LALWANI FERRO ALLOYS LTD.
OM TOWER, 32, Jawaharlal Nehru Road, 2nd Floor, Kolkata - 700 071
Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

Ref.: LFA/20222-23/01R
Date: 10.06.2022

To,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi- 110003

Sub.: Application for Terms of References for proposed Ferro Alloys Plant (6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces) at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal in an area of 13.91 acres

Sir,

M/s Lalwani Ferro Alloys Limited is proposing a Ferro alloy plant with 6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces, sinter plant, jigging plant, and associated facilities for smooth operation. The plant is proposed at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal over an area of 13.91 acres (5.629 ha).

The project intends to manufacture the following ferro alloys :

Sl. No.	Product	Production, TPA
1	High Carbon Ferro-Manganese	45,600
2	Silico-Chrome or High Carbon Ferro Chrome	18,000
3	Ferro-Silicon	9,600
4	Silico Manganese (High Carbon/ Medium Carbon/ Low Carbon)	36,000
5	Ferro Chrome (Medium Carbon/ Low Carbon)	15,300
6	Ferro Manganese (Medium Carbon/ Low Carbon) (via AOD)	38,760
7	Low Carbon Ferro Manganese (Thermic Process)	18,000
8	Ferro Molybdenum	3000

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The above manufacturing activity is covered under item 3(a) of the Schedule of EIA Notication 2006 & its amendments till date Hence, Form 1 is submitted online for your kind consideration along with the following documents uploaded with it:

1) Brief summary
2) Kml file of the proposed project
3) Project boundary on SOI toposheet
4) Authorisation letter for the signatory
5) Proposed Terms of Reference with list & location of sampling stations being monitored between 01.03.2022 to 31.05.2022.
6) Pre-feasibility report.
7) Additional Documents :
    1. List of environmental features in 15 km radius
    2. Summary of amenities available in the villages & towns within 15 km radius

We hope you will find in order the above documents and our baseline sampling stations being monitored during summer 2022 and process our application for the grant of TOR for the proposed project at the earliest.

Thanking you,
For M/s Lalwani Ferro Alloys Limited

Sandeep Lalwani
Director

APPENDIX I

(See Paragraph-6)

FORM 1

Note : If space provided against any parameter is inadequate, Kindly upload supporting document under 'Additional Attachments if any' at the last part of the Form1. Please note that all such Annexures must be part of single pdf document.

(I) Basic Information

S.No.	Item	Details
	Is your project Comes under Notified Industrial Area	No
	Whether proposal involved violation of EIA notification	No
	Weather Consent to Establishment Obtained	N/A
	Upload copy of CTE	N/A
1.	Name of the Project/s	Proposed Ferro Alloy Plant
	Brief summary of project	Annexure-Brief summary of project
	Proposal Number	IA/WB/IND/277459/2022
	Project Cost	258.89 cr
2.	S. No. in the schedule	3(a) Metallurgical industries (ferrous & non ferrous)
	Project Sector	Industrial Projects - 1
3.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number or wells to be drilled	Ferro Alloy Plant : 1.3 lakh TPA, Land area: 13.91 acres (5.529 ha) ha.
4.	New/Expansion/Modernization	New
5.	Existing Capacity/Area etc.	0 ha.
6.	Category of project i.e. 'A' or 'B'	A
7.	Does it attract the general condition? If yes, please specify	No
8.	Does it attract the specific condition? If yes, please specify	No
9.	Location of the project	Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, Barjora, Bankura, West Bengal
	Shape of the project land	Block (Polygon)
	Uploaded GPS file	Annexure-GPS file
	Uploaded copy of survey of India Toposheet	Annexure-Survey of india toposheet
	Plot/Survey/Khasra No.	Plot B1 & C1, Plasto Steel Park, Phase-II
	Town / Village	Mouza Ghutgariya J.L. No. 24
	State of the project	West Bengal

Details of State of the project

S.no	State Name	District Name	Tehsil Name
(1.)	West Bengal	Bankura	Barjora

10.		

	Nearest railway station along with distance in kms	Durgapur Railway station, 10.2 km
	Nearest airport along with distance in kms	Durgapur, 19 km
11.	Nearest Town/City/District Headquarters along with distance in kms	Ghutgarya (CT) , 0 km
12.	Village Panchayats, Zila Parishad, Muncipal Corporation, Local body (Complete postal address with telephone nos. to be given)	West Bengal Industrial Development Corporation Ltd.
13.	Name of the Applicant	SandeepLalwani
14.	Registered Address	32, Jawaharlal Nehru Road, Om Tower, Suite No. 205, 2nd Floor
15.	**Address for correspondance:**	
	Name of the Company	LALWANI FERRO ALLOYS LIMITED
	Name of the Applicant	SandeepLalwani
	Designation (Owner/ Partner/ CEO)	Director
	Pin code	700071
	E-mail	import@lalwaniferroalloys.com
	Telephone No.	--1
	Fax No.	-
	Copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency .	Annexure-Uploaded Copy of documents in support of the competence/authority
16.	Details of Alternative Sites examined, if any. Location of these sites should be shown on a toposheet	No
17.	Whether part of Interlinked projects?	No
18.	Whether separate application of Interlinked project has been submitted?	N/A
19.	If Yes, MoEF file number	N/A
	Date of submission	N/A
20.	If No, Reason	N/A
21.	**Whether the proposal involves Approval/ Clearance under: if yes, details of the same and their status to be given**	
	(i) Whether the proposal involves approval/clearance under the Forest (Conservation) Act,1980?	No
	(ii) Whether the proposal involves approval/clearance under the wildlife (Protection) Act,1972?	No
	(iii) Whether the proposal involves approval/clearance under the C.R.Z notification, 2011?	No
22.	Whether there is any Government Order/Policy relevant/relating to the site?	No
23.	Whether any Forest Land Involved?	No
	Area of Forest land Involved (hectares)	N/A
24.	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up?	No
	(a) Name of the Court	N/A

	(b) Name of the Sub court	N/A
	(c) Case No.	N/A
	(d) Orders/directions of the court, if any and relevance with the proposed project	N/A

(II) Activity

1 Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No	Information/Checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	Total project area 13.91 acres (5.63 ha) is already under possession of company, in industrial area & shall be converted to Industrial use. Topography of land is flat with maximum elevation of 90 MRL as per google earth. The project area is almost vacant. Development of industrial unit, green belt, roads, water reservoir, etc. will take place in the project area, which will be a permanent change. Currently, a part of land is being used for storage of excess imported material of another plant
1.2	Clearance of existing land, vegetation and buildings?	Yes	Mostly shrubs are present inside the proposed plant area. The shrubs will be cleared prior to construction. If any trees has to cut, prior permission from the competent authority will be taken for the same.
1.3	Creation of new land uses?	Yes	The land will come under industrial use along with all its buildings, facilities, green belt, water reservoir and some open areas. The land use will have 25612 sq.m plant & facilities, 1260 sq.m finished product shed, 18577 sq.m greenbelt & plantation, 1282 sq.m water tank & Cooling pond, 4286 sq.m road & parking, 1047 sq.m slag yard and 4229 sq.m open space.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Geophysical testing shall be carried out prior to the construction of new buildings
1.5	Construction works?	Yes	Construction will be done for installation of 25612 sq.m plant facilities, 1260 sq.m finished product shed, 18577 sq.m greenbelt, 1282 sq.m rain water tank & cooling pond, 4286 sq.m road & parking, 1047 sq.m slag yard and 4229 sq.m open area/ future expansion. Currently, a part of land is being used for storage of excess imported material of another plant
1.6	Demolition works?	No	No demolition work envisaged
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Temporary housing facilities will be provided for construction workers within the boundary. The temporary facilities will either be dismantled after completion of construction or used for other activities. Currently, a part of land is being used for storage of excess imported material of another plant
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations and fill or excavations	Yes	There will be excavation, cut and fill during the process of construction/ erection of buildings, roads, reservoir, parking, etc. in proposed project.
1.9	Underground works including mining or tunnelling?	No	Underground mining or tunneling is not envisaged. For the construction of buildings, sheds and installation of

			equipments etc, only foundation work will be carried out.
1.10	Reclamation works?	Yes	The levelling, stabilisation and/ or plantation of the reclaimed area disturbed for construction of project components will be carried.
1.11	Dredging?	No	No dredging is required since no water body is involved in the project area
1.12	Offshore structures?	No	Not applicable as this is an inland project
1.13	Production and manufacturing processes?	Yes	Production of 45,600 TPA Fe-Mn, 18,000 TPA Silico/ high carbo Fe-Cr, 9600 TPA Fe-Si and 36,000 TPA Si-Mn will be taking place through SAFs. 15 MTx2 AOD, 9 MTX2 Holding Furnace to produce low carbon Fe-Mn and Medium carbon Fe-Mn and 6 MTx2 EAFs to make low carbon Fe-Cr shall be installed. Additionally Fe-Mo 3000 TPA & Low Carbon Fe-Mn 18000 TPA by Thermic Process is proposed. Manufacturing process is described in more details in section 3.5 of pre-feasibility report uploaded separately.
1.14	Facilities for storage of goods or materials?	Yes	Slag yard (1047 sq.m.) and finished product storage (1260 sq.m) will be provided.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	(1) Ferro alloy slag will be used for village road construction & low land filling; (2) DM plant resin (~1 KLPA) shall be disposed in impervious pit; (3) Waste Oil & Lubricant (~1 KLPA) shall be sold to SPCB/CPCB authorized vendor; (4) effluent will be treated & reused in dust suppression, water sprinkling & greenbelt development; (5) Sewage & sanitary wastewater shall be treated in sewage treatment system. (6) Sludge generated from it will be used as manure in greenbelt development.
1.16	Facilities for long term housing of operational workers?	No	No long term housing of operational workers is envisaged.
1.17	New road, rail or sea traffic during construction or operation?	Yes	During construction, additional road traffic will be generated for bringing in material (Peak 10 trucks/day) & movement of local manpower (on two wheeler & cycles mostly). During operation, additional traffic will be generated to bring in raw materials (~32 trucks/day) and for dispatch of finished goods (~16 trucks/day). Trucks which bring raw material can take away finished product as well, further reducing truck movement. No additional rail or sea traffic is envisaged.
1.18	New road, rail, air water borne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	Yes	No new public road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc. will be required or created. For transportation, existing public roads will be used. New internal roads will be constructed & parking will be provided over an area of 4286 sq.m, within the plant.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	There will be no closure or diversion of transport routes or infrastructure leading to changes in traffic movements due to proposed project
1.20	New or diverted transmission lines or pipelines?	No	No new or diversion of transmission lines or pipelines is proposed
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	No impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers are envisaged due to proposed project activities
1.22	Stream crossings?	No	No streams or their crossing are present within the

			proposed project area. A seasonal stream passed outside along the plant boundary
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	Total Water requirement: 351.5 KLD Source: Rain Water Harvesting, Ground Water and Piped Water from WBIDC Industrial Park Facility.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	Yes	There will be no change in water bodies since no water bodies exist in project area. However, the land surface will change due to construction of buildings, roads, yards, water tank, greenbelt, etc., all of which will impact the sheet run off. Thus, construction of storm water drains within the plant will be carried out to manage rain water and collect in the tank.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	About 300 nos. people during construction and 700 nos. people during operation will be employed. The people will travel through their own vehicles, cycles or walk to the plant. There will also be transportation of raw materials and finished products as described in point 1.17 earlier.
1.26	Long-term dismantling or decommissioning or restoration works?	No	No long-term dismantling or decommissioning or restoration works is required.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not Applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	There will be temporary influx of manpower during construction (about 300 nos.) and permanent influx of manpower (700 nos.).
1.29	Introduction of alien species?	No	Introduction of alien species is not envisaged
1.30	Loss of native species or genetic diversity?	No	No loss of native species or genetic diversity is envisaged due to plant activities.
1.31	Any other actions?	No	Not Applicable

2 Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	Total land area requirement is 13.91 acres (5.63 Ha) which is already under the possession of Lalwani Ferro Alloys Limited. There is no agricultural land within the project boundary. It is land in an industrial estate. Currently, a part of land is being used for storage of excess imported material of another plant. The trees present within the project area will be preserved to the extent possible, shrubs will be cleared. Greenbelt will be established over 33% area.
2.2	Water (expected source & competing users) unit: KLD	Yes	Total Water requirement: 351.5 KLD Source: Rain Water Harvesting, Ground Water and Piped Water from WBIDC Industrial Park Facility.
2.3	Minerals (MT)	Yes	Coke breeze, Dolomite, chrome ore, Mn Ore, Coal & Coke, Quartzite, Bauxite, charcoal etc. including fuels, will be used for the project
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Construction material available locally such as sand, reinforcement steel, structural steel, cement, metal

			etc. will be used. The quantification of the materials will be done during detailed engineering stage
2.5	Forests and timber (source – MT)	No	No forests and timber is proposed to be used for construction. Instead alternates to it such as aluminium, ferro cement, recycled & composite material boards shall be used.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT),energy (MW)	Yes	The power requirement for the proposed project will be 70 MW. It will be sourced from Damodar Valley Corporation. Power line shall be constructed till the plant. 2 X 250 KVA DG sets are also proposed in case of power failure. The competing users sourcing power from Damodar Valley Corporation are the residents of the nearby villages and the plants and mines in surrounding areas (list of industries is given in point 9.4 later).
2.7	Any other natural resources (use appropriate standard units)	No	Not Applicable

3 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies	Yes	Industrial processes producing metals by means of electrical energy are under the purview of MSIHC rules. Hazardous material likely to be used in the plant will be (i) additives in treatment of water & waste water treatment, (ii) Fuels such as diesel, from ignitability point of view and (iii) raw materials. They will be stored in designated areas with full precautions & security.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Not anticipated since the industrial waste water generation will be limited, treated and 100% reutilised in dust suppression, sprinkling and green belt development within the plant. Domestic sewage will be treated in sewage treatment system.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	There will be positive impact of the proposed project in the area which are as follows: ?Economic status will be improved by generation of employment opportunities (700 nos.) during operation. Development of physical and social infrastructure in nearby areas will be carried out through CSR activities and budget
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	Yes	The project is located at edge of industrial area & much impact on vulnerable population is not envisaged. There will be 100% reuse of waste water & reuse/ sale of solid waste. However, impact can be due to air emissions (PM, SO2 & NO2), which shall conform to permissible limits of GSR 277(E) dt. 31.03.2012 for steel plants & controlled by dry fogging system, bag filters,etc. Hence, company will take steps such that impact on vulnerable groups living in surrounding areas will be minimised.
3.5	Any other causes	No	Not Applicable

4 Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data

4.1	Spoil, overburden or mine wastes	Yes	Waste materials from adjoining plant will be used for levelling the land, road making, etc. Earth excavated during civil works will be used for backfilling of foundations, making road and other landscaping activities inside the premises. There will be no overburden or mine waste.
4.2	Municipal waste (domestic and or commercial wastes)	Yes	Municipal solid waste will be generated in the plant @150 gm/capita/day from the workers, which will be collected in segregation bins. The composting of biodegradable component (estimated 80%), selling of recyclable component (estimated 15%) will be done and the balance will be disposed in designated area designed for the purpose by the municipal authority of Durgapur.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	During maintenance of DG sets, transformers and machines, small quantity of used oil will be generated intermittently, which will be sold to the CPCB authorized recyclers
4.4	Other industrial process wastes	Yes	Dust collected from various pollution control equipments will be 100% recyclable in own sinter plant and can be sold to other users as well.
4.5	Surplus product	No	There will be no surplus product. Only HC Ferro Manganese (45600 TPA) by SAF & LC FeMn (18000 TPA) by thermic process, Silica Manganese (36000 TPA), SiCr/ HC Ferro chrome (18000 TPA), Ferro Silicon (9600 TPA), MC/LC FeCr (15300 TPA), and Fe-Mo (3000 TPA) shall be manufactured as per production envisaged
4.6	Sewage sludge or other sludge from effluent treatment	Yes	Approximately 8-9 kg/ day sludge generated from sewage treatment system will be utilized as manure for greenbelt development / plantation
4.7	Construction or demolition wastes	No	No demolition is envisaged. Little construction waste that will get generated will be reused if recyclable or used for land levelling within the plot.
4.8	Redundant machinery or equipment	No	Since this is a proposed project, no redundant machinery or equipment is envisaged. As and when machine or equipment get redundant during operation, they will be sold as scrap
4.9	Contaminated soils or other materials	No	No contaminated soils or other materials are anticipated in the project
4.10	Agricultural wastes	No	There will not be any agricultural wastes
4.11	Other solid wastes	No	There will not be any other solid wastes

5 Release of pollutants or any hazardous, toxic or noxious substances to air(Kg/hr)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Emissions shall be there from use of fossil fuels (Coke breeze, Coal & Coke, Charcoal) and diesel (for DG set). Process stack emissions shall comply GSR 277 (E) dated 31.03.2012. The mobile sources will be diesel or petrol based vehicles. The emissions heavy diesel vehicles of BS IV shall comply to CO 1.5 g/kmhr, HC 0.96 g/kmhr, NOx 3.5 g/kmhr & PM 0.02 g/km/hr.

			Emissions limits are higher for BS III & II. Norms will apply according to age of vehicle.
5.2	Emissions from production processes	Yes	From ferro alloy manufacturing, particulate and gaseous emissions are envisaged. Bag Filters & other APCM will be installed to control PM emission from the entire plant within 30 mg/Nm3. Adequate stack height will be provided as per CPCB norms for proper dispersion of particulate matter and gaseous emissions.
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive emissions generation will be there due to the transportation activity, vehicular movement and material handling activities. At all material handling and feeding points, Bag Filters will be installed to limit emission to 30 mg/Nm3. Finished product Yard shall be covered. Proper cleaning of paved roads and proper house-keeping will be maintained to control fugitive dust emissions.
5.4	Emissions from construction activities including plant and equipment	Yes	Fugitive dust emissions generation from construction activities and vehicular movement which will be temporary and controlled by water spraying and internal road sweeping. The total suspended particulate emission rate during construction is anticipated as 2.69 megagrams (Mg)/hectare/month of construction activity
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	Dust generation during construction will be minimized by water spraying at regular intervals. Raw material shall be covered to reduce dust emission. No odour from handling of materials including construction materials, sewage and waste is anticipated due to implementation of mitigation measures.
5.6	Emissions from incineration of waste	No	No separate incinerator for waste is envisaged.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	There will be no burning of waste in open air.
5.8	Emissions from any other sources	No	There will be no emissions from any other sources.

6 Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Noise generated during operation will be kept below the prescribed limit by CPCB. The ambient noise shall remain within 75 dB(A) in day time and 70dB(A) during night time. Measures will be taken for noise abatement and persons working close to machines and machine operators will be provided with personal protective equipment viz. Ear plugs/Ear defenders etc. for further protection.
6.2	From industrial or similar processes	Yes	Noise generation will be there from operation of machinery. Mitigation measures will be taken for the reduction of noise levels viz. acoustic enclosures etc and personal protective equipment will be provided to the workers.
6.3	From construction or demolition	Yes	Noise generation, if any, from construction and demolition/ dismantling activities will be maintained within the prescribed ambient noise standards of 75 dB(A) during day time.

6.4	From blasting or piling	Yes	There will be no blasting. Minimal noise during piling activities, if required based on geophysical investigation outcome, will be addressed by providing PPEs to workers and noise barriers around working area.
6.5	From construction or operational traffic	Yes	Due to movement machine/ vehicle, there will be some noise (upto 90 dB(A)) but the ambient noise will be maintained within the prescribed limit by maintaining the vehicles, maintaining the roads and planting trees.
6.6	From lighting or cooling systems	Yes	Marginal noise will be generated from cooling systems such as air conditioners and pumps & fans of cooling tower
6.7	From any other sources	No	Not Applicable

7 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Handling of hazardous material during periodic oil change. Storage of used oil will be in closed containers, which will be used for lubrication of equipment parts and rest will be sold to CPCB authorized recycler. During lubrication, care will be taken that it does not fall on the ground or contaminate the soil. Equipments will be kept well maintained, so that they may remain leakage free.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	No effluent will be discharged from proposed plant. Waste water generated will be treated and reused in dust suppression, water sprinkling and greenbelt development. The sewage and sanitary wastewater (28.35 KLD) from toilets, washrooms and canteen shall be treated in a sewage treatment system.
7.3	By deposition of pollutants emitted to air into the land or into water	Yes	The emissions from proposed plant will be controlled within emission limits through bag filters, cyclone separators etc. Fugitive dust will be controlled by sprinkling water. Deposition will take place but housekeeping team will undertake cleaning of roads & other surfaces reducing risk of contamination. Periodical air quality & stack monitoring will be carried out & results analyzed and immediate remedial measures shall be undertaken.
7.4	From any other sources	No	Not Applicable
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	Emission of dust and pollutants into the environment will be there but undergo dispersion due to winds and any deposited particles on vegetation and other surfaces will be washed off during rains.

8 Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data

8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Machines will be maintained and it will be ensured that there are no leakages to minimize the possibilities of fire. Fire extinguishers will be installed near all machines & workers will be given fire fighting training. Safety management plan will be implemented during construction & operation phase. Procedures shall be in place to manage any spillages during handling and storage of oils, treatment plant additives, coal etc.
8.2	From any other causes	Yes	Vehicles accidents may occur for which dedicated parking, road, loading & unloading areas and manpower at the entry/ exit will be provided.
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	The proposed plant-site area falls in Seismic Zone III as per IS 1893:2002 (Part-1), which is moderate sensitive seismic zone. The area has no history of cloudburst. This area is a plain area, hence, not affected by landslide. Flood can occur due to Damodar river, which is at a distance of 6.0 km and the plant is about 35 m above the elevation of the river, as seen on google earth. Hence, flood due to river is not likely to impact the plant.

9 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: ◦ Supporting infrastructure (roads, power supply,waste or waste water treatment, etc.) ◦ housing development ◦ extractive industries ◦ supply industries ◦ Other	Yes	Result in growth of the surrounding areas due to proposed project by generation of employment opportunities in the region including ancillary development. Several local house construction and commercial construction may get accelerated due to upcoming project and contribute towards raising socio-economic status and standard of living.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	Not Applicable
9.3	Set a precedent for later developments	No	Nil
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	Yes	The project is located in an industrial area and there are several industries and Barjora Coal Mine within 15 km radius. Thus, cumulative effect can occur of the industries do not take due precaution. The magnitude of the proposed project is very low in comparison to the larger plants and the industrial area around it. Also all the projects are & will take environmental management measures.

(III) Environmental Sensitivity

S.No	Areas	Name/Identity	Aerial distance (within 15km.) Proposed project location boundary

1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Yes	Distances in km - Beliyator R.F. 0.004, Beliyator PF nr Barjora 1.8, PF nr Saharjora 2.6, PF nr Madhabpur 4.5, Beliyator R.F. nr Kanchanpur 5.2, Beliyator PF nr Nirisha 7.5, Beliyator PF nr Sanagara 7.2, PF nr Lakshminarayanpur 7.7, PF nr Gadardihi 8.0, Gobindapur PF 9.2, Beliyator PF nr Beleshala 4.6, PF nr kallapur 6.7, Gangajalghati PF nr Santalpara 8.6, PF nr Kenduadihi 9.9 and 16 more is listed in Annexure-1 uploaded in Additional Documents.
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes	Distance in km - Tartari Nala 0.3, Seasonal drain tributory to Tartari Nala adjoining, Barjora Nala 2.9, Subhankari Nala 3.6, Kanjor Nadi 6.5, Sali Nadi 9.7, Tamla nala 8.4, Damodar River 6.0, Barajuri Nala 8.9, Baro Bil 5.6, Dhannu Bil 7.4, Nityanandpur Lake 4.2, Kanjor Reservoir 8.7, Left Bank Main Canal 8.2, and 3 more is listed in Annexure-1 uploaded in Additional Documents. In addition there are numerous water tanks & ponds in villages as seen in the uploaded toposheet map.
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Yes	As listed in point no. 1 (forests) & 2 (water bodies) above
4	Inland, coastal, marine or underground waters	Yes	Water bodies as listed in point no. 2 above
5	State, National boundaries	Yes	Nil in 15 km
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Yes	Raniganj to Mejia TPS railway line (11.9 km), Asansol to Barddhman railway line (9.5 km), Bankura to Rajnagar railway line (13.1 km), Durgapur railway station (10.2 km), Beliayator railway station (13.1 km); SH-9, Durgapur to Beliyator (4.2 km), Barjora to Durlavpur Road (1.7 km), NH-14, Raniganj to Bankura (11.7 km), SH-8, Beliyator to Sonamukhi (12.8 km), NH-19, Delhi to Kalkata Hwy (12.3 km).
7	Defence installations	No	Nil in 15 km
8	Densely populated or built-up area	Yes	Villages and towns in 15 km are seen in uploaded toposheet map and list of villages is given in Annexure 2 uploaded in Additional Documents.
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Yes	Schools, hospitals, community facilities and various other amenities are present in villages as per Census 2011 (given in Annexure-2 uploaded in Additional Documents)
10	Areas containing important, high quality or scarce resources.(ground water resources,surface resources,forestry,agriculture,fisheries,tourism,minerals)	No	Nil in 15 km
11	Areas already subjected to pollution or environmental damage.(those where existing legal environmental standards are exceeded)	Yes	The nearest critically polluted area is Durgapur at a distance of 8.3 km.
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions) similar effects	No	Seismic Zone III as per IS 1893:2002 (Part-1)- moderate sensitive seismic zone.

(IV) Proposed Terms of Reference for EIA studies

1	**Uploaded Proposed TOR File**	Annexure-TOR file
2	**Uploaded scanned copy of covering letter**	Annexure-scanned copy of covering letter
3	**Uploaded Pre-Feasibility report(PFR)**	Annexure-PFR
4	**Uploaded additional attachments(only single pdf file)**	NIL

Additional Attachments, if any
Attached File
Additional Attachment 2 : Villages and amenities in 15 km radius of project
Additional Attachment 3 : Proposed Tentative Layout Plan
Additional Attachment 1 : Features in 15 km radius of project

Essential Detail Sought:

Sno.	EDS Letter	Remarks	Date of EDS
1.	Eds Reply Letter	The EDS reply is uploaded with corrections.	18 Aug 2022
2.	NA	Dear Sir, The reply has been examined and it is noted that PP mentioned that the project is not located in any SPA/CPA. However in Form 1 it is mentioned that this is category A project as it is located Critically polluted areas as notified by the Central Pollution Control Board(CPCB) from time to time. The statement is contratadory. Please submit the correct details. If project is located in CPA/SPA then Action Plan as per Ministry OM 0f 2019 and 5th July 2022 needs to be submitted.	16 Aug 2022
3.	Eds Reply Letter	EDS reply dated 8.8.2022 is uploaded with all the Annexures	08 Aug 2022
4.	NA	Kindly refer your proposal for Terms of Reference (ToR) along with Form 1. The proposal has been examined in the Ministry. It is noted that the Form 1 has been filled without providing requisite information/documents in the Form 1/PFR and has also not provided accurate scientific/technical details of the project. In view of the same, you are requested to revise the Form1 with correct details, revise the PFR in line with the EIA Notification, 2006 and upload the requisite documents, in addition to the details desired as below: (i) It is informed that, complete application is processed online, and hence accurate data needs to be provided in the Form 1/PFR. Please recheck the application accordingly. (ii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. (iii) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing. (iv) Details of land and its possession letter needs to be uploaded. Please confirm whether land conversion for industrial purpose has been completed. On perusal it is observed that PP has not even applied the land conversion to the concerned authority. (v) Please confirm whether the said Unit is located in CPA/SPA/OPA. If yes, please provide the details. (vi) Details of court case, directions issued by SPCB, if any, pending needs to be submitted. (vii) Details of forest land involved in the	20 Jun 2022

		project. If yes, please provide the details of Stage I FC application and its proposal number. (viii) PP submitted the TOR application in June 2022, however the covering letter is dated of April 2022. Please provide the correct letter. This is not good practice. (ix) In s.no. 9, copy of survey of India Toposheet shall have proper project boundaries as per coordinates and shall include the legends. (x) Under the Environmental sensitivity section, all the vulnerable groups shall be mentioned with distance and direction from the project site respectively. (xii) Coordinates of all corners of the project site shall be submitted. (xi) It is mentioned that the processing of EC proposal, in the Ministry, is through Parivesh Portal only, therefore providing the requisite information/documents shall be in compliance as per Form and accordingly the PP are kindly requested to revise the application in the Form and resubmit the same.	

Additional Detail Sought : NIL

(V) Undertaking

I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

V. (i)	**Name of Applicant**	SandeepLalwani
	Designation	Director
	Name of Company (Applicant Name should not be given here)	LALWANI FERRO ALLOYS LIMITED
	Address	32, Jawaharlal Nehru Road, Om Tower, Suite No. 205, 2nd Floor

Brief Summary for TOR application for Proposed Ferro Alloy Plant by M/s Lalwani Ferro Alloys Limited at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal

1. M/s Lalwani Ferro Alloys Limited has made an application online vide proposal no. IA/WB/IND/277459/2022 along with the application in Prescribed Format (Form I), copy of Pre-Feasibilty Report and proposed Terms of Reference (TOR) for undertaking detailed EIA study under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

2. The project of M/s Lalwani Ferro Alloys Limited located in Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal is for establishment of Ferro Alloys Plant with following facilities& production:

	Equipment	Capacity	Product	Unit wise Production, TPA	Total Production, TPA
1	**Submerged Arc Furnace (SAF)**				
1.1	SAF	9 MVA	HC FeMn	22,800	**45,600**
1.2	SAF	9 MVA	HC FeMn	22,800	
1.3	SAF	9 MVA	SiCr or HCFeCr	18,000	**18,000**
1.4	SAF	9 MVA	FeSi	9,600	**9,600**
1.5	SAF	9 MVA	SiMn (HC/ MC/ LC)	18,000	**36,000**
1.6	SAF	9 MVA	SiMn (HC/ MC/ LC)	18,000	
			Total SAF		**1,09,200**
2	**Electric Arc Furnace (EAF)**				
2.1	EAF	6 T	FeCr (MC/ LC)	7,650	**15,300 (derived from 1.3)**
2.2	EAF	6 T	FeCr (MC/ LC)	7,650	
3	**Argon oxygen decarburization (AOD) & Holding furnace (HF)**				
3.1	AOD & HF	15 T 9 T	FeMn (MC/ LC)	19,380	**38,760 (derived from 1.1 & 1.2)**
3.2	AOD & HF	15 T 9 T	FeMn (MC/ LC)	19,380	
4	**Thermic process**				
4.1	Refractory crucible(s)	2000 TPM	FeMo	3,000	**3,000**
			LC FeMn	18,000	**18,000**
			Total Thermic		**21,000**
				TOTAL (1+4)	**1,30,000**

Abbreviations : LC- low carbon, MC- medium carbon, HC- high carbon, FeCr- Ferro Chrome, FeMn- Ferro Manganese, FeSi- Ferro Silicon, SiCr- Silico Chrome, SiMn- Silico Manganese

In addition to above, supporting units such as briquetting unit, slag recovery unit and sinter plant are also proposed.

3. Environmental site settings

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total Land</td><td>13.91 Acres (5.629 ha)</td><td></td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>100% is in possession of PP</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project Site :</u> No habitation
<u>Study Area :</u> nearest :<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Ghutghariya</td><td>1.3 km</td><td>ENE</td></tr><tr><td>Saharjora</td><td>2.2 km</td><td>S</td></tr><tr><td>Manohar</td><td>2.7 km</td><td>NNW</td></tr></table></td><td>Status of R&R : Not applicable since entire land is in possession of the PP</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Coordinate No.</th><th>Latitude (N)</th><th>Longitude (E)</th></tr><tr><td>North most</td><td>23°26'9.82"</td><td>87°14'21.55"</td></tr><tr><td>East most</td><td>23°26'4.34"</td><td>87°14' 29.74"</td></tr><tr><td>South Most</td><td>23°25'59.44"</td><td>87°14' 23.88"</td></tr><tr><td>West most</td><td>23°26' 3.80"</td><td>87°14'18.37"</td></tr></table></td><td>Measured from google earth kml</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>90 m amsl average based on Google Earth.</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>Nil.</td><td>The project boundary when superimposed on the toposheet based on the coordinates given in point iv above, it shows part of the project area is in forest. However, on ground, the forest area begins after the seasonal nala, which marks the boundary of the project and also the Plasto Steel Park of WBIDCL.</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site: No natural water body
Study area: Nearest water body is a seasonal stream, adjoining to the boundary. It is tributary of Tartari Nala at 0.3 km. Nearest major river is Damodar River at 6 km NE. 2 other rivers, 6 nalas, 2 bils, 2 lake/ reservoir, 2 canals and 2 barrages are also present in study area.</td><td></td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td><u>Study area</u>
Name of the ESZ/ESA: Nil
List of Reserved and protected forests: 2 pockets of Beliyator reserved forests and 29 protected forests are present in study area. Nearest is at 4 m.</td><td></td></tr>
</table>

4. The water requirement for the project is estimated as 351.5 m^3/day, which will be obtained from Rain Water Harvesting, Ground Water and Piped Water from WBIDC industrial park facility.

5. The power requirement for the project is estimated as 70 MW, which will be obtained from Damodar Valley Corporation (DVC). During power failure, 2 nos x 250 kVA DG sets are proposed.

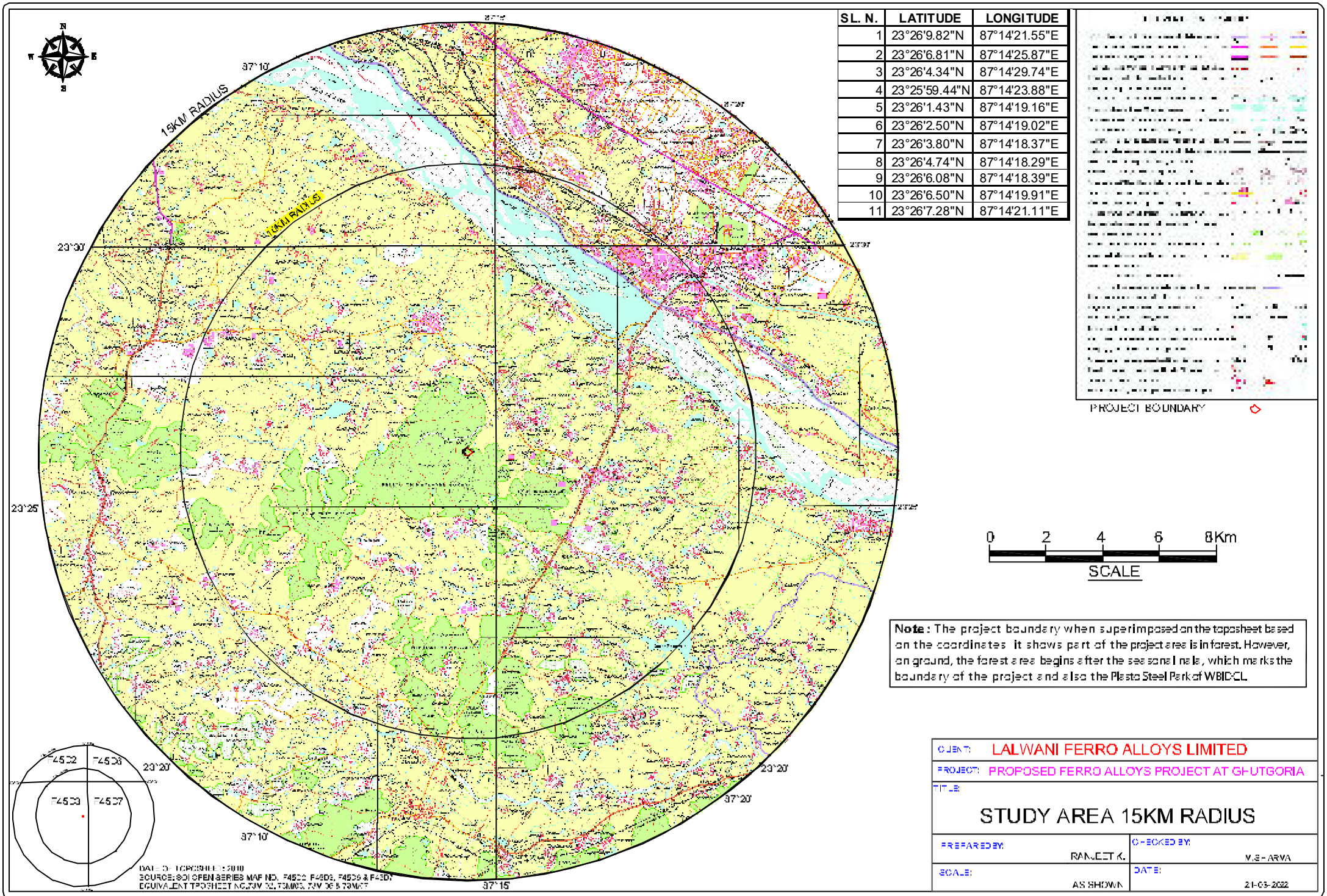
6. The capital cost of the project is Rs. 258.8958 crores and the capital cost for environmental protection measures will be calculated in EIA. The employment generation for the proposed project will be 700 persons.

7. There is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

8. Proposed Terms of Reference ***(Baseline data collection period:*** *01.03.2022 to 31.05.2022****)***

Attributes	**Parameters**	**Sampling**	
		No. Of stations	**Frequency**
A. Air			
a. Meterological Parameters	Wind speed, direction, relative humidity, temperature and rainfall	1 (Core Zone)	Measured at hourly duration for 3 months
b. AAQ parameters	PM10, PM2.5, SO_2, NO_2, CO	8 (one in core zone and 7 in buffer zone)	24 hourly samples, twice a week for 3 months
	Benzene, NH_3, BaP, Arsenic, Nickel and Lead	8 (one in core zone and 7 in buffer zone)	Twice a week for 1 week in core & buffer zone
B. Noise	Leq (Day), Leq (Night)	8 (one in core zone and 7 in buffer zone)	Hourly readings taken for 24 hours
C. Water			
Surface water/ Ground water quality parameters	**Ground Water:** Odour, Turbidity, pH, EC, TDS, TSS, Hardness, Alkalinity, Sulphate, Chloride, Calcium, Magnesium, Sodium, Potassium, Iron, Fluoride, Aluminium, Silver, Lead, Manganese, Nickel, Selenium, Arsenic, Zinc, Mercury, Molybdenum, Nitrate **Surface Water**: in addition to the aforementioned parameters in ground water - DO, BOD, COD, Oil & Grease, Total Coliform, E.Coli	Ground water - 8 and Surface water - 8	Once in monitoring period
D. Land			
a. Soil quality	pH, EC, $CaCO_3$, Specific gravity, Moisture, Sodium, Potassium, Textural Classification, Grain size analysis, Colour, Organic Carbon, Organic matter, Phosphorus, Nitrate Nitrogen	3 (1 in core zone, 2 in buffer zone)	Once in monitoring period
b. Land Use	Satellite Imagery Interpretation,	Of 10 km study area	once

Attributes	Parameters	Sampling	
		No. Of stations	**Frequency**
	Land use details		
E. Biological			
a. Aquatic	Flora and Fauna species	Of 10 km study area	Once
b. Terrestrial	Flora and Fauna species	Of 10 km study area	Once
F. Socio-Economic Parameter	1) Various amenities, demography, employment pattern, 2) need assessment for CSR	1) Of 10 km study area 2) nearby villages	1) Census data 2) sample survey- once
G. Traffic	Traffic volume (PCU)	2	Once in monitoring period



SL. N.	LATITUDE	LONGITUDE
1	23°26'9.82"N	87°14'21.55"E
2	23°26'6.81"N	87°14'25.87"E
3	23°26'4.34"N	87°14'29.74"E
4	23°25'59.44"N	87°14'23.88"E
5	23°26'1.43"N	87°14'19.16"E
6	23°26'2.50"N	87°14'19.02"E
7	23°26'3.80"N	87°14'18.37"E
8	23°26'4.74"N	87°14'18.29"E
9	23°26'6.08"N	87°14'18.39"E
10	23°26'6.50"N	87°14'19.91"E
11	23°26'7.28"N	87°14'21.11"E

PROJECT BOUNDARY

0 2 4 6 8Km

SCALE

Note : The project boundary when superimposed on the toposheet based on the coordinates it shows part of the project area is in forest. However, on ground, the forest area begins after the seasonal nala, which marks the boundary of the project and also the Plasto Steel Park of WBIDCL

CLIENT: LALWANI FERRO ALLOYS LIMITED

PROJECT: PROPOSED FERRO ALLOYS PROJECT AT GHUTGORIA

TITLE:

STUDY AREA 15KM RADIUS

PREPARED BY:	CHECKED BY:
RANJEET K.	V.E - ARYA
SCALE: AS SHOWN	DATE: 21-03-2022

PROPOSED TERMS OF REFERENCE FOR EIA STUDY OF PROPOSED FERRO ALLOY PLANT OF M/S LALWANI FERRO ALLOYS LIMITED

The terms of reference on the basis of which the EIA will be prepared are given below**:**

1.0 DATA GENERATION

Baseline Environmental data was generated during summer season of 2022 i.e. from 01.03.2022 to 31.05.2022. Monitoring has been carried out by NABL accredited/ MoEF&CC recognised laboratory in accordance with the requirement of statutory agencies, is given in **Table 1**. The monitoring and testing has been done as per the guidelines of MOEF&CC and the IS standards. Monitoring has been conducted for the following parameters:

TABLE 1 : DATA GENERATED

Description	No. of locations	Total No of samples
Air Ambient air monitoring (24 hourly samples), twice a week Parameters : PM 10, PM 2.5, SO_2, NOx, CO	8 (one in core zone and 7 in buffer zone)	192
Benzene,NH_3, BaP, Arsenic, Nickel and Lead	8 (twice in core zone and buffer zone)	16
Meteorological parameters measured at hourly duration simultaneously at one air monitoring station for 3 months for Wind speed, direction, relative humidity, temperature and rainfall.	1 (Core Zone of existing plant)	90 days
Water Water sample from various surface and ground water sources in core and buffer zone (10 km radius) and tested for physical, chemical & biological parameters **Ground Water Parameters:** Odour, turbidity, pH, EC, TDS, TSS, Hardness, Alkalinity, Sulphate, Chloride, Calcium, Sodium, Potassium, Magnesium, Iron, Fluorides, Aluminium, Silver, Barium, Boron, Bismuth, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Nickel, Selenium, Arsenic, Zinc, Mercury, Molybdenum, Nitrate **Surface Water Parameters**: in addition to above parameters- DO, BOD, COD, Oil & Grease, Total Coliform, E. Coli	16 (Surface Water-8 and Ground water-8)	16 (Surface Water-8 and Ground water-8)
Soil **Parameters:** pH, EC, $CaCO_3$, Specific Gravity, Moisture, Sodium, Potassium, Textural Classification, Grain Size analysis, Colour, Organic Carbon, Organic Matter, Phosphorous, Nitrate-Nitrogen	3	3
Noise Hourly readings taken for 24 hours (Leq)	8	8 sets
Traffic density Hourly for 24 hours	3	3 set

2.0 DATA COLLECTION

Secondary and primary data collection has been done for 10 km radius around the project comprising of, but not restricted to the following:

- ❖ Long Term Climatic data from Indian Meteorological Department (IMD) for available previous decade
- ❖ Geo-hydrological aspects based on available data from various sources
- ❖ Identification of water bodies, hills, roads etc. within 10 km radius
- ❖ Details of fauna, flora, information in forests, major habitats, sanctuaries, sensitive places within a distance of 10 km from the project site (including forest details).
- ❖ Major industries within 10 km radius.
- ❖ Historical monuments and sanctuaries within 10 km radius.
- ❖ Land use pattern within core zone and buffer zone (10 km radius around the core zone), Cropping pattern.
- ❖ Demography and socio-economic based on last available Census data for entire study area
- ❖ Emission data and details of implemented pollution control systems in case of operational plant

2.1 Following stations have been monitored for air, water, noise and soil as per the guidelines.

Air Quality monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Core Zone	-
2.	Ghutgariya Village	1.4, NE
3.	Barjora Village	3.3, E
4.	Saharjora Village	2.3, S
5.	Beleshola Village	5.0, SW
6.	Anandapur Village	2.8, WNW
7.	Bhabanipur Village	2.9, NW
8.	Keshabpur Village	3.0, N

Noise Quality monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Core Zone	-
2.	Ghutgariya Village	1.4, NE
3.	Barjora Village	3.3, E
4.	Saharjora Village	2.3, S
5.	Beleshola Village	5.0, SW
6.	Anandapur Village	2.8, WNW
7.	Bhabanipur Village	2.9, NW
8.	Keshabpur Village	3.0, N

Soil Quality monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Core Zone	-
2.	Forest Area	0.07, W
3.	Ghutgariya Village	1.5, NE

Surface water Quality monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Nala Up Stream Near Project Area	Adjoining
2.	Nala Down Stream Near Project Area	0.06, N
3.	Pond In Barjora	4.0, ESE
4.	Pond Near Lalwani Plant	0.2, E
5.	Barjora Nala Up Stream In Phuljam Village	4.1, NW
6.	Barjora Nala Down Stream In Nutangram Village	6.0, NE
7.	Damodar River Up Stream In Madhabpur Village	6.4, NNE
8.	Damodar River Down Stream In Krishnanagar Village	7.9, Ese

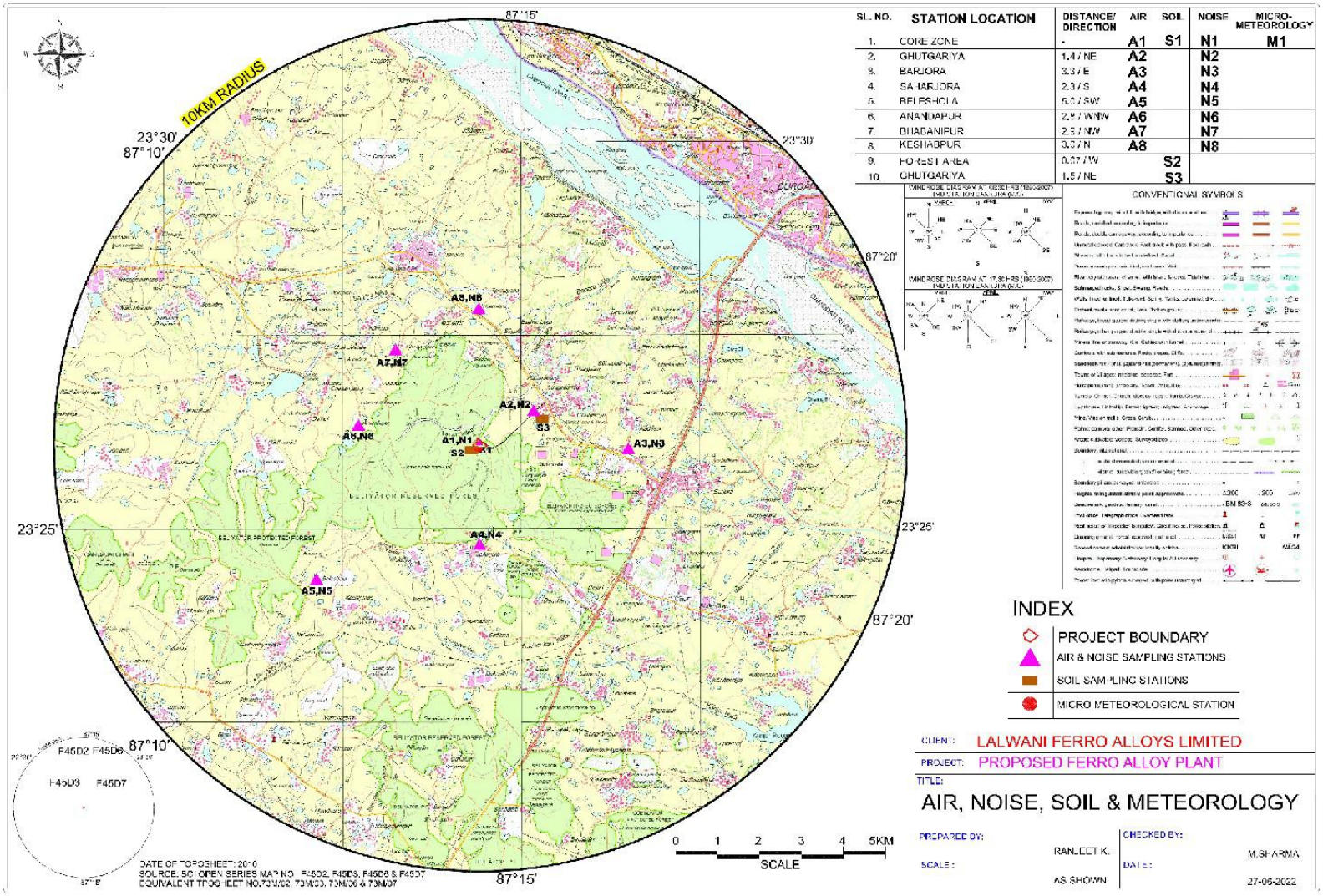
Ground water monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Lalwani Plant	0.3, E
2.	Ghutgariya Village	1.7, NE
3.	Kadashol Village	3.4, ESE
4.	Saharjora Village	2.2, S
5.	Beleshole Village	4.9, SW
6.	Anandapur Village	2.8, WSW
7.	Bhabanipur Village	2.87, NW
8.	Keshebpur Village	3.0, N

Traffic monitoring stations selected:

S.No.	Monitoring Locations	Distance (km) & Direction
1.	Road Near Lalwani Plant	0.8, NE
2.	Road Near Baguli Village	2.4, N
3.	Road Near Kadashol Village	3.0, E

FIG.1: AIR, SOIL AND NOISE MONITORING LOCATIONS



SL. NO.	STATION LOCATION	DISTANCE/ DIRECTION	AIR	SOIL	NOISE	MICRO-METEOROLOGY
1.	CORE ZONE	-	A1	S1	N1	M1
2.	GHUTGARIYA	1.4 / NE	A2		N2	
3.	BARJORA	3.3 / E	A3		N3	
4.	SALBARJORA	2.3 / S	A4		N4	
5.	BELESHOLA	5.0 / SW	A5		N5	
6.	ANANDAPUR	2.9 / WNW	A6		N6	
7.	BHADANIPUR	2.5 / NW	A7		N7	
8.	KESHABPUR	3.0 / N	A8		N8	
9.	FOREST AREA	0.07 / W		S2		
10.	GHUTGARIYA	1.5 / NE		S3		

INDEX

- PROJECT BOUNDARY
- AIR & NOISE SAMPLING STATIONS
- SOIL SAMPLING STATIONS
- MICRO METEOROLOGICAL STATION

CLIENT: LALWANI FERRO ALLOYS LIMITED

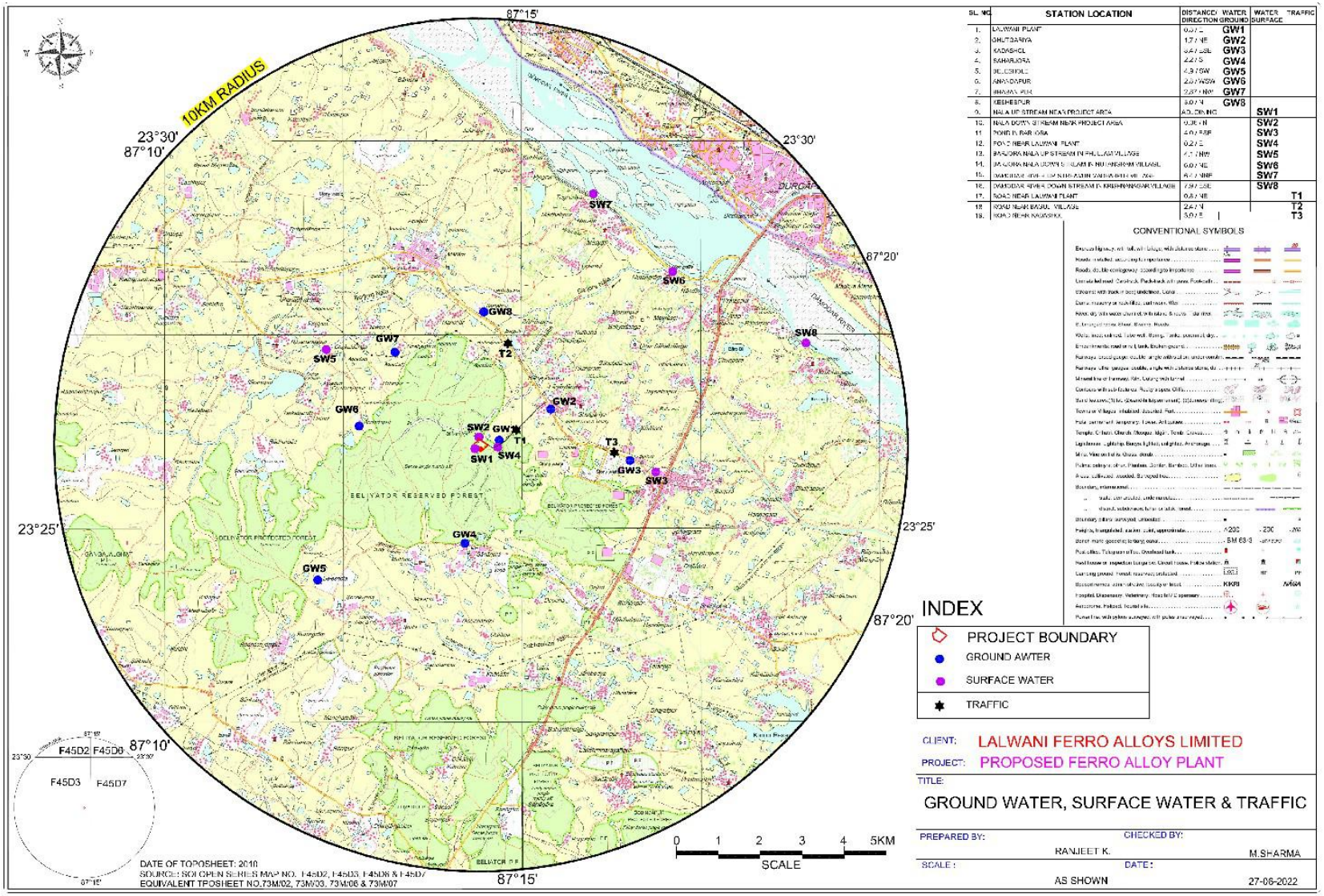
PROJECT: PROPOSED FERRO ALLOY PLANT

TITLE:

AIR, NOISE, SOIL & METEOROLOGY

PREPARED BY:	RANJEET K.	CHECKED BY:	M.SHARMA
SCALE :	AS SHOWN	DATE :	27-06-2022

FIG.2: GROUNDWATER, SURFACE WATER & TRAFFIC MONITORING LOCATIONS



SL NO	STATION LOCATION	DISTANCE/ DIRECTION	WATER GROUND	WATER SURFACE	TRAFFIC
1.	LALWANI PLANT	0.0/ -	GW1		
2.	GHUTGARIYA	1.7/ NE	GW2		
3.	KADASHOL	0.4/ SSE	GW3		
4.	SAHARJORA	2.2/ S	GW4		
5.	BELGHORIA	4.3/ SW	GW5		
6.	ANANDAPUR	2.2/ WSW	GW6		
7.	BHAWAL PUR	0.2/ WNW	GW7		
8.	KESHERPUR	3.0/ N	GW8		
9.	NALA UP STREAM NEAR PROJECT AREA	ADJOINING		SW1	
10.	NALA DOWN STREAM NEAR PROJECT AREA	0.3/ N		SW2	
11	POND IN PARJORA	4.0/ ESE		SW3	
12.	POND NEAR LALWANI PLANT	0.2/ E		SW4	
13.	BASJORA NALA UP STREAM IN PHULLARA VILLAGE	4.7/ NW		SW5	
14.	JAJORA NALA DOWN STREAM IN NIJ ANGARIA VILLAGE	6.0/ NE		SW6	
15.	DAMODAR RIVER UP STREAM AT KANKARTOLA	8.2/ WNW		SW7	
16.	DAMODAR RIVER DOWN STREAM IN KRISHNANAGAR VILLAGE	7.9/ SSE		SW8	
17.	ROAD NEAR LALWANI PLANT	0.6/ NE			T1
18	ROAD NEAR BAGUL VILLAGE	2.4/ N			T2
19.	ROAD NEAR KADASHOL	5.0/ E			T3

CONVENTIONAL SYMBOLS

INDEX

- PROJECT BOUNDARY
- GROUND AWTER
- SURFACE WATER
- TRAFFIC

CLIENT: LALWANI FERRO ALLOYS LIMITED

PROJECT: PROPOSED FERRO ALLOY PLANT

TITLE: GROUND WATER, SURFACE WATER & TRAFFIC

PREPARED BY:	CHECKED BY:
RANJEET K.	M.SHARMA
SCALE : AS SHOWN	DATE : 27-06-2022

3.0 PREPARATION OF EMP

The preparation of the EIA/EMP will be done as per the generic structure prescribed in EIA Notification dated 14th September 2006 and its amendments, as follows:

❖ Chapter 1: Introduction

Covering purpose of the report, identification of project & project proponent, brief description of nature, size, location of the project and its importance to the country, region and scope of the study – details of regulatory scoping carried out (As per Terms of Reference)

❖ Chapter 2: Project Description

(Based on study of the reports like Pre-feasibility Report or Techno-economic Feasibility Report)

This includes condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Details such as type of project, project boundary & project site layout, size or magnitude of operation (including associated activities required by or for the project), project implementation schedule, technology and process description.

❖ Chapter 3: Present Baseline Scenario

The base line data generated and collected will be used to establish the present environmental scenario. This will cover the study area, period, components & methodology, establishment of baseline for valued environmental components, as identified in the scope and base maps of applicable environmental components.

❖ Chapter 4: Environmental Impacts & Mitigation

(Identification, prediction and evaluation of Anticipated Environmental Impacts due to the proposed plant and related facilities)

The impact assessment and mitigation is proposed for:

* Ambient Air Quality
* Noise levels
* Topography
* Land use
* Traffic density
* Occupational health and safety
* Sensitive Places/Historical Monuments etc.
* Surface and Ground Water Quality & Resources
* Soil Quality
* Ecology
* Socio-economic conditions

Environmental Management plan suggesting the environmental safeguards, abatement technology and pollution control measures as follows:

- Air, water, noise pollution control measures
- Solid waste management
- Traffic management
- Land use changes and mitigation
- Pronounce the improvement in socio-economic conditions and benefits the people will get on implementation of the project. Outlining corporate social responsibility.
- Green belt development plan & reclamation plan.

- Environmental monitoring, implementation organization and feedback mechanism to effect mid course corrections.
- Cost for Environmental Protection measure

❖ **Chapter 5: Analysis of Alternatives (Technology & Site).**

In case, the scoping exercise results in need for alternatives then description of each alternative, summary of adverse impacts of each alternative, mitigation measures proposed for each alternative and selection of alternative is done.

❖ **Chapter 6: Environmental Monitoring Program**

Technical aspects of monitoring the effectiveness of mitigation measures including measurement methodologies, frequency, location, data analysis, reporting schedules, detailed budget & procurement schedules.

❖ **Chapter 7: Additional Studies**

This shall comprise of public consultation, risk assessment, social impact assessment and R&R action plans or any other studies specified by MoEF&CC.

❖ **Chapter 8 : Project benefits**

This comprises of the improvements in the physical infrastructure, improvements in the social infrastructure, employment potential –skilled; semi-skilled and unskilled and other tangible benefits.

❖ **Chapter 9: Environmental Cost Benefit Analysis**

If recommended at the Scoping stage.

❖ **Chapter 10: Environmental Management Plan**

Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA.

❖ **Chapter 11: Executive Summary of EIA/EMP**

This will constitute the summary of the EIA Report.

❖ **Chapter 12: Disclosure of Consultants engaged**

The names of the Consultants engaged with their brief resume and nature of Consultancy rendered.

LALWANI FERRO ALLOYS LTD.
OM TOWER, 32, Jawaharlal Nehru Road, 2nd Floor, Kolkata - 700 071
Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

ISO 9001 REGISTERED

TO WHOMSOEVER IT MAY CONCERN

This is to state that Mr. Sandeep Lalwani S/O Mr. Kamal Kishore Lalwani, is the Director of M/s Lalwani Ferro Alloys Ltd. , having its registered office at 32, Jawaharlal Nehru Road, Om Tower, Suite No. 205, 2nd Floor, Kolkata, West Bengal 700071, is duly authorized to sign any documents and represent the company in any matters related to the environmental clearance of the proposed Ferro Alloys Plant of the Company in plot no. B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal.

For LALWANI FERRO ALLOYS LTD.

DIRECTOR

No site alternatives have been considered since two adjoining plots became available in the existing Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal and M/s Lalwani Ferro Alloys Ltd. purchased the same from West Bengal Industrial Development Corporation Ltd. as well as M/s Aditi Commodities Pvt. Ltd.

PRE-FEASIBILITY REPORT

For

Proposed Ferro Alloy Plant

(6 nos. x 9 MVA Submerged Arc Furnace,
2 nos. X 6 T Electric Arc Furnaces,
2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces and 2000 TPM Thermic process)

(Annual production of FeMn/ FeCr/ SiMn/ FeSi/ SiCr/ FeMO = 1,30,000 TPA, Area = 13.91 Acres)

At

Plot B1 & C1, Plasto Steel Park, Phase-II,
Mouza Ghutgariya J.L. No. 24,
District Bankura, West Bengal

ISSUE 1 REV. 1 JULY 2022

Submitted by:

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<tr><td>Plant Area</td><td>13.91 Acres</td></tr>
<tr><td>Product</td><td>1. High Carbon Silico Manganese (HC Si Mn)
2. Medium Carbon Silico Manganese (MC Si Mn)
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</table>
Supporting units such as briquetting unit, slag recovery unit (10,000 TPM) and sinter plant are also proposed.</td></tr>
</table>

<table>
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</td></tr>
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<tr><td>Water requirement</td><td>Make-up water 351.5 KLD CuM/Hour</td></tr>
<tr><td>Source of water</td><td>Rain Water Harvesting, Ground Water and Piped Water from WBIDC industrial park facility.</td></tr>
<tr><td>Power requirement</td><td>70 MW</td></tr>
<tr><td>Power source</td><td>The power will be sourced from Damodar Valley Corporation (DVC).
2 X 250 KVA DG sets back up power</td></tr>
</table>

2.0 INTRODUCTION

2.1 Identification of project and project proponent

Lalwani Ferro Alloys (P) Ltd. (LFAL) which was established on 27.11.1986 to manufacture & trade in Ferro Alloys is first Group Company of Lalwani Group. M/s Lalwani Ferro Alloys Private Limited was incorporated at Kolkata with the main object of manufacturing, dealing, import and export of ferro alloys. The company is promoted by Sri Kamal Kishore Lalwani to produce Noble Alloys, Master Alloys and Bulk Alloys. It is one of the leading ferro alloy manufacturing and trading companies in India located at Kolkata, West Bengal.

LFAL has achieved net sales of Rs. 721.87 crores and earned a profit after tax of Rs. 31.28 crores during the year ended 31.3.2021. The company's projected net sales for the year ended 31.3.2022 is Rs.1207.57 crores and net profit is estimated at Rs. 100 crores.

LFAL is presently operating 5 x 9 MVA ferro alloy furnaces at its plant located within the Plasto Steel Park at P.S. Barjora, District Bankura, West Bengal.

The company's core strengths, complemented with the vast experience of the promoters and its key managerial personnel will help it keep pace with the changing times and respond to domestic and international market dynamics by maintaining consistent product quality, efficient management of logistics for material procurement, minimum quantity inventory management, maintaining product despatch schedules, making LFAL a reliable global partner for many large steel producers like SAIL, Tata Steel, Arcelor Mittal, Bhushan Steel, Jindal Steel, etc.

2.2 Brief description of nature of the project

The nature of the project is ferrous metallurgical industries, which fall under the category of 3(a) under category “A" of the Schedule of EIA Notification, 2006.

2.3 Need for the project and its importance to the country and/or region

India's economic growth is contingent upon the growth of the Indian Steel Industry. Consumption of steel is taken to be an indicator of economic development. While steel continues to have a strong hold in traditional sectors such as construction, housing and ground transportation. Special steels are increasingly used in engineering industries such as power generation, petrochemicals and fertilizers, defense sectors in the manufacture of armaments, ships, boats, fighter aircrafts, ammunition, white goods like household durables including washing machines, microwave ovens, air conditioners, refrigerators, induction cookers etc. and in passenger and transportation vehicles like cars, two wheelers, light, medium and heavy commercial vehicles etc.

India has recently reserved a large number of defense equipments for manufacture and supply by domestic industrial units which is giving rise to high demand for steel in general and special steels in particular.

Ferro alloys like high, medium and low carbon ferro manganese, ferro silicon, silico manganese, ferro chrome are essential elements in imparting ductility, malleability and strength to steel during its conversion from sponge or pig iron. The demand for ferro alloys rises in tandem with increase in the production and consumption of iron and steel.

As per the National Steel Policy, the objective is to build a globally competitive industry. It is anticipated that a crude steel capacity of 300 Million Tonnes will be required by 2030 based upon the demand projections. Thus, achieving crude steel capacity of up to 300 million Tonnes will require extensive mobilization of natural resources, finances, manpower and infrastructure including land.

The proposed project will assist in the endeavor to meet the projected demand of steel in the country by providing the necessary additives to the larger steel manufacturers.

2.4 Demand-supply gap

Ferro Alloys are used additives in steel making as de-oxidants and as alloying agent. These are added in steel production process not only for de-oxidation but also for grain size control as well as for improvement in the mechanical properties of steel. Depending upon the process of steel making and the type of steel being made, the requirement of Ferro Alloys varies widely.

The product mix of the Ferro Alloy industry consists of Ferro manganese, Silico Manganese, Ferro Silicon, Ferro Chrome & Charge Chrome called Bulk Ferro Alloys. There is another group of ferro alloys called Noble Ferro alloys which consists of Ferro Molybdenum, Ferro Titanium, Ferro Tungsten, Ferro Vanadium, etc. As per Indian Ferroalloys Producers' Association (IFAPA), the total installed capacity of bulk Ferroalloys Industry in India is estimated at 5.10 million tonnes per annum and for noble ferroalloys it is 50,000 tonnes per annum[1]. Owing to high cost of power, Ferroalloys Industry has not been operating to its full capacity in India

Ferro alloys are used in production of mild steel, carbon steel, special alloy steel and stainless steel in the country. India’s steel production is increasing every year; thereby the consumption of ferro alloys is also increasing. The industry has enough capacity to produce ferro alloys required for domestic steel industry. However, certain basic raw materials, i.e., ores viz, manganese ore, chrome ore, roasted molybdenum ore and concentrate/ moly oxide, tungsten ore, wolframite ore, scheelite ore, nickel oxide, vanadium ore, vanadium pentoxide, etc need linkages and stable supplies.

The total production of ferromanganese in 2017-18 was about 5,18,000 tonnes which remained same in 2018-19. The estimated consumption of ferromanganese was 50,800 tonnes in 2017-18.

The production of silicomanganese (including medium-carbon & low carbon silicomanganese) which was about 3,11,326 tonnes in 2017-18 increased to 3,45,291 tonnes in 2018-19. In 2017-18, the total consumption of silicomanganese by all industries has been estimated at 1,22,600 tonnes.

The production of ferrosilicon in 2017-18 was about 90,000 tonnes which remained same in 2018-19. The domestic consumption of ferrosilicon in the Organised Sector was estimated at 23,400 tonnes in 2017-18.

Imports of ferroalloys (total) decreased marginally by 7% to 5,08,008 tonnes in 2018-19 from 5,44,264 tonnes in the previous year. In terms of value, the ferroalloys imports increased to Rs. 7,573 crore in 2018-19 from Rs. 6,617 crore in 2017- 18. Out of total imports in terms of quantity, imports of ferrosilicon accounted for about 44% followed by ferromanganese (24%), ferronickel (17%), ferrochrome (6%) and charge chrome (4%). Other ferroalloys together accounted for the remaining 5% of the imports in 2018-

[1] Source: Indian Minerals Yearbook 2019 (part-II: metals & alloys), July 2020 of Indian Bureau of Mines available at https://ibm.gov.in/writereaddata/files/08012020124231Ferroalloys2019.pdf accessed 25.03.2021

19. Imports were mainly from Bhutan (21%) followed by Malaysia (17%), China (14%), Indonesia & South Africa (9% each), Japan (4%) Korea Republic of, Russia & Singapore (3% each) and Brazil (2%).[2]

As per the steel world report, ferroalloys Industry is estimated to grow at a CAGR of 5.9% between 2017 to 2025 and is expected to reach a valuation of US$ 188.7 Bn by 2025. India is expected to show strong growth in usage of steel in the coming years because of its robust economy, massive infrastructure needs and expansion of industrial production. India is expected to become one of the leading steel consuming nations in the next decade. In this scenario, the Ferroalloys Industry estimates that the consumption of ferroalloys will increase domestically and internationally in the coming years. Some of the Ferroalloy Producers have already gone for expansion and some new units are coming up.

Hence, considering the huge increase in demand and production of steel, the demand for ferro alloys is also projected to rise in tandem. The present proposal initiated by LFAL proposes to partially meet the higher demand for a range of ferro alloys in the country. Further, India being a source of large quantities of thermal coal has emerged as one of the most efficient producers of power globally. Since, power constitutes nearly 35% of cost of production of bulk ferro alloys, India has emerged as a major supplier of ferro alloys globally.

Imports vs. indigenous production

Imports of steel from China had adversely affected the Indian Steel Market and the policy changes by Govt. of India has lead to recovery of the sector. Further, due to its competitiveness India has enjoyed a very strong exporter of ferro alloys for many decades now and it is expected to continue its dominance of the ferro alloy market in the long term. There are no imports of major and bulk ferro alloys in India and the country is a major exporter of this product.

2.5 Export possibility

Owing to high cost of power, Ferroalloys Industry has not been operating to its full capacity in India. As per Indian Minerals Yearbook 2019 (part-II: metals & alloys), July 2020 of Indian Bureau of Mines, in 2018-19, exports of ferroalloys (total) decreased slightly to 19,42,134 tonnes in 2018- 19 from 19,55,751 tonnes in the previous year. In terms of value, the ferro-alloys exports increased to Rs. 14,962 crore in 2018-19 from Rs. 14,328 crore in 2017-18.

Out of total export, in terms of quantity, majority were exports of ferrochrome (44%) followed by ferrosilico-manganese (39%), ferromanganese (14%) and ferrosilicon (1%). The other ferroalloys together

[2] Source: Indian Minerals Yearbook 2019 (part-II: metals & alloys), July 2020 of Indian Bureau of Mines available at https://ibm.gov.in/writereaddata/files/08012020124231Ferroalloys2019.pdf accessed 25.03.2021

accounted for remaining 2% of exports in 2018-19. Exports were mainly to Republic of Korea & China (15% each), UAE (11%), Japan (10%), Taiwan (7%), Italy (4%), Thailand & Malaysia (3% each) and USA & Netherlands (2% each).

The **Table 1** below shows the trend in production for sale, import, export and actual consumption of finished steel (alloy/ stainless + non-alloy) in the country for the last five years.

TABLE 1: TREND IN PRODUCTION FOR SALE, IMPORT, EXPORT AND ACTUAL CONSUMPTION OF FINISHED STEEL IN INDIA (IN MILLION TONNES)

Description	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*
Production (finished steel)	104.578	106.602	120.140	126.855	101.287#	76.326# (1.8)
Imports	9.32	11.712	7.227	7.482	7.834	5.51 (-6.7)
Export	5.596	4.079	8.242	9.620	6.361	6.52 (39.4)
Apparent steel use	76.994	81.525	84.042	90.708	90.708	75.05 (3.8)

Source: Annual Report 2019-20, Ministry of Steel, Government of India
**** Provisional; for April- December, 2019***
 # Crude steel equivalent

The first priority of LFAL is to meet the growing domestic demand for ferro alloys especially from the defence industries. India has been a major exporter of ferro alloys over the years and LFAL has strong linkages with international steel manufacturers and ferro alloy traders to continue exporting its products from proposed facility.

2.6 Domestic / Export markets

The wide variety of ferro alloys to be produced by LFAL in the proposed facility shall be sold both in domestic and export markets. LFAL had achieved an export turnover of Rs. 104.96 crores which is expected to grow rapidly with the expansion in economic activities post covid scenario.

2.7 Employment generation (Direct and Indirect)

Employment generation from the proposed project is envisaged to be around 300 persons during construction. Total manpower during operation phase is proposed to be 700. An equal number are expected to be in indirect employment.

3.0 PROJECT DESCRIPTION

3.1 Type of project including interlinked and interdependent projects

There are no interlinked project to the proposed LFAL's Ferro Alloys Plant,

3.2 Location with Coordinates

The proposed project is located as follows:

Plot No.	: B1 & C1, Plasto Steel Park Phase II
Mouza	: Ghutgariya J.L. No. 24
P.S.	: Barjora
District & State	: Bankura, West Bengal
P.O & Village	: Ghutgoria.

The location map of the project is given in **Fig. 1**

The coordinates of the project based on Google Earth, accessed on 25.03.2022 is as follows:

A - North most coordinate : 23°26'9.82" N, 87°14'21.55" E

B - East most coordinate : 23°26'4.34" N, 87°14' 29.74" E

C - South most coordinate : 23°25'59.44" N, 87°14' 23.88" E

D - West most coordinate : 23°26' 3.80"N, 87°14'18.37" E

The map showing the project site on Google Earth image is given in **Fig. 2**.

When the project boundary is superimposed on the toposheet (**Fig. 3**) based on the above coordinates, it shows part of the project area is in forest. However, on ground, the forest area begins after the seasonal nala, which marks the boundary of the project and also the Plasto Steel Park of WBIDCL.

3.3 Details of Alternate Sites & Environmental Considerations

The proposed project site is adjacent to LFAL's existing plant and is most suitable from the point of factory management, cost control, ease of managing transportation logistics and surplus land is also available with the company at the proposed site. Thus, no alternate site has been examined.

Environmental considerations

The location of plant on toposheet can be seen in the 15 km radius map in **Fig. 3**. There are no National parks, Wildlife Sanctuary, Biospheres reserves within 15 km radius. The nearest Wildlife Sanctuary is Ballavpur WLS at a distance of 50 km in NE and its eco sensitive zone is at a distance of 49.7 km, NE.

FIG. 1: LOCATION MAP OF THE PROJECT

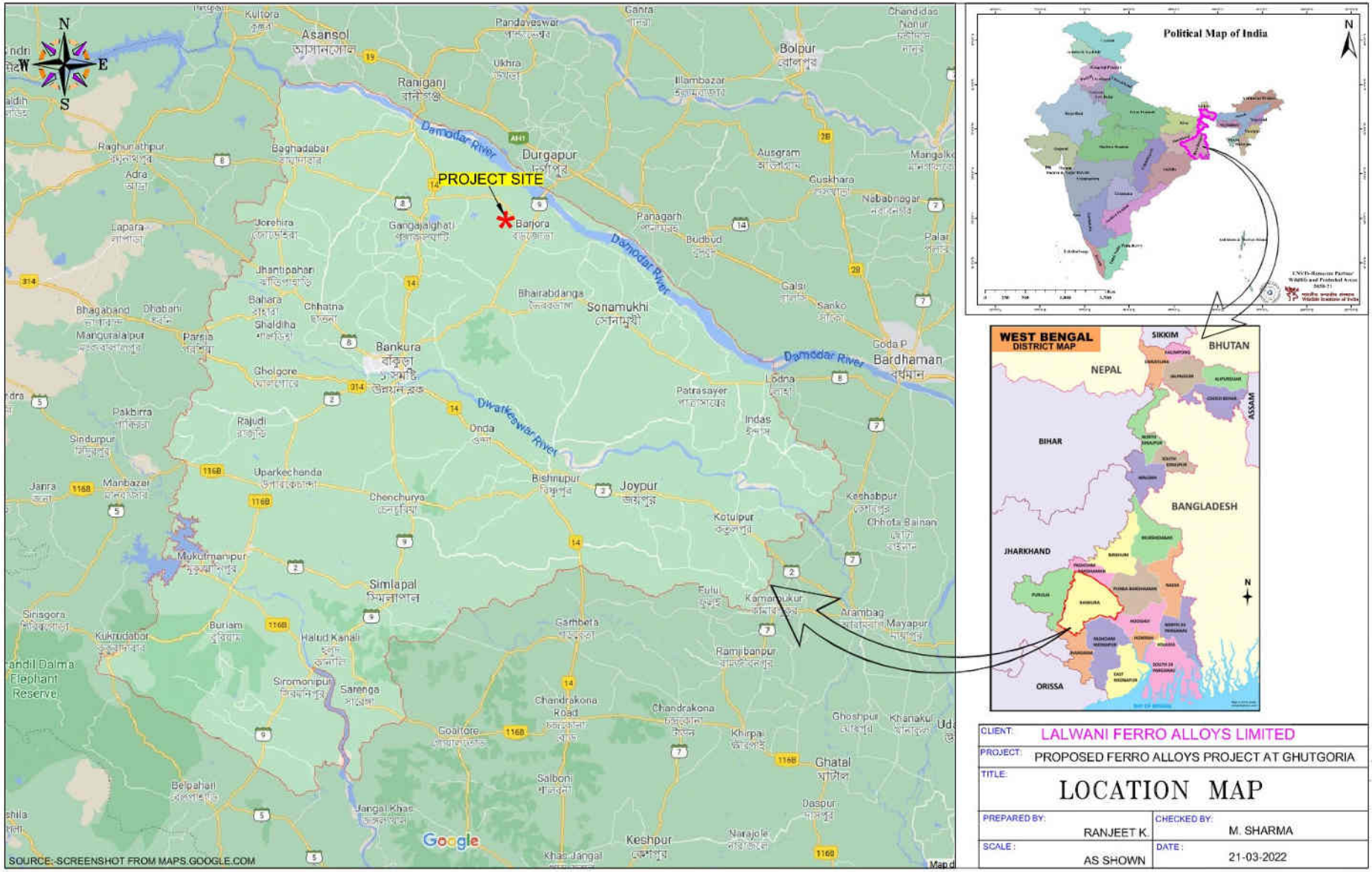
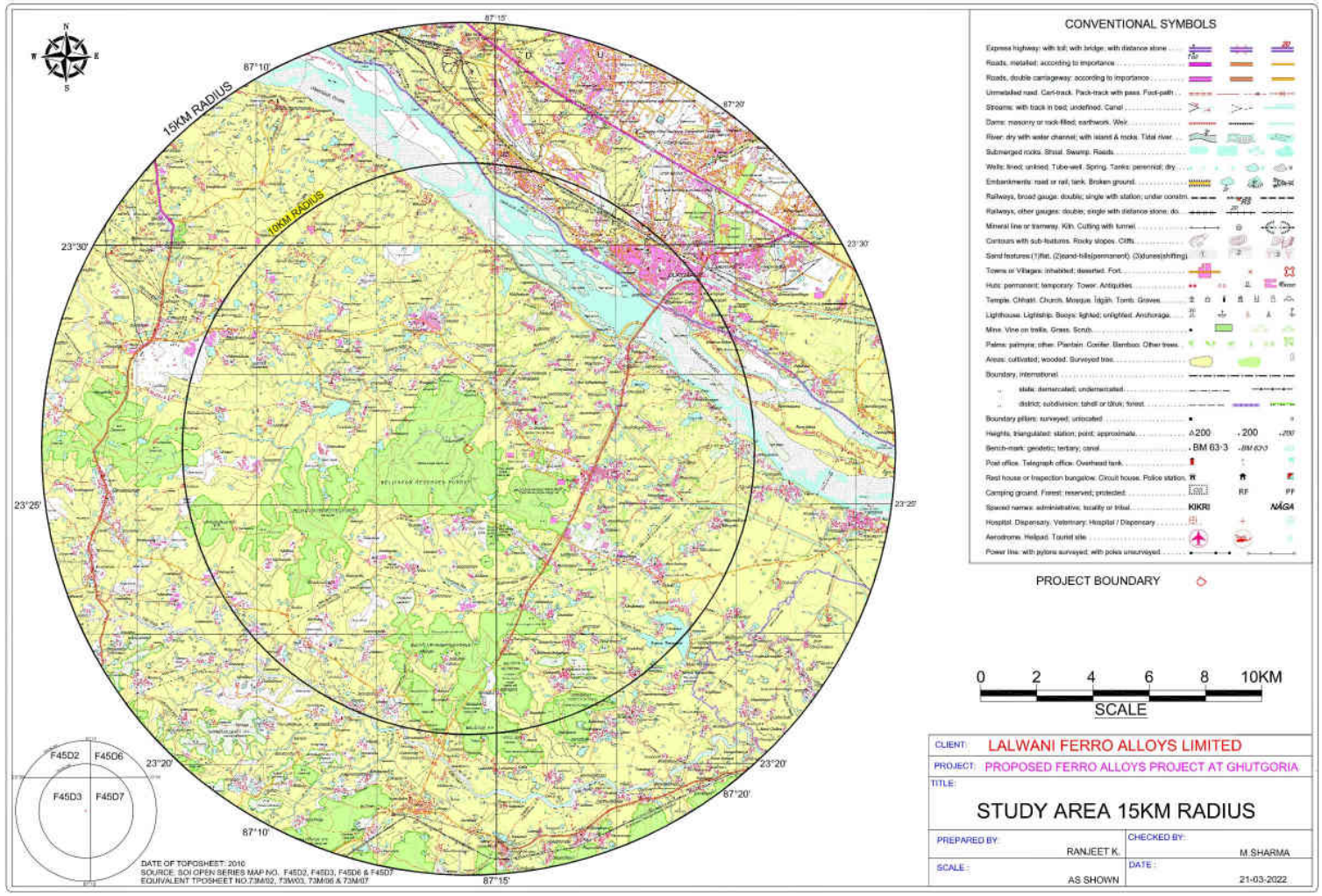


FIG. 2: GOOGLE EARTH

SL. N.	LATITUDE	LONGITUDE
1	23°26'9.82"N	87°14'21.55"E
2	23°26'6.81"N	87°14'25.87"E
3	23°26'4.34"N	87°14'29.74"E
4	23°25'59.44"N	87°14'23.88"E
5	23°26'1.43"N	87°14'19.16"E
6	23°26'2.50"N	87°14'19.02"E
7	23°26'3.80"N	87°14'18.37"E
8	23°26'4.74"N	87°14'18.29"E
9	23°26'6.08"N	87°14'18.39"E
10	23°26'6.50"N	87°14'19.91"E
11	23°26'7.28"N	87°14'21.11"E

FIG. 3: STUDY AREA 15 KM RADIUS



Note : When the project boundary is superimposed on the toposheet based on the google earth coordinates, it shows part of the project area is in forest. However, on ground, the forest area begins after the seasonal nala, which marks the boundary of the project and also the Plasto Steel Park of WBIDCL.

There are several water bodies and forests present within 15 km radius of the project. The distance of various water bodies and forest are given in **Table 2.**

TABLE 2: DISTANCE AND DIRECTION (WITHIN 15 KM) OF WATER BODIES AND FORESTS FROM PROJECT BOUNDARY

Sl. No.	Particulars	Distance (km)	Direction
i.	**Forest**		
1.	Beliyator R.F.	0.004	N & W
2.	Beliyator PF near Barjora	1.8	SE
3.	PF near Saharjora	2.6	SSE
4.	PF near Madhabpur	4.5	SSE
5.	Beliyator R.F. near Kanchanpur	5.2	S
6.	Beliyator PF near Nirisha	7.5	SSW
7.	Beliyator PF near Sanagara	7.2	S
8.	PF Near Lakshminarayanpur	7.7	SSE
9.	PF near Gadardihi	8.0	SSE
10.	Gobindapur PF	9.2	SSE
11.	Beliyator PF near Beleshala	4.6	SW
12.	PF near kallapur	6.7	WSW
13.	Gangajalghati PF near Santalpara	8.6	WSW
14.	PF near Kenduadihi	9.9	WSW
15.	PF near Gangajolghati	9.5	W
16.	PF near Palerbandh	12.4	NW
17.	PF near Puruniya	8.2	SE
18.	PF near Dadhimukha	9.8	SE
19.	PF near Beliya Narayanpur	10.9	SE
20.	Gangabandh PF	14.5	SE
21.	Swargabati PF	13.8	SE
22.	Beliyator PF near Govindapur	14.0	S
23.	Beliyator PF near Nutangram	12.3	SSW
24.	Gangajalghati PF near Phakir danga	11.6	SSW
25.	PF near Bhaluka	12.5	SSW
26.	PF near Tilaghati	14.1	SSW
27.	Gangajalghati PF near Tentulidanga	11.8	SW
28.	PF near Dattardi	13.7	SW
29.	PF near Ramkanali	14.0	SW
30.	PF near Barajuri	14.6	SW
31.	PF near Bhiringi	12.7	SW
ii.	**River / Nala / Water Body**		
1.	Tartari Nala	0.3	N
2.	Seasonal drain tributory to Tartari Nala	adjoining	W & NW
3.	Barjora Nala	2.9	N
4.	Subhankari Nala	3.6	SW
5.	Kanjor Nadi	6.5	SE

Sl. No.	Particulars	Distance (km)	Direction
6.	Sali Nadi	9.7	SSW
7.	Tamla nala	8.4	NE
8.	Damodar River	6.0	NE
9.	Barajuri Nala	8.9	NNW
10.	Chouphari Nala	13.4	NNW
11.	Singaran Nala	12.5	N
12.	Baro Bil	5.6	ENE
13.	Dhannu Bil	7.4	E
iii	**Reservoirs/ Canals/ Barrages**		
1.	Nityanandpur Lake	4.2	WNW
2.	Kanjor Reservoir	8.7	SE
3.	Left Bank Main Canal	8.2	NE
4.	Right Bank main Canal	5.1	ENE
5.	Nirisha shali Barrage	10.1	SSW
6.	Durgapur Barrage	7.0	NE

3.4 Size / Magnitude of operation Project

Plant area: 13.91 acres

The Company, in terms of its objects, proposes to set up a six Submerged Arc Furnaces having a rated capacity of 9 MVA each along with AOD Converters, Holding Furnaces, Electric Arc furnaces and thermic refractory crucibles for manufacturing the following ferro alloys as given in **Table 3**.

TABLE 3: FURNACE ALLOCATION PLAN

Sl. No.	Equipment	Capacity	Product	Unit wise Production, TPA	Total Production, TPA
1	**Submerged Arc Furnace (SAF)**				
1.1	SAF	9 MVA	HC FeMn	22,800	**45,600**
1.2	SAF	9 MVA	HC FeMn	22,800	
1.3	SAF	9 MVA	SiCr or HCFeCr	18,000	**18,000**
1.4	SAF	9 MVA	FeSi	9,600	**9,600**
1.5	SAF	9 MVA	SiMn (HC/ MC/ LC)	18,000	**36,000**
1.6	SAF	9 MVA	SiMn (HC/ MC/ LC)	18,000	
			Total SAF		**1,09,200**
2	**Electric Arc Furnace (EAF)**				
2.1	EAF	6 T	FeCr (MC/ LC)	7,650	**15,300 (derived from 1.3)**
2.2	EAF	6 T	FeCr (MC/ LC)	7,650	

Sl. No.	Equipment	Capacity	Product	Unit wise Production, TPA	Total Production, TPA
3	**Argon oxygen decarburization (AOD) & Holding furnace (HF)**				
3.1	AOD & HF	15 T 9 T	FeMn (MC/ LC)	19,380	**38,760 (derived from 1.1 & 1.2)**
3.2	AOD & HF	15 T 9 T	FeMn (MC/ LC)	19,380	
4	**Thermic process**				
4.1	Refractory crucible(s)	2000 TPM	FeMo	3,000	**3,000**
			LC FeMn	18,000	**18,000**
			Total Thermic		**21,000**
				TOTAL (1+4)	**1,30,000**

The plant will install to produce the following capacities:

a. 45,600, TPA of High Carbon Ferro Manganese by deploying 2 submerged arc furnaces of 9 MVA capacity each,

b. 18,000 TPA of Silico Chrome / High Carbon Ferro Chrome by deploying 1 submerged arc furnace of 9 MVA capacity,

c. C. 9600 TPA of Ferro Silicon by deploying 1 submerged arc furnace of 9 MVA capacity and

d. 36,000 TPA of Silico Manganese by deploying 2 submerged arc furnaces of 9 MVA capacity each.

e. The plant shall also install 2 Nos. AOD of 15 MT Capacity and 2 Holding Furnace of 9 MT Capacity each to produce LCFeMn and MCFeMn & 2 Electric Arc Furnaces of 6 MT Capacity to make LCFeCr.These will be produced from further refining of the high carbon ferro manganese and ferro chrome.

f. Ferro Molybdenum 3000 TPA by Thermic Process and

g. Low Carbon Ferro Manganese 18000 TPA by Thermic Process.

Supporting units such as briquetting unit, slag recovery unit (10,000 TPM) and sinter plant are also proposed.

It is to be noted that the furnaces are versatile and can produce all the bulk ferro alloy products, in line with market trends and orders procured. The other main equipment required in the process of manufacture includes Raw Material Handling System, Pollution Control Equipment, furnace transformers, control panels, cooling water arrangement and sintering and briquetting plants for conversion of ore fines into sinters and briquettes which can then be charged into the furnace with minimum loss of input material as is the case with charging ore fines directly into the furnace.

3.5 Project description with process details

Ferro alloys are alloys of iron with a high proportion of elements such as manganese, silicon, chromium and molybdenum. Each alloy is generally named after the added metal for example, Ferro Chrome, Ferro Manganese, and Ferro Silicon etc. Ferro alloys can be further classified as bulk and noble Ferro-alloys[3].

Ferro-alloys are used in the manufacture of all grades of steel including stainless steel, alloy steel, castings and other engineering products as mentioned in below **Table 4**.

TABLE 4: FERRO ALLOY USES

Product	Shares%	Applications	Key Inputs
Manganese alloys	62	• Normal and high-carbon steel manufacture • Ferro manganese finds application in auto industry • Silicon manganese used in construction industry	Manganese ore
Ferro — Silicon	5	• Additive for deoxidation and as an alloy element • Used in steel making and foundries as a source of silicon in carbon stainless steel production	Silica and charcoal
Chrome alloy	32	• Ferro chrome used in superior alloys and stainless steel manufacture • All classes of stainless steel have a minimum of 10.5% chromium • Apart from ferrous and non ferrous industries, ferro chrome is used in chemical and refractory industries	Chromite
Noble Ferro Alloys	1	• Vital additive used in alloy and special steels • Used as a deoxidant and alloying agent	-

Source: Rohit Ferro-Tech Limited Annual Report 2010-11, accessible at https://www.rohitferrotech.com/annual-report_2010-11_rftl.pdf

Ferro alloys are vital to the steel industry as they provide certain special properties to steel like strength, luster and finish, ductility etc. Most of the alloys e.g., Ferro Manganese, Ferro Silicon, Ferro Chrome and Silico Manganese, etc. are produced by smelting process. Smelting of the charge

[3] Source: http://shyamcenturyferrous.com/wp-content/uploads/2015/05/Information-Memorandum.pdf

materials are carried out in electrical arc furnace equipped with transformer of proper ratings.

Submerged Arc Furnace (SAF) is mainly used for the production of Ferroalloys. SAF is used to produce a wide range of metal products by smelting various minerals to metal products. Generally, in SAF, the reducing agent is carbon to reduce ore and produce Ferro Alloy, metallic silicon, carbide, corundum phosphor, pig iron etc. Additionally, SAF produce calcium carbide and calcium silicon for secondary metallurgy in steel production. SAF is ideal for reprocessing / recycling residues from the iron and steel industries.

Ferro Alloy is produced from the ores of manganese/ chrome. It has manganese/ chrome as the principal constituent, mainly in the form of Oxides. The remaining contintuents are usually iron, aluminium, magnesium oxides and silica. To make Ferro- manganese, coke/ charcoal/ coal is used as a reducing agent. Carbon content in Coke & Coal reacts with the oxides which are reduced to metal by liberation of carbon monoxide and carbon dioxide. Fluxes like limestone or dolomite are added, is the slag is required of particular composition. Usual practice is to mix the ore materials, reducing agent and any fluxes outside the furnace. It is then periodically charged (often called charge mix) into the furnace.

Even though the charge mix is added periodically, metal production and reduction reactions proceed continuously. With heat from the electric arc and from the resistance of the burden, submerged and reduction process is carried out. Temperatures range from 1600 -1800 Degree Centigrade. This produces reduced molten metal and slag, which are tapped at regular intervals. It is a continuous process. The metal is usually allowed to accumulate till the time tapping takes place periodically. Molten metal is tapped in ladles for further handling. It is broken and sized to buyers requirement.

The impurities in ore are separated by use of fluxes and it forms slag, which being lighter, floats over the molten metal. Slag is tapped into the slag pot. It is then sent for either metal recovery or crushed for further us as construction/ filling material and stored into the slag yard. However, Ferro Manganese slag is utilized as input material for production of Silico Manganese.

For manufacturing medium carbon grade of alloys, the molten high carbon Ferro alloys are transferred from SAF by Ladle to the AOD converter. There further refining is undertaken to desired chemical composition with the addition of required alloys, fluxes and various gases. Thus, the carbon content is brought down to 0.95-1.5% (max), Si content to 0.50 (max) and Mn to 70-75%, in case of Fe-Mn alloy.

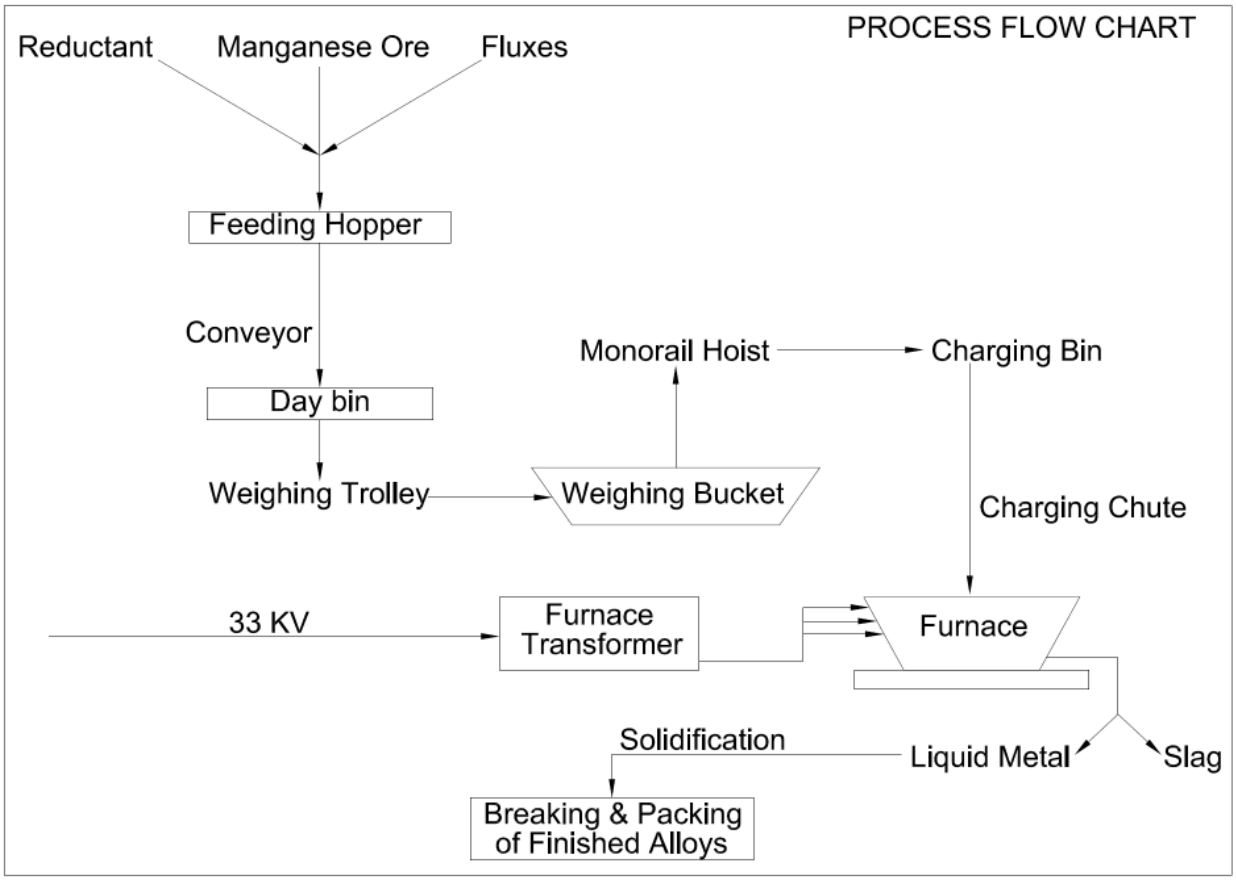
Spoon analysis is used for quality control of raw material, intermediate stage and finished product. The emissions generated from the furnace are

treated through pollution control equipment. Clean gas is allowed to be released to the atmosphere through chimney.

The whole manufacturing process is highly power intensive, therefore, the cost of electrical energy forms a major component of the production cost. Therefore, every care is taken for conservation of the energy.

A process flow sheet of manufacturing of ferro alloys using SAF is given in **Fig. 4**.

FIG. 4: PROCESS FLOW SHEET OF MANUFACTURING OF FERRO ALLOYS USING SUBMERGED ARC FURNACE



3.5.1 Ferro Manganese

Two manganese ferro alloys, ferro manganese and silico- manganese, are key ingredients for steel making. Heating a mixture of the oxides of MnO_2 and Fe_2O_3, with carbon in a furnace, makes ferro-manganese, a ferro alloy with high content of manganese. It undergoes a thermal decomposition reaction. It is used as a deoxidizer for steel. After tapping and cooling, metal cake are broken, chipped / dressed and screened to a desired size and packed in the required packing material. Henry Bessemer invented the use of Ferromanganese as a method of introducing manganese in controlled proportions during the production of steel. The advantage of combining powdered iron oxide and manganese oxide together is the lower melting

point of the combined alloy compared to pure manganese oxide. A standard specification is ASTM A99.

Brief Manufacturing Process of High Carbon/ Medium Carbon Ferro Manganese:

High-Carbon Ferro Manganese is made in three phases in an open or closed top furnace with a power between 7,500 and 16,500 KVA. Voltage is linear of 120-130 kVA with electrodes 800-1150 mm in diameter. In the proposed project, 9 MVA furnaces are proposed. The hearth and walls of the furnace will be lined with carbon blocks. The upper portion of walls with fire clay bricks. The charge for making high carbon ferro-manganese may be composed of manganese ore, coke breeze (reducing agent), iron, silicon, alumina, phosphorous, sulphur etc.

High carbon ferro manganese is smelted by a continuous process with the electrodes submerged deep into the charge. The following process takes place when making high carbon Ferro manganese.

(a) Pre-heating of materials;

(b) Drying and removal of volatiles and moisture from the charge. Heating of the charge by the heat of burning gases which leave the furnace and after burn at the top;

(c) Reduction of oxides;

(d) Melting of the elements reduced with the formation of molten ferro manganese;

(e) Formation and melting of slag;

Thus there is a single large pool of molten metal under the electrodes, instead of individual "pots" as is the case with slagless process for smelting silicon alloys.

The iron contained in the manganese ore is reduced considerably in the process. Carbon monoxide first and then hydrogen reduces various ferric oxides at low temperatures of 500-600 deg. After solid carbon reduces in the deeper zones of the bath. The reduction of manganese from occurs stepwise as follows:
$MnO_2 \rightarrow Mn_3O_4 \rightarrow MnO \rightarrow Mn_3C$.

For melting of material, electric power is required, which is transmitted from sub-station to transformer to the casing electrode with the copper bus bars and copper flexible cables and contact clamps. Casing electrode is poked in the charged furnace. Thereafter reaction takes place in the SAF. After melting, liquids alloys are held and taken out periodically through tap-holes. Tap-holes are opened with the help of flow of Oxygen through lancing pipes, which are consumed in the process. Liquid alloys and molten slag coming out are separated with the help of ladle and skimmer.

After cooling, both metal and slag cake are lifted from the furnace bed area to their designated area. Metal cakes are broken, chipped / dressed and screened to the desired size, as per customer requirement, and packed.

Disturbances in the furnace run can be caused by the various factors such as inappropriate consumption of slag, a deficiency or excess of reducer in the charge, etc. Disturbances will have a root cause in deep or shallow position of the electrodes, increase or decrease in slag viscosity and in the content of carbon or silicon, overheating or chilling of the top, evolution of white smoke at the electrodes, ejects of coke breeze, intense slagging at the electrodes, etc.

Physico-Chemical properties of Manganese

Manganese has an atomic mass of 54.9381, density of 7.3 and melting point of 1244 deg. Centigrade. Iron and manganese in molten state are mutually soluble. Manganese ores to be used for melting Ferro-manganese should meet the following process conditions for the process to be more efficient:

- High manganese content in ores - ensures higher productivity of furnaces and a lower use of electric energy per ton of alloy.
- Low silica content in ore - silica increases the slag ratio and causes a larger loss of manganese to manganese and a higher use of electric energy.
- Reductant for the process (usually coke breeze) should not have more than 12% ash, 11% moisture, 2% volatiles and less than 0.2% phosphorus; its grain size should be from 3 to 15 mm.

The material balance for manufacture of high carbon ferro manganese using 2 X 9 MVA submerged arc furnace along with its briquette plant is given in **Table 5**.

TABLE 5: MATERIAL BALANCE FOR FERRO MANGANESE (HIGH CARBON) USING SAF AND CORRESPONDING BRIQUETTE PLANT

Sl. No.	Description	Unit	Furnace-1	Furnace-2	Total
A.	**Configuration**				
1	Furnace Capacity	MVA	**9**	**9**	9 + 9
2	Numbers	nos.	**1**	**1**	2
3	Working Hours in a Day	Hours	24	24	24
4	Working Day in a Year	Days	350	350	350
5	Daily Production	TPD	65.2	65.2	130.4
6	Briquette Required for 1T Production	T/T	2	2	2
7	Briquette required per Day	TPD	130.4	130.4	260.7
8	Capacity of Briquette Plant	TPH	5.4	5.4	10.9
9	Briquette Plant to be installed	TPH	6	6	12

Sl. No.	Description	Unit	Furnace-1	Furnace-2	Total
B	**Material Balance (SAF)**				
Sl. No.	**Raw Material**	**Specific consumption (T/T)**	**Quantity, T**	**Quantity, T**	**Quantity, T**
1	Mn Briquettes	2.06	46,968	46,968	93,936
2	Manganese Ore Lump	0.2	4,560	4,560	9,120
3	Coke	0.057	1,300	1,300	2,599
4	Quartz	0.061	1,391	1,391	2,782
5	Electrode Paste	0.022	502	502	1,003
	Sub total	**2.4**	**54,720**	**54,720**	**109,440**
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**Quantity, T**	**Quantity, T**	**Quantity, T**
1	Ferro-Manganese (High Carbon Ferro-Manganese at 75 to 80% Mn)	1	22,800	22,800	45,600
2	Fe-Mn Slag	1.2	27,360	27,360	54,720
3	Bag Filter Fines (Fe-Mn)	0.2	4,560	4,560	9,120
	Sub total	**2.4**	**54,720**	**54,720**	**109,440**
C	**Briquetting Plant (for HC Fe-Mn)**				
Sl. No.	**Raw Material**	**Specific consumption (T/T)**			**Quantity, T**
1	Manganese Ore Concentrate	1.059	48,323	48,323	96,646
2	Lime	0.047	2,145	2,145	4,289
3	Molasses	0.07	3,194	3,194	6,388
Sl. No.	**Product & By-Products**				
1	Mn Briquette	1	45,631	45,631	91,261
2	Reused Briquette Fines	0.176	8,031	8,031	16,062

Further refining will be carried out using the high carbon ferro manganese produced from the submerged arc furnace. The refining shall be carried out in argon-oxygen decarburization unit with holding furnace to reduce the carbon content and improve other parameters of the alloy. The material balance for manufacturing low or medium carbon ferro manganese is given in Table 6.

TABLE 6: MATERIAL BALANCE FOR LOW/ MEDIUM CARBON FERRO MANGANESE USING AOD-HF

Sl. No.	Raw Material	Specific consumption (T/T)	AOD/LF-1, Quantity, T	AOD/LF-2, Quantity, T	Quantity, T
1	High Carbon ferro manganese	1.18	22,800	22,800	45,600
2	Additives	0.13	2,533	2,533	5,067
	Sub total	**1.3**	**25333**	**25333**	**50667**

Sl. No.	Product & By-Products	Specific generation (T/T)	Quantity, T	Quantity, T	Quantity, T
1	Ferro Manganese (medium/ low carbon)	1	19,380	19,380	38,760
2	Bag filter dust	0.03	507	507	1,013
3	Slag & other losses	0.28	5,447	5,447	10,893
	Sub total	**1.31**	**25333**	**25333**	**50667**

3.5.2 Silico manganese (SiMn)

Silico manganese (SiMn), a Ferro alloy with high contents of manganese and silicon, is made by heating a mixture of the oxides of manganese (MnO_2), silicon (SiO_2), and iron (Fe_2O_3), with carbon in a furnace. They undergo a thermal decomposition reaction. The process for smelting Silico-manganese essentially consists in manganese and silicon being simultaneously reduced from manganese silicates, slag, ore and quartzite. The process requires a higher temperature than that needed for smelting ferro-manganese. The process is carried out continuously under slag having a ratio of 1:1. Charging and furnace top maintenance are done essentially in the same way as in Ferro Manganese.

The metal and slag are tapped from the furnace in regular intervals. The thick slag at tapping entrains much of metal beads, which has a negative effect on manganese recovery. The slag can be made more fluid by adding raw dolomite. The metal and slag are tapped through same tap hole in a similar way to ferro-manganese.

Silico manganese is used as a deoxidizer and an alloying element in steel. The standard grade silico-manganese contains 14 to 16% of silicon, 65 to 68% of manganese and 2% of carbon. The low carbon grade SiMn has carbon level from 0.05 to 0.10%.

The material balance for manufacture of silico manganese in submerged arc furnace is given in **Table 7**.

TABLE 7: MATERIAL BALANCE FOR SILICO MANGANESE USING SAF

Sl. No.	Raw Material	Specific consumption (T/T)	Furnace-1 Quantity, T	Furnace-2 Quantity, T	Total Quantity, T
1	Quartz (94%-95%)	**0.15**	2,700	2,700	5,400
2	Charcoal / Coke	**0.48**	8,640	8,640	17,280
3	Iron Ore / Mill Scale	**0.0125**	225	225	450
4	Electrode Paste	**0.025**	450	450	900

Sl. No.	Raw Material	Specific consumption (T/T)	Furnace-1 Quantity, T	Furnace-2 Quantity, T	Total Quantity, T
5	Manganese Ore (38%-40%)	**0.72**	12,960	12,960	25,920
6	Low-Grade High Silicon Moil Ore	**0.865**	15,570	15,570	31,140
7	Fe-Mn Slag	**0.72**	12,960	12,960	25,920
8	Dolomite	**0.1**	1,800	1,800	3,600
9	Coal	**0.23**	4,140	4,140	8,280
	Sub total	**3.3025**	**59,445**	**59,445**	**118,890**
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**Quantity, T**	**Quantity, T**	**Quantity, T**
1	Silico-Manganese	**1**	18,000	18,000	36,000
2	Slag (Si-Mn)	**0.5**	9,000	9,000	18,000
3	Bag Filter Fines (Si-Mn)	**0.02**	360	360	720
4	Losses	**1.7825**	32,085	32,085	64,170
	Sub total	**3.3025**	**59,445**	**59,445**	**118,890**

3.5.3 Ferro Chrome

High-carbon ferro-chrome is made in three phase, open or closed top furnace with power varying from 6,000 to 10,000 Kva and electrodes 800-1150 mm in diameter, operating between a voltage of 140 and 190 V. The hearth and walls of the furnace are lined with magnesite bricks and the upper portion of walls with fire clay bricks.

The charge for making high-carbon ferro-chrome may be composed of chrome ore and coke breeze.

Chrome ore is blended to equalize its particle size and composition. The size of lumps is usually not more than 80 mm. The amount of lumpy ore in the mixture should be not less than 50 per cent. A constant composition and uniform quality of chrome ore determine normal run of the furnace. The reducer may be graded coke breeze in lumps 10-25 mm in size; it should contain not more than 0.5% S and 0.04% P.

If the calculation of slag composition requires the use of a flux, an appropriate flux may be quartzite in lumps 10 to 100 mm.

Brief Manufacturing Process:

The following processes take place when making high-carbon ferro-chrome:

- removal of volatiles and moisture from the charge and heating of the charge by the heat of burning gases which leave the furnace and after-burn at the top;
- reduction of iron and chromium with simultaneous formation of chromium and iron carbides;
- melting of the elements reduced with the formation of molten ferro-chrome;
- formation and melting of slag;
- reduction of chromium and silico from the slag.

The skull in the furnace is composed of dense semi-molten charge and slag. There is an ore layer with up to 61 per cent Cr_2O_3 on the metal beneath the electrodes. Ferro-chrome that forms in the upper zones of the furnace contains up to 12% C and decarbonization of the metal (down to 6% C) takes place on passage of metal droplets through the ore layer.

The reduced iron dissolves chromium carbide with the formation of a complex $(CrFe)_7C_3$ carbide, which shifts the equilibrium of the action towards reduction of chromic oxide.

Thermodynamically, the reduction of chromic oxide to chromium by the reaction $2/3\ CrO_3 + 2C = 4/3\ Cr + 2CO$ requires a high-temperature and is therefore less probable.

The reduction of chromium from ore begins at 1100-1150° C, continues at an increasing rate in hotter zones of the furnace and ends in - hearth, where chromium is reduced from the chromic oxide - the slag. Chromic oxide is an amphoteric oxide and therefore can form compounds in neither basic nor acid slags.

If chromium reduction is being made with carbon, the content of the latter in the melt may exceed 8 per cent. To produce ferro chrome Grade, which contains upto 6.5% C, it is required to form oxidizing conditions in the hearth so as to decompose part of the carbides.

At a sufficiently high temperature, the melt being formed can be decarbonized by the reaction. To effect this reaction, the ore being used should be selected so as to have high-melting gangue, it is then possible to form an ore layer rich in chromic oxide above the melt. The density of chrome ore is 4.2-4.8, while that of slag is 3.2, that is why the ore passes into the lower layers of the slag. The ore layer is very viscous and therefore does not escape from the furnace at tapping.

Decomposition of carbides requires much heat, and therefore, high temperature is essential for smelting high-carbon ferro-chrome.

The reduction of iron from ferrous oxide takes place simultaneously with the reduction of chromium from chromic oxide. The reduction of ferrous oxide facilitates the process of smelting, since iron lowers the melting temperature of the melt. The reduction of iron proceeds to a deeper extent than that of chromium. This may be verified by the fact that the Cr_2O_3/FeO ratio in final slag is higher than that in ore. Practical experience suggests that upto 97 per cent of ferrous oxide present in the charge can be reduced to iron.

In operation with acid slags, the content of silicon in the melt may reach 8%. In making many grades of steel, it is advantageous to use ferro-chome with less than 1% Si. The presence of an ore layer in the bath ensures that silicon be oxidized along with the oxidation of carbon.

The content of phosphorus in high-carbon ferro-chrome is allowed up to 0.06%. The reducing atmosphere of the furnace and the composition of the slag are responsible for the fact that the phosphorus passes from the charge to the melt. In making steel from alloy scrap, ferro-chrome with 0.07% phosphorus can cause certain difficulties. The production of ferro-chrome with a lowered content of phosphorus requires the use of more pure ore and coke breeze. Sulphur can be brought into the melt mainly by coke breeze. In operation with acid slags the main portion of sulphur passes to the melt and part of it is volatilized. The content of sulphur in high carbon ferro-chrome must not exceed 0.06%, and therefore the tolerable content in coke breeze is not more than 0.50% Sulphur. On consumer's request, ferro-chrome with less than 0.04% sulphur can be produced.

The temperature in the hearth is determined by slag composition. The melting temperature of an alloy with 4% C and 70% Cr is near 1550 degree C. The metal should be overheated by roughly 100 degrees C above the melting point in order that it can flow easily from the furnace at tapping.

The melting temperature of slag should be higher than that of the metal. With an excessive fluid slag being formed in the furnace, the temperature that is established in the hearth will be equal to or, slightly higher than, the melting point of slag. It may turn out to be even lower than the melting point of the metal resulting in scar being built up on the bottom. In that case, the heat produced by the electric current will be spent to form and smelt new portions of slag from the materials charged at the top, rather than to raise the temperature of the melt in the hearth. However, it is not advantageous to select an excessively high-melting slag, since this will cause overheating of the metal in the hearth and increase the consumption of energy.

The gangue in chrome ore consists mainly of magnesia, alumina and silica. Therefore, selection of slag is usually done by referring to constitutional diagram. A great part of electric energy is lost in the slag, which raises the temperature of the slag above that of the metal.

The material balance for manufacture of high carbon ferro chrome using 1 X 9 MVA submerged arc furnace along with its briquette plant is given in **Table 8**.

TABLE 8: MATERIAL BALANCE FOR FERRO CHROME (HIGH CARBON) USING SAF AND CORRESPONDING BRIQUETTE PLANT

Sl. No.	Description	Unit	Furnace-1
A	**Configuration**		
1	Furnace Capacity	MVA	9
2	Numbers	Nos.	1
3	Working Hours in a Day	Hours	24
4	Working Day in a Year	Days	350
5	Day Production	TPD	51.43
6	Briquette required for 1T Production	T/T	2
7	Briquette required per day	TPD	102.86
8	Capacity of Briquette Plant	TPH	4.29
9	Briquette plant to be installed	TPH	5
B	**Ferro-Chrome (HC) SAF material balance**		
Sl. No.	**Raw Material**	**Specific consumption (T/T)**	**Quantity, T**
1	Cr Briquettes	2.043	36,774
2	Chrome Ore Lump	0.2	3,600
3	Coke (400kg/fc)	0.056	1,008
4	Quartz	0.061	1,098
5	Electrode Paste	0.022	396
	Sub-Total	**2.382**	**42,876**
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**Quantity, T**
1	Ferro-Chome	1	18,000
2	Slag (Fe-Cr)	1.19	21,420
3	Bag Filter Fines (Fe-Cr)	0.192	3,456
	Sub-Total	**2.382**	**42,876**
C	**Briquetting Plant for Fe-Cr (HC)**		
Sl. No.	**Briquette Plant Raw Material**	**Specific consumption (T/T)**	**Quantity, T**
1	Chome-ore concentrate	1.059	38943.7
2	Lime	0.047	1728.4
3	Molasses	0.071	2611.0
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**Quantity, T**
1	Cr Briquette	1	36774.0
2	Reused Briquette Fines	0.177	6509.0

The silico chrome manufactured from submerged arc furnace shall be used to manufacture low and medium carbon ferro chrome using electric arc furnace. The material balance for manufacturing low or medium carbon ferro chrome is given in **Table 9**.

TABLE 9: MATERIAL BALANCE FOR FERRO CHROME (MEDIUM/ LOW CARBON) FROM EAF

Sl. No.	Raw Material	Specific consumption (T/T)	EAF-1, Quantity, T	EAF-2, Quantity, T	Total Quantity, T
1	Silico chrome	0.60	4,500	4,500	9,000
2	Chrome Ore	1.50	11,250	11,250	22,500
3	Lime	1.10	8,250	8,250	16,500
	Sub total	3.2	24000	24000	48000
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**EAF-1, Quantity, T**	**EAF-2, Quantity, T**	**Quantity, T**
1	Ferro Chrome (medium/ low carbon)	1	7,500	7,500	15,000
2	Bag filter dust	0.16	1,200	1,200	2,400
3	Slag & other losses	2.04	15,300	15,300	30,600
	Sub total	**3.20**	**24000**	**24000**	**48000**

3.5.4 Ferro Molybdenum

Ferro Molybdenum used as a hardening agent in the manufacture of steel It is found in several alloy steels that are heat-treatable. The role of Molybdenum is to prevent corrosion in stainless steels as well as alloy steels. The largest used of the molybdenum is the steel industry, accounting for the use of approx. 80% of molybdenum mined in the world.

Molybdenum improves the mechanical and physical properties of various kinds of steels. Application of ferro molybdenum include addition to constructional alloy steels, tool and high speed steels, super alloys, stainless steels, cast irons as well as cast steels. It is also utilised in production of welding electrodes.

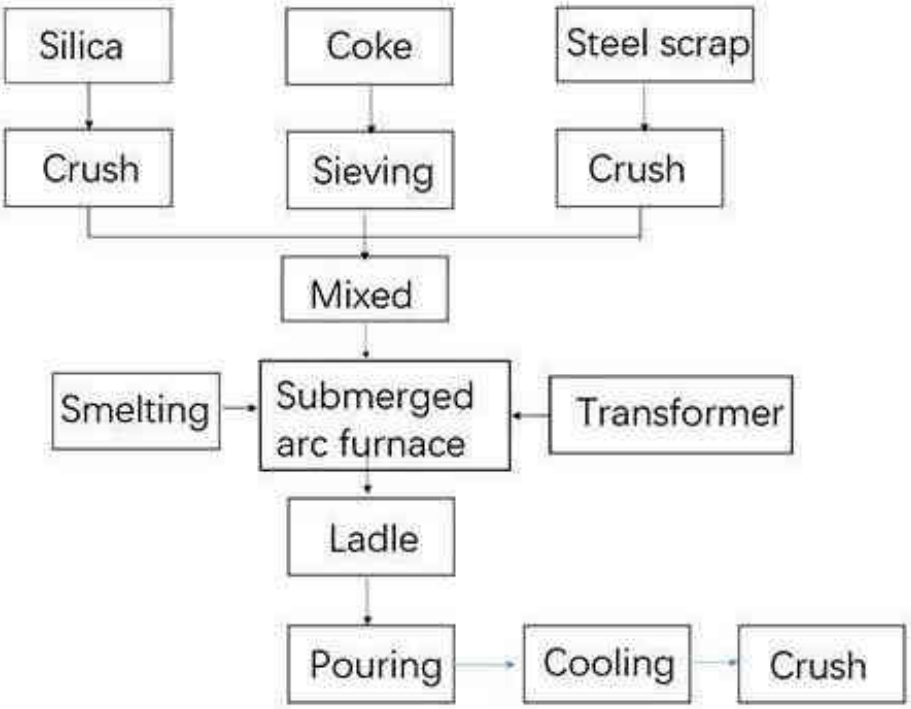
About 30-40% molytech oxide production is processed into ferro Molybdenum (FeMo). The manufacturing process includes use of oxide and mixing with iron and reducing it by aluminium in presence of Ferro Silicon in a thermite reaction. Electron-beam melting then purifies the Ferro Molybdenum,.This produces ferromolybdenum ingots weighing several hundred kilograms or as afine powder. The resultant product usually contains 60-65% molybdenum, balance being iron. The ingot produced is air cooled, crushed and screened to meet specified ferromolybdenum particle size ranges.

3.5.5 Ferro Silicon

As the name suggests, Ferrosilicon is made up of silicon and iron. Its main use is in the steel industry as a deoxidizer and alloying agent.

Silica, carbonaceous reducing agent and steel scrap are the raw materials for the manufacture of ferro silicon.

FIG. 5: FERRO SILICON MANUFACTURING PROCESS[4]



For the manufacture of Ferrosilicon, smelting is carried out in a reduction furnace with continuous operation. Electrodes are inserted in the charge deeply and steadily during the production process. The raw materials are added continuously to ensure a certain amount of charge in the furnace. The molten ferrosilicon are tapped off through the tapping hole when a certain amount has been produced. Ferrosilicon production is slag-free but in actual production, there will be some slag comprising of Al_2O_3 45%-62%, SiO_2 23%-46%, CaO 9%-18%. The slag increases the energy cost and deteriorates the furnace due to its high melting point and high viscosity.

Sizing is also a very important part of ferro silicon manufacturing process. Standard lumps are easy to use as deoxidizing agent for steel factory. It's crashed and then selected to 10-50mm, 50-100mm. Grains are easy to be used as ferrosilicon inoculant. Grain size usually are 1-3mm, 3-8mm, etc. Ferrosilicon powder can be used as flotation agent for various kinds of minerals.

The material balance for manufacture of high carbon ferro silicon using 1 X 9 MVA submerged arc furnace along is given in **Table 10**.

[4] Source : https://zxferroalloy.com/resource/ferrosilicon-production/#:~:text=Ferro%20silicon%20manufacturing%20process%201%20Raw%20materials%20preparation%EF%BC%9A,the%20submerged%20arc%20furnace.%20...%20More%20items...%20?msclkid=f1ac140ab94c11ec8f53b0526554228e accessed 09.04.2022

TABLE 10: MATERIAL BALANCE FOR HIGH CARBON FERRO SILICON USING SAF

Sl. No.	Raw Material	Specific consumption (T/T)	Quantity, T	Quantity, T	Quantity, T
1	Quartz (94%-95%)	1.95	18,720	58,500	77,220
2	Charcoal / Coke	1.3	12,480	39,000	51,480
3	Iron Ore/ Mill Scale	0.25	2,400	7,500	9,900
4	Electrode Paste	0.07	672	2,100	2,772
5	Dolomite	0.07	672	2,100	2,772
	Sub-total	3.64	34,944	109,200	144,144
Sl. No.	**Product & By-Products**	**Specific generation (T/T)**	**Quantity, T**	**Quantity, T**	**Quantity, T**
1	Ferro-Silicon	1	9,600	30,000	39,600
2	Bag Filter Fines (Fe-Si)	0.2	1,920	6,000	7,920
3	Slag (Fe-Si)	0.055	528	1,650	2,178
4	Losses	2.385	22,896	71,550	94,446
	Sub-total	3.64	34,944	109,200	144,144

3.6 Raw material required along with estimated quantity, likely source, marketing area of final product's Mode of transport of raw material and Finished product.

The tentative raw material quantities and their sources is given below in **Table 11**.

TABLE 11: ANNUAL RAW MATERIAL REQUIREMENT, AND THEIR SOURCES FOR FERRO ALLOY PLANT

	Raw Material	Quantity (MTPA)	Source	Distance, km	Mode
Silico-Manganese (HC/MC/LC) SAF	Quartz (94%-95%)	5400	Jharkhand	150	Road
	Charcoal / Coke	17280	Imported via Haldia/ Kolkata; Domestic-West Bengal	150-250	Road
	Iron Ore / Mill Scale	450	Open market	Within 200	Road
	Electrode Paste	900	Durgapur & other areas in Bankura district	Within 50	Road
	Manganese Ore (38%-40%)	25920	Mn Ore Fines from MOIL in Nagpur, Bandhara or Balaghat; Imported via Haldia	250-1700	Road
	Low-Grade High Silicon Moil Ore	31140	Nagpur, Bandhara or Balagha	1100-1700	Road
	Fe-Mn Slag	25920	In house, other SAF plants in Dist. Bankura	Within 50	Road
	Dolomite	3600	Chhattisgarh, Jharkhand	150-650	Road
	Coal	8280	Domestic, imported	Within 100	Road

	Raw Material	Quantity (MTPA)	Source	Distance, km	Mode
Ferro Manganese (HC) SAF	Mn Briquettes	93936	In house	0	Road
	Manganese Ore Lump	9120	Nagpur, Bandhara or Balagha, Barbil, Koida	300-1700	Road
	Coke	2599	West Bengal	Within 200	Road
	Quartz	2782	Jharkhand	150	Road
	Electrode Paste	1003	Durgapur	30	Road
Ferro-Silicon SAF	Quartz (94%-95%)	77220	Jharkhand	150	Road
	Charcoal / Coke	51480	Open market	Within 200	Road
	Iron Ore/ Mill Scale	9900	District Bankura	Within 50	Road
	Electrode Paste	2772	Durgapur	30	Road
	Dolomite	2772	Chhattisgarh	650	Road
Ferro-Chrome (HC) SAF	Cr Briquettes	179784	In house	0	Road
	Chrome Ore Lump	17600	Orissa Mines	350	Road
	Coke (400kg/fc)	4928	Open market	Within 200	Road
	Quartz	5368	Jharkhand	150	Road
	Electrode Paste	1936	Durgapur	30	Road
Briquetting Plant (for HC Fe-Mn)	Manganese Ore Concentrate	96646	West Bengal	Within 200	Road
	Lime	4289	West Bengal	Within 200	Road
	Molasses	6388	West Bengal	Within 200	Road
Ferro-Chrome Briquette Plant	Chome-ore concentrate	193319	West Bengal	Within 200	Road
	Lime	8580	West Bengal	Within 200	Road
	Molasses	12961	West Bengal	Within 200	Road
FeMn (MC/ LC) using AOD/LF	High Carbon ferro manganese	45600	In house	0	Road
	Additives	5067	West Bengal	Within 200	Road
Silico-Chrome using SAF	Chrome Ore	29070	Odisha	350	Road
	Ferro Chrome slag	19380	In house		Road
	Lime	3876	West Bengal	Within 200	Road
	Coke	9690	Open market	Within 200	Road
FeCr (MC/ LC) from EAF	Silico chrome	9000	In house		Road
	Chrome Ore	22500	West Bengal	Within 200	Road
	Lime	16500	West Bengal	Within 200	Road

3.6.1 Mode of transport of Raw material

Raw material will be transport through Rail/ Road. Imported manganese ore, coal and coke will be imported through sea and brought from port to plant via rail/ road.

3.7 Resource optimization/ recycling and reuse envisaged in the project

Water: The entire waste water from the various units of the Ferro Alloy Plant shall be treated and reused for green belt watering, sprinkling and dust suppression. n. Cooling water shall be recycled after cooling in the Cooling Towers. Therefore, there shall be no waste water discharge from the plant premises except during monsoon when the sprinkling and watering demand will be almost negligible.

Solid waste: The main solid wastes generated will be various slags, bag filter dusts and ore fines from raw material handling section. Waste reutilisation shall be as discussed in **Table 12**. It can be seen that waste is intended for reutilisation to the maximum extent possible. The ore fines shall be converted into sinter and briquettes before charging into the plant.

Domestic waste shall be generated from the plant office, organic component of which shall be composted/ vermi composted.

3.8 Availability of water, its source, energy/ power requirement and source

The water required for the plant shall be sourced from harvested rain water and piped water from Plasto Steel Industrial Park for industrial use and water for domestic use will be sourced from bore well. The total water required for circulation will be 2900 Cu.M and make-up water will be 351.4 Cu.M per day for the proposed project.

3.9 Quantity of wastes likely to be generated (liquid and solid) and scheme for their management /disposal

Only small quantity of slag shall be generated for disposal. Remaining solid waste will be recycled/ reused.

Domestic waste will be generated from the plant office, organic component of which shall be composted/ vermi composted. Quantity of waste generation is estimated and given in **Table 12**.

TABLE 12: SOLID WASTE GENERATION (TPA)

Sl. No.	Source	Total (TPY)	Reuse/ Sale (TPY)	Remarks	Balance for Disposal (TPY)*
1	Waste Oil & Lubricant	1 KL	1 KL	Shall be sold	0
2	DM plant resin	1 KL	1KL	Shall be disposed in properly constructed pit asper CPCB norms	0
Ferro Alloy:					

Waste	Source	Reuse
Slag	Ferro Manganese	100% slag is reuseable in silico manganese production in-house and outside
Slag	Ferro Chrome	Metal from Ferro-chrome slag will be

Waste	Source	Reuse
		recovered through jigging at slag recovery plant. After recovery, the waste material will be used as stone chips (+8- 25 mm) and for land filling/ levelling purpose ((-)8mm) after TCLP test.
Slag	(Ferro)-Silico chrome	Useable in cement industries as a raw material as well as for construction and filling/ levelling material after undergoing TCLP Test.
Slag	Ferro molybdenum	Slag having higher molybdenum content will be returned to smelting. Slag containing a large number of metal particles would be enriched and recovered by the magnetic selection after pulverizing.It is also a good raw material (aggregate) for manufacturing concrete "R-blocks"[5]
Slag	Silico Manganese	100% can be sent to slag recovery plant (with jigging) for manganese recover.SiMn slag is suitable for blended cements manufacture[6] and as aggreegate[7]. After slag recovery, rest will be useable in making paver blocks and land leveling.
Slag	Ferro Silicon	It is a slag less process. The little slag that comes will be sold to cement industries as a raw material or used for medium carbon silico manganese production purpose.
Fines	Sinter fines	100% is reuseable in sinter making
Fines	Fines from material handling & bag filters	100% is reuseable in sinter making

3.10 Schematic Representations of the Feasibility drawing which give information of EIA

Process Flow Chart for Ferro Alloy Manufacturing have been given in respective sections.

4.0 SITE ANALYSIS

4.1 Connectivity

The plant is proposed to be located at Plasto Steel Park, Mouza Ghutgariya J.L. No. 24, P.S. Barjora, District Bankura, West Bengal. The details of network connectivity is provided In subsequent paragraphs.

[5] Ferromolybdenum slag as valuable resource material for the production of concrete blocks, Boehme et.al
[6] Recycling of Silicomanganese Slag as Pozzolanic Material in Portland Cements: Basic and Engineering Properties, Frias et. al., Cement and Concrete Research 36(3):487-491
[7] Properties of silicon manganese slag as an aggregate for concrete depending on cooling conditions, Hong-Beom Choi & Jin Man Kim, Journal of Material Cycles and Waste Management volume 22, pages1067–1080 (2020)

Road link

The proposed plant is accessible by all weather road from NH-14- Raniganj to Bankura (11.7 km W aerially) and SH-9 Durgapur- Beliyator (4.2 kms SE aerially). Durgapur town is at a distance of 7.7 km, NE from the project site. The project being within the WBIDC's Industrial Park “Plasto Steel” has a well developed network of internal and connected road infrastructure.

Rail link

The nearest railway station is Durgapur railway station at a distance of 10.2 km aerially, NE from the plant.

Air link

The nearest airport is at Durgapur, which is approximately 15 km by road from the proposed plant. Kolkata international airport is 149 km SE from the plant.

4.2 Land form, land use and land ownership

Company has purchased 13.91 acres industrial land within the Plasto Steel Industrial Park of West Bengal Industrial Development Corporation. The proposed Ferro Alloys Plant will be established in the this land only.

4.3 Topography (With map)

The core zone represents nearly flat land with average elevation of 90 m amsl as per google earth. The plant site is connected to the drainage arrangement of the industrial estate and is devoid of any significant drainage or topographical features. There is a seasonal nala flowing along the boundary. The project and study area falls in Survey of India Open Series Map No. F45D2, F45D3, F45D6 and F45D7 The project boundary superimposed upon the toposheet was given in **Fig. 3** earlier.

4.4 Existing land use pattern

The land use pattern of the project site is industrial land use as given in section 4.2.

4.5 Existing infrastructure

New supporting infrastructure like office building, canteen and roads are proposed. Temporary sheds for workers will be established at the site. Primary and secondary school in Barjora and power supply for industrial and domestic use are available. Durgapur city is very close to the plant site which is well developed with modern residential facilities, hotels, education hubs including engineering colleges, hospitals and well developed markets for urban living.

4.6 Soil classification

Soil of Bankura district can be broadly grouped into three principal types 1) Red soil 2) Alluvial soil 3) Laterite Soil. The western portion marks the gradual descent from the table land of Chota Nagpur to the delta of lower Bengal, consisting largely of spurs projecting from the western tableland and of low swelling ridges. However, there is no marked ridge of hills. In the central portion of the district there are rolling downs finally merging with the alluvial plains. The western part of the district has poor, ferruginous soil and hard beds of laterite with scrub jungles and sal (*Shorea robusta*) woods. Long broken ridges with irregular patches of more recent alluvium have marks of seasonal cultivation. During the long dry season, large extents of red soil with hardly any trees provide the area a scorched and dreary appearance. In the eastern part, there are wide expanses of rice fields, green in the rains but dry in summer.

Soil differs from the parent materials in the physical, chemical, morphological and biological properties. Also soil differs among themselves in some or all the genetic or environmental factors, therefore, some soils are yellow, some are black, some are reddish, some are coarse textured. They serve as a reservoir of nutrients for plants and crop and also provide mechanical anchorage and favorable tilth.

4.7 Climatic data from secondary sources

Temperature

As per the nearest IMD station, Bankura M.O. (1990 – 2007), the mean of the mean of minimum temperature ranges from 11.4°C in January to 26.6°C in June and the mean maximum temperature ranges from 25.1°C in January to 37.4°C in May.

Rainfall

The total average rainfall from 1990 to 2007 is 1563.9 mm monthly variation is from 9.1 mm in January to 363 mm in July.

Relative Humidity

The relative humidity is higher in the morning hours averaging 78% compared to night hours scoring 68% of average. The relative humidity varies from 63% in March to 87% in September during morning and from 45% in March to 83% in September and October during evening.

4.8 Social infrastructure available

There are schools, hospitals, health centers, etc. in the villages of the surrounding areas. Ghutgarya is the nearest census town. List of amenities in villages in 15 km is given in ***Annexure 2*** of additional documents uploaded at end of Form 1 at parivesh.nic.in.

5.0 PLANNING BRIEF

5.1 Planning concept

M/s Lalwani Ferro Alloys Limited proposes to set up a ferro alloy plant for manufacturing (0.11 MTPA) high, medium and low carbon ferro alloys at mouza Ghutgariya, P.S. Barjora, District: Bankura, West Bengal. The plant site is within the Plasto Steel Industrial Park Phase-II developed by WBIDC specially of iron and steel industry. Taking into consideration the requirements for the proposed industries that were to be setup there necessary infrastructure including power sub station, internal roads, water supply, connectivity to national highways, railway networks etc. are available within the industrial estate.

LFAL is presently operating a ferro alloy unit adjacent to the proposed site. Administrative project management and implementation teams will be available from the existing unit for the proposed unit.

5.2 Population projection

The proposed project will require approximately 700 person's to be directly employment.. An equal number is expected to be in indirect employment. Unskilled and semi skilled (after training) will be hired from in and around the Plant while skilled, engineers, managerial staff and technical experts will have to be partly available from the existing unit located adjacent to the proposed site and others hired from outside.

5.3 Land use planning (break up along with green belt etc.)

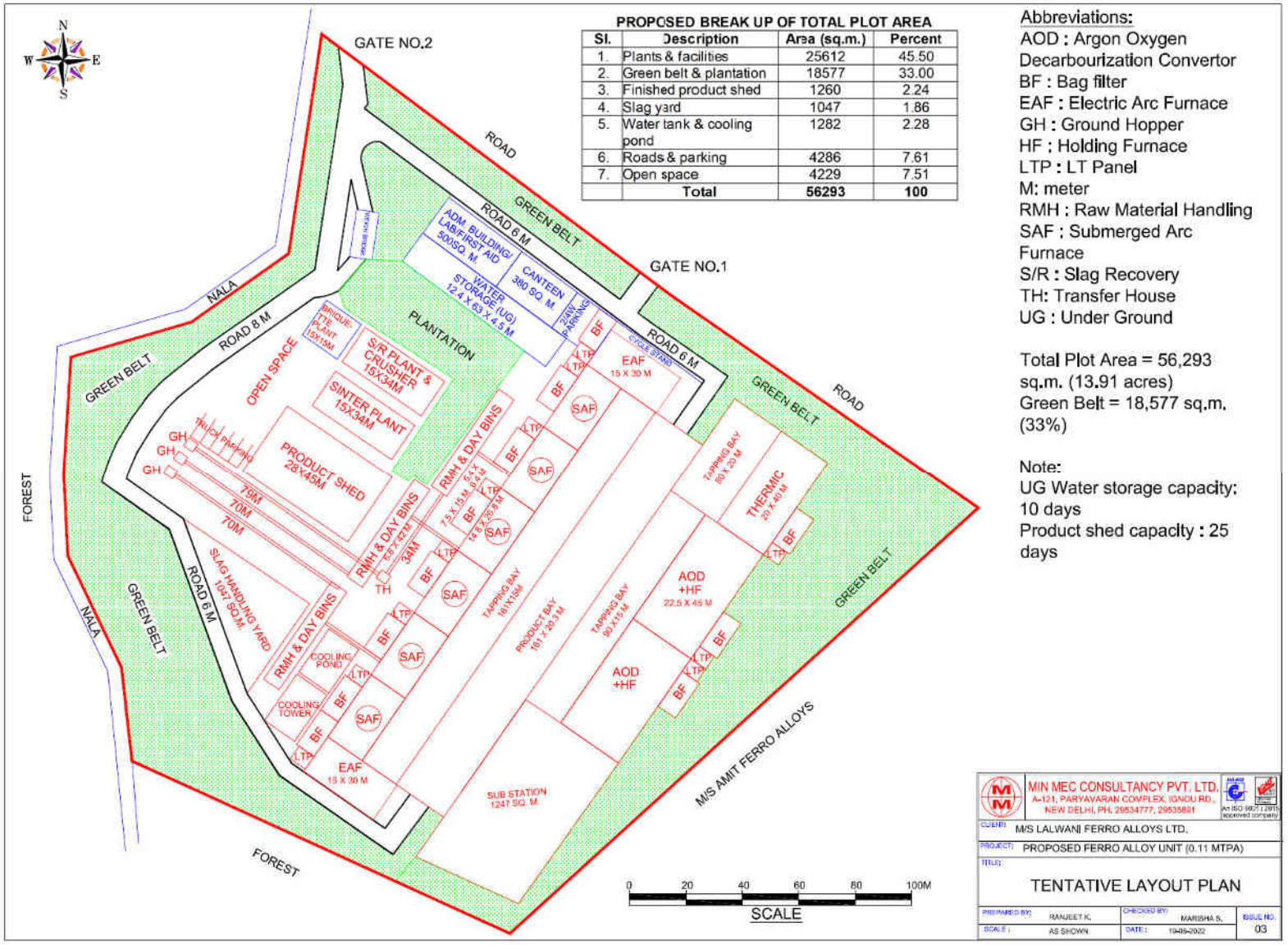
The proposed Ferro Alloy will be set up in the 13.91 acres (5.63 ha) land. Proposed break up of land use are given **Table 13**.

TABLE 13: PROPOSED BREAK UP OF TOTAL PLOT AREA

Sl. No.	Description	Area (sq.m.)	Percent
1.	Plants & facilities	25612	45.50
2.	Green belt & plantation	18577	33.00
3.	Finished product shed	1260	2.24
4.	Slag yard	1047	1.86
5.	Water tank & cooling pond	1282	2.28
6.	Roads & parking	4286	7.61
7.	Open space	4229	7.51
	Total	**56293**	**100**

The tentative layout plan is shown in **Fig. 6**.

FIG. 6: TENTATIVE LAYOUT PLAN



5.4 Assessment of infrastructure demand (physical & social)

Secondary survey has revealed that drinking water facility is satisfactory to meet the local people as all the villages are having either well or tube well as source of drinking water. Under medical facilities all the system such as allopathic, homeopathic and ayurvedic medicines are available at Durgapur or local area at a distance of 2-3 kms. There are primary, secondary and higher educational facility in the area. There is electricity in most of the villages. For assessment of socio-economic condition, sample survey for some villages in the study area will be conducted during preparation of EIA report. Accordingly, development activities will be undertaken under Corporate Social Responsibilities (CSR) program for the upliftment of the nearby communities.

5.5 Amenities/Facilities

Education, hospitals, drinking water, power supply, post and telegraph, banks, communication and approach roads are present in the villages in buffer zone within 15 km of study area as seen in the list of amenities in ***Annexure -2*** of additional documents uploaded at end of Form 1 at parivesh.nic.in. Additional amenities and facilities will be put by the company as a part of its CSR plan in due course, based on need assessment.

6.0 PROPOSED INFRASTRUCTURE

6.1 Industrial area (processing area)

The Ferro Alloy Plant will be established in the proposed plant premises. The water and power related infrastructure proposed is already discussed in section 3.8 earlier. Infrastructure facilities such as Administrative office, canteen, parking etc. will be provided.

6.2 Residential area (non processing area)

Direct and indirect employment will be generated due to this project. Some skilled manpower may be required from outside the area while remaining unskilled/semi- skilled manpower will be sourced from the local villages. No residential facilities are envisaged for the employees. No residential area is proposed.

6.3 Green belt

An extensive plantation within the boundary limits of the will be carried out during project implementation by planting about 4590 saplings making a two tier green belt along the periphery and all along internal roads, iron ore storage areas, ground hoppers, etc. The total land area covered for greenbelt will be 33% of the total area. A tentative list of trees suitable for proposed plantation is given in **Table 14**.

TABLE 14: A TENTATIVE LIST OF TREES SUITABLE FOR PROPOSED PLANTATION

Sl. No.	Common name	Scientific name	Family
01.	Arjun, Arjuna	*Terminalia arjuna*	Combretaceae
02.	Ashwatha	*Ficus religiosa*	Moraceae
03.	Akashmoni	*Acacia moniliformis*	Mimosaceae
04.	Aam	*Mangifera indica*	Anacardiaceae
05.	Bot	*Ficus benghalensis*	Moraceae
06.	Chatim	*Alstonia scholaris*	Apocynaceae
07.	Debdaru	*Polyalthia longifolia*	anonaceae
08.	Ghoranim	*Melia azedarch*	Meliaceae
09.	Jhaun	*Casuarina equisetifolia*	Casuarinaceae
10.	Jarul	*Lagerstroemia speciosa*	Lythraceae
11.	Karanj	*Derris indica*	Fabaceae
12.	Krishnachura	*Caesalpinia pulcherrima*	Caesalpinaceae
13.	Nim	*Azadirachta indica*	Meliaceae
14.	Pakur	*Ficus infectoria*	Moraceae
15.	Radhachura	*Delonix regia*	Caesalpinaceae
16.	Tantul, Tentuli	*Tamarindus indica*	Caesal pinaceae
17.	Sisso	*Dalbergia sissoo*	Papilionaceae
18.	Sirish	*Albizia Lebbeck*	Mimosaceae

6.4 Social infrastructure

The social infrastructure in the surrounding villages will be improved by increased direct and indirect employment opportunities in the region including ancillary development and supporting infrastructure as a part of the CSR activities of the company.

6.5 Connectivity

Refer Section 4.1 earlier.

6.6 Drinking water management (source & supply of water)

Refer section 3.8

6.7 Sewerage system & industrial waste management

Domestic waste shall be generated from the plant office, organic component of which shall be composted/ vermi composted. All the domestic effluent will be properly treated and treated waste water recycled. Thus, there is no discharge of effluents envisaged from the proposed plant.

6.8 Solid waste management

Slag will be recycled / reused as discussed in section 3.9 earlier.

The municipal solid waste generated from the plant will be segregated as compostable, recyclable and non compostable wastes. The compostable waste will be composted and used as manure, the recyclable will be sent to recycling vendors and balance sent to land fill.

The hazardous waste like transformer oil, spent oil etc can be utilized in the plant as a source of high calorific fuel which will also reduce the fuel consumption and solve the problem of hazardous waste disposal, with due permission of SPCB.

6.9 Power requirement & supply / source

The total connected load for the plant is estimated at 70 MW

7.0 REHABILITATION AND RESETTLEMENT PLAN

No rehabilitation and resettlement plan has been made as no displacement of population. Company has purchased directly 13.91 acres land within the WBIDC industrial estate.

8.0 PROJECT SCHEDULE & COST ESTIMATES

8.1 Project Schedule

The completion schedule of the proposed plant will be in 30 months after receipt of Consent to Establish.

8.2 Cost of the Project

The total cost of the project will be Rs. 25889.58 Lacs.

9.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)

The proposed ferro alloy plant is a stand alone plant of the company located at plot B-1 and C-1, Plasto Steel Park Phase-II, mouza Ghutgariya, P.S. Barjora, District Bankura, West Bengal. The project will consists of 6 x 9 MVA Submerged Arc Furnaces for manufacturing bulk ferro, 2 x 6 MT capacity each Electric Arc Furnace, 2 x 15 MT capacity each AOD converter and 2 x 9 MT capacity each Holding Furnaces for producing ferro alloys of different grades. There will also be production through thermic/ thermite process.

Local people will be provided with both direct and indirect employment. They would be mostly recruited in unskilled, semi skilled, office assistant categories, etc. This will improve the economic condition of the local people. The employment of local people in primary and secondary sectors of project

will upgrade the prosperity of the region. Thus, proposed project will have positive impact in economic condition of local people

With the advancement in technology and the stringency in permissible limits of emission along with regular monitoring, it is possible to operate small plants of this type by having minimal impact on the environment.

DISTANCE AND DIRECTION TO VARIOUS ENVIRONMENTAL FEATURES FROM PROPOSED FERRO ALLOYS PLANT OF LALWANI FERRO ALLOYS LTD. IN PLOT B1 & C1, PLASTO STEEL PARK, PHASE-II, MOUZA GHUTGARIYA J.L. NO. 24, DISTRICT BANKURA, WEST BENGAL

Sl. No.	Particulars	Distance (km)	Direction
i.	**Forest**		
1.	Beliyator R.F.	0.004	N & W
2.	Beliyator PF near Barjora	1.8	SE
3.	PF near Saharjora	2.6	SSE
4.	PF near Madhabpur	4.5	SSE
5.	Beliyator R.F. near Kanchanpur	5.2	S
6.	Beliyator PF near Nirisha	7.5	SSW
7.	Beliyator PF near Sanagara	7.2	S
8.	PF Near Lakshminarayanpur	7.7	SSE
9.	PF near Gadardihi	8.0	SSE
10.	Gobindapur PF	9.2	SSE
11.	Beliyator PF near Beleshala	4.6	SW
12.	PF near kallapur	6.7	WSW
13.	Gangajalghati PF near Santalpara	8.6	WSW
14.	PF near Kenduadihi	9.9	WSW
15.	PF near Gangajolghati	9.5	W
16.	PF near Palerbandh	12.4	NW
17.	PF near Puruniya	8.2	SE
18.	PF near Dadhimukha	9.8	SE
19.	PF near Beliya Narayanpur	10.9	SE
20.	Gangabandh PF	14.5	SE
21.	Swargabati PF	13.8	SE
22.	Beliyator PF near Govindapur	14.0	S
23.	Beliyator PF near Nutangram	12.3	SSW
24.	Gangajalghati PF near Phakir danga	11.6	SSW
25.	PF near Bhaluka	12.5	SSW
26.	PF near Tilaghati	14.1	SSW
27.	Gangajalghati PF near Tentulidanga	11.8	SW
28.	PF near Dattardi	13.7	SW
29.	PF near Ramkanali	14.0	SW
30.	PF near Barajuri	14.6	SW
31.	PF near Bhiringi	12.7	SW
ii.	**River / Nala / Water Body**		
1.	Tartari Nala	0.3	N
2.	Seasonal drain tributory to Tartari Nala	adjoining	W & NW
3.	Barjora Nala	2.9	N
4.	Subhankari Nala	3.6	SW
5.	Kanjor Nadi	6.5	SE
6.	Sali Nadi	9.7	SSW
7.	Tamla nala	8.4	NE

Sl. No.	Particulars	Distance (km)	Direction
8.	Damodar River	6.0	NE
9.	Barajuri Nala	8.9	NNW
10.	Chouphari Nala	13.4	NNW
11.	Singaran Nala	12.5	N
12.	Baro Bil	5.6	ENE
13.	Dhannu Bil	7.4	E
iii	**Reservoirs/ Canals/ Barrages**		
1.	Nityanandpur Lake	4.2	WNW
2.	Kanjor Reservoir	8.7	SE
3.	Left Bank Main Canal	8.2	NE
4.	Right Bank main Canal	5.1	ENE
5.	Nirisha shali Barrage	10.1	SSW
6.	Durgapur Barrage	7.0	NE
iv.	**Roads**		
1.	SH-9, Durgapur to Beliyator	4.2	SE
2.	Barjora to Durlavpur Road	1.7	NE
3.	NH-14, Raniganj to Bankura	11.7	W
4.	SH-8, Beliyator to Sonamukhi	12.8	S
5.	NH-19, Delhi to Kalkata Highway	12.3	NE
v.	**Railway Line**		
1.	Raniganj to Mejia TPS	11.9	WNW
2.	Asansol to Barddhman	9.5	NE
3.	Bankura to Rajnagar	13.1	S
vi.	**Railway Station**		
1.	Durgapur R.S.	10.2	NE
2.	Beliayator R.S.	13.1	S
vii.	**District Head Quarter**		
1.	Bankura DM Office	28.4	SW
vii.i	**Interstate Boundary**		
1.	Jharkhand	41.0	N
ix.	**International Boundary**		
1.	Bangladesh	136.0	E
x.	**Seismic Zone**		
1.	Zone-III (Moderate)		
xi.	**Nearest Town (As per Census)**		
1.	Ghutgariya CT	Project is within	within
2.	Barjora CT	1.8	SE
3.	Beliyator CT	11.7	S
4.	Durgapur (M.Corp)	7.7	NE
xii.	**Critically Polluted area**		
1.	Durgapur PIA	8.15	NE
xiii.	**Defence Installation**		
1.	Panagarh AFS	18.5	ENE
2.	Barrackpur Cantonment	135.0	SE
xiv.	**Airport**		

Sl. No.	Particulars	Distance (km)	Direction
1.	Netaji Subhash Chandra Bose International Airport, Kolkata	149.0	SE
2.	Kazi Nazrul Islam Airport, Durgapur	19 km	N
xv.	**National Park and Sanctuary**		
1.	Ballavpur Wildlife Sanctuary Ballavpur Wildlife Sanctuary ESZ	50.0 49.7	NE NE
2.	Ramnabagan Wildlife Sanctuary Ramnabagan Wildlife Sanctuary ESZ	65.3 65.2	ESE ESE

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																										MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
	District : Barddhaman																														
	Sub distt.: Ondal																														
318679	Shrirampur	4	-	4	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
	Sub distt.: Faridpur Durgapur																														
318770	Shankarpur	1	-	1	-	(<5 km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	(<5 km)	-	N.A.	-	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)
	Sub distt.: Kanksa																														
318832	Banskopa	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
318833	Beharpur	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	-
318834	Babnabera	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	1	1
318847	Nutunganj	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(<5 km)
318849	Mobarakganja	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	1	1
318850	Napara	4	-	4	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(<5 km)
	District : Bankura																														
	Sub distt.: Mejhia																														
326156	Ranipur	3	-	3	-	N.A.	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	-	-
326157	Mukundapur	1	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	-
326158	Benagarya	(10+ km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	-	(5-10 km)	(<5 km)	(<5 km)
326159	Ramkrishnapur	4	-	4	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326160	Parulia	(5-10 km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326162	Palashi	2	-	2	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326164	Jamkuri	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(<5 km)
326165	Nandanpur	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	1	1
326166	Mochrakend	3	-	3	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	-	(5-10 km)	(<5 km)	(5-10 km)
326167	Bharra	4	-	4	-	N.A.	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	1	(5-10 km)
326169	Murra	(10+ km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	-
326170	Purunia	2	-	2	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	-	-
326172	Damodar Mohan	1	-	1	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	-
326173	Ramchandrapur	11	-	11	-	1	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	-	-	-
326174	Debagram	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326175	Purbator	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326176	Janakpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326177	Dighalgram	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
326178	Japamali	2	-	2	-	1	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	1	(10+ km)
326179	Sarama	1	-	1	-	1	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	(10+ km)
326180	Jangpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	-	(10+ km)
326181	Banjora	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	-	(10+ km)
326182	Jalanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
	Sub distt.: Gangajalghati																														
326184	Kali Pathar	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326185	Barasal	8	-	8	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	-	(<5 km)
326186	Kamalpur	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326187	Ratanpur	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326188	Duberdanga	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326189	Barasal Srirampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326190	Bara Lachhipur	1	-	1	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326191	Rajarampur	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326192	Lalpur Bara	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326193	Palajuria	2	-	2	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326194	Dhabani	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326195	Panktor	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																										MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
326196	Basudebpur	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326197	Chausal	4	-	4	-	1	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	1	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326198	Adwitpur	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
326199	Srichandrapur	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	-	1	1	1
326200	Ghanashyampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(5-10 km)	-	(<5 km)	-	(5-10 km)	(<5 km)	(<5 km)	(<5 km)
326201	Phuljam	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(5-10 km)	-	(<5 km)	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326202	Anandapur	2	-	2	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
326204	Chaitanyapur	1	-	1	-	(<5 km)	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326205	Dethol	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326206	Chandipur	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326207	Nityanandapur	10	-	10	-	1	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	(<5 km)	1	(<5 km)
326208	Sibipara	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	1	-	(5-10 km)	-	-	1	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326209	Sarangapur	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	(<5 km)	1	(<5 km)
326210	Bankdaha	4	-	4	-	2	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	1	(5-10 km)
326211	Pheguasol	2	-	2	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
326212	Hadalbani	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	1	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326213	Latiabani	7	-	7	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326214	Machh Banda	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
326215	Benagari	3	-	3	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
326216	Durlabhpur	2	1	2	-	1	-	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(<5 km)
326217	Nidhirampur	3	-	3	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	(5-10 km)	(<5 km)	(10+ km)
326222	Gopinathpur	1	-	1	-	N.A.	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	1
326223	Dumuria	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
326224	Nandanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	1	(10+ km)
326225	Deuli	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)
326284	Mautara	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
326287	Selera	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326288	Konra	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
326290	Bhairabpur	3	-	3	-	1	-	1	-	1	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326291	Mandi	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326292	Gangajal Ghati	16	1	16	-	4	-	2	-	2	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(<5 km)	1	2	(<5 km)
326293	Belarmari	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326294	Chhota Kumira	1	-	1	1	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326295	Kenduadihi	1	-	1	-	N.A.	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	1	-	N.A.	-	N.A.	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
326296	Nabagram	1	-	1	-	N.A.	-	(<5 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326297	Kot Madan Mohanpur	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326298	Kapishtha	8	-	8	-	2	-	2	-	1	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(<5 km)	(<5 km)	1	(<5 km)
326299	Subar Nator	1	-	1	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326301	Saltora	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326302	Salbedya	1	-	1	-	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	1	(5-10 km)	(5-10 km)
326303	Madhabpur	1	-	1	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
326304	Kallapur	2	-	2	-	1	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)
326305	Ramnagar	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	(10+ km)
326306	Suarara	2	-	2	-	(5-10 km)	-	N.A.	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326307	Radhashyampur	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326308	Sankarara	1	-	1	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
326309	Brahmanara	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
326310	Charadihi	1	-	1	-	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
326311	Rampur	1	-	1	-	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(10+ km)
326313	Birra	1	-	1	-	1	1	1	1	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	-	(5-10 km)	1	-
326314	Jemua	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	-	(<5 km)	(<5 km)	-

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																												MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
326315	Balijora	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	-	(5-10 km)	(<5 km)	-
326316	Gopalpur	1	-	1	-	1	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	-	(10+ km)	(<5 km)	-
326317	Jambedya	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	-
326318	Bhiringi	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326319	Malkonra	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
326320	Barajuri	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
326322	Ramkanali	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	-	(10+ km)	-	N.A.	-	N.A.	-	(5-10 km)	(10+ km)	(10+ km)	-
326332	Pirrabani	7	-	7	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
326334	Radha Krishnapur	1	-	1	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	-	-
326335	Kantabani	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	1	(10+ km)
326336	Gopinathpur	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326338	Tentulia Danga	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326339	Shimlagar	(<5 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	1
326340	Bhatla Para	1	-	1	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	1	(10+ km)
326341	Menjua	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	-	(10+ km)	-	(10+ km)
326342	Abhirampur	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	2	(10+ km)	2	2
326343	Srirampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
326344	Tilasuli	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	2	(5-10 km)	(<5 km)	(5-10 km)
326345	Bhaluka Pahari	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
326346	Bayer Mara	1	-	1	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	1
326347	Raniara	1	-	1	-	-	1	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	1	-	N.A.	-	N.A.	-	-	(5-10 km)	(<5 km)	(5-10 km)
326348	Arbetal	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	-
	Sub distt.: Barjora																																
327163	Kuldiha	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(<5 km)
327164	Pingrui	2	-	2	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	1	1
327165	Napara	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
327166	Tentulpoha	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
327167	Maliara	13	1	13	-	2	-	2	-	1	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	2	(5-10 km)
327168	Naricha	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327169	Bhabanipur	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327170	Monohar	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327171	Bara Pukhuria	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327172	Baguli	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	1	(5-10 km)
327173	Tikargram	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327174	Chak Kulbana	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327175	Methyali	2	-	2	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	-	1	(5-10 km)	(10+ km)
327176	Nutangram	2	-	2	-	1	-	1	-	1	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327177	Pratappur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	1	(5-10 km)
327178	Sitarampur	2	-	2	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327179	Shalgara	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327180	Gokul Mathura	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327181	Kishoripur	2	-	2	-	2	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327182	Jaysinghapur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327183	Pathrajuri	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327184	Kadasol	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	1	(<5 km)
327185	Kamarsol	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327187	Saharjora	5	-	5	-	2	-	2	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	1	(5-10 km)
327189	Muktatar	1	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	2	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
327190	Beleshola	2	-	2	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
327191	Chak Keshya	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)
327192	Shitla	1	1	1	1	1	-	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	4	-	-	(10+ km)	1	(10+ km)

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																										MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
327193	Koch Kunda	1	-	1	-	N.A.	-	N.A.	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
327196	Manjmura	1	-	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
327197	Monoharbati	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
327198	Kanchanpur	1	-	1	-	N.A.	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327199	Pabayan	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
327200	Dakaisini	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)
327201	Khanrari	8	1	8	-	2	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	1	-	N.A.	-	(5-10 km)	(5-10 km)	1	(5-10 km)
327202	Uara	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
327203	Deucha	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327204	Dejuri	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327205	Birsinghapur	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	-	-
327206	Sonergram	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327207	Ronalejora	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(5-10 km)	(<5 km)	-	(<5 km)
327208	Shyampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327209	Bhagabanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(5-10 km)	(<5 km)	(<5 km)	(<5 km)
327211	Paharpur	2	-	2	-	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	(<5 km)	(5-10 km)
327212	Krishna Nagar	1	-	1	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	-	-	1	-
327213	Bilmalpur	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
327214	Bamandihi	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	1	(<5 km)
327215	Purakonda	1	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327216	Tajpur	1	-	1	-	2	-	1	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	1	(10+ km)
327217	Pakhanna Bhairabpur	1	-	1	-	1	-	(<5 km)	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	-	-
327218	Pakhanna	4	-	4	-	4	-	2	-	2	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	1	(10+ km)	(10+ km)
327219	Gopalpur	2	-	2	-	N.A.	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(5-10 km)	-	(10+ km)	(<5 km)	(<5 km)	(5-10 km)
327220	Radhakantapur	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	(10+ km)	-	(10+ km)	(<5 km)	(<5 km)	(5-10 km)
327221	Kamalpur	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327222	Pakhanna Pratappur	1	-	1	-	N.A.	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	(5-10 km)	(10+ km)
327223	Palashbani	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	(5-10 km)	(10+ km)
327224	Shitalpur	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327225	Suratpur	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(<5 km)	(5-10 km)	(5-10 km)
327226	Chandai	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327227	Kusumgarya	(5-10 km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	(<5 km)	(<5 km)	(5-10 km)
327228	Tajpur Rampur	1	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	(10+ km)	(10+ km)	(<5 km)
327230	Rajmadhabpur	1	-	1	-	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327232	Rajprasadpur	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	(<5 km)	1	(10+ km)
327233	Bhairabpur (Paschim)	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	1	(<5 km)
327234	Kamala	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327235	Basudebpur (Uttar)	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	-
327236	Hari Nagara	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(5-10 km)
327238	Hatashuria	6	-	6	-	3	-	3	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	1	(5-10 km)
327239	Mandarbani	1	-	1	-	N.A.	-	(<5 km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	-	(5-10 km)
327240	Managram	1	-	1	-	1	-	(<5 km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(<5 km)	(5-10 km)
327241	Dewangarya	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)
327242	Sarali	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
327243	Madanhati	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)
327244	Numuigarya	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(<5 km)	(5-10 km)
327246	Gururbad	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	1	1
327247	Kotalpukur	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	-	(10+ km)	(5-10 km)	(10+ km)
327248	Radhaballavpur	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	-	(10+ km)	-	(10+ km)
327249	Arjuni	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	(10+ km)
327250	Metia Narayanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																												MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
327251	Mahidhara	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	(<5 km)	(<5 km)
327252	Krishnabati	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	(<5 km)	(<5 km)
327253	Gour Mohanpur	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)
327254	Naykona	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
327256	Payermohan	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)
327257	Shushunia	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	-	(5-10 km)
327258	Sahebdihi	N.A.	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
327259	Bishanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(5-10 km)	(<5 km)
327260	Ashuria Madhabpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(5-10 km)	(5-10 km)	(5-10 km)
327261	Harirampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)
327262	Talanjuri	4	1	4	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-		4	-	(10+ km)	(5-10 km)	1	(10+ km)
327263	Kanta Band	3	-	3	-	(<5 km)	-	N.A.	-	N.A.	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	-	(5-10 km)
327264	Belianarayanpur	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327265	Harekrishnapur	3	-	3	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327266	Dadhimukha	2	-	2	-	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	1	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	1	(<5 km)
327267	Gopkande	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327268	Purunia	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	-	(<5 km)
327269	Sangrampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327270	Lakshminarayanpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327271	Bahara Khuliya	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327272	Gangadharpur	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327273	Kalpaini	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
327274	Banshol	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(5-10 km)
327276	Dhwajamanipur	1	-	1	-	N.A.	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	-	(5-10 km)	(<5 km)	(<5 km)
327277	Nirisha	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
327278	Phulberya	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(<5 km)	1	(<5 km)
327279	Damodarpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327280	Enayetpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327281	Dangarpara	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	1	-	(<5 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327282	Nutangram	1	1	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327283	Bahadurpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	-	(<5 km)	(<5 km)	(<5 km)
327284	Ratganj Madhabpur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327285	Oltara	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327286	Kanchchhala	1	1	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
327289	Ramchandrapur	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327290	Challa	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(<5 km)	-	N.A.	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(<5 km)	1	1
327291	Kalberia	2	-	2	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(<5 km)
327293	Kururiya	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327294	Kururiya Balarampur	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327295	Malkuriya	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	(10+ km)	(<5 km)	-	(10+ km)
327296	Ekarya	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(5-10 km)
327298	Saragara	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	N.A.	-	-	(5-10 km)	(5-10 km)	(5-10 km)
327300	Gadardihi	6	-	6	-	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	1	1	(<5 km)
327302	Birsingpur	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327303	Gobindapur	1	-	1	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
327304	Jharia	1	-	1	-	N.A.	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
327305	Lalbazar	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)
327306	Kalla	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327307	Sonagara	N.A.	-	N.A.	-	(5-10 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	(10+ km)
327308	Talanda	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(5-10 km)
327309	Nabasan	1	-	1	-	N.A.	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	EDUCATION FACILITIES																										MEDICAL FACILITIES			
		PPS		PS		MS		SS		SSS		DCAS		EC		MC		MI		P		VTS/ITI		NFTC		SFD		EO		CHC	PHC	PHSC	MCWC
		Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.	Govt.	Pvt.				
327310	Chhandar	8	-	8	-	3	-	2	-	1	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	2	1	1
327311	Gobindapur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327312	Murakata	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327313	Pataspur	(<5 km)	-	(<5 km)	-	N.A.	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327315	Chandaibot Ramchandra	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327316	Paschim Brindabanpur	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327333	Brindabanpur	9	-	9	-	2	-	N.A.	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	-	(5-10 km)
327334	Shyamdaspur	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327335	Amthia	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(10+ km)
327336	Gosainpur	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	1	(5-10 km)
327337	Bankurardanga	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(5-10 km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327338	Belut	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327339	Saldanga	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327340	Jagannathpur	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	1	(<5 km)	(<5 km)
327341	Purushottampur	2	-	2	-	-	1	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	N.A.	-	(<5 km)	(<5 km)	(<5 km)	(<5 km)
327342	Asansola	2	-	2	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327343	Muktapur	1	-	1	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(5-10 km)	(10+ km)
327344	Kodma	2	-	2	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327348	Mathuraberia	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327349	Bhairabdanga	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327350	Bhairabpur	2	-	2	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(<5 km)
327351	Rautara	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327352	Barkura	1	-	1	-	1	-	1	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	1	(5-10 km)
327353	Mathuradanga	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	1	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)
327355	Radhakantapur	1	-	1	-	1	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)
327357	Kantabeshe	1	-	1	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(5-10 km)
	Sub distt.: Sonamukhi																																
327386	Chakai	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327391	Radharamanpur	2	-	2	-	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327392	Ulai	(10+ km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(5-10 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
327393	Pear Bera	4	-	4	-	1	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(<5 km)	(10+ km)
327394	Prayagpur	1	1	1	1	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327395	Radhakrishnapur	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	-	-	-	-
327396	Khidirpur	1	-	1	-	N.A.	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)
327397	Basu Nandanpur	(10+ km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	(10+ km)	(<5 km)	(<5 km)	(10+ km)
327398	Paschim Nandarampur	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
327399	Shitaljor	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	N.A.	-	(10+ km)	(10+ km)	1	(10+ km)
327400	Kubir Bandh	1	-	1	-	1	-	1	-	1	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	N.A.	-	N.A.	-	N.A.	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)
327401	Majir Danga	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	(10+ km)	-	N.A.	-	N.A.	-	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)
327402	Chaulya	1	-	1	-	(<5 km)	-	(<5 km)	-	(<5 km)	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	(10+ km)	-	N.A.	-	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)
327403	Barachatra	1	-	1	-	1	-	1	-	1	-	(5-10 km)	-	(10+ km)	-	(10+ km)	-	(10+ km)	-	(<5 km)	-	N.A.	-	N.A.	-	(<5 km)	-	N.A.	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O	TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
	District : Barddhaman																														
	Sub distt.: Ondal																														
318679	Shrirampur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	T	Y
	Sub distt.: Faridpur Du																														
318770	Shankarpur	(5-10 km)	(<5 km)	(10+ km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	-	-	-	2	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
	Sub distt.: Kanksa																														
318832	Banskopa	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	N
318833	Beharpur	(10+ km)	(10+ km)	-	-	(10+ km)	-	(<5 km)	-	-	-	-	2	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
318834	Babnabera	(10+ km)	(10+ km)	-	-	(10+ km)	-	1	-	-	-	-	1	1	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	T	Y
318847	Nutunganj	(10+ km)	(10+ km)	-	-	(5-10 km)	-	-	-	-	-	-	1	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	T	Y
318849	Mobarakganja	(10+ km)	(10+ km)	-	(5-10 km)	(5-10 km)	-	1	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
318850	Napara	(10+ km)	(10+ km)	-	(5-10 km)	(5-10 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	N	T	N
	District : Bankura																														
	Sub distt.: Mejhia																														
326156	Ranipur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	1	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
326157	Mukundapur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
326158	Benagarya	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326159	Ramkrishnapur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326160	Parulia	(5-10 km)	(10+ km)	-	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326162	Palashi	(5-10 km)	(10+ km)	-	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326164	Jamkuri	(5-10 km)	(5-10 km)	(10+ km)	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	Y	T	Y
326165	Nandanpur	(5-10 km)	(5-10 km)	(10+ km)	(10+ km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	1	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
326166	Mochrakend	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
326167	Bharra	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	1	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326169	Murra	(10+ km)	(<5 km)	-	-	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	N	Y	N	Y	N	N	N
326170	Purunia	(10+ km)	(10+ km)	-	-	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
326172	Damodar Mohan	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	N	N	Y	N	N	N
326173	Ramchandrapur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	1	1	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
326174	Debagram	-	(10+ km)	(10+ km)	(<5 km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	Y	N	N	Y	N	N	N
326175	Purbator	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	Y	Y	N	Y	N	N	N
326176	Janakpur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
326177	Dighalgram	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
326178	Japamali	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
326179	Sarama	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	Y	Y	N	Y	N	N	N
326180	Jangpur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	N	N	Y	N	N	N
326181	Banjora	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	N	N	Y	N	N	N
326182	Jalanpur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
	Sub distt.: Gangajalgha																														
326184	Kali Pathar	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326185	Barasal	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	2	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326186	Kamalpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
326187	Ratanpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326188	Duberdanga	(<5 km)	(<5 km)	(10+ km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326189	Barasal Srirampur	(<5 km)	(10+ km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326190	Bara Lachhipur	(<5 km)	(10+ km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326191	Rajarampur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326192	Lalpur Bara	(10+ km)	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	N	Y	Y	Y	N	N	N
326193	Palajuria	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N	N
326194	Dhabani	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326195	Panktor	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O	TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
326196	Basudebpur	(10+ km)	(<5 km)	(10+ km)	(<5 km)	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N
326197	Chausal	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	Y	Y	N	N	N
326198	Adwitpur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	N	N	N	Y	N	N	N
326199	Srichandrapur	1	1	-	1	1	2	1	30	30	-	2	-	-	-	3	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
326200	Ghanashyampur	(10+ km)	(<5 km)	-	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	Y	Y	N	N	N
326201	Phuljam	(10+ km)	(<5 km)	-	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	Y	Y	N	N	N
326202	Anandapur	(10+ km)	(5-10 km)	-	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	Y	Y	N	N	N
326204	Chaitanyapur	(10+ km)	(<5 km)	-	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N	N
326205	Dethol	(10+ km)	(<5 km)	-	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	Y	T	Y
326206	Chandipur	(10+ km)	(5-10 km)	-	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N	N
326207	Nityanandapur	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	N	N	N	Y	N	Y	N	N	N
326208	Sibipara	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N	N
326209	Sarangapur	(10+ km)	(<5 km)	-	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
326210	Bankdaha	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
326211	Pheguasol	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
326212	Hadalbani	(10+ km)	(5-10 km)	-	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N	N
326213	Latiabani	(10+ km)	(5-10 km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326214	Machh Banda	(10+ km)	(<5 km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326215	Benagari	(10+ km)	(<5 km)	(10+ km)	1	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
326216	Durlabhpur	(10+ km)	(<5 km)	(10+ km)	-	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	2	-	5	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	T	N
326217	Nidhirampur	(10+ km)	(<5 km)	(10+ km)	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	T	N
326222	Gopinathpur	2	(5-10 km)	2	(5-10 km)	2	2	2	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	N	N	Y	N	N	N
326223	Dumuria	(5-10 km)	(5-10 km)	-	(<5 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326224	Nandanpur	(10+ km)	(5-10 km)	(10+ km)	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	Y	Y	N	Y	N	N	N
326225	Deuli	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	(<5 km)	(10+ km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326284	Mautara	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
326287	Selera	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N
326288	Konra	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(10+ km)	-	-	-	-	-	-	-	2	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326290	Bhairabpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(10+ km)	(<5 km)	-	-	-	-	-	-	-	2	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	Y	T	Y
326291	Mandi	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	N	T	N
326292	Gangajal Ghati	(<5 km)	1	(<5 km)	1	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	8	-	N	N	Y	Y	Y	N	N	Y	Y	N	Y	N	N	N
326293	Belarmari	(5-10 km)	(<5 km)	-	(<5 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	T	N
326294	Chhota Kumira	(<5 km)	(<5 km)	(10+ km)	(10+ km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326295	Kenduadihi	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	1	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326296	Nabagram	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	1	-	-	-	N	N	N	Y	N	Y	N	N	Y	Y	Y	Y	T	Y
326297	Kot Madan Mohanpur	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	1	-	N	N	N	N	Y	Y	N	N	Y	N	Y	N	N	N
326298	Kapishtha	(10+ km)	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	-	-	-	-	-	3	-	1	-	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	T	Y
326299	Subar Nator	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	1	-	-	-	N	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y	T	Y
326301	Saltora	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	Y	N	Y	N	N	N
326302	Salbedya	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	2	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	N	T	N
326303	Madhabpur	(10+ km)	(10+ km)	-	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326304	Kallapur	(10+ km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326305	Ramnagar	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(10+ km)	2	2	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	Y	Y	Y	T	Y
326306	Suarara	(10+ km)	(10+ km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	Y	N	N	Y	N	Y	N	N	Y	Y	Y	Y	T	Y
326307	Radhashyampur	(10+ km)	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326308	Sankarara	(10+ km)	(10+ km)	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	1	1	-	-	-	Y	N	N	N	N	Y	N	N	Y	N	Y	N	T	N
326309	Brahmanara	(10+ km)	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	Y	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326310	Charadihi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326311	Rampur	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	Y	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326313	Birra	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	1	1	1	1	1	-	Y	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326314	Jemua	-	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	3	-	1	-	-	-	Y	N	N	Y	Y	Y	N	N	N	N	Y	N	N	N

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O	TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
326315	Balijora	-	(10+ km)	-	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326316	Gopalpur	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	N
326317	Jambedya	-	(5-10 km)	-	-	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
326318	Bhiringi	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326319	Malkonra	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326320	Barajuri	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
326322	Ramkanali	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	(10+ km)	-	-	-	-	-	-	1	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326332	Pirrabani	(10+ km)	(5-10 km)	-	1	(5-10 km)	(10+ km)	-	-	-	-	-	-	-	1	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
326334	Radha Krishnapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	N	N	N	Y	N	N	N
326335	Kantabani	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(10+ km)	-	-	1	-	-	-	1	-	-	N	N	Y	Y	N	Y	N	N	Y	N	Y	N	N	N
326336	Gopinathpur	-	(5-10 km)	-	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	Y	N	Y	N	N	N
326338	Tentulia Danga	(10+ km)	(5-10 km)	-	(<5 km)	(5-10 km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326339	Shimlagar	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	N	N	Y	N	N	N
326340	Bhatla Para	(10+ km)	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	Y	Y	N	Y	N	N	N
326341	Menjua	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326342	Abhirampur	2	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
326343	Srirampur	-	(10+ km)	-	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	N	N	N	Y	N	N	N
326344	Tilasuli	(10+ km)	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	1	-	-	N	N	Y	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326345	Bhaluka Pahari	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
326346	Bayer Mara	-	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	N	Y	N	Y	N	N	N
326347	Raniara	-	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	Y	Y	N	Y	Y	T	Y
326348	Arbetal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
	Sub distt.: Barjora																														
327163	Kuldiha	(<5 km)	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327164	Pingrui	1	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327165	Napara	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	1	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	N
327166	Tentulpoha	(10+ km)	(5-10 km)	(10+ km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	N	N	Y	N	N	N
327167	Maliara	-	(5-10 km)	(10+ km)	1	(5-10 km)	-	(5-10 km)	1	-	-	-	-	-	-	4	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
327168	Naricha	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327169	Bhabanipur	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327170	Monohar	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327171	Bara Pukhuria	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327172	Baguli	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327173	Tikargram	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327174	Chak Kulbana	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327175	Methyali	1	(10+ km)	(10+ km)	(5-10 km)	1	-	-	-	-	2	2	1	2	-	1	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	Y	T	Y
327176	Nutangram	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	T	N
327177	Pratappur	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	Y	Y	N	Y	N	T	N
327178	Sitarampur	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	T	N
327179	Shalgara	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327180	Gokul Mathura	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N
327181	Kishoripur	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	T	N
327182	Jaysinghapur	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N
327183	Pathrajuri	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	N	N	N
327184	Kadasol	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	N	Y	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327185	Kamarsol	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	Y	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327187	Saharjora	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	T	N
327189	Muktatar	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327190	Beleshola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327191	Chak Keshya	(10+ km)	(10+ km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327192	Shitla	(10+ km)	(10+ km)	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																	DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O		TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
327193	Koch Kunda	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	N	N	Y	N	T	N
327196	Manjmura	(5-10 km)	(5-10 km)	(10+ km)	(<5 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-		Y	N	N	Y	Y	N	N	N	N	N	Y	N	N	N
327197	Monoharbati	(10+ km)	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327198	Kanchanpur	(10+ km)	(10+ km)	(10+ km)	1	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	N	N	N	Y	N	Y	N	N	N
327199	Pabayan	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	6	-		N	N	N	N	N	N	N	N	Y	N	Y	Y	T	Y
327200	Dakaisini	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	1	-	-		N	N	N	Y	N	N	N	N	Y	N	Y	Y	T	Y
327201	Khanrari	(5-10 km)	(5-10 km)	(10+ km)	(<5 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	N	N	N	N	N	Y	Y	T	Y
327202	Uara	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	N	N	N	Y	N	Y	N	N	N
327203	Deucha	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327204	Dejuri	(<5 km)	(<5 km)	(<5 km)	1	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	N	T	N
327205	Birsinghapur	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	N	N	N	Y	N	Y	N	T	N
327206	Sonergram	(<5 km)	(<5 km)	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
327207	Ronalejora	(<5 km)	(<5 km)	(5-10 km)	(<5 km)	(<5 km)	1	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	N	N	Y	Y	N	Y	Y	T	Y
327208	Shyampur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327209	Bhagabanpur	(<5 km)	(<5 km)	(5-10 km)	(<5 km)	(<5 km)	1	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	Y	N	Y	Y	N	Y	N	N	N
327211	Paharpur	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)	(5-10 km)	1	(<5 km)	-	-	-	-	-	1	-	-	-		N	N	N	Y	N	Y	N	Y	Y	N	Y	Y	T	Y
327212	Krishna Nagar	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-		Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327213	Bilmalpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	N	N	N	N	N	Y	N	Y	N	N	N
327214	Bamandihi	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	1	(<5 km)	-	-	-	-	-	1	-	-	-		N	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327215	Purakonda	(10+ km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	Y	Y	N	Y	N	Y	Y	Y	Y	Y	T	Y
327216	Tajpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	Y	Y	N	Y	N	Y	Y	N	Y	Y	T	Y
327217	Pakhanna Bhairabpur	(10+ km)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	N	N	N	Y	Y	Y	Y	N	N	N
327218	Pakhanna	(10+ km)	(10+ km)	(10+ km)	2	(10+ km)	-	(10+ km)	-	-	-	-	-	-	1	1	-		N	N	N	N	N	Y	N	N	Y	N	Y	Y	T	Y
327219	Gopalpur	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	1	-	-	-		N	N	N	N	N	Y	N	N	Y	Y	Y	Y	T	Y
327220	Radhakantapur	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	1	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	Y	N	N	Y	N	Y	Y	Y	Y	N	T	N
327221	Kamalpur	(10+ km)	(10+ km)	-	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	2	-		N	N	N	N	N	Y	N	N	Y	N	Y	N	T	N
327222	Pakhanna Pratappur	(10+ km)	(10+ km)	-	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	N	N	Y	N	N	Y	N	Y	N	T	N
327223	Palashbani	(10+ km)	(10+ km)	-	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	N	N	N	Y	N	N	Y	N	Y	N	T	N
327224	Shitalpur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	Y	Y	N	Y	Y	T	Y
327225	Suratpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	N	Y	N	Y	N	N	Y	Y	Y	N	N	N
327226	Chandai	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	N	N	N	Y	N	N	Y	N	Y	Y	T	Y
327227	Kusumgarya	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327228	Tajpur Rampur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	Y	Y	N	Y	N	Y	Y	N	Y	Y	N	N
327230	Rajmadhabpur	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	Y	Y	N	Y	Y	T	Y
327232	Rajprasadpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	1	-	-	-		N	N	N	N	N	Y	N	N	Y	N	Y	Y	T	Y
327233	Bhairabpur (Paschim)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327234	Kamala	(<5 km)	(<5 km)	(<5 km)	(5-10 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-		Y	N	Y	Y	Y	Y	N	N	Y	N	Y	N	N	N
327235	Basudebpur (Uttar)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-		N	N	Y	N	N	N	N	N	Y	N	Y	N	N	N
327236	Hari Nagara	(<5 km)	(<5 km)	-	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
327238	Hatashuria	(5-10 km)	(5-10 km)	-	1	(5-10 km)	-	-	-	-	-	1	1	-	-	2	-		N	N	N	N	Y	N	N	N	Y	N	Y	Y	T	Y
327239	Mandarbani	(5-10 km)	(5-10 km)	-	-	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	N	N	N	Y	N	Y	Y	T	Y
327240	Managram	(5-10 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	N	Y	N	N	Y	N	Y	Y	T	Y
327241	Dewangarya	(<5 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	N	N	Y	Y	N	Y	N	N	N
327242	Sarali	(5-10 km)	(5-10 km)	-	1	(5-10 km)	-	-	-	-	-	-	1	-	-	3	-		N	N	N	N	Y	N	N	N	Y	N	Y	Y	T	Y
327243	Madanhati	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	1	-		N	N	N	N	Y	N	N	N	Y	N	Y	Y	T	Y
327244	Numuigarya	(5-10 km)	(5-10 km)	-	-	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327246	Gururbad	1	(5-10 km)	-	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	Y	N	N	Y	N	Y	Y	T	Y
327247	Kotalpukur	(10+ km)	(10+ km)	-	-	(10+ km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327248	Radhaballavpur	(10+ km)	(10+ km)	-	-	(10+ km)	-	-	-	-	-	-	-	-	-	-	-		N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327249	Arjuni	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(<5 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-		N	N	N	N	N	N	N	Y	Y	N	Y	N	N	N
327250	Metia Narayanpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-		N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O	TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
327251	Mahidhara	(<5 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	Y	Y	N	Y	Y	T	Y
327252	Krishnabati	(<5 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	Y	T	Y
327253	Gour Mohanpur	(<5 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	N
327254	Naykona	(5-10 km)	(5-10 km)	-	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	N	N	N
327256	Payermohan	(<5 km)	(5-10 km)	-	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	N	N	N	Y	N	Y	N	N	N
327257	Shushunia	(5-10 km)	(5-10 km)	-	-	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327258	Sahebdihi	(5-10 km)	(5-10 km)	-	(5-10 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	Y	N	N	N	N	N	N	N	Y	Y	T	Y
327259	Bishanpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	N	N	N	Y	N	Y	Y	T	Y
327260	Ashuria Madhabpur	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	N	N	N	Y	N	Y	N	T	N
327261	Harirampur	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327262	Talanjuri	(10+ km)	(5-10 km)	(10+ km)	(5-10 km)	1	-	(5-10 km)	-	1	-	1	-	2	-	2	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327263	Kanta Band	(5-10 km)	(5-10 km)	-	-	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	Y	N	Y	N	N	Y	Y	N	Y	Y	T	Y
327264	Belianarayanpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
327265	Harekrishnapur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	N	N
327266	Dadhimukha	(<5 km)	(<5 km)	(<5 km)	1	(<5 km)	(<5 km)	(<5 km)	40	90	-	-	1	1	-	2	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
327267	Gopkande	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
327268	Purunia	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	N	N
327269	Sangrampur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
327270	Lakshminarayanpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
327271	Bahara Khuliya	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
327272	Gangadharpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	N	N	Y	N	N	N
327273	Kalpaini	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327274	Banshol	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	N	N	N	Y	N	Y	N	N	N
327276	Dhwajamanipur	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327277	Nirisha	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327278	Phulberya	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	Y	T	Y
327279	Damodarpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	Y	T	Y
327280	Enayetpur	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(10+ km)	1	-	-	-	-	1	-	2	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	Y	T	Y
327281	Dangarpara	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	2	-	Y	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327282	Nutangram	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	2	-	N	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327283	Bahadurpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327284	Ratganj Madhabpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	N	N	N	Y	N	Y	N	N	N
327285	Oltara	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	2	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327286	Kanchchhala	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	Y	T	Y
327289	Ramchandrapur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327290	Challa	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	1	(<5 km)	-	-	-	-	-	-	1	-	-	N	Y	N	N	Y	N	N	Y	Y	N	Y	N	T	N
327291	Kalberia	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	Y	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327293	Kururiya	(<5 km)	(<5 km)	(10+ km)	-	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	N	N	Y	Y	T	Y
327294	Kururiya Balarampur	(<5 km)	(<5 km)	(10+ km)	-	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	N	N	Y	N	N	N
327295	Malkuriya	(10+ km)	(<5 km)	-	(5-10 km)	(<5 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327296	Ekarya	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327298	Saragara	(10+ km)	(5-10 km)	(<5 km)	(5-10 km)	(5-10 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327300	Gadardihi	(<5 km)	(<5 km)	(<5 km)	(<5 km)	1	(<5 km)	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	T	N
327302	Birsingpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	N	N	N
327303	Gobindapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	N	N	Y	N	N	N
327304	Jharia	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	Y	Y	N	Y	Y	T	Y
327305	Lalbazar	(<5 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	N	N	Y	N	Y	Y	N	Y	Y	T	Y
327306	Kalla	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327307	Sonagara	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327308	Talanda	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	N	Y	N	N	Y	N	Y	N	N	N
327309	Nabasan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N

AMENITIES AVAILABLE IN VILLAGES WITHIN 15KM STUDY AREA (CENSUS 2011)

LALWANI FERRO ALLOYS LIMITED, DISTRICT BARJORA, WEST BENGAL

Town/ village code	Town/village name	MEDICAL FACILITIES																DRINKING WATER FACILITY										POWER SUPPLY			
		TBC	HA	HAM	D	VH	MHC	FWC	NGMF-OP	NGMF-IOP	NGMF-C	NGMF-MBBS	NGMF-OD	NGMF-ND	NGMF-TPFH	NGMF-MS	NGMF-O	TWT	TWUT	CW	UW	HP	TW/ BW	S	R/C	T/P	WO	PSDU	PSIAU	PSCU	PSALL
327310	Chhandar	(10+ km)	1	2	2	2	2	(5-10 km)	2	2	2	2	2	2	2	2	2	N	N	N	N	N	Y	N	N	Y	N	Y	N	T	N
327311	Gobindapur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327312	Murakata	(10+ km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	N	N	Y	N	N	N
327313	Pataspur	(10+ km)	(<5 km)	-	-	(<5 km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327315	Chandaibot Ramchandra	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	Y	N	Y	Y	T	Y
327316	Paschim Brindabanpur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(10+ km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	Y	T	Y
327333	Brindabanpur	-	(5-10 km)	(<5 km)	(5-10 km)	(5-10 km)	-	-	-	-	1	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327334	Shyamdaspur	(<5 km)	(5-10 km)	(<5 km)	(5-10 km)	(5-10 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	N	N
327335	Amthia	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	Y	Y	N	Y	N	N	N
327336	Gosainpur	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327337	Bankurardanga	(10+ km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	N	N	N
327338	Belut	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	N	N
327339	Saldanga	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	1	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327340	Jagannathpur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	-	-	1	-	1	-	-	-	N	N	N	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327341	Purushottampur	(<5 km)	(<5 km)	(<5 km)	(<5 km)	(<5 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	N	Y	N	N	Y	N	Y	Y	N	N
327342	Asansola	(10+ km)	(10+ km)	(<5 km)	(<5 km)	(10+ km)	(<5 km)	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327343	Muktapur	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327344	Kodma	(<5 km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	Y	N	N
327348	Mathuraberia	(<5 km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	N	Y	N	Y	Y	N	N
327349	Bhairabdanga	(<5 km)	(5-10 km)	(<5 km)	(5-10 km)	(5-10 km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N
327350	Bhairabpur	(<5 km)	(10+ km)	(<5 km)	-	-	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	N
327351	Rautara	(<5 km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	T	Y
327352	Barkura	1	(5-10 km)	1	(5-10 km)	(5-10 km)	-	1	-	-	-	-	-	-	2	-	-	N	N	Y	N	Y	N	N	N	Y	N	Y	N	T	N
327353	Mathuradanga	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	N	N	Y	Y	N	Y	N	N	N
327355	Radhakantapur	(<5 km)	(5-10 km)	(<5 km)	(5-10 km)	(5-10 km)	-	(<5 km)	-	-	1	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
327357	Kantabeshe	(10+ km)	(10+ km)	(<5 km)	(10+ km)	(10+ km)	-	(<5 km)	-	-	-	-	-	-	-	-	-	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N
	Sub distt.: Sonamukhi																														
327386	Chakai	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	Y	N	N	Y	N	Y	N	N	N
327391	Radharamanpur	-	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	1	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	N	N
327392	Ulai	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	1	-	-	N	N	N	N	Y	Y	N	N	N	N	Y	N	T	N
327393	Pear Bera	(10+ km)	(10+ km)	(10+ km)	(5-10 km)	(<5 km)	-	-	-	-	-	-	2	2	2	-	-	N	N	Y	Y	Y	Y	N	N	Y	N	Y	Y	T	Y
327394	Prayagpur	-	(10+ km)	-	(10+ km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	N	N
327395	Radhakrishnapur	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	N	N	N	N	N	N	Y	N	N	N
327396	Khidirpur	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	(10+ km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	N	N	N
327397	Basu Nandanpur	(10+ km)	(5-10 km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	N	N	N
327398	Paschim Nandarampur	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	N	N
327399	Shitaljor	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	(10+ km)	-	-	-	-	-	1	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	N	N
327400	Kubir Bandh	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	Y	N	N
327401	Majir Danga	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(<5 km)	-	-	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	N	Y	N	Y	Y	T	Y
327402	Chaulya	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	Y	N	N
327403	Barachatra	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	(5-10 km)	-	-	-	-	-	-	-	-	-	N	N	N	N	Y	Y	N	Y	Y	N	Y	Y	N	N

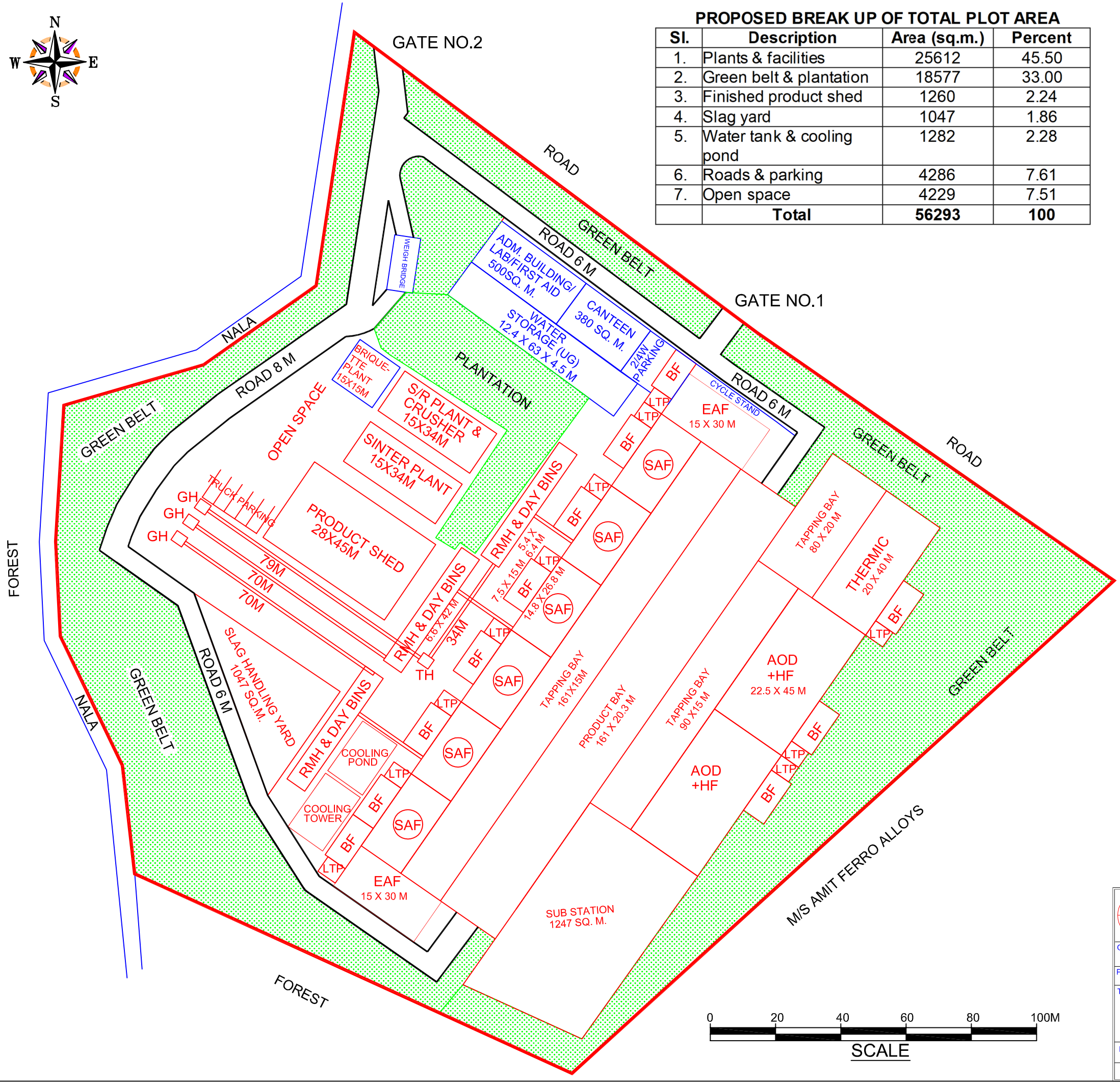
PROPOSED BREAK UP OF TOTAL PLOT AREA

Sl.	Description	Area (sq.m.)	Percent
1.	Plants & facilities	25612	45.50
2.	Green belt & plantation	18577	33.00
3.	Finished product shed	1260	2.24
4.	Slag yard	1047	1.86
5.	Water tank & cooling pond	1282	2.28
6.	Roads & parking	4286	7.61
7.	Open space	4229	7.51
	Total	**56293**	**100**

Abbreviations:
AOD : Argon Oxygen Decarbourization Convertor
BF : Bag filter
EAF : Electric Arc Furnace
GH : Ground Hopper
HF : Holding Furnace
LTP : LT Panel
M: meter
RMH : Raw Material Handling
SAF : Submerged Arc Furnace
S/R : Slag Recovery
TH: Transfer House
UG : Under Ground

Total Plot Area = 56,293 sq.m. (13.91 acres)
Green Belt = 18,577 sq.m. (33%)

Note:
UG Water storage capacity: 10 days
Product shed capacity : 25 days



MIN MEC CONSULTANCY PVT. LTD.
A-121, PARYAVARAN COMPLEX, IGNOU RD.,
NEW DELHI, PH. 29534777, 29535891
An ISO 9001 : 2015 approved company

CLIENT: M/S LALWANI FERRO ALLOYS LTD.

PROJECT: PROPOSED FERRO ALLOY UNIT (0.11 MTPA)

TITLE: TENTATIVE LAYOUT PLAN

PREPARED BY:	CHECKED BY:	ISSUE NO.
RANJEET K.	MARISHA S.	03
SCALE : AS SHOWN	DATE : 19-05-2022	

LALWANI FERRO ALLOYS LTD.
OM TOWER, 32, Jawaharlal Nehru Road, 2nd Floor, Kolkata - 700 071
Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

Ref.: LFA/20222-23/02
Date: 08.08.2022

To,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi- 110003

Sub.: Application for Terms of References for proposed Ferro Alloys Plant (6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces) at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal in an area of 13.91 acres - reply to EDS

Sir,

This has reference to the EDS raised on the parivesh website, point wise reply to which is given below:

(i) It is informed that, complete application is processed online, and hence accurate data needs to be provided in the Form 1/PFR. Please recheck the application accordingly.

Reply : The data has been cross checked and any needful corrections in the Form 1 & PFR have been made.

(ii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

Reply : The minimum road widths in our project are 8 m and turning radius is accordingly available as can be seen in the layout plan given in **Annexure 1**. The road network connects all the service areas in the layout and the area statement as desired has been mentioned on the layout along with proper indexing.

(iii) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing.

Reply : The contour map of the site along with the drainage disposal system calculations and drawings is given in **Annexure 2**.

(iv) Details of land and its possession letter needs to be uploaded. Please confirm whether land conversion for industrial purpose has been completed. On perusal it is observed that PP has not even applied the land conversion to the concerned authority.

Reply : The project comprises of two plots B1 (7.80 acres or 3.1566 ha) and C1 (6.11 acre or 2.4727 ha) totaling to 5.6293 ha. The possession letter for both the plots are given in **Annexure 3.** The land has been allotted/ purchased from West Bengal Industrial Development Corporation Ltd. (WBIDCL) in the already existing industrial estate of the WBIDCL. Therefore both the plots B1 & C1 falling in the project are industrial plots and no separate land conversion is required from any other authority.

(v) Please confirm whether the said Unit is located in CPA/SPA/OPA. If yes, please provide the details.

Reply: The unit is not located in any PA/SPA/OPA.

(vi) Details of court case, directions issued by SPCB, if any, pending needs to be submitted.

Reply: The is no court case or directions issued by SPCB on the project site.

(vii) Details of forest land involved in the project. If yes, please provide the details of Stage I FC application and its proposal number.

Reply: There is no forest land involved in the project. As seen in the **Annexure 4**- Sector Map of Master Plot "C1" Plasto Steel Park Phase-II, Under Mouza Ghutgarya at Barjora in Bankura District, our project plots are part of the industrial estate "Plasto Steel Park Phase-II". When the google earth based coordinates of the project site are superimposed on the toposheet, it appears there is an overlap of the plot with forest boundary on western side. However, on ground, the forest area starts outside the plot boundary. As per our talks with WBIDCL, there is no forest land in the project area.

(viii) PP submitted the TOR application in June 2022, however the covering letter is dated of April 2022. Please provide the correct letter. This is not good practice.

Reply: We have corrected the date as per the actual submission date and uploaded the letter. We express our regret for this error. The same is attached as **Annexure 5**.

(ix) In s.no. 9, copy of survey of India Toposheet shall have proper project boundaries as per coordinates and shall include the legends.

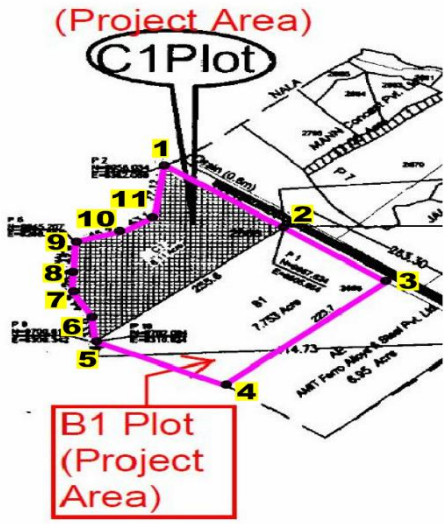
Reply: The project boundary has been marked as per the coordinates of the boundary and the legend has been included and updated at Sl. No. 9. The same is attached as **Annexure 6**.

(x) Under the Environmental sensitivity section, all the vulnerable groups shall be mentioned with distance and direction from the project site respectively.

Reply: The environmental sensitivity section has been updated by mentioning all the vulnerable groups with distance and direction from the project site. The same is given in **Annexure 7**.

(xii) Coordinates of all corners of the project site shall be submitted.

Reply: The coordinates of all corners of the project site are given below and the map of the same is given in Fig 2 in the uploaded Pre-Feasibility Report:

Sl. No.	Latitude	Longitude	Boundary line
1	23°26'9.82"N	87°14'21.55"E	
2	23°26'6.81"N	87°14'25.87"E	
3	23°26'4.34"N	87°14'29.74"E	
4	23°25'59.44"N	87°14'23.88"E	
5	23°26'1.43"N	87°14'19.16"E	
6	23°26'2.50"N	87°14'19.02"E	
7	23°26'3.80"N	87°14'18.37"E	
8	23°26'4.74"N	87°14'18.29"E	
9	23°26'6.08"N	87°14'18.39"E	
10	23°26'6.50"N	87°14'19.91"E	
11	23°26'7.28"N	87°14'21.11"E	

(xi) It is mentioned that the processing of EC proposal, in the Ministry, is through Parivesh Portal only, therefore providing the requisite information/documents shall be in compliance as per Form and accordingly the PP are kindly requested to revise the application in the Form and resubmit the same.

Reply: The requisite information has been provided in compliance as per Form and accordingly any needful revisions have been carried out and resubmitted.

We hope you will find in order the above documents and process our application for the grant of TOR for the proposed project at the earliest.

Thanking you,
For M/s Lalwani Ferro Alloys Limited

Sandeep Lalwani

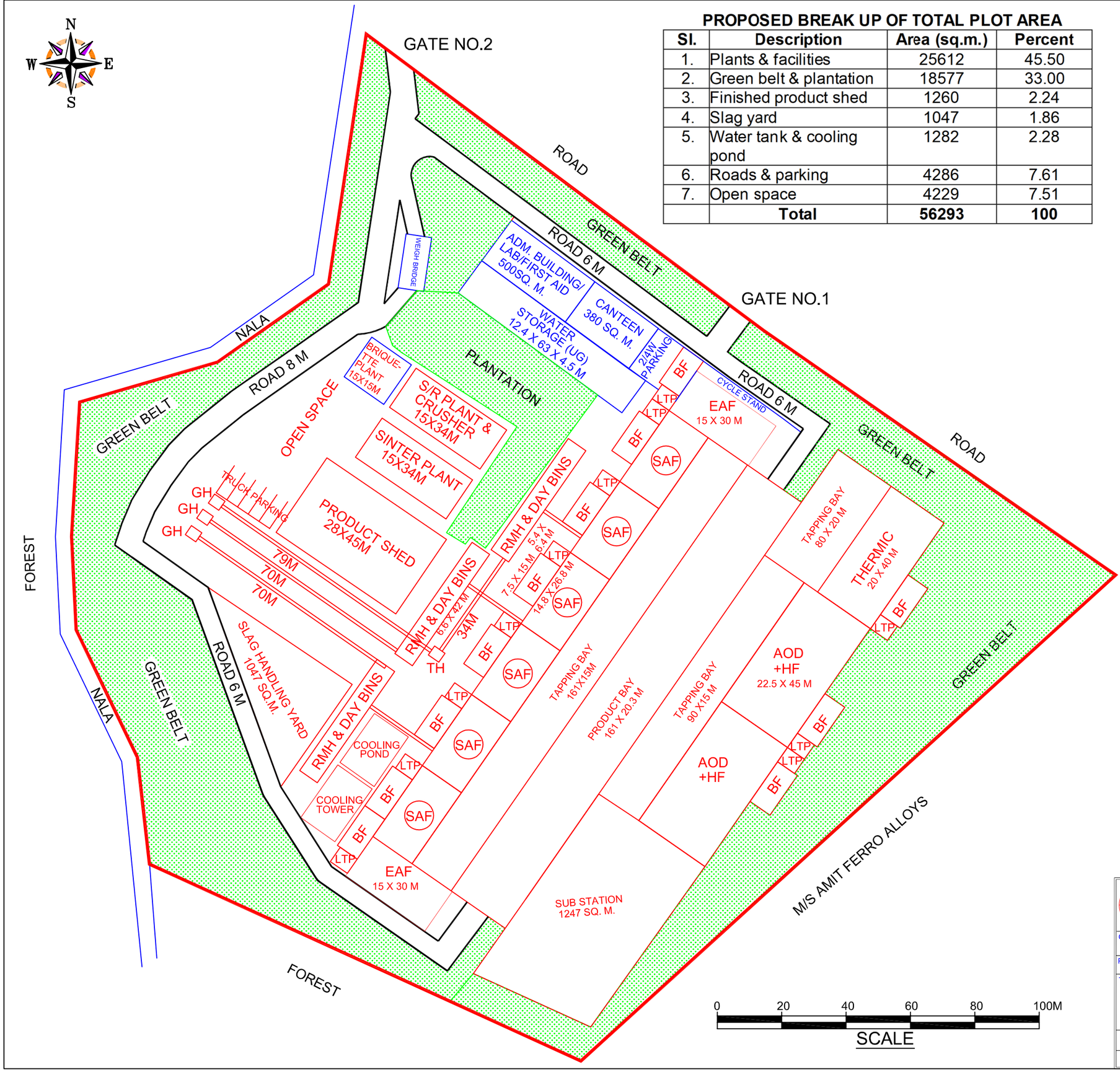
Sandeep Lalwani
Director

Encl: As Above

ANNEXURE : 1

PROPOSED BREAK UP OF TOTAL PLOT AREA

Sl.	Description	Area (sq.m.)	Percent
1.	Plants & facilities	25612	45.50
2.	Green belt & plantation	18577	33.00
3.	Finished product shed	1260	2.24
4.	Slag yard	1047	1.86
5.	Water tank & cooling pond	1282	2.28
6.	Roads & parking	4286	7.61
7.	Open space	4229	7.51
	Total	**56293**	**100**



Abbreviations:
AOD : Argon Oxygen Decarbourization Convertor
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SAF : Submerged Arc Furnace
S/R : Slag Recovery
TH: Transfer House
UG : Under Ground

Total Plot Area = 56,293 sq.m. (13.91 acres)
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Note:
UG Water storage capacity: 10 days
Product shed capacity : 25 days

MIN MEC CONSULTANCY PVT. LTD.
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An ISO 9001 : 2015 approved company

CLIENT: M/S LALWANI FERRO ALLOYS LTD.

PROJECT: PROPOSED FERRO ALLOY UNIT (0.11 MTPA)

TITLE: TENTATIVE LAYOUT PLAN

PREPARED BY:	CHECKED BY:	ISSUE NO.
RANJEET K.	MARISHA S.	03
SCALE : AS SHOWN	DATE : 19-05-2022	

ANNEXURE : 2

PROPOSED BREAK UP OF TOTAL PLOT AREA

Sl.	Description	Area (sq.m.)	Percent
1.	Plants & facilities	25612	45.50
2.	Green belt & plantation	18577	33.00
3.	Finished product shed	1260	2.24
4.	Slag yard	1047	1.86
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M: meter
RMH : Raw Material Handling
SAF : Submerged Arc Furnace
S/R : Slag Recovery
TH: Transfer House
UG : Under Ground
OGT : Oil & Grease Trap
DT : Desilting Tank

Total Plot Area = 56,293 sq.m. (13.91 acres)
Green Belt = 18,577 sq.m. (33%)

Note:
UG Water storage capacity: 10 days
Product shed capacity : 25 days

GATE NO.2
GATE NO.1
OGT
DT
WEIGH BRIDGE
ADM. BUILDING/ LAB/FIRST AID 500SQ. M.
CANTEEN 380 SQ. M.
24W PARKING
WATER STORAGE (UG) 12.4 X 63 X 4.5M
CYCLE STAND
ROAD 6 M
GREEN BELT
ROAD
NALA
FOREST
PLANTATION
BRIQUETTE PLANT 15X15M
S/R PLANT & CRUSHER 15X34M
SINTER PLANT 15X34M
OPEN SPACE
PRODUCT SHED 25X45M
TRUCK PARKING
79M
70M
70M
GH
GH
GH
RMH & DAY BINS
6.6 X 42 M
34M
7.5 X 15 M
5.4 X 6.4 M
14.8 X 26.8 M
EAF 15 X 30 M
SAF
BF
LTP
TH
TAPPING BAY 161 X 15M
PRODUCT BAY 161 X 20.3 M
TAPPING BAY 90 X 15 M
AOD +HF 22.5 X 45 M
AOD +HF
THERMIC 20 X 40 M
TAPPING BAY 80 X 20 M
SLAG HANDLING YARD 1047 SQ.M.
COOLING POND
COOLING TOWER
SUB STATION 1247 SQ. M.
M/S AMIT FERRO ALLOYS
83.5
84.0
84.5
85.0
85.5
86.0
86.5
87.0
87.5
88.0
88.5

0 20 40 60 80 100M
SCALE

LEGENDS

- PLANT BOUNDARY
- STORM WATER DRAIN
- FLOW DIRECTION
- 88.5 SURFACE CONTOUR
- GREEN BELT & PLANTATION
- ROAD
- NATURAL NALA

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An ISO 9001 : 2015 approved company

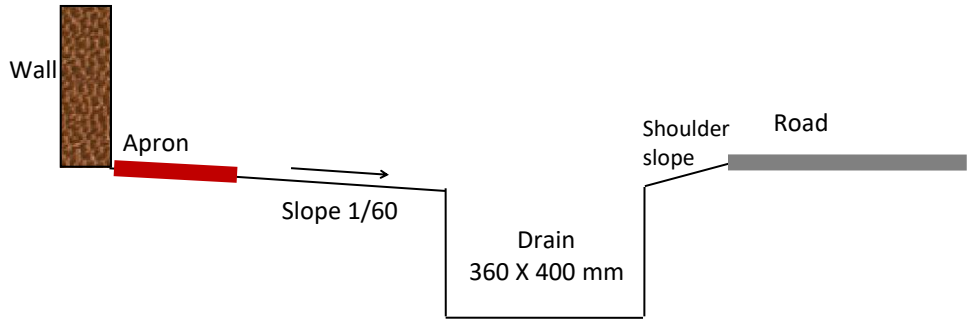
CLIENT: M/S LALWANI FERRO ALLOYS LTD.
PROJECT: PROPOSED FERRO ALLOY UNIT (0.11 MTPA)
TITLE: STORM WATER DRAINAGE & SURFACE CONTOUR

PREPARED BY:	RANJEET K.	CHECKED BY:	MARISHA S.	ISSUE NO.
SCALE :	AS SHOWN	DATE :	07-07-2022	

The drainage shall be provided as per West Bengal Municipal (Building) Rules, 2007, section 166 with the following features:

(1) (a) An open drain will be provided on the side of an internal road, constructed in accordance with the specifications following specification:

- This is a plain land with no undulation.
- The surrounding area is predominantly industrial area.
- By applying rational formula, runoff discharge is given by Q = C X i X A/ 360
- i is the peak rate of storm runoff considered as 12 mm/hr (derived from IMD Bankura)
- A is the total land area of the proposed project 5.6293 ha
- C is the average runoff coefficient of the project area = 0.64
- Q = 0.60 x 12 x 5.6293/ 360 = 0.113 cum/sec.
- Considering velocity through pipe as 1.1 m/sec (non scouring and non silting), The required section of drain will be 360 X 400 mm.



(b) An effective slope and drainage system shall be maintained at all times on the developed ground after slope cutting or filling, during and after development ;

(c) The drainage system will efficiently collect and carry away from the site the water collected within the premises of the project complex for disposal to adjoining water course after passing through a settling chamber

(2) (a) Slopes of not less than 1 : 60 shall be maintained all around a building for quick drainage of the entire plot. Erosion or ground failure through ingress and percolation of water into soft ground or through joints and fissures in the soil crust shall be prevented by suitable surface protection measures such as surface grouting, stone pitching, planting of small plants and grass, so as to protect and make the surface impervious; an impervious apron, not less than 0.75m wide, shall be provided all round the building to prevent the entry of water into the foundations.

(b) The flow of water, particularly on the upper side of the building, shall be diverted away from the foundations through lined drains;

(c) Drains for rain water will be constructed with round or half round tiles embedded in concrete, or with V-shaped stone masonry set in lime mortar and plastered over the inner surface with Portland cement, or with V-shaped stone concrete

(d) No building shall be placed to cover any drain;

(e) Where the roads and drain overlay each other, a removable R.C.C. slab cover or iron grating, will be laid over the drain.

(f) The outfall of the drainage system into the water channel shall be protected. The outfall level shall be higher than the drain level

(g) Every building shall have 8” rain water gutters and 10”-12” pipes connected to the drain passing nearest to it;

(3)(a) Septic tank soak pits will be so located so as to be easily accessible from the means of access to the plot;

(b) soak pits will be constructed on the side of buildings at right angles to the slope of the land and from the building foundations. There shall be a minimum clearance of 2.1 metres between the foundation and the soak pit to minimize the chances of dampness and slope failures due to seepage from the soak pit.

ANNEXURE : 3

- 41 -
P-2

WEST BENGAL INDUSTRIAL DEVELOPMENT CORPORATION LTD.

(A GOVERNMENT OF WEST BENGAL UNDERTAKING)
5, COUNCIL HOUSE STREET, KOLKATA-700 001

POSSESSION CERTIFICATE

I, Sri Arabinda Mukhopadhyay, Deputy General Manager of West Bengal Industrial Development Corporation Limited, 5, Council House Street, Kolkata-700001, do hereby handover the possession of 7.80 acres of land as per schedule below today, the 26th May, 2005 to M/s Aditi Commodities Pvt. Ltd., 39, Strand Road, 4th Floor, Room No.75 Kolkata-700001, for setting up a Ferroalloys /Induction/Rolling unit.

SCHEDULE

DISTRICT: BANKURA, POLICE STATION – BARJORA
MOUZA- GHUTGORIA, J.L. NO. 24

SL.No.	R.S. Plot Nos.	Full/Part	Area (in acre)
1	2666,	PART	7.80 (B1)

A copy of the land plan is enclosed.

Possession of 7.80 acres of land as per schedule above delivered to M/s Aditi Commodities Pvt. Ltd.. 39 Strand Road, 4th floor, Room No.75 Kolkata-700001

Arabinda Mukhopadhyay 26.05.05
Arabinda Mukhopadhyay
Deputy General Manager
West Bengal Industrial Development Corporation Limited
5, Council House Street
Kolkata-700001.

Possession of 7.80 acres of land as per Schedule above received by me today

Pradeep Agarwal 26/5/05
Aditi Commodities Pvt. Ltd.
39, Strand Road, 4th floor,
Room No.75
Kolkata-700007

WEST BENGAL INDUSTRIAL DEVELOPMENT CORPORATION LTD.
(A GOVERNMENT OF WEST BENGAL UNDERTAKING)
"PROTITI", 23, Abanindranath Thakur Sarani (Camac Street), Kolkata - 700 017
Phone : +91 33 2255 3700-705, Fax : +91 33 2255 3737
E-mail : wbidc@wbidc.com Web : www.wbidc.com
Corporate Identity Number : U75142WB1967SGC026988

No. IP/LFAPL/PSP/PH-II/25/ 1654 Dated: 22 February, 2022

POSSESSION CERTIFICATE

I, Sri P. Kamalakanth, Executive Director, West Bengal Industrial Development Corporation Limited, 'PROTITI', 23, Abanindranath Thakur Sarani, Kolkata – 700 017 do hereby hand over the possession of 6.11 (Six Point Eleven) acres of land as per schedule below on this date to M/s. Lalwani Ferro Alloys Ltd. Om Tower, 32, Jawahar Lal Nehru Road, Kolkata – 700 071 for setting up of Silico Manganese manufacturing unit with installed capacity of 15,000 MTPA as per their application dated 16/04/2021 and WBIDC's allotment letter dated 05/08/2021.

LOCATION

Phase-II, Plasto Steel Park, P.S: Barjora, District: Bankura

Index Map attached.

SCHEDULE

Plot : "C1"

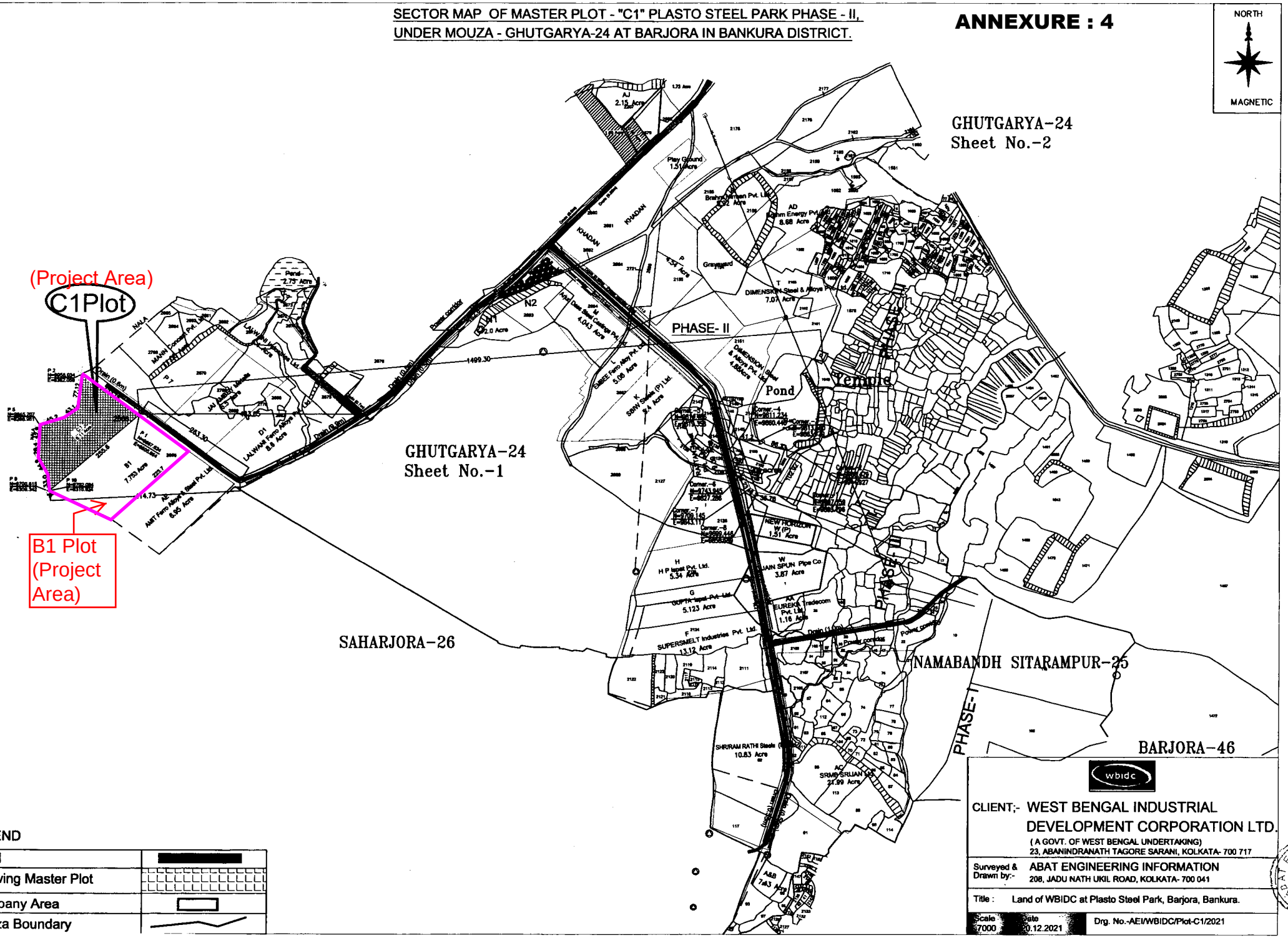
Area : 6.11 (Six Point Eleven) Acres.

Site Plan, Mouza Map and Sector Map attached.

Possession of 6.11 (six point eleven) acres of land as per schedule above delivered to M/s. Lalwani Ferro Alloys Ltd. Om Tower, 32, Jawahar Lal Nehru Road, Kolkata – 700 071	Possession of 6.11 (six point eleven) acres of land as per schedule above received by me today.
22/2/2022	Abhishek Jain 22.02.2022 LALWANI FERRO ALLOYS LTD. Kolkata
(P. Kamalakanth) **Executive Director** **West Bengal Industrial Development Corporation Limited. 'PROTITI', 23, Abanindranath Thakur Sarani, Kolkata - 700 017**	Abhishek Jain (Commercial Manager) **M/s. Lalwani Ferro Alloys Ltd.** **Om Tower, 32 Jawahar Lal Nehru Road** **Kolkata – 700 071**

SECTOR MAP OF MASTER PLOT - "C1" PLASTO STEEL PARK PHASE - II,
UNDER MOUZA - GHUTGARYA-24 AT BARJORA IN BANKURA DISTRICT.

ANNEXURE : 4



ANNEXURE : 5

LALWANI FERRO ALLOYS LTD.
OM TOWER, 32, Jawaharlal Nehru Road, 2nd Floor, Kolkata - 700 071
Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

ISO 9001 REGISTERED
MGMT. SYS. RvA C 024

Ref.: LFA/20222-23/01R
Date: 10.06.2022

To,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi- 110003

Sub.: Application for Terms of References for proposed Ferro Alloys Plant (6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces) at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal in an area of 13.91 acres

Sir,

M/s Lalwani Ferro Alloys Limited is proposing a Ferro alloy plant with 6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces, sinter plant, jigging plant, and associated facilities for smooth operation. The plant is proposed at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal over an area of 13.91 acres (5.629 ha).

The project intends to manufacture the following ferro alloys :

Sl. No.	Product	Production, TPA
1	High Carbon Ferro-Manganese	45,600
2	Silico-Chrome or High Carbon Ferro Chrome	18,000
3	Ferro-Silicon	9,600
4	Silico Manganese (High Carbon/ Medium Carbon/ Low Carbon)	36,000
5	Ferro Chrome (Medium Carbon/ Low Carbon)	15,300
6	Ferro Manganese (Medium Carbon/ Low Carbon) (via AOD)	38,760
7	Low Carbon Ferro Manganese (Thermic Process)	18,000
8	Ferro Molybdenum	3000

LALWANI FERRO ALLOYS LTD.
OM TOWER, 32, Jawaharlal Nehru Road, 2nd Floor, Kolkata - 700 071
Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

The above manufacturing activity is covered under item 3(a) of the Schedule of EIA Notication 2006 & its amendments till date Hence, Form 1 is submitted online for your kind consideration along with the following documents uploaded with it:

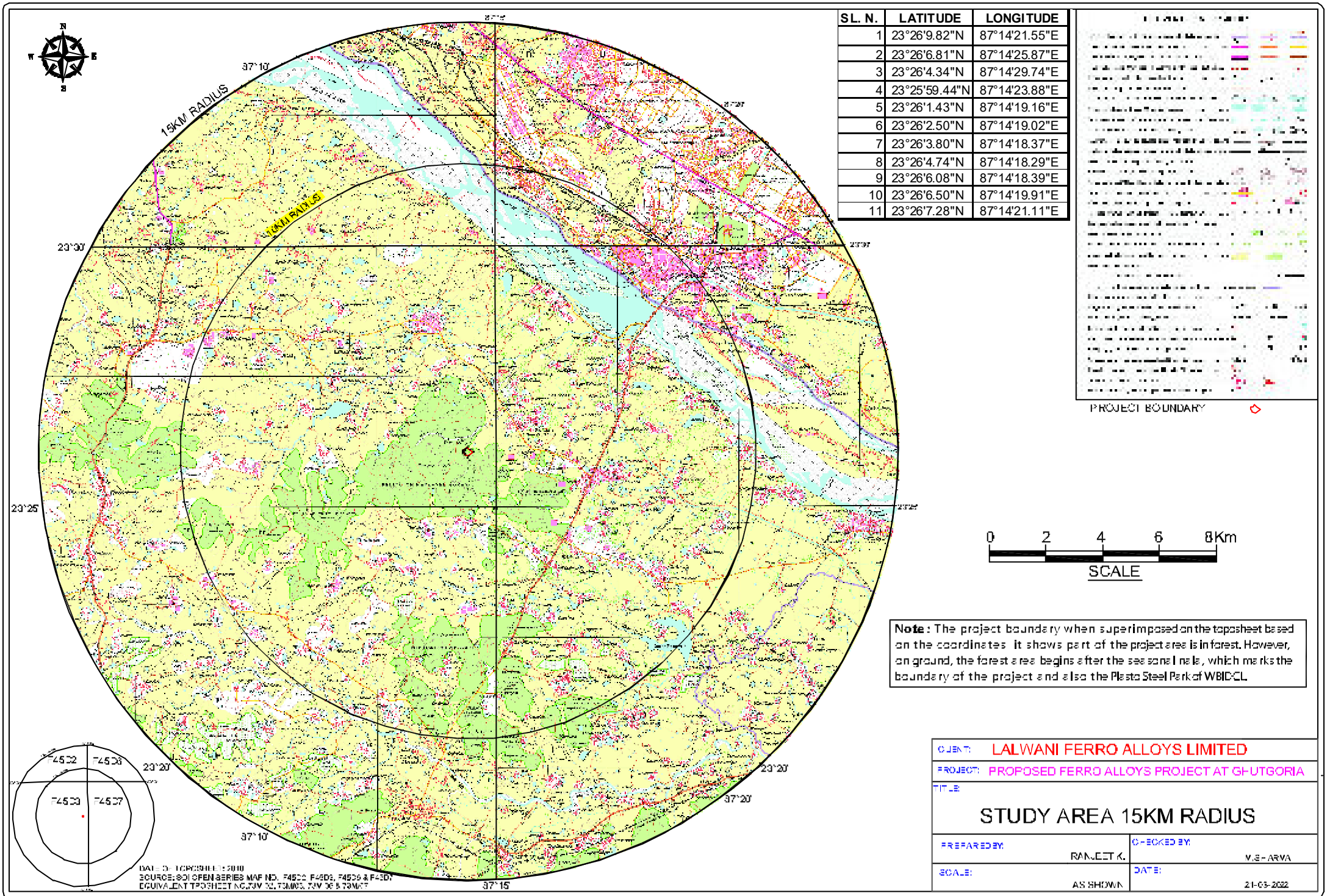
1) Brief summary
2) Kml file of the proposed project
3) Project boundary on SOI toposheet
4) Authorisation letter for the signatory
5) Proposed Terms of Reference with list & location of sampling stations being monitored between 01.03.2022 to 31.05.2022.
6) Pre-feasibility report.
7) Additional Documents :
    1. List of environmental features in 15 km radius
    2. Summary of amenities available in the villages & towns within 15 km radius

We hope you will find in order the above documents and our baseline sampling stations being monitored during summer 2022 and process our application for the grant of TOR for the proposed project at the earliest.

Thanking you,
For M/s Lalwani Ferro Alloys Limited

Sandeep Lalwani
Director

ANNEXURE : 6



SL. N.	LATITUDE	LONGITUDE
1	23°26'9.82"N	87°14'21.55"E
2	23°26'6.81"N	87°14'25.87"E
3	23°26'4.34"N	87°14'29.74"E
4	23°25'59.44"N	87°14'23.88"E
5	23°26'1.43"N	87°14'19.16"E
6	23°26'2.50"N	87°14'19.02"E
7	23°26'3.80"N	87°14'18.37"E
8	23°26'4.74"N	87°14'18.29"E
9	23°26'6.08"N	87°14'18.39"E
10	23°26'6.50"N	87°14'19.91"E
11	23°26'7.28"N	87°14'21.11"E

DATE OF TOPOSHEET : 2010
SOURCE: SOI OPEN SERIES MAP NO. F45S2, F45S6, F45S3 & F45S7
EQUIVALENT TOPOSHEET NO.78M/14, 78M/15, 78M/10 & 78M/11

Note : The project boundary when superimposed on the toposheet based on the coordinates it shows part of the project area is in forest. However, on ground, the forest area begins after the seasonal nala, which marks the boundary of the project and also the Plasta Steel Park of WBIDCL

CLIENT:	LALWANI FERRO ALLOYS LIMITED
PROJECT:	PROPOSED FERRO ALLOYS PROJECT AT GHUTGORIA
TITLE:	STUDY AREA 15KM RADIUS
PREPARED BY: RANJEET K.	CHECKED BY: M.E - ARYA
SCALE: AS SHOWN	DATE: 21-03-2022

ANNEXURE : 7

DISTANCE AND DIRECTION TO VARIOUS ENVIRONMENTAL FEATURES FROM PROPOSED FERRO ALLOYS PLANT OF LALWANI FERRO ALLOYS LTD. IN PLOT B1 & C1, PLASTO STEEL PARK, PHASE-II, MOUZA GHUTGARIYA J.L. NO. 24, DISTRICT BANKURA, WEST BENGAL

Sl. No.	Particulars	Distance (km)	Direction
i.	**Forest**		
1.	Beliyator R.F.	0.004	N & W
2.	Beliyator PF near Barjora	1.8	SE
3.	PF near Saharjora	2.6	SSE
4.	PF near Madhabpur	4.5	SSE
5.	Beliyator R.F. near Kanchanpur	5.2	S
6.	Beliyator PF near Nirisha	7.5	SSW
7.	Beliyator PF near Sanagara	7.2	S
8.	PF Near Lakshminarayanpur	7.7	SSE
9.	PF near Gadardihi	8.0	SSE
10.	Gobindapur PF	9.2	SSE
11.	Beliyator PF near Beleshala	4.6	SW
12.	PF near kallapur	6.7	WSW
13.	Gangajalghati PF near Santalpara	8.6	WSW
14.	PF near Kenduadihi	9.9	WSW
15.	PF near Gangajolghati	9.5	W
16.	PF near Palerbandh	12.4	NW
17.	PF near Puruniya	8.2	SE
18.	PF near Dadhimukha	9.8	SE
19.	PF near Beliya Narayanpur	10.9	SE
20.	Gangabandh PF	14.5	SE
21.	Swargabati PF	13.8	SE
22.	Beliyator PF near Govindapur	14.0	S
23.	Beliyator PF near Nutangram	12.3	SSW
24.	Gangajalghati PF near Phakir danga	11.6	SSW
25.	PF near Bhaluka	12.5	SSW
26.	PF near Tilaghati	14.1	SSW
27.	Gangajalghati PF near Tentulidanga	11.8	SW
28.	PF near Dattardi	13.7	SW
29.	PF near Ramkanali	14.0	SW
30.	PF near Barajuri	14.6	SW
31.	PF near Bhiringi	12.7	SW
ii.	**River / Nala / Water Body**		
1.	Tartari Nala	0.3	N
2.	Seasonal drain tributory to Tartari Nala	adjoining	W & NW
3.	Barjora Nala	2.9	N
4.	Subhankari Nala	3.6	SW
5.	Kanjor Nadi	6.5	SE
6.	Sali Nadi	9.7	SSW
7.	Tamla nala	8.4	NE

Sl. No.	Particulars	Distance (km)	Direction
8.	Damodar River	6.0	NE
9.	Barajuri Nala	8.9	NNW
10.	Chouphari Nala	13.4	NNW
11.	Singaran Nala	12.5	N
12.	Baro Bil	5.6	ENE
13.	Dhannu Bil	7.4	E
iii	**Reservoirs/ Canals/ Barrages**		
1.	Nityanandpur Lake	4.2	WNW
2.	Kanjor Reservoir	8.7	SE
3.	Left Bank Main Canal	8.2	NE
4.	Right Bank main Canal	5.1	ENE
5.	Nirisha shali Barrage	10.1	SSW
6.	Durgapur Barrage	7.0	NE
iv.	**Roads**		
1.	SH-9, Durgapur to Beliyator	4.2	SE
2.	Barjora to Durlavpur Road	1.7	NE
3.	NH-14, Raniganj to Bankura	11.7	W
4.	SH-8, Beliyator to Sonamukhi	12.8	S
5.	NH-19, Delhi to Kalkata Highway	12.3	NE
v.	**Railway Line**		
1.	Raniganj to Mejia TPS	11.9	WNW
2.	Asansol to Barddhman	9.5	NE
3.	Bankura to Rajnagar	13.1	S
vi.	**Railway Station**		
1.	Durgapur R.S.	10.2	NE
2.	Beliayator R.S.	13.1	S
vii.	**District Head Quarter**		
1.	Bankura DM Office	28.4	SW
vii.i	**Interstate Boundary**		
1.	Jharkhand	41.0	N
ix.	**International Boundary**		
1.	Bangladesh	136.0	E
x.	**Seismic Zone**		
1.	Zone-III (Moderate)		
xi.	**Nearest Town (As per Census)**		
1.	Ghutgariya CT	Project is within	within
2.	Barjora CT	1.8	SE
3.	Beliyator CT	11.7	S
4.	Durgapur (M.Corp)	7.7	NE
xii.	**Critically Polluted area**		
1.	Durgapur PIA	8.3	NE
xiii.	**Defence Installation**		
1.	Panagarh AFS	18.5	ENE
2.	Barrackpur Cantonment	135.0	SE
xiv.	**Airport**		

Sl. No.	Particulars	Distance (km)	Direction
1.	Netaji Subhash Chandra Bose International Airport, Kolkata	149.0	SE
2.	Kazi Nazrul Islam Airport, Durgapur	19 km	N
xv.	**National Park and Sanctuary**		
1.	Ballavpur Wildlife Sanctuary Ballavpur Wildlife Sanctuary ESZ	50.0 49.7	NE NE
2.	Ramnabagan Wildlife Sanctuary Ramnabagan Wildlife Sanctuary ESZ	65.3 65.2	ESE ESE

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Phone : 91-33-2226-3680/81, 2226-3753, 3028-1331, Fax : 91-33-2226-3754
E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

Ref.: LFA/2022-23/03
Date: 17.08.2022

To,
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan,
3rd Floor, Vayu Wing,
Aliganj, Jor Bagh Road,
New Delhi - 110 003

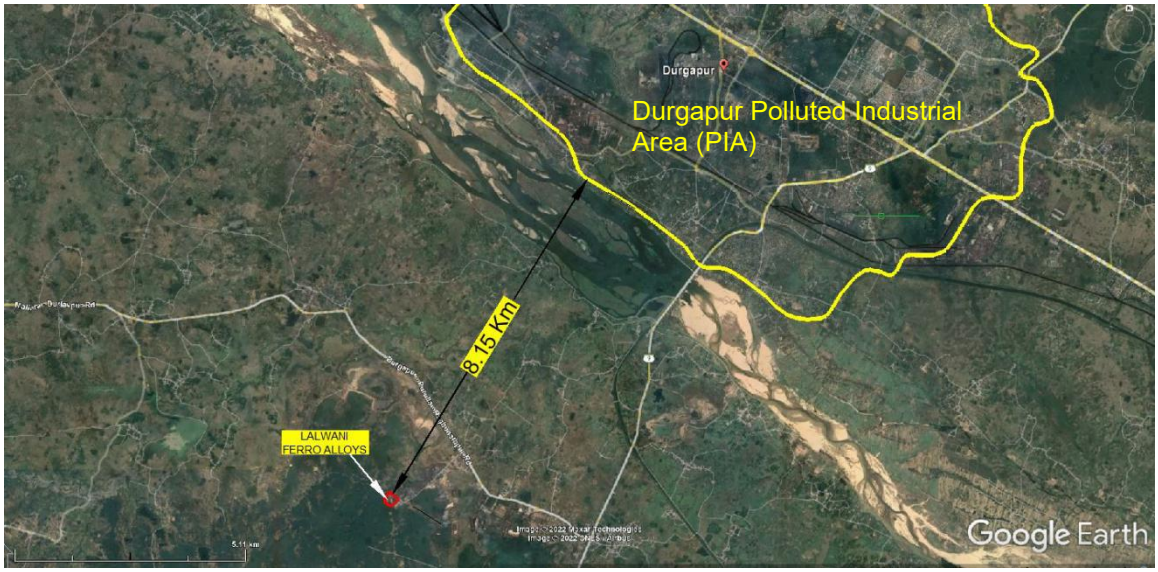
Subject: Application for Terms of References for proposed Ferro Alloys Plant (6 nos. x 9 MVA Submerged Arc Furnace, 2 nos. X 6 T Electric Arc Furnaces, 2 nos. X 15 T AOD Converter with 2 nos. X 9 T Holding Furnaces) at Plot B1 & C1, Plasto Steel Park, Phase-II, Mouza Ghutgariya J.L. No. 24, District Bankura, West Bengal in an area of 13.91 acres - reply to EDS

Sir,

This has reference to the EDS raised on the parivesh website, point wise reply to which is given below:

(i) It is noted that PP mentioned that the project is not located in any SPA/CPA. However in Form 1 it is mentioned that this is category A project as it is located in Critically polluted areas as notified by the Central Pollution Control Board(CPCB) from time to time. The statement is contradictory. Please submit the correct details. If project is located in CPA/SPA then Action Plan as per Ministry OM of 2019 and 5th July 2022 needs to be submitted.

Reply: The proposed project of Ferro Alloys Plant belongs to A category (item 3(a) : Secondary metallurgical processing industry- All toxic & heavy metal producing units >20,000 tonnes/ annum). Unit is not located in any Critically polluted areas. The nearest CPA from the project site is Durgapur Polluted Industrial Area (PIA) which is located at a distance of 8.15 km in North-East direction as shown below:



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E-mail : lalwanical2@hotmail.com, Website : www.lalwaniferroalloys.com

The boundary of the Durgapur Polluted Industrial Area has been obtained from Action Plan for Polluted Industrial Area(PIAs) in West Bengal by West Bengal Pollution Control Board dated 14.06.2019.

In form-1, the drop-down menu of general conditions has 4 conditions in which one condition is mentioned as “Critically polluted areas as notified by the Central Pollution Control Board(CPCB) from time to time”. Since the project falls in an industrial estate and was within 10 km of the CPA, general condition related to CPA was ticked as per EIA Notification 2006. However, as per MoEF&CC Gazette Notification vide S.O. 1599 (E) dated 25.06.2014, the general conditions distance related to CPA stands revised to 5 km for all projects except 1(d), 7(c) & 7(d). Therefore, the correction has been made in Form-1 and the tick against CPA has been removed. We regret the inconvenience caused due to the same.

We hope you will find the above documents in order and process our application for the grant of TOR for the proposed project at the earliest.

Thanking you,
For M/s Lalwani Ferro Alloys Limited

Sandeep Lalwani
Director