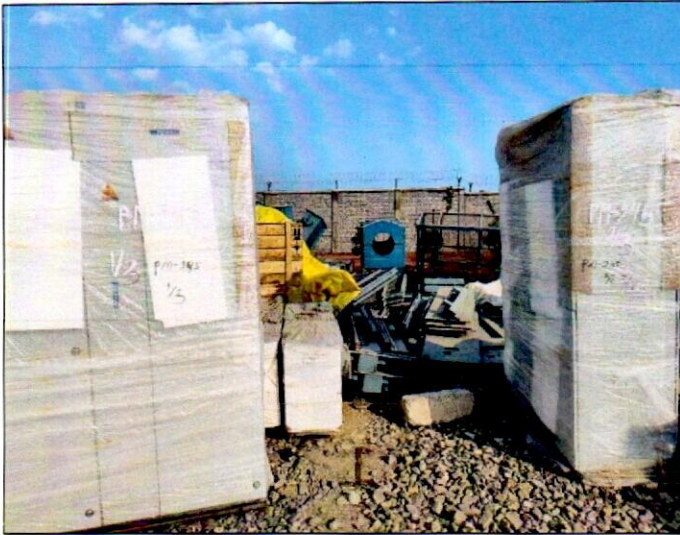


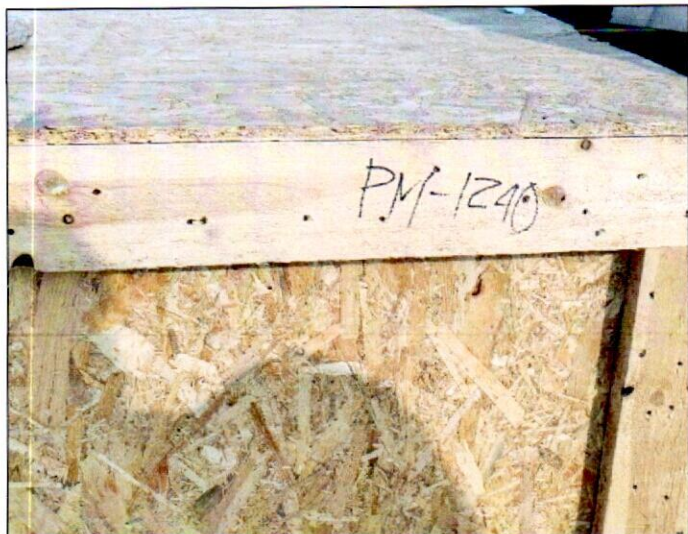




Machineries at Integrated Unit:







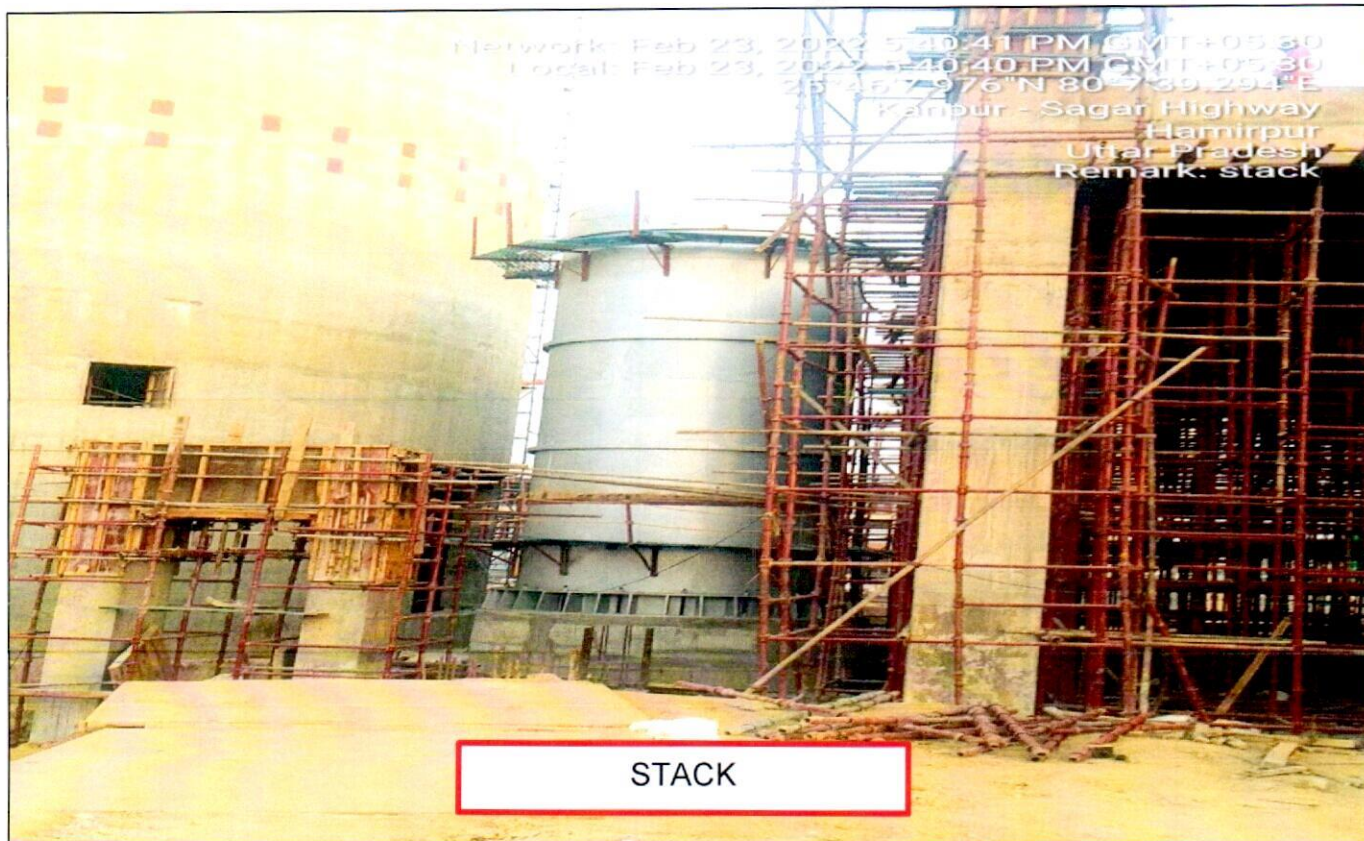
GRINDING UNIT- HAMIRPUR

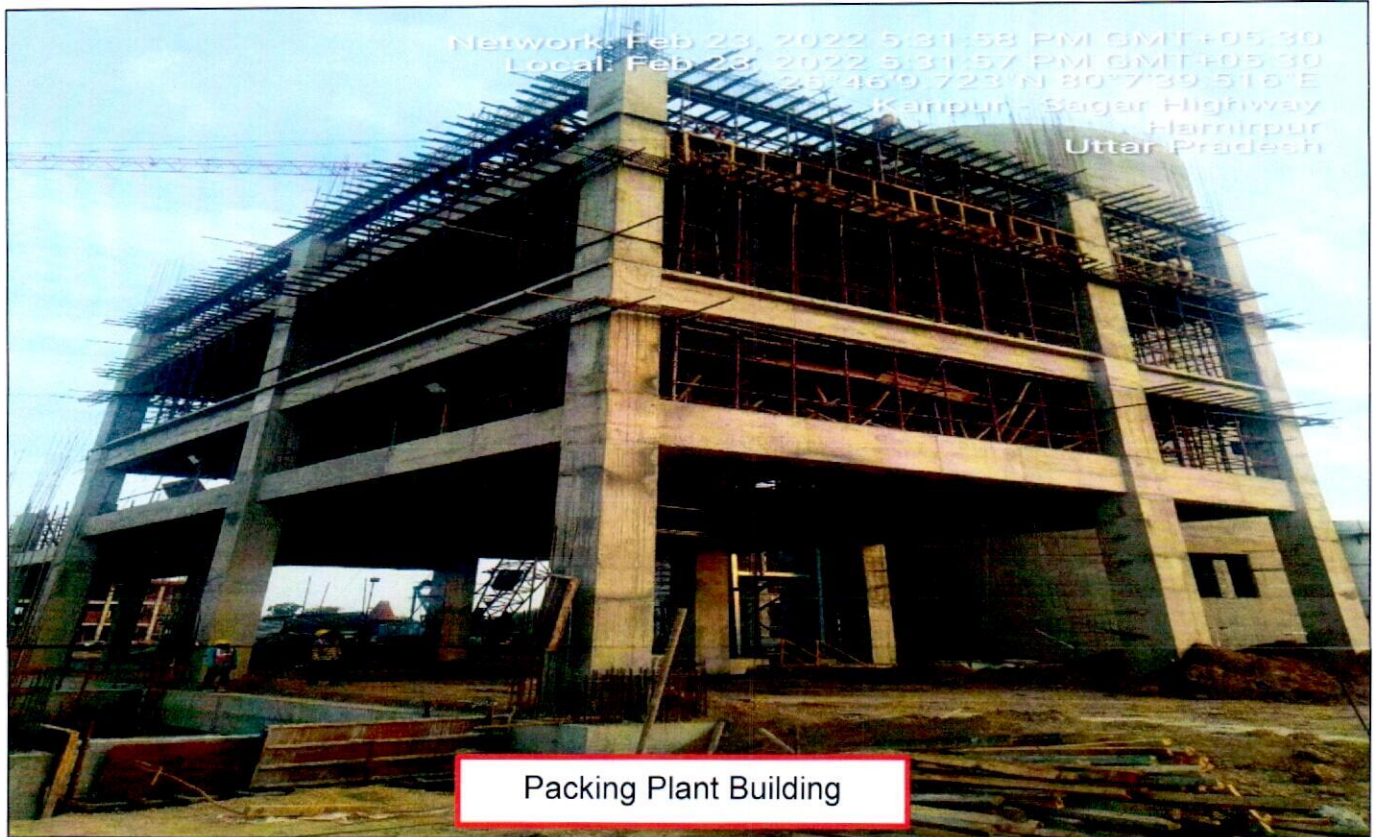


Cement Silo-1



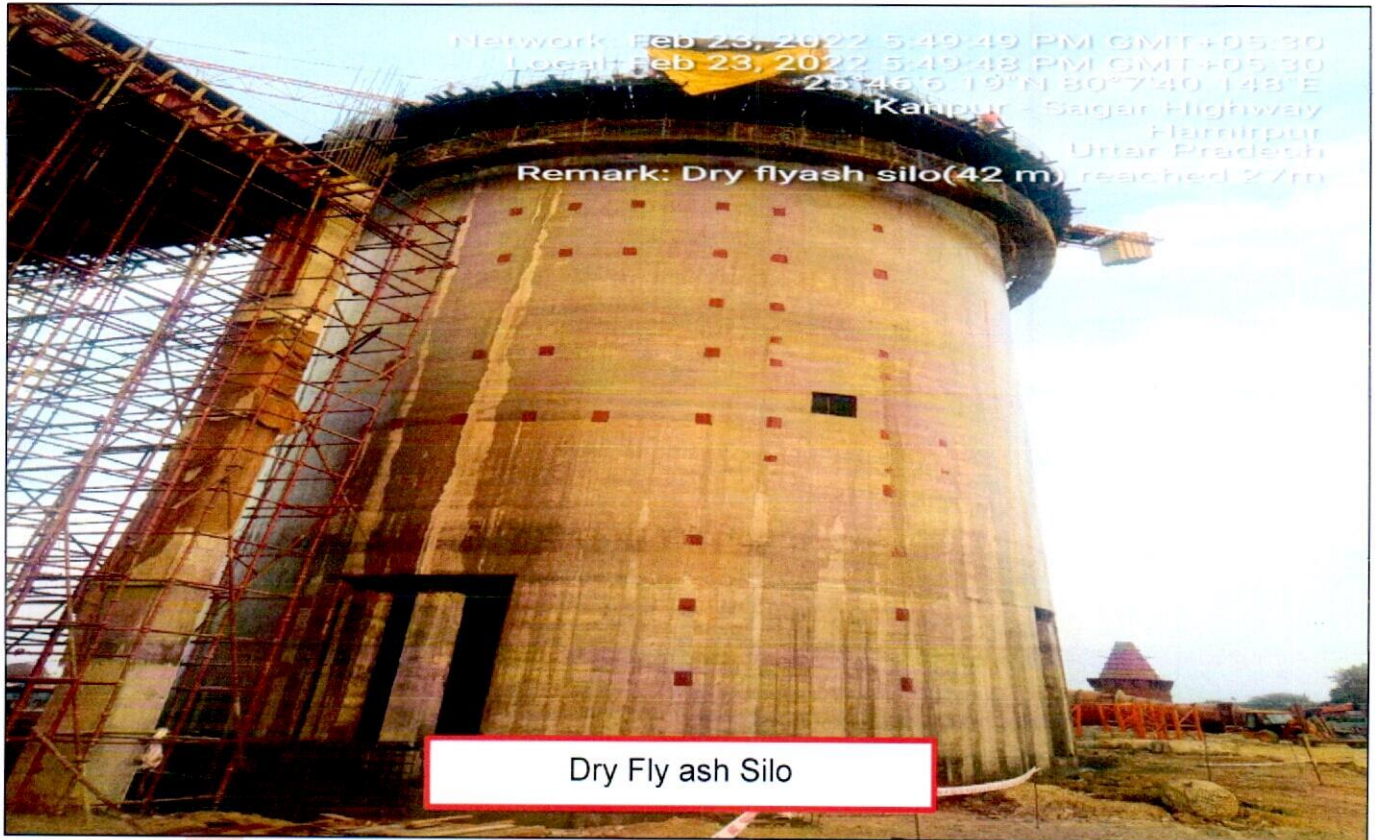
Bag House & Compressor Building











Machineries Photos at Site-Hamirpur

