ANKUR UDYOG LIMITED
Steel Division
(A Unit of Ankur Udyog Limited)

7th March 2019

To,
Director (Industry-1)
Ministry of Environment, Forest & Climate Change,
Indira Paryavaran Bhavan,
Jorbagh Road, Jorbagh,
New Delhi

Sub: **Environmental Clearance** for our **proposed Integrated Steel Plant** at Plot No. AL-2, Sector 23, GIDA Industrial Area, Village Sahbazganj & Domharmafi, Tehsil Sahjanwa, District Gorakhpur, Uttar Pradesh - **Reply to EDS** – Reg.

Ref: **1. Proposal No. IA/UP/IND/75680/2018**
2. ADS issued by honourable MOEF&CC on 27th February, 2019

Sir,

With reference to the above, we are herewith submitting the clarification to the Additional Details Sought (ADS) by the Hon'ble Ministry for your kind consideration.

Point no. (i)	**Confirmation regarding the transportation of iron ore, fluxes and coal only by Rail by providing dedicated railway siding to the plant site.**
Reply	We do here by confirm that we have proposed a dedicated Railway siding for transportation of iron ore & coal up to the plant site. These materials will be brought to the plant site through railways only. A copy of Application filed to North Eastern Railways is enclosed as **ANNEXURE – 1 for your kind perusal.**
Point no. (ii)	**Explore the possibility of use of river water/ water from the other industries located in the Gorakhpur industrial area in order to reduce the ground water drawl.**
Reply	We would like to bring to your kind notice that Rapti river is situated beyond Sahjanwa town. It is also to be noted that the project site is locked by Rail Line on the North, NH #28 on the South, Another running Industry on the West and Rural settlement on the East, Hence laying a dedicated pipeline may not be feasible. We definitely explore the possibility of using other industrial treated effluent (condensate) provided it meets the quality requirement. We also would like to bring to your kind notice that we have received NOC No. CGWA/NOC/IND/ORIG/2019/4878 dated 26.02.2019 from CGWA for extraction of 1800 KLD of Groundwater. We have also proposed ground water recharge for 1916 KLD which more than the industry consumption.

Email - ankurtmt@gmail.com • Tel - +91 9793800000, 9415243900

Correspondence Address
Nakaha No. 2, Near Fertilizer Factory
Gorakhpur - 273007, U.P.

Factory Address
Plot No. AL-2, Sector 23, GIDA, NH-28
Sahjanwa, Gorakhpur - 273209, U.P.

Point no. (iii)	**Scheme for ground water recharge more than the amount extracted from the ground shall be submitted. The recharge can be done within the factory premises and outside the factory premises also.**
Reply	The total water requirement for the plant operations will be 1800 KLD. The potential rain water that can be recharged / collected will be **165827 m^3/year i.e. 500 KLD** within the factory premises. Additional **1416 KLD** of water will be recharged by providing Recharge pits outside the premises i.e. in nearby villages. The detailed Scheme for ground water recharge is enclosed **ANNEXURE – 2.**
Point no. (iv)	**Particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3.**
Reply	We do hereby confirm that we will provide all air emission control systems with an outlet particulate emission of less than 30 mg/Nm^3.

The following air emission control systems proposed in the project

S.No.	Source	Control Equipment	Emission at the outlet
1	DRI kilns with WHRBs	Electro Static Precipitators (ESP) – 2 nos.	PM ≤ 30 mg/Nm^3
2	Induction Furnaces with CCM	Fume Extraction system with bag filters with each furnace.	PM ≤ 30 mg/Nm^3
3	Rolling Mill	Stacks of Adequate height	----
4	CFBC Boiler	Electro Static Precipitator	PM ≤30 mg/Nm^3

Point no. (v)	**Point wise issues raised during the public hearing in verbatim shall be prepared along with time bound action plan with fund allocation for the implementation of the issues raised in public hearing.**
Reply	Compliance to the issues raised during Public Hearing is enclosed as **ANNEXURE – 3.**
Point no. (vi)	**Scheme for achieving zero liquid discharge shall be submitted.**
Reply	**In the proposed project** • Closed loop cooling water system will be adopted in DRI, SMS, and Rolling Mill units. The effluent generated from Rolling Mill will be sent to settling tank & clear water will be recycled through closed circuit cooling system. • Effluent from power plant will be treated in ETP and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash

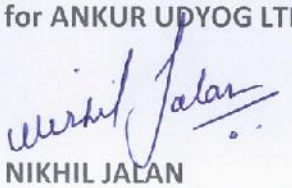
	conditioning and for greenbelt development. • There will not be any effluent discharge outside the premises. • Sanitary wastewater will be treated in Sewage Treatment Plant (STP) of 20 KLD capacity and treated sewage will be utilised for greenbelt development. • No effluent will be discharged outside the plant premises. **TREATED EFFLUENT & DISPOSAL** Total effluent generation from proposed project : 227 m^3/day Sanitary wastewater : 20 m^3/day **Total effluent : 247 m^3/day** **Utilization of treated effluent** : Effluent quantity to be used for ash conditioning : 80 m^3/day Effluent to be used for dust suppression in CHP : 67 m^3/day Balance effluent to be used for Greenbelt development : 100 m^3/day **Greenbelt will be developed in 33% plant area i.e. 10.9 Hectares (27 Acres) within the plant premises by using the treated effluent. A dedicated pipe distribution network will be provided for using the treated effluent for greenbelt development in the plant premises.** **No effluent will be discharged. It is a ZLD plant.**
Point no. (vii)	**CER action plan shall be reworked and submitted. This should include skill developmental program to ensure 70% employment of local inhabitants.**
Reply	The revised CER action plan is enclosed as **ANNEXURE – 4.** **We do hereby confirm that local people will be given first priority in employment.**
Point no. (viii)	**Confirmation regarding use of FO only in reheating furnace.**
Reply	We do here by confirm that we will use **Furnace Oil (FO) /Pulverised coal** in reheating furnace.
Point no. (ix)	**Study on hydrogeology of the area shall be submitted.**
Reply	A copy of **hydro geological** report is enclosed as **ANNEXURE – 5.**
Point no. (x)	**Permission for withdrawal of ground water shall be submitted.**
Reply	Water drawl permission for 1800 KLD of water is approved by CGWA vide **NOC no. CGWA/NOC/IND/ORIG/2019/4878 dated 26-02-2019.** A copy of screenshot of CGWA Web portal showing NOC approved as well as the communication received from CGWA confirming of issuance of NoC is enclosed as **ANNEXURE-6** for your kind reference.

We request your good selves to kindly issue Environmental Clearance for our proposed Integrated Steel plant at the earliest.

Thanking you sir,

Yours Sincerely

for ANKUR UDYOG LTD. (STEEL DIVISION)



NIKHIL JALAN
Authorised Signatory

ANNEXURE - 1

Online Application Form
(For Private Siding Project)

Reporting Date: 22/08/2018

Proposal ID : NER-LJN-2018-02 **Date : 22/08/2018**

Name of Party/Organisation :	ANKUR UDYOG LIMITED (STEEL DIVISION)
Name of Authorised Signatory :	Nikhil Jalan Email: ankur1in@gmail.com
Contact No. :	Phone No.:05512261660 Mobile No.: 9793800000
Address :	NAKAHA No.2; NEAR FERTILIZER FACTORY, GORAKHPUR - 273007 (U.P.)
City :	Gorakhpur State:Uttar Pradesh Pin Code:273007
Private Siding/Private Freight Terminal :	Private Siding
Name of Project :	Development of Private Railway Siding,for M/S ANKUR UDYOG LIMITED (STEEL DIVISION)
Brief Description of Project :	M/S ANKUR UDYOG LIMITED (STEEL DIVISION), is planning to set up steel plant at this plot for production of steel and steel products
Concerned Railway :	North Eastern Railway
Consultant :	
Division :	Lucknow Jn.
Station :	Sahjanwa (SWA)
Is Siding Electrified? :	Full
Is Siding to be taken off from Other Siding :	No
Details of NOC :	
Total Length of Private Siding :	2650 m
Length of Private Siding on Railway Land :	150 m
Siding will be served by? :	Block Rake
Ownership of land exist or not? :	Yes
Details of ownership :	Land is owned by M/S ANKUR UDYOG LIMITED (STEEL DIVISION)

Proposed Traffic for Siding :

Inward Traffic			
Station From	State	Commodity	Projected Traffic (Rake per Month)
Singrauli (SGRL)	Madhya Pradesh	Coal	10
Barbil (BBN)	Odisha	Iron-Ore	10
Joda Block Cabin (JBC)	Odisha	Others : Sponge Iron	4

Proposed facilities to be created by the Party in Railway Premises :	Connection from Main Line on Railway Land
Proposed facilities to be created by the Party in Private Land :	Rest complete private siding on private available land
Any Other Relavant Information :	NIL
Anticipated Cost of the Siding Project :	₹ **83619200**

For ANKUR UDYOG LIMITED
(Steel Division)
Nikhil Jalan
Authorised Signatory
(Nikhil Jalan)
Authorised Signatory
ANKUR UDYOG LIMITED (STEEL DIVISION)

ANNEXURE - 2

SCHEME FOR GROUND WATER RECHARGE

1.0 ARTIFICIAL RAIN WATER REHCARGE CALCULATION

- **Total Fresh water requirement for the project – 1800 KLD**
- **Total Annual Ground Water requirement: 594000 KL (considering 330 days of operation)**

As per the recommendation of Expert Appraisal Committee of MOEF&CC, we propose to artificially recharge more than the consumption. Hence it is proposed to harvest around **1,916 KLD** or **6,31,950 KL /Annum.**

To meet the recharge requirement industry will construct artificial recharge structures within plant premises and through which we will be able to recharge rain water approx. **1,65,000 KL /Annum** and the remaining **4,66,950 KL** will be recharged outside the premises for which we will adopt pond in nearby villages of Sahjanwa block. To meet the recharge requirement outside the premises industry will adopt ponds of total area: **8.653 Hectare.**

The development of ponds located in nearby villages for artificial rain water harvesting is proposed and natural percolation in ponds will result into creation of additional recharge which will be sufficient to fulfill the mandatory requirements as per the guidelines of **Central Ground Water Authority.**

Industry will develop the artificial recharge system and has preliminary identified ponds of **5 no.** of villages (Sihapaar,Domharmafi, Bangava, Deipaar, Jagdishpur) of sahjanwa block.

1.1 ARTIFICIAL RECHARGE IN THE PONDS OF VILLAGES

Introduction:

Recharge can either be natural, from precipitation that falls on the earth's surface and moves on its way underground or it can be artificial, from human activities that deliberately or inadvertently replenish an aquifer. Artificial recharge is the process of replenishing groundwater by augmenting the natural infiltration of rainwater or surface water into

underground formations through various methods designed depending on the topographic, geologic and soil conditions.

Pond in the village is generally filled with water only during the rainy season and during summer they are dry. It is proposed to adopt these village ponds to take up artificial recharge artificial recharge to ground water of the pond water, which is overflowing to adjacent areas during monsoon period. The artificial recharge to ground water in the pond area will result into rise in water levels in the village tube well as wells and increase the supply of water to the land adjacent for irrigation purposes. Thus recharge scheme in the pond will benefit the tube wells.

Tentative details of Ponds, which we will adopt for artificial recharge to the ground water:

Pond No.	**Village & Tehsil**	**Khasra Nos.**	**Area (in Ha.)**	**Proposed Depth (in M)**
Pond -1	Sihapaar, Sahjanwa	325,425/3,430,593,597,686	1.250	3.0
Pond -2	Domharmafi, Sahjanwa	318,418	0.554	3.0
Pond -3	Bangava, Sahjanwa	78,100,143,161,187,247,261,295, 321,441,447,522,523,524/2,467	2.873	3.0
Pond -4	Deipaar, Sahjanwa	13,174,288,397,424,434,480,532, 535, 563, 597, 407, 414, 255, 255, 563, 414	3.620	3.0
Pond -5	Jagdishpur, Sahjanwa	44,203	0.356	3.0
		TOTAL	**8.653**	**3.0**

The details of pond and available runoff to be recharged are as under in the table:

POND RECHARGE CALCULATION (BASED ON SPREAD POND)

S. No.	**Village Name / Pond**	**Area (in Ha.)**	**Area (m^2)**	**Depth in meter after De-silting**	**Total Storage Capacity**	**60%**	**No of Feeling**	**Quantity of water to be recharge (m^3)**
1	Sihapaar	1.25	12500	3	37,500	22,500	3	67500
2	Domharmafi	0.554	5540	3	16,620	9,972	3	29916
3	Bangava	2.873	28730	3	86,190	51,714	3	155142
4	Deipaar	3.62	36200	3	1,08,600	65,160	3	195480
5	Jagdishpur	0.356	3560	3	10,680	6,408	3	19224
	Grand Total	**8.653**	**86530**	**3**	**2,59,590**	**155754**	**3**	**467262**

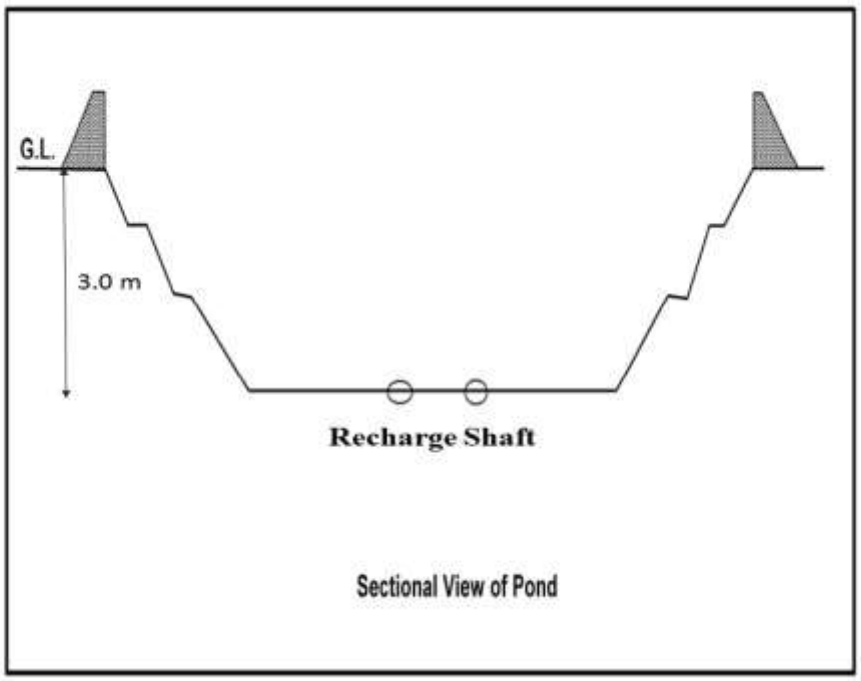
From ponds total water available for recharge will be **4,67,262 KL.** The total amount of proposed recharge including both with in premises and outside the premise in pond will be **6,31,950 KL (1916 KL/day)** (Within premises + Pond outside the premises) in a year and we have applied for the withdrawal of 1800 KL per day.

As per CGWA guidelines total amount of rainwater to recharge for the withdrawal of 594000 KL/ Annum is 297000 KL/Annum (@50 % of total withdrawal). Against 297000 KL/annum, we have proposed 6,31,950 KL/annum to be recharged.

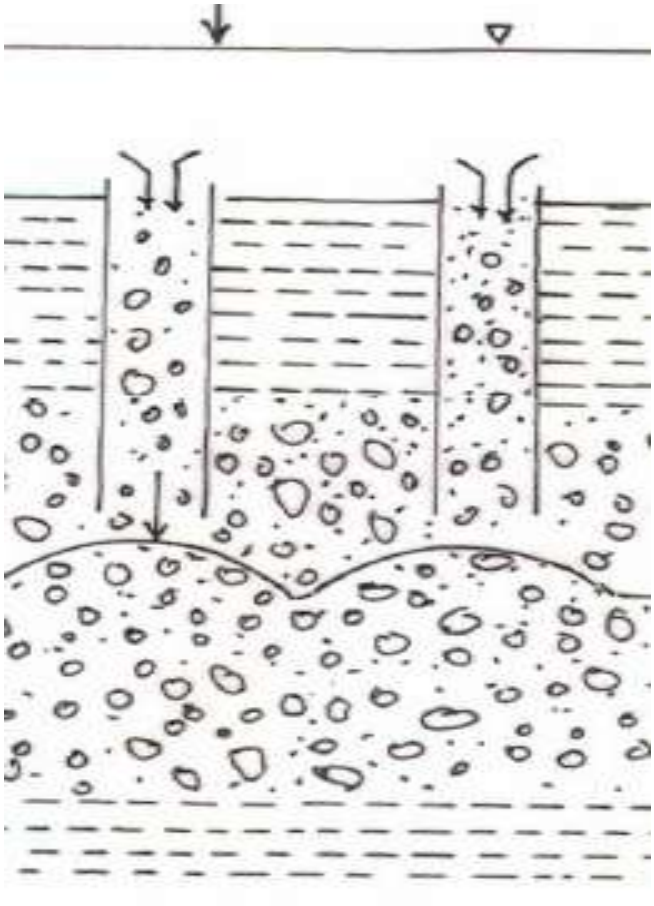
SUMMARY OF RECHARGE REPORT

S.No.	Particulars	Quantity in KL/Annum
1	**Ground Water Withdrawal / Annum**	**594000**
2	**Volume of Rain water to be recharge as per CGWA Guidelines**	**297000 (@50 % of total withdrawal)**
3	**Total Rain Water recharge proposed (RWH within Premises + Pond)**	**6,31,950 KL**
	3 (a) Rain water Harvesting proposed within premises	1,65,000 KL
	3 (b) Rain Water Harvesting proposed in ponds	4,67,262 KL

SCHEMATIC DIAGRAM OF POND RECHARGE TO BE CONSTRUCTED IN VILLAGES



CROSS SECTION OF POND



Recharge Shaft Cross Section

COMPLIANCE TO THE ISSUES RAISED DURING PUBLIC HEARING

Public Consultation for Proposed project of **M/s. Ankur Udyog Limited** has been conducted by Uttar Pradesh Pollution Control Board (UPPCB) under the chairmanship of **District Magistrate** on 09-10-2018 in the Site premises at Sector 23, GIDA, Gorakhpur (D), U.P.

Point wise issues raised during the public hearing along with time bound action plan with fund allocation for the implementation of the issues raised in public hearing is shown below.

The following are the issues raised during PH & commitment of the Project Proponent

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
1	Sri. Vijay Kumar, Village-Sahabganj	**(i)** Land which has been allotted by GIDA to the proposed industry, that land was acquired from farmers, regarding which, no compensation has been received till date.	Land has been taken on lease from Gorakhpur Industrial Development Authority (GIDA). Entire payment has been made by the company to GIDA for the entire land. Copy of the lease deed has been enclosed in the EIA report. A copy of the letter issued by GIDA confirming the receipt of total payment from the company is shown in next page. Entire payment as per norms has been made by Gorakhpur Industrial Development Authority (GIDA) to all concerned farmers pertaining to the land on which the project is proposed.	----	----	----
		(ii) Due to installing deep tube wells by the Industries for use of underground water, the underground water level is going down, due to which, the hand pumps of villagers are getting waterless.	The plant area is categorized as SAFE zone . The Average Annual rainfall in the area is 1221 mm. As per As per State Ground Water Board, Govt. of Uttar Pradesh, the depth of ground water table from the years 2008 to 2017 is varying from 3.15 mbgl to 4.25 mbgl during Pre-monsoon & 1.93 mbgl to 3.8 mbgl during Post-monsoon. NOC for Groundwater drawl for 1800 KLD of water is approved by CGWA vide NOC no. CGWA/NOC/IND/ORIG/2019/4878. Ground water recharging has been proposed for quantity more than that of drawl quantity. Ground water table will be monitored periodically and the data will be submitted to MOEF&CC, SPCB periodically.	Within 3 months of commissioning of plant	Rs.30 Lakhs	---
		(iii) The nearby villagers are also not being employed in the industries. Therefore, all of us oppose the same.	Top priority will be given to local people in providing employment.	---	---	---

Letter confirming payment made to GIDA , Gorakhpur

प्रेषक,

मुख्य कार्यपालक अधिकारी,
गोरखपुर औद्योगिक विकास प्राधिकरण,
सेक्टर–7, गीडा, गोरखपुर।

प्रेषित,

निदेशक,
मैसर्स अंकुर उद्योग लि0,
भू.सं. ए.एल.–2, सेक्टर–23,
गीडा, गोरखपुर।

पत्रांक: 3866/ सम्पत्ति–9 / भू.सं.ए.एल.–2 / से.–23 / 2018–19 दिनांक: 15-02-2019

विषयः गीडा में मैसर्स अंकुर उद्योग लि0 को आवंटित भूखण्ड संख्या ए.एल.–2, सेक्टर–23 के सापेक्ष अदेयता प्रमाण पत्र निर्गत किये जाने के सम्बन्ध में।

महोदय,

कृपया उपर्युक्त विषयक अपने पत्र दिनांक 11–02–2019 का सन्दर्भ ग्रहण करने का कष्ट करें।

उपरोक्त के क्रम में अवगत कराना है कि मैसर्स अंकुर उद्योग लि0 के पक्ष में गीडा के औद्योगिक योजनान्तर्गत भूखण्ड संख्या ए.एल.–2, क्षेत्रफल–331854.00 वर्गमीटर, सेक्टर–23 में आवंटित है। उक्त आवंटित भूखण्ड के सापेक्ष आवंटी द्वारा प्रीमियम मद् में सम्पूर्ण धनराशि जमा की जा चुकी है।

भवदीय,

Sanjiv

(संजीव रंजन),
मुख्य कार्यपालक अधिकारी,
गीडा, गोरखपुर।

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
1	**Contd..** Sri. Vijay Kumar, Village- Sahabganj	**(iv)** Even though management is giving undertaking for controlling the same before setting up of industry, but, after the set up, same are not complied and nearby people get affected by the pollution.	In the proposed project all required air emission control systems such as ESP, Bagfilters, dust suppression system, covered conveyers, pucca internal roads, Dust extraction system with bag filters will be installed and operated to comply with the SPCB norms. Interlocking system will be provided to ESP and whenever ESP fails, the raw material feed to the unit will be stopped and after rectification of the ESP only production in that unit will commence. Net Resultant Ground Level Concentrations are within the National Ambient Air Quality standards. Pucca internal roads will be laid to prevent fugitive dust emanation. Greenbelt development in 1/3rd of the total land area also reduces the emissions further. The wastewater generated from the Rolling Mill will be sent to settling tank and will be recycled back to the process. Closed loop cooling system will be adopted in DRI & SMS units. Effluent from power plant will be treated and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development. Sanitary wastewater will be treated in STP and treated sewage will be utilised for greenbelt development Solid wastes such will be stored in designated storage yard. Ash generated will be stored in silos only. There will not be any open storage of fly ash. Fly ash utilization will be in accordance with MOEF&CC notification . It is assured that all required Environmental protection measures will be implemented and operated to ensure compliance with the norms. Health check up will be carried out in the villages periodically. Hence There will not be any adverse impact on health of the people in the area.	Implemented parallel with implementation of the proposed project	Rs. 28 Crores is earmarked for Environmental Protection Measures	Rs. 185 Lakhs / Annum

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
1	**Contd..** Sri. Vijay Kumar, Village- Sahabganj	**(v)** M/s. Gallent Ispat Ltd. is established and is in operation, which is situated adjacent to the proposed Industry in the western side. From the huge air pollution being generated from M/s. Gallant Ispat Ltd., the nearby people are being affected badly. A huge amount of ash is poured down on the terrace and residential premises of the villagers, due to which, people are getting suffered from diseases like Asthema and T.B.	The issue is not related to the present proposal. However in the proposed project all required air emission control systems such as ESP, Bagfilters (PTFE/glass fiber type) , dust suppression system, covered conveyers, pucca internal roads, Dust extraction system with bag filters will be installed and operated to comply with the SPCB norms. Interlocking system will be provided to ESP and whenever ESP fails, the raw material feed to the unit will be stopped and after rectification of the ESP only production in that unit will commence. Bag houses will be designed for 50% excess volumetric flow rate. Net Resultant Ground Level Concentrations are within the National Ambient Air Quality standards. Pucca internal roads will be laid to prevent fugitive dust emanation. Greenbelt development in 1/3rd of the total land area also reduces the emissions further. Ash generated will be stored in silos only. There will not be any open storage of fly ash. Fly ash utilization will be in accordance with MOEF&CC notification. It is assured that all required Environmental protection measures will be implemented and operated to ensure compliance with the norms. Health check up will be carried out in the villages periodically. Hence There will not be any adverse impact on health of the people in the area due to the proposed project.	Implemented parallel with implementation of the project	In the proposed project Rs. 28 Crores is earmarked for Environmental Protection Measures	Rs.185 Lakhs / Annum

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
1	**Contd..** Sri. Vijay Kumar, Village-Sahabganj	**(vi)** All of us villagers are suffering from the water/air/noise pollution generated by Gallant Ispat Ltd.	Not related to this proposal. However in the proposed project all required air emission control systems such as ESP, Bagfilters (PTFE/glass fibre type), dust suppression system, covered conveyers, pucca internal roads, Dust extraction system with bag filters will be installed and operated to comply with the SPCB norms. Interlocking system will be provided to ESP and whenever ESP fails, the raw material feed to the unit will be stopped and after rectification of the ESP only production in that unit will commence. Net Resultant Ground Level Concentrations are within the National Ambient Air Quality standards. Pucca internal roads will be laid to prevent fugitive dust emanation. Acoustic enclosures will be provided STG and the ambient noise levels will be with in the stipulated standards. Greenbelt development in 1/3rd of the total land area also reduces the air emissions further. It is proposed to develop more Greenbelt in the North East, East Directions. Health check up will be carried out in the villages periodically. Hence There will not be any adverse impact on health of the people in the area due to the proposed project.	Implemented parallel with implementation of the project	In the proposed project Rs. 28 Crores is earmarked for Environmental Protection Measures	Rs. 185 Lakhs / Annum

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
2	Sri. Yogendra Tiwari	**(i)** PA's have not given the details of ETP/STP/WTP. ETP etc. in the EIA report. If these facilities not installed by the Industries, due to which the ground water is getting polluted.	Closed loop cooling water system will be adopted in DRI, SMS, and Rolling Mill units. The effluent generated from Rolling Mill will be sent to settling tank & clear water will be recycled through closed circuit cooling system. Effluent from power plant will be treated in ETP and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development. Sanitary wastewater will be treated in Sewage Treatment Plant (STP) of 20 KLD capacity and treated sewage will be utilised for greenbelt development. No effluent will be discharged outside the plant premises. ZLD will be implemented. ETP details are shown in Chapter-10 of EIA report. Ground water quality will be monitored every month and reports will be submitted to MOEF&CC , UPPCB.	Implemented parallel with implementation of the project	In the proposed project Rs 2.25 Crores is earmarked for Wastewater Management	Rs.14 Lakhs / Annum
		(ii) Construction of labour hutment and toilets	During construction, labour hutment and toilets will be provided in the plant area.	---	---	---
		(iii) Industries do not develop Green belt as promised	Greenbelt will be developed in 1/3rd of the total land area as per CPCB guidelines @ 1500 nos/ha.	During the 1st monsoon after commencement of production	In the proposed project Rs 25 Lakhs is earmarked for Greenbelt development	Rs.10 Lakhs / Annum

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
2	**Contd..** Sri. Yogendra Tiwari	**(iv)** Village road is occupied by several trucks	We are proposing a dedicated railway siding through which major raw materials will be transported upto the plant site. We will not be using the village road as our approach is directly from NH.	---	---	---
		(v) Fly ash management	Ash generated will be stored in silos only. There will not be any open storage of fly ash. Fly ash will be given to cement plants. Fly ash utilization will be in accordance with MOEF&CC notification	Implemented parallel with implementation of the project	In the proposed project Rs. 3 Crores is earmarked for Solid waste Management	Rs.40 Lakhs / Annum
3	**Contd..** Sri. Yogendra Tiwari & Sri. Yashpal Rao	Steel Industries are being established at the proposed place, whereas, earlier, this rumor was spread by the Govt. that textile industry would be established in this area belongs to Gorakhpur Industrial Area.	In the lease deed between the company and M/s. GIDA in the year 2010 it has been mentioned that Integrated steel plant and Textile industry will be established in the land. Subsequently the company has now proposed to establish mini integrated steel plant in the said land.	---	---	---

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
4	**Contd..** Sri. Yashpal Rao	Due to air pollution pets and cattle are also being affected	The issue is not related to the present proposal. However in the proposed project all required air emission control systems such as ESP, Bagfilters (PTFE/glass fiber type) , dust suppression system, covered conveyers, pucca internal roads, Dust extraction system with bag filters will be installed and operated to comply with the SPCB norms. Interlocking system will be provided to ESP and whenever ESP fails, the raw material feed to the unit will be stopped and after rectification of the ESP only production in that unit will commence. Bag houses will be designed for 50% excess volumetric flow rate. Net Resultant Ground Level Concentrations are within the National Ambient Air Quality standards. Pucca internal roads will be laid to prevent fugitive dust emanation. Greenbelt development in 1/3rd of the total land area also reduces the emissions further. Ash generated will be stored in silos only. There will not be any open storage of fly ash. Fly ash utilization will be in accordance with MOEF&CC notification. It is assured that all required Environmental protection measures will be implemented and operated to ensure compliance with the norms. **Hence there will not be any impact on pets, cattle due to our project.**	Implemented parallel with implementation of the project	In the proposed project Rs. 20.9 Crores is earmarked for Air emission Management	Rs.98 Lakhs / Annum

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
5	**Contd..** Sri. Yashpal Rao & Sri. Pramod Singh Gram Pradhan Domharmafi	Location of Plant near population Norms regarding siting of steel industry near population	Proposed industry is in Industrial Area. Siting guidelines are not applicable .	---	---	---
6	**Contd..** Sri. Pramod Singh Gram Pradhan Domharmafi	**(i)** Due to the outflow of excessive quantity of polluted water by the M/s. Gallant Ispat Ltd. through the drain flowing adjacent to it, the water quality of Aami River is also getting affected and aforesaid drain have been made very congested by the proposed Industry and M/s. Gallant Ispat Ltd. This drain was natural drain, which has been diverted and industry has been set up in it's place.	A drain passes just outside the plant premises. No encroachment of drain by our company. As per the directions of the Hon'ble District Magistrate, management has agreed to strengthen the drain that is passing adjacent to the proposed project site . In our plant ZLD system will be followed and there will not be any effluent discharge outside the premises. Hence no impact on Aami river due to the proposed project.	1st year of operation	Rs 10 lakhs	---

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
7	District Magistrate	What is the plan to ensure water treatment and zero discharge	Closed loop cooling water system will be adopted in DRI, SMS, and Rolling Mill units. The effluent generated from Rolling Mill will be sent to settling tank & clear water will be recycled through closed circuit cooling system. Effluent from power plant will be treated in ETP and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development. Sanitary wastewater will be treated in Sewage Treatment Plant (STP) of 20 KLD capacity and treated sewage will be utilised for greenbelt development. No effluent will be discharged outside the plant premises. Zero Liquid Discharge will be ensured in the project.	Implemented parallel with implementation of the project	In the proposed project Rs 2.25 Crores is earmarked for Wastewater Management	Rs.14 Lakhs / Annum
		Does the management has any plan for labour housing for construction workers. Accordingly DM has directed to PAs to provide labour hutment and toilets for construction workers in the plant area.	During construction, labour hutment and toilets will be provided in the plant area.	---	---	---

S.No.	Name of the Person	Issue raised	Management Response	Time schedule	Budgetary allocation	Recurring cost
7	District Magistrate	What is the green belt area and how many plants will be planted	10.9 Ha. (27 Acres) of greenbelt will be developed out of total 32 Ha. (79 Acres) within the plant premises. Total 17,000 nos. of saplings will be planted in consultation with local DFO. Width greenbelt ranges from 10 m to 130 m. More greenbelt width is proposed in North, NE & Eastern side of the project site towards Villages.	Implemented parallel with implementation of the project	In the proposed project Rs 25 Lakhs is earmarked for Greenbelt development	Rs.10 Lakhs / Annum

REVISED CER ACTION PLAN

Ankur Udyog Limited will actively contribute to improve the Socio economic conditions of the area by providing assistance for local persons preferable from the nearby villages. **₹ 5.45 Crores will be spent on CER activities based on need base assessment.**

Budget earmarked towards CER as per Ministry's Office Memorandum vide F.No. 22-65/2017-IA.III dated 1st May 2018.

Details of expenditure for CER activities

Total cost of the proposed project ***: Rs 330 Crores***

Work out to ***: Rs 5.45 Crores***

Spent over in no. of years ***: 3 years***

Calculation for CER Budget

Project Cost	Slab for Green field project (%)	CER Amount (Rs in Crores)
≤ 100 Crores	2.0 %	2.00
>100 to ≤ 500 Crores	1.5 %	3.45
Total CER Budget		**5.45 Crores**

Cost Break-up of Proposed CER activities

S.No.	Major Activity Heads	Years (Rs. in Crores)			Total Expenditure (Rs.in Crores)
		1st	2nd	3rd	
A	**Based on Social Impact Assessment (SIA)**				
1	Community & Infrastructure Development Programs (construction of 10 nos. of toilets in 5 nos. of schools in Sahjanwa Town, Jigna, Ujikar & Domhar villages under Swachh Bharat (10 nos. @ Rs 2 lakhs/toilet), renovation of 3 nos. of school buildings (Rs. 10 Lakhs), drainage facilities in Sahjanwa Town (20 lakhs), Maintenance & repairs of roads (Rs.50 Lakhs), Community Hall in Sahjanwa Town (Rs. 50 Lakhs).	0.5	0.5	0.5	**1.5**
2	**for Health & Hygiene of the community** (Mineral Water plants, construction toilets in villages, PHC, Ambulance facility, Distribution of Medicines etc.)	0.3	0.3	0.3	**0.9**
3	**Skill Development** **A Community Centre will be established in the village which will consist of the following:**				
i.	Vocational Training Institute with latest tools, machinery & softwares etc. for making them Industry ready.	0.15	0.15	0.1	0.4
ii.	Workshop centre with latest tailoring machines for training women (like tailoring, stitching etc.)	0.2	0.1	0.1	0.4
iii.	Skill development / Computer / IT Training Centre for improving computer knowledge and making Industry ready.	0.1	0.1	0.1	0.3
	Total Budget for skill development				**1.1**
4	**for Education & Sports** (Merit Scholarships (for), construction of class rooms in schools, providing computers in class rooms, development of library facility)	0.1	0.1	0.1	**0.3**
5	**Other Need based activities**	0.45	0.45	0.25	**1.15**
	Sub Total (A)	**1.80**	**1.70**	**1.45**	**4.95**

Cost Break-up of Proposed CER activities .....contd..

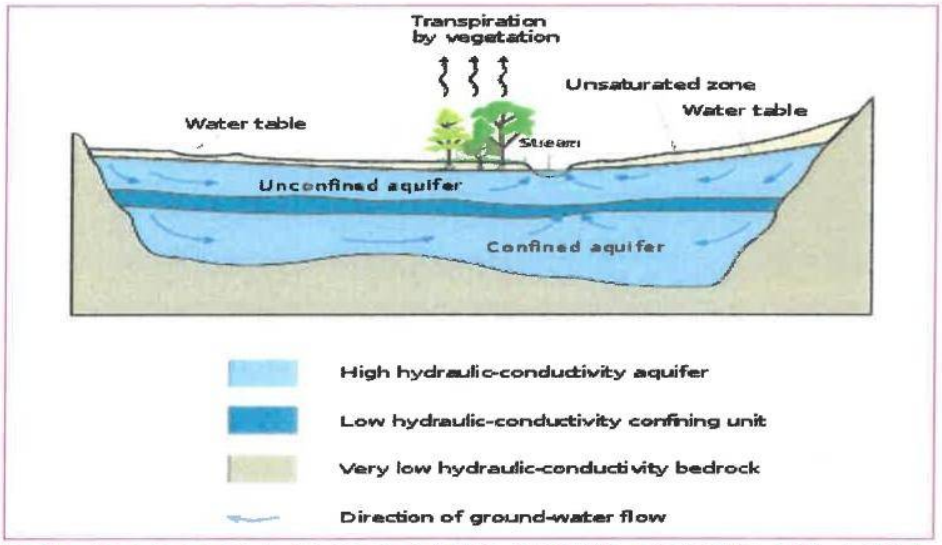
S.No.	Major Activity Heads	Years (Rs. in Crores)			Total Expenditure (Rs.in Crores)
		1st	2nd	3rd	
B	**Based on Public Consultation**				
1	Rain water harvesting in nearby villages • Pond deepening • Recharge Structures	0.10	0.10	0.10	0.30
2	Greenbelt development outside the Plant Boundary & in Village (4000 nos. will be planted and maintained)	0.05	0.03	0.02	0.10
3	Strengthening of Drain passing through adjacent to the Boundary	0.10	0.0	0.0	0.10
	Sub Total (B)	**0.25**	**0.13**	**0.12**	**0.50**
	Total (A+B)	**2.05**	**1.83**	**1.57**	**5.45**

HYDRO - GEOLOGICAL INVESTIGATION

&

PREPARATION OF FEASIBILITY REPORT

FOR RAIN WATER HARVESTING & GROUND WATER CONSERVATION



FOR PROPOSED INTEGRATED STEEL PLANT,
PLOT – AL 02, SECTOR – 23,
GIDA INDUSTRIAL AREA,
TEHSIL : SAHJANWA,
DISTRICT: GORAKHPUR (UP)

OF

M/S ANKUR UDYOG LIMITED
(STEEL DIVISION)

PREPARED BY:

ENVIRONMENTAL AND TECHNICAL RESEARCH CENTRE

AN ISO 9001: 2015, 14001: 2004, OHSAS 18001: 2007
AND NABL ACCREDITATED LABORATORY
ADDRESS: GOMTI NAGAR, LUCKNOW

1.0 INTRODUCTION

The occurrence and movement of ground water in any area is controlled by geomorphic features, geologicalset up, structural features, recharge from annual precipitation and local surface water sources. To assess the quantity of ground water in a given area, various parameters like annual recharge from all sources and present rate of extraction of ground water have to be estimated to know the quantum available for future extraction. Indiscriminate extraction leads to over exploitation and decline of water levels.

As per study of groundwater investigation and analysis of data was analysed for assessment of availability of groundwater to fulfil the catering water demand by installation of tube well. The scope of work for the investigation is as follows: -

1. Study of physiographic, geological & hydro geological set-up of the area.
2. Study of nature of aquifer around the project area.
3. Study of water producing capabilities of the area.
4. Rainfall pattern around the study area.
5. Natural recharging capabilities of the area.
6. Water table study.
7. Study of existing groundwater structure, around the project area.
8. Quantitative groundwater assessment at the project location.
9. Assessment of nature of formation below the ground.
10. Determination of spacing between tube wells.
11. Determination of number of tube wells required to fulfill the projected water demand.
12. Selection of most potential sites for installation of tube wells.
13. Determination of type of drilling method, depth of drilling & design of tube wells.
14. Feasibility & designing of rain water harvesting system.

1.1 Project Description

It is proposed integrated steel plant having following products: Sponge Iron Plant, M.S. Billet via Induction furnace & caster machine route and captive power plant. Proposed plant capacity will be Sponge Iron plant :330000.0 MTPA, M.S. Billets via induction furnace & caster machine route: 356400.0 MTPA and Captive Power 50.0 MW. Proposed unit is located at plot no: AL – 2, Sector – 23, GIDA industrial area, Tehsil: Sahjanwa, District: Gorakhpur

The total fresh water requirement of plant will be 1800 m^3/day, which is being met through ground water. It is based on Zero Liquid discharge. Total 03 Number of bore wells will be installed to meet our proposed requirement. Out of Three (03) tube wells, two will be in operation and one will be stand by.

The project envisagess "**Manufacturing of Sponge Iron / M.S. Billet / Captive Power"** having demand of **1800 m^3/day**. Total land area of project is **32.0 Hectares**. Detailed land use breakup of the project is given in Table 1.1. The total abstraction of groundwater per annum will be **594000 m^3 (**in a year, which is 330 days for the industry operation and 365 days for domestic use).

Table: 1.1: Detailed Land Use / Land cover breakup of total area

S.No.	Description	Area (in Sq.m.)
1	Built-up area (including Admin Building)	98000
2	Storage area (Raw Material, Product & Solid Waste)	40000
3	Parking area	4000
4	Internal Roads	20000
5	Water Reservoir & RWH	4000
6	Railway Siding	20000
7	Greenbelt area	109000
8	Open area & others	25000
	Total	**320000**

1.2 Location

The district Gorakhpur occupies extreme North-Eastern part of Uttar Pradesh and lies between 26^0 15' and 27^0 06' N latitude and 83^0 06' and 83^0 45' E longitude, falling in survey of India Toposheet 63 N. The total geographical area of the district is 3483.815 Km^2. There are 7 tehsils and 19 blocks. There are 191 Nyay Panchyat, 1224 Gram Sabha and 563 Panchyat Ghar. Gorakhpur is the head quarter of this district.

The district of Gorakhpur occupies a part of Middle Ganga-Plain-East and comprises a huge stretch of country lying to north of the river Ghaghara. Being the part of Eastern Uttar Pradesh, the district presents different characteristics from those of western district due to relative proximity of the Himalaya. The district is plain, form a level tract which slopes gently from west to south-east.

The plant is situated at plot no: AL – 2, Sector – 23, GIDA industrial area of district: Gorakhpur. Proposed integrated Steel plant is situated at a distance of 1.5 km away from Tehsil - Sahjanwa in west direction. Location map of proposed project given in Fig; 1.1.

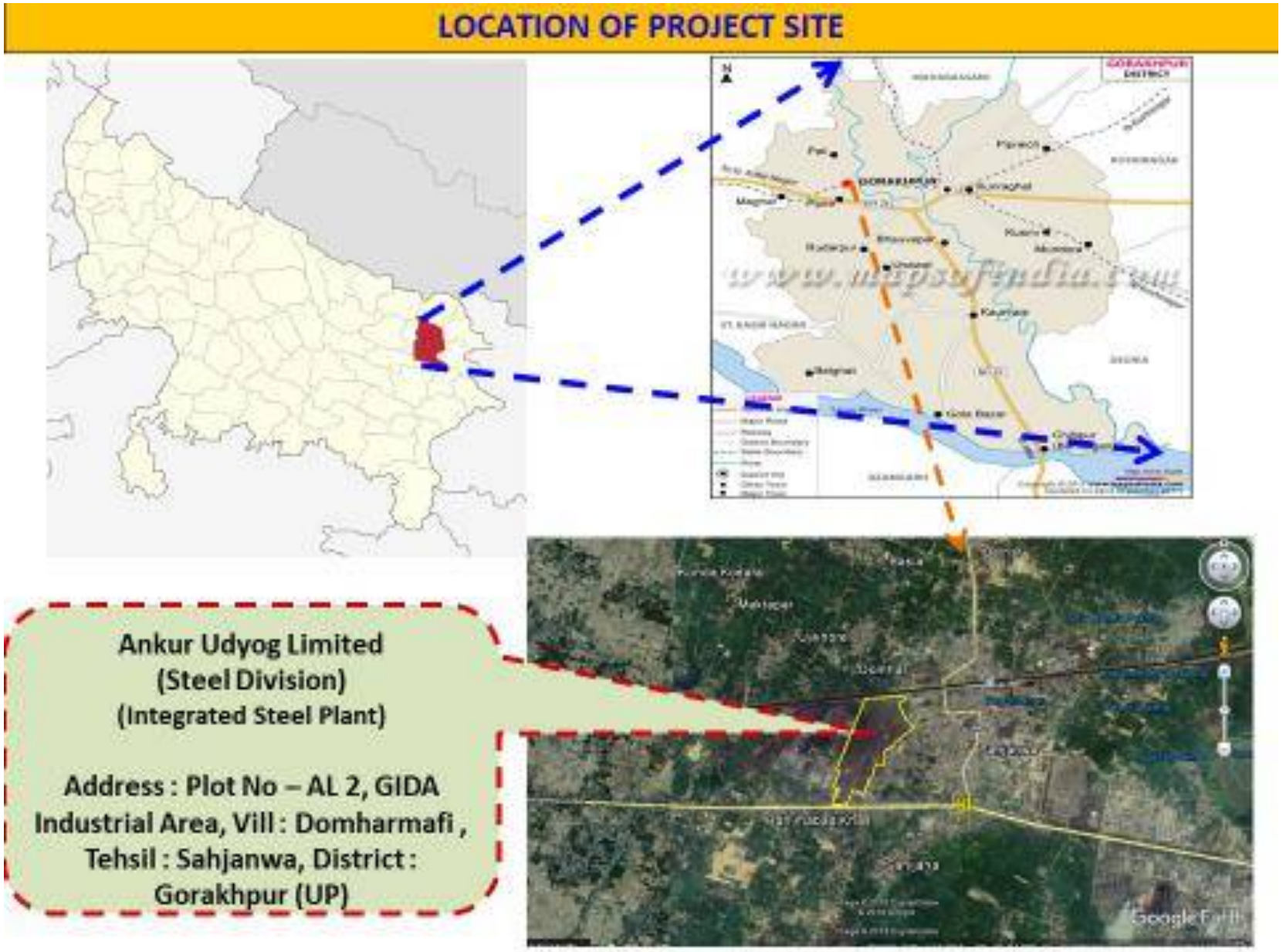


Fig: 1.1, Proposed Project Location

1.3 Basin and Sub-Basin

The district of Gorakhpur occupies a part of Middle Ganga-Plain-East and comprises a huge stretch of country lying to north of the river Ghaghara. Being the part of Eastern Uttar Pradesh, the district presents different characteristics from those of western district due to relative proximity of the Himalaya. The district is plain, form a level tract which slopes gently from west to south-east. In the north of the district a stretch of forest land which extends downwords in patches as for as centre of the district. Average depth of water is about 4.5 meters. The average height above sea-level ranges from 95 metres in the north west to 93 metres in the south-east.

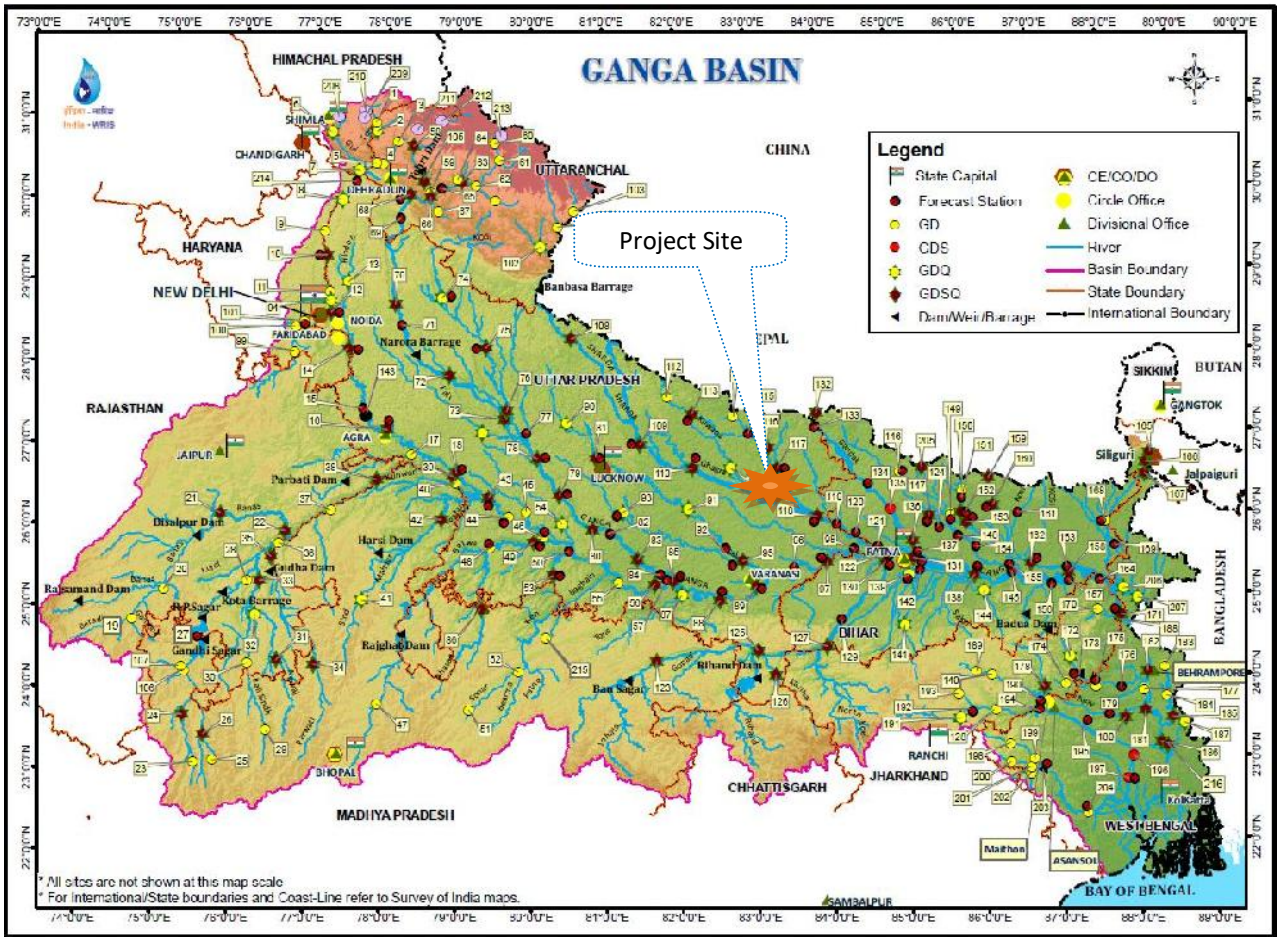
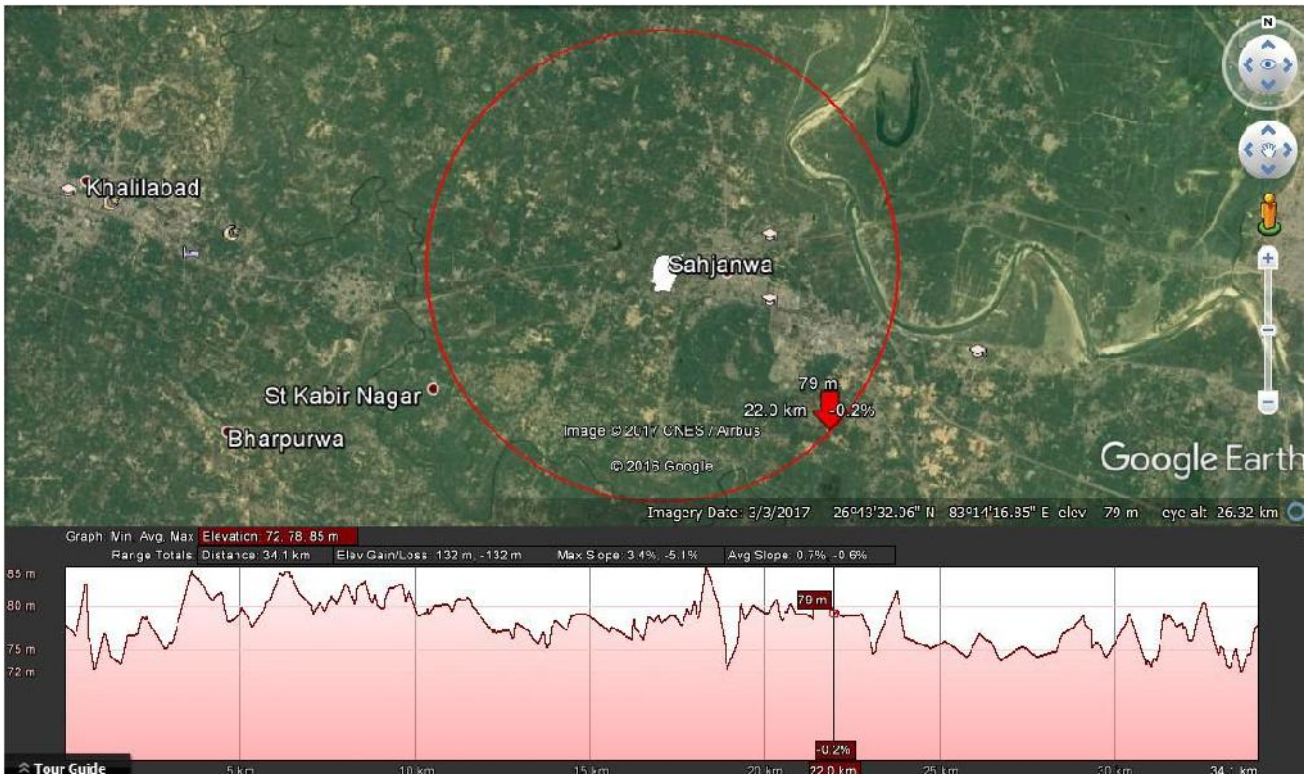


Fig: 1.2, Project Location on Ganga Basin

1.4 Topography of the district

The entire district falling in Ghagara Sub basin of Ganga basin represents flat topography, very gentle sloping land toward south east devoid of any conspicuous physiographic features. The average elevation of land surface ranges between 108 m above MSL in the west and 98 m above MSL in the east. The remarkable physiographic feature worth mentioning is the presence Ponds & lakes over the entire district especially in the lowland regions.

As per Surface elevation, in study area slope is found towards southeast. Slope is toward river Rapti and Ami. Average slope in study area is from 0.7 - 0.6 %.



DEM of the study area

In order to understand the topographical features of the area a DEM map has been prepared using satellite data, which has been subjected to image processing. The DEM map of the area within 10 km radius is given in **Fig. 1.3.** As per the DEM of Study area general slop in the area found in the direction from west to South and South east.

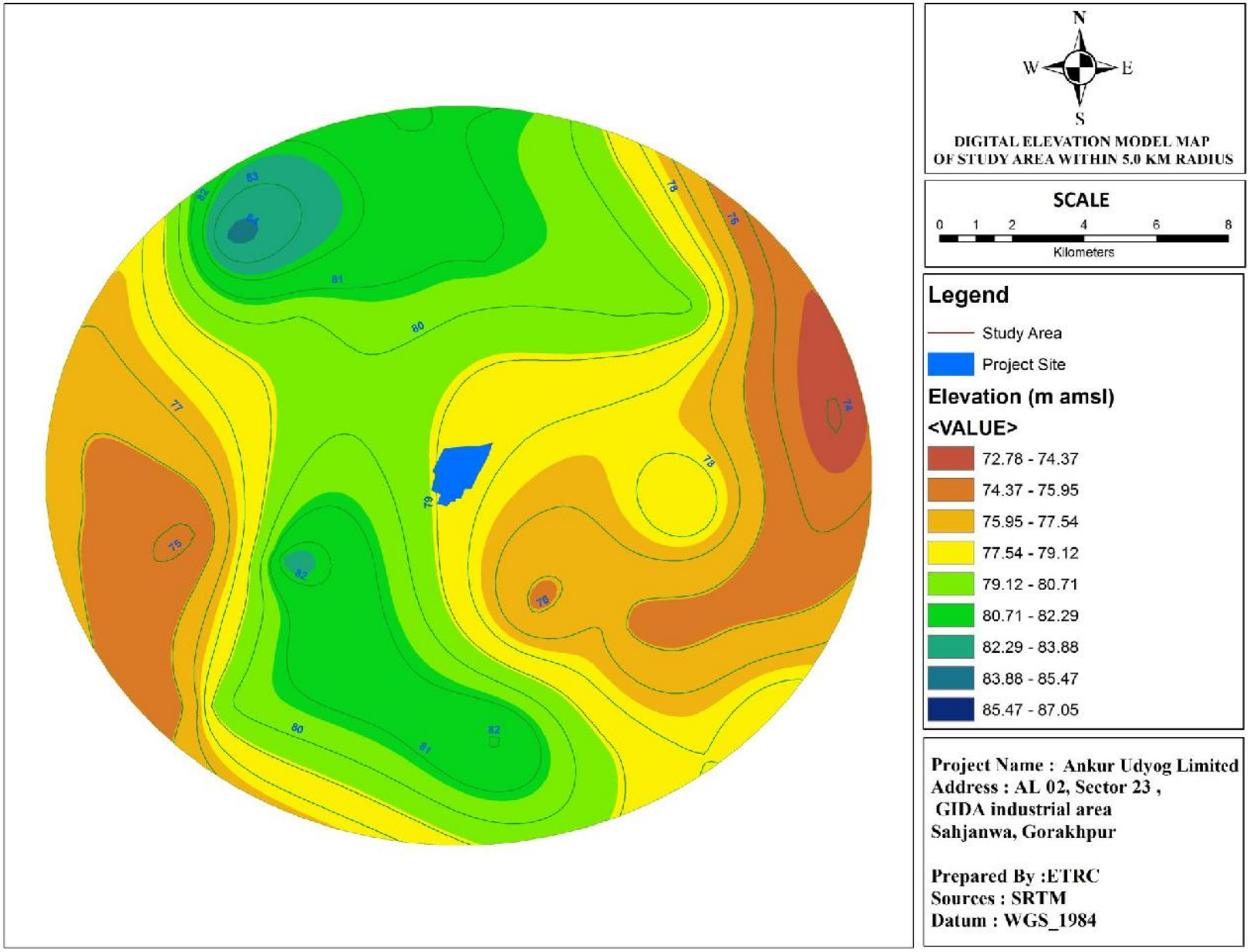


Fig : 1.3 , DEM of the area

1.5 Climate of the District:

The climate is sub-humid to humid and is influenced to some extent by the proximity of the north and the existence of Terai swamps. About 87% of rainfall takes place from June to September. During monsoon surplus water is available for deep perlocation to ground water. January is the coldest month with mean daily maximum temperature at 23˚C and mean daily minimum temperature at 11.9˚C. May is the hottest month with mean daily maximum temperature at 39˚C and mean daily minimum temperature is 25.9˚C. With onset of the monsoon day temperature drops appreciably but nights continue to be warm. The mean monthly maximum temperature is at 31.9˚C while mean monthly minimum temperature is 19.8˚C. During the monsoon and post-monsoon seasons the relative humidities are high and decreases in winter months. The mean monthly morning relative humidity is 69% and mean monthly evening relative humidity is 53%. Winds are generally light with a slight increase in force in the late summer and southwest monsoon months. The mean wind velocity is 4.1 Km/hr. The potential evapotranspiration is 1422.7 mm.

Rainfall- Average Annual Rainfall of the district is **1221 mm**. The normal rainfall is of tune of 1379.20 mm. The most of rainfall in the area occurs from south west monsoon from mid-June to September. During the rest of the year, the rainfall is sporadic and scanty. Last five-year monthly rainfall data given in Table – 1.2.

Rainfall data of the District in last five Year (2012 - 2016)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F
2013	16.4	48.5	0.0	34.5	3.6	636.8	190.4	269.8	112.2	158.8	0.0	0.0
2014	21.8	21.5	16.2	0.0	44.9	115.3	198.1	204.3	141.6	125.3	0.0	9.3
2015	28.2	8.9	48.8	29.8	29.9	129.5	134.5	273.2	26.7	7.9	0.0	0.0
2016	3.2	0.6	0.2	0.0	93.1	80.5	400.7	85.0	195.3	39.1	0.0	0.0
2017	6.5	0.0	2.7	1.2	53.0	110.3	412.0	300.3	129.7	7.0	0.0	0.0

Source: IMD

Humidity - During July and September the relative humidity are high being over 70 %. During the Post-Monsoon and winter season the humidity is high in the morning. By summer, the relative humidity become very low i.e. less than 25 %.

Temperature- The May-June are hottest month with max. mean temp. at about 41° C and mean daily minimum about 26° C. January is generally the coldest month with mean daily maximum temp. at about 23° C and mean daily minimum at about 9° C.

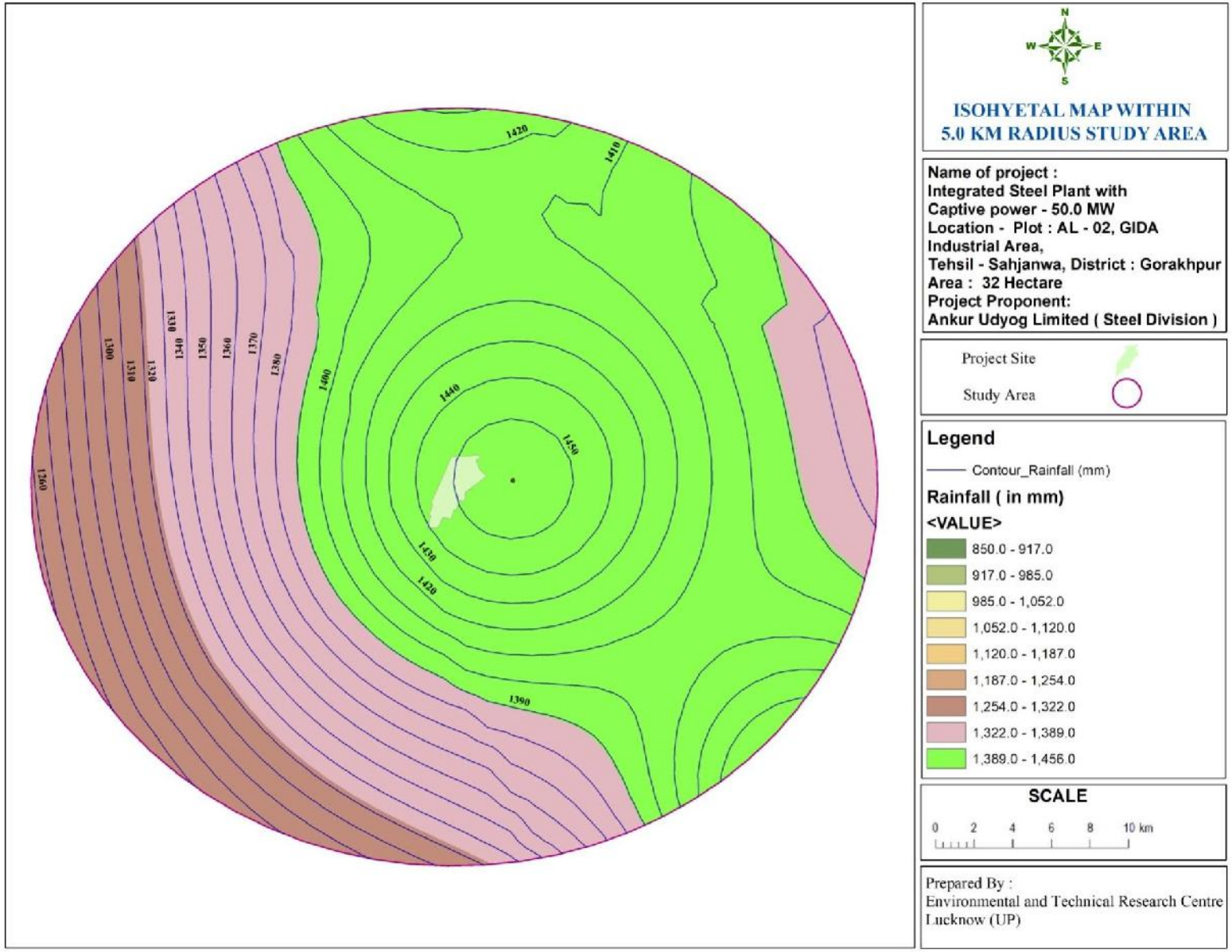


Fig : 1.5, Isohyetal Map within Study area

6 Physiography of the area

The district of Gorakhpur occupies a part of Middle Ganga-Plain-East and comprises a huge stretch of country lying to north of the river Ghaghara. Being the part of Eastern Uttar Pradesh, the district presents different characteristics from those of western district due to relative proximity of the Himalaya. The district is plain, form a level tract which slopes gently from west to south-east. In the north of the district a stretch of forest land which extends downwords in patches as for as centre of the district. Average depth of water is about 4.5 meters. The average hight above sea-level ranges from 95 metres in the north west to 93 metres in the south-east. On the basic of physical characteristics of the district is divided in to the following four sub-micro regions: -

1- Gorakhpur Plain

2- Rapti Khadar

3- Bansgaon Uparhar Plain

4- Ghaghara Khadar

1. Gorakhpur Plain:

It is a higher surface area situated in the eastern part of the district. There are few mounds along the district boundary, which is watershed zone also. The general slope of the region is towards south, Tura and Rohini are the only streams which drain towards south. There is a large size depression in the central part named as Chillua nala. It is very significant topographical feature in the entire district.

2. Rapti Khadar

It is approximately 10 kms wide belt along the Rapti river extending from north-west to south-east. River Rapti flows through the central part of this region. Surface height decreases towards the flow direction of the Rapti river. There are a number of streams which join the Rapti in this zone. Besides a few small rivulets drain parallel to the main river. Actually, these are the off shoots of the Rapti river. A few water bodies are located along this river. There are the remanents of the main channel.

3. Bansgaon Uparhar Plain

It is an upland tract between the flood plain of Rapti in north and Ghaghra in south. It is narrow and elongated belt extending from north-west to south-east direction. The surface is flat with a high crest in the centre. Although the general slope of the surface is towards south-east direction but it is slightly influenced by Rapti and Ghaghra river also. Taraina is a small rivulet which

drains through the region and joins Rapti river. Except few small, size water bodies, it is completely a monotonous plain. Area is productive and left with the vagaries of the flood.

4. **Ghaghra Khadar**

It is a narrow belt stretching parallel to the Ghaghra river which drains towards the east. The general slope is also according to the flow direction of the river but in western part, the Kuwano river drains to the south. The region is situated towards the high bank of Ghaghra which is less septical to floods. There are few water features along the river.

Physiography of the study area:

Study area is part of Middle Ganga-Plain-East. The surface is flat with a high crest in the centre. It is a flat plain with fertile soil. The general slope of the regions is south–east oriented.

1.7 Geomorphology of the area:

Gorakhpur district falls in eastern part of Middle Ganga-Plain-East. General topography is flat to gentle undulation. Following geomorphic units have been demarcated in the district.

(a) Flood Plain

(b) New Alluvium Plain

(c) Older Alluvium Plain

a) Flood Plain : It is restricted all along the river channels. The flat, low lying, poorly drained area adjacent to Rapti, Ghaghra and Ami rivers forms the flood plains frequented by floods during monsoons. The area is mostly covered by present river and its adjacent smooth plains. It is comprised of coarse to fine sand, silt, clay and gravel. The sand bar, abandoned channels levies landforms are very common in the area.

b) Newer Alluvial Plain: It refers to old flood plain cycle of deposition. It is mostly consists of unconsolidated coarse to fine sand, silt and clay of varying amounts. The gently sloping (Southward) and slightly undulating terrain having oxbow lakes, back swamps and Paleo-Channels from this geomorphologic units along the southern bank of Rapti. The fluvial landforms, like paleo-channels meander scar, back swamps etc are observed.

c) Older Alluvial Plain: The older alluvial plain forms the central part of the Ghaghra and Rapti and its tributary interfluves. The surface water divide passes through the area. The area is flat and gently undulating due to paleochannels. It gently slopes towards south east besides. It is mainly constituted of coarse to fine sand, silt and clay. Paleo-channels meander lakes marshy and swampy lands are very common in this unit.

Geomorphology of the area:

Proposed project site is situated in 3.0 km in west from bank of Rapti River. Study area comprises of Flood plain and new alluvium soil. Topography of the study area is flat. Gentle slope is found from south and south east. Geomorphology of the area given in Fig; 1.5.

Fig: 1.5, Geomorphology of the study area

1.8 Land forms in District:

Following types of land forms and structural land forms were also marked and confirmed field check.

(i) Back Swamp

(ii) Old meander

(iii) Ox-bow lake

(iv) Paleo channel

(V) Water logged area.

1. Back Swamp:

The low-lying swampy land is formed along the flood plains of Ghaghra in the south-western part of the district around.

2. Paleo-Channels:

In the northern part of the district, cut-off menders forming ox-bow lakes suggest the buried Paleo-channels in the younger alluvial plains which are along the course of river Rapti River and its tributaries.

3. Levees Deposits:

These deposits are characteristic of river Ghaghra in the South western part of the district and river Rapti in northern and western.

Land Forms in Study area

Study area mainly comprises of new alluvium. The surface water divide passes through the area. The area is flat and gently undulating due to paleochannels. It gently slopes towards south east towards Rapti River. It is mainly constituted of coarse to fine sand, silt and clay. Paleo channels are found in the north-eastern part of study area.

1.9 Drainage in the study area

The main river system is confined to the west side of the Gorakhpur city. It is known as the Rapti system. The drainage of the entire district, except that carried off by the Great Gandak, is discharged into Ghaghra. In many places the drainage is imperfect especially in the basin of the Rapti and its affluents. Besides it is being linked by several rivers and tributaries such as Rapti, Rohini, Tura and Gaura, Ami, Kuwana. Gorakhpur has a number of large perennial lakes, formed in most cases in the abandoned Channels of rivers, which have become blocked by the accumulation of silt, or by the accumulation water in deep natural depression. These includes Ramgarh Tal, Narhai Tal, Domingarh and Karmaini Tal, Nandour Tal, Amiar Tal,

Bhenri Tal and Chillua Tal. In the eastern part of the district there are many lakes such as Ramabhar Tal, Kuseshar Tal, Chakahwa Tal and Deirani Tal.

1.10 Soil

On the basis of the variety of land, The district is divided into two region. Northern region includes Jungle Kaudia, Campierganj, Khorbar, Chargawan, Bhathat, Pipraich, Pali, Sahjanwa and Sardarnagar. The soil variety is doma in these blocks. The Southern region comprises light domat in the blocks of Brahmpur, Piprauli, Khajni, Belghat, Urua, Barhalganj, Gola, Bansgoan , Kauriram, and Gagaha, In the eastern part, Math soil is found.

The soils of the district are mainly transported i.e. alluvial soil, comprising sand, silt and clay in varying proportions and rich in humus. The alluvial soil of the districts are subdivided into older alluvial soil and younger alluvial soil. The older alluvial soil occupies high land and younger alluvial soils are restricted to marginal tract of Rapti and Ghaghra rivers and both are fertile. In study area fertile soil is found. Soil texture map of the study area is given Fig ; 1.7.

Apart from the above classification, the soils of the basin are grouped into three categories as A. Bhur soil, B. Dumat soil and C. Mattiyar on the basis of the sand, silt and clay content (U.P. District Gazetteers, Gorakhpur, 1987).

A. Bhur soil: It is grayish in colour. The proportion of sand (65%) is very high as compared to silt (20%) and clay (15%). It is moderately alkaline and deficient in organic matter. Jowar, Tarbooj, Sakarkand and Kodon are the typical agricultural products. These are generally grown near the river.

B. Dumat soil: It is grey to brown in colour. The proportion of silt and sand (40%) is high as compared to clay (20%). This soil is suitable for wheat, paddy and sugarcane cultivation.

C. Mattiyar soil: In this soil, the proportion of clay (70%) is very high in comparison to sand (15%) and silt (15%). It is appropriate for intensive Rabi crop cultivation.

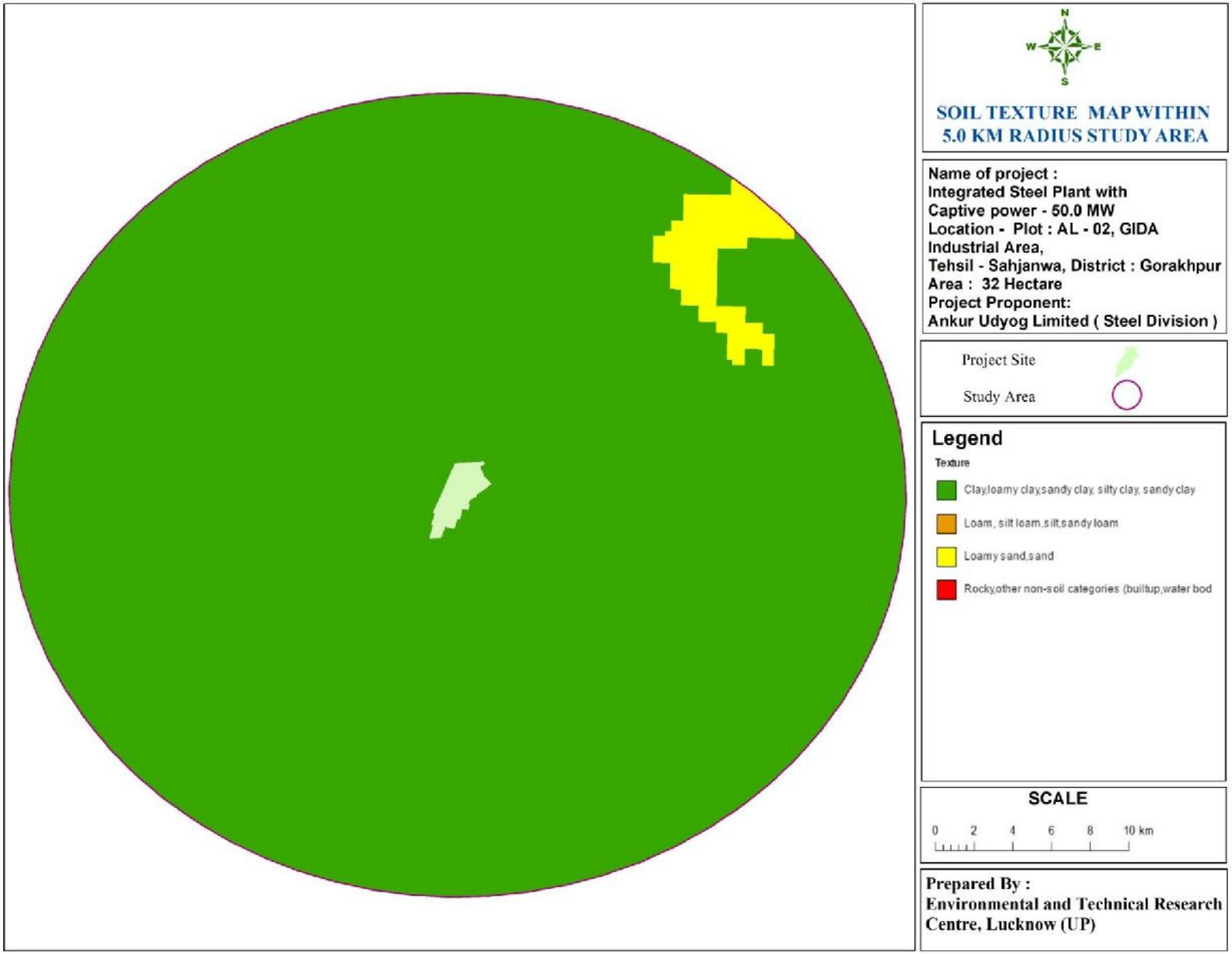


Fig : 1.7 , Soil Texture of study area

1.11 Geology of the Area

The geology of the district exposes nothing beyond ordinary river borne alluvium which is not old. The mineral products are few and unimportant. The minerals of commercial value are the nodular limestone conglomerate known as kankar, brick and saltpetre. Few mineral products are mined in Gorakhpur, with the most common being a nodular limestone conglomerate known as kankar, brick, and saltpetre. The last occurs principally in the south and south-east and is manufactured in a crude state in considerable quantities most of it being exported to markets of Bihar.

The soil in the district is light sandy or dense clay of yellowish brown colour. The sand found in the rivers is medium to coarse grained, greyish white to brownish in colour and is suitable for construction.

The area is mainly consisted of gangatic alluvium, the deposition of which commence from Pleistocene period after final upheaval of Himalayas and still continuing. It consist of inter beded layers sand, silt and clays, which are associated at places with kankar. The maximum thickness explored is 450 mbgl. The stratigraphy of geological section as given below.

Age	**Formation**	**Lithology**
Upper Pleistocene to Recent	Newer Alluvium	Unconsolidated sand ,silt and clays
Middle to Upper Pleistocene	Older Alluvium	Fairly consolidated clays with kankar, sand fine to medium with some gravel.

1.12 Hydrogeology of the area

The study of ground water is known as hydrogeology. Rainfall is the main source of water on the earth. A portion of rainfall, which percolates through the earth surface, forms ground water. All underground water cannot be termed as ground water, ground water must have a pressure greater than an atmospheric pressure otherwise water will not flow. Non - flowing underground water may create soil moisture but cannot be termed as groundwater.

The importance of ground water to serve as a clean and dependable source of water is widely recognized. With increasing demands of water, dependence on ground water has grown leading to water scarcity at places and dried wells. Burdened with the pollution of water sources we have entered a regime of fresh water crises. Ground and surface water are linked together by a series of interactions, interactions to replenish the groundwater but which may

also be a source of pollution. Renewal of ground water is faster at the surface than deep down. Near the water table itself renewal may take as little as a year but in deep aquifers renewal may take thousands of years.

The district Gorakhpur is underlain by quaternary alluvium brought by Ghaghra and Rapti river system. At comprises mainly sand of various grades, sandy clay, silt, clay with varying amount of kankar and gravels. The alluvial deposits are broadly classified under two categories (a) older (b) younger alluvium. The older alluvium deposits known as 'Bangar' or high land soils are due to denudation. The Bangar can be further sub divided into three sub categories on the basis of percentage of the sand content viz Balua containing more than 70% silica, Loam containing silica about 50% and Matiar containing less than 40% silica.

The younger alluvium deposits known as 'Kachhar' occupy the marginal tract of Rapti and Ghaghra and other third order streams and consists of sandy clay and sand along the river tract and fine silt in the gentle sloping plains.

Occurrence of ground water in the area is controlled by Ghaghra and Rapti and their main tributaries. Fine to coarse grained sand, mixed with gravel and kankar form the principal aquifer in the district. Ground water in the area occurs both under confined and water table conditions. It occurs in the zone of saturation within the granular zones encountered below land surface. South and East of Rapti the formation are sandy and suitable for construction of shallow and deep tubewells.

Tubewells upto 200 mbgl depth tapped aquifers zones ranging from 40.00 to 50.00mbgl, 80 mbgl - 100.00 mbgl and 180 mbgl – 195.00 mbgl indicating existence of three tier aquifer system.

The discharge varies from 1100 to 2350 lpm and transmissivity range from 113 to 1032 m2 /day. First and second aquifers upto 100.00 metre and second and third aquifer below 200 metre depth. The deepest tubewell in the district is Sarpataha where tapping of zones start from 236.00 mbgl and zone tapped from 223 to 335.00 mbgl. The discharge of well was 2195 lpm. Except this in the entire district 70 to 180.00 m depth of tubewells were constructed and tapped first and second aquifer upto 100.00 metre and some where second and third aquifer below 180.00 mbgl. The discharge vary from 2733 to 3450 mbgl. The discharge vary from 2733 to 3450 lpm. Deeper tubewells are found in Khajani and Piprauli block area due to thick clay

band between first aquifer and second aquifer which range from 85-95 m, 135-170 m of depth respectively. The discharge of tubewells ranges from 1500 to 2100 lpm. Except this area tubewells are down to depth of 100.00 m and discharge vary from 1200 to 1800 lpm, and along flood plains area the shallow aquifers constructed down to 60 to 70 m tubewells yield 1200 lpm using centrifugal pumps.

1.13 Ground Water Regime

In District; As per water level data 2015 (GWD) during pre-monsoon the depth to water level ranges from 2.13 - 6.5 mbgl. Along the river water level varies from 7.00 to 8.00 mbgl show that river is effluent in nature. During the post monsoon water becomes shallower in the interfluve and ranges from 2.5 to 4.49 mbgl, 70% to 80% of the area during this period is under water level 2.00 to 4.00 mbgl indicating excellent recharge due to monsoon.

Depth to water level varies widely depending upon topography, drainage system, geology and depth to bed rock etc. In order to study the ground water regime condition of the study area the data from CGWB has been collected and processed for depicting spatial and seasonal variations.

Ground water occurs in pore spaces and interstices of unconsolidated alluvial sediments under phreatic to semi confined to confined conditions. The near surface aquifer is under unconfined / water table condition. The shallow phreatic aquifer is tapped by dugwells.

In order to study the spatial variations in ground water level the point water level data has been analyzed and the pre-monsoon and post-monsoon maps have been generated. The pre-monsoon as well as post monsoon depth to water level map is generated on the basis of Ground Water Department data published for year 2015. Water level in the area ranges from 2.1 – 7.5 m bgl during pre-monsoon and 2.5 – 8.3 m bgl during post monsoon. 2015 data of water level in the district is given in **Table:2.** The areas having comparatively deeper water level lie in east part of study area. The seasonal fluctuation between pre-and post-monsoon water level indicates fall in water level. The depth to water level maps for post and pre-monsoon map which is shown in Fig. 1.8, 1.9 respectively.

Table: 2: Ground water level data in the district at different location For Yr 2015

Latitude	Longitude	Pre Monsoon (Mbgl)	Pre Monsoon (Mbgl)	Fluctuation
26.549356	83.345727	5.38	3.70	1.68
26.284238	83.506856	5.04	2.76	2.28

26.705509	83.378795	6.65	5.10	1.55
26.898455	83.490779	3.11	1.45	1.66
26.582414	83.585987	5.87	3.99	1.88
27.030029	83.272111	5.36	2.05	3.31
26.806004	83.381853	5.00	2.88	2.12
26.436306	83.444256	5.90	4.87	1.03
26.35233	83.342203	6.03	4.11	1.92
26.873606	83.305809	5.67	2.69	2.98
26.529476	83.402547	7.20	5.10	2.10
26.655505	83.251396	5.43	3.04	2.39
26.709097	83.445971	6.09	3.18	2.91
26.821525	83.203054	4.87	2.16	2.71
26.829548	83.528724	3.86	1.85	2.01
26.720156	83.248766	6.88	4.98	1.90
26.759494	83.211751	5.50	3.64	1.86
26.683839	83.55696	5.04	2.51	2.53
26.455874	83.256155	6.05	3.47	2.58
26.830727	83.055744	5.48	4.35	1.13
26.984482	83.005994	4.94	3.10	1.84
26.552796	83.047446	5.24	2.81	2.43
26.775779	83.067597	5.46	4.18	1.28
26.977117	83.10889	4.77	2.94	1.83
26.643164	83.026403	5.05	2.68	2.37
26.588498	82.909377	5.72	4.51	1.21
26.998443	83.03583	4.65	1.98	2.67
26.899363	82.907451	5.52	3.86	1.66

1.14 Water Level in the study area:

As per As per State Ground Water Board, Govt. of Uttar Pradesh, the depth of ground water table at the nearest Hydrograph Station (Kasraul) (26°45'45.00"N LAT & 83°10'15.00"E LONG) from the years 2008 to 2017 is varying from 3.15 mbgl to 4.25 mbgl during pre monsoon & 1.93 mbgl to 3.80 m bgl during post monsoon. The depth of water table from 2008 to 2017 at the above specified location near the plant is shown below in **Table 2**.

Year	Pre Monsoon (Mbgl)	Post Monsoon (Mbgl)
2008	3.89	3.19
2009	4.04	3.80
2010	4.25	2.98
2011	3.15	2.90
2012	4.00	2.65
2013	3.67	1.93
2014	3.55	2.60
2015	3.59	3.77
2016	DRY	2.66
2017	4.02	2.88

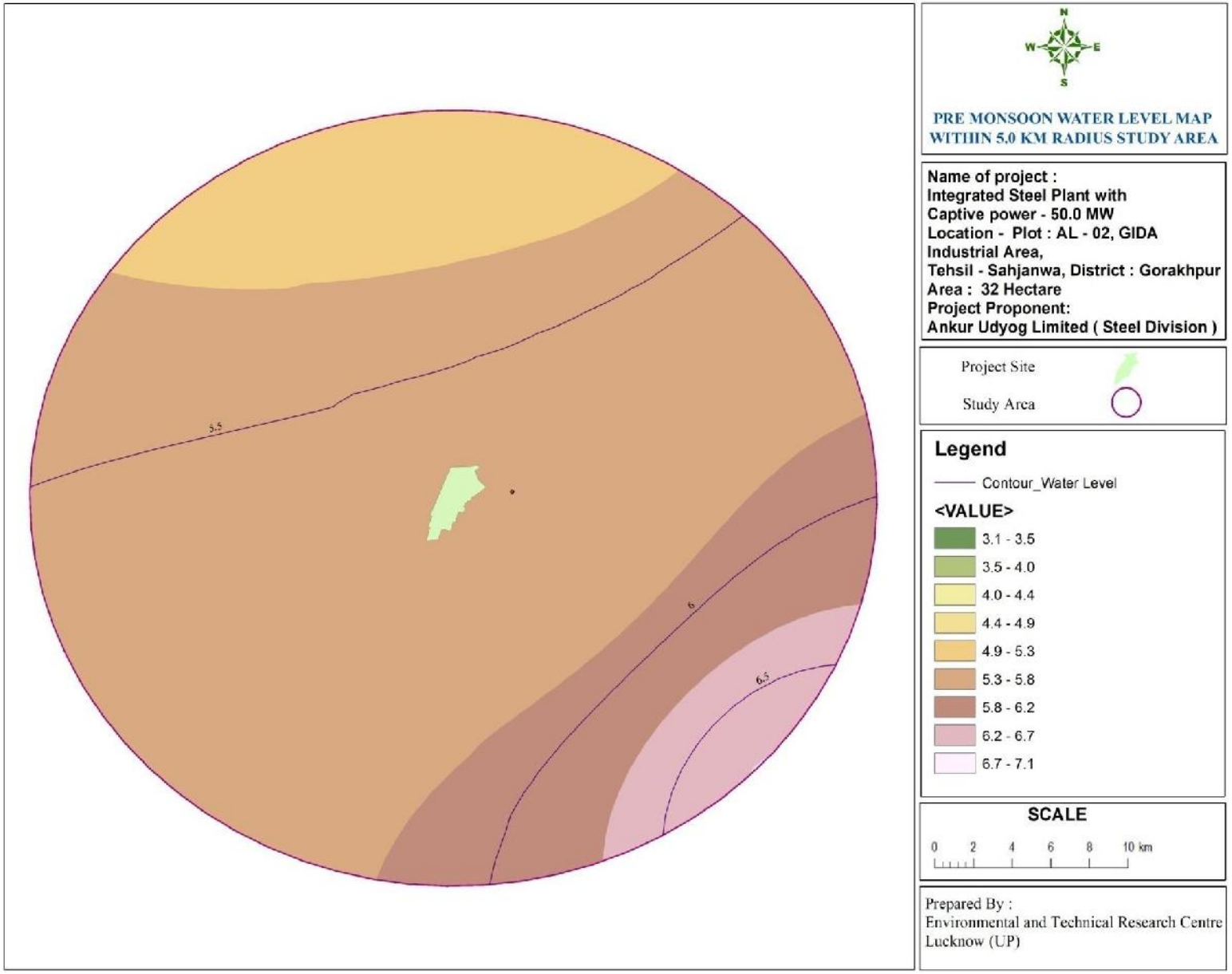


Fig ; 1.8 , Pre Monsoon Water Level Map

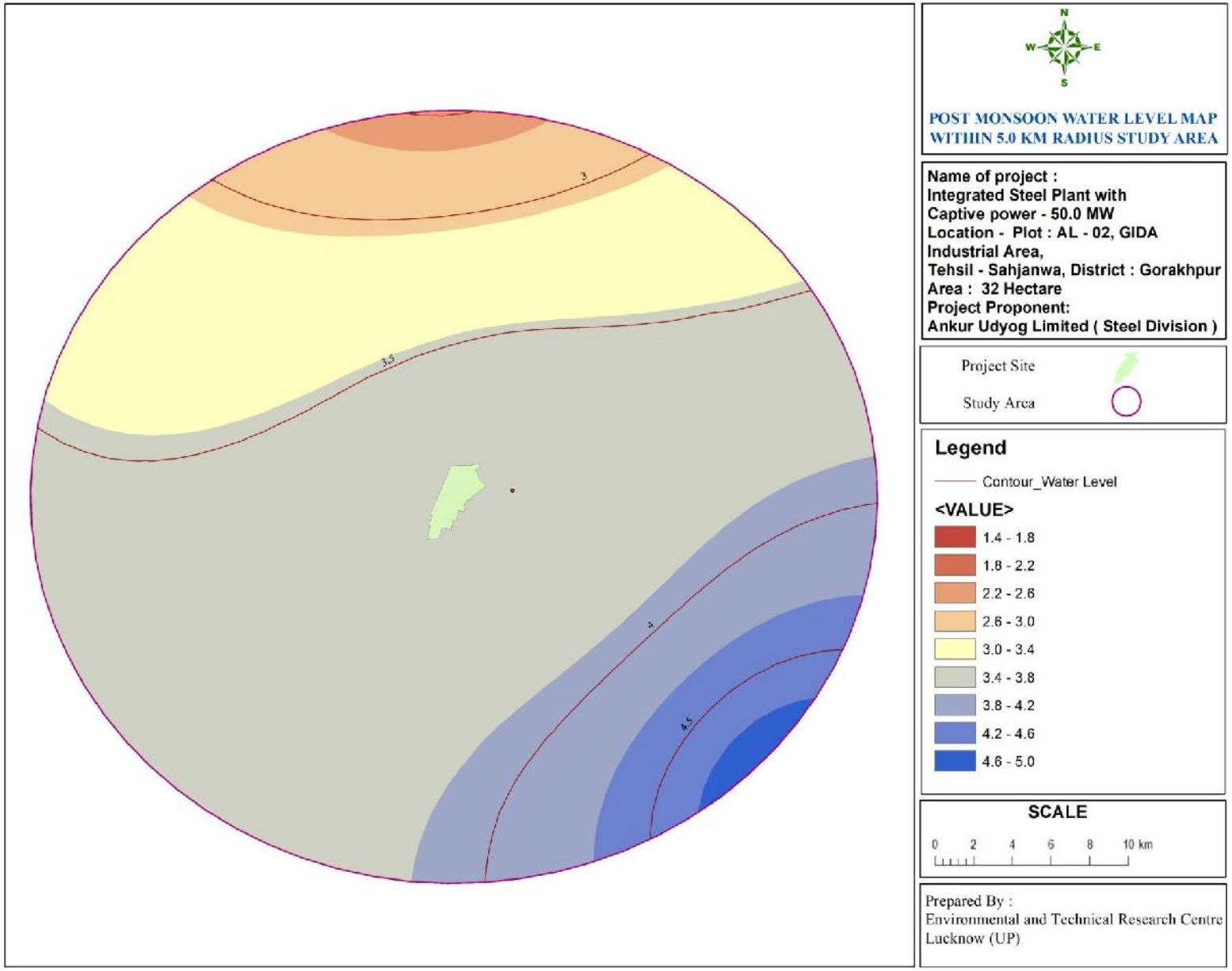


Fig ; 1.9 , Post Monsoon Water Level Map

1.14 Movement of ground Water:

The ground water in the shallower zone in the area occurs under unconfined conditions and in the deeper zones under semi-confined to confined conditions. The movement of ground water is towards the Rapti river which is flowing in N-S direction. The ground water flow reveals that the river is effluent. The water table contour maps show that in the area near river the ground water flows south western. The water level in the area along Rapti River is ranges from 5.5 – 6.0 m bgl.

1.16 Land Use Study

1.16.1 Land Use Based on Satellite Imagery

Remote sensing satellite imageries were collected and interpreted for the 10 km radius study area for analyzing the land use pattern of the study area based on the satellite data, land use / land cover map have been prepared.

1.16.2 Land Use /Land Cover Classification System

The present land use / land cover maps were prepared based on the classification system of National standards.

- **Data Requirement**

IRS-P6 Geo -Coded FCC of LISS-III was acquired for 2014 - 2015 and was used for the mapping and interpretation. Besides, other collateral data as available in the form of maps, charts, census records, other reports and especially topographical survey of India maps are used. In addition to this, ground truth survey was also conducted to verify and confirm the ground features.

- **Methodology**

The methodology adopted for preparation of land use/ land cover thematic map is mono scopic visual interpretation of geo coded scenes of IRS-P6 satellite LISS-III and field observations are taken. The various steps involved in the study are preparatory field work, field survey and post field work.

- **Pre- Field Interpretation of satellite data**

The False Color Composite (FCC) of IRS-P6 satellite data are used for pre-field interpretation work. Taking the help of topo sheets, geology, geo- morphology and by using the image element the feature are identified and delineated the Boundaries roughly. Each feature is identified on image by their image elements like tone, texture, colour, shape, size, pattern and association. A tentative legend in term of Land cover and land use, physiography and erosion was formulated.

The sample areas for field check are selected covering all the physiography, land use / land cover feature cum image characteristics.

- **Software's Used**

  a) ERDAS Imagine for image processing /rectification/geo coding;

  b) Arc View for Image /Land use presentation.

- **Ground Truth Collection**

  Both topo sheets and imagery were taken for field verification and a transverse plan using existing road network was made to cover as many representative sample areas as possible to observe the broad land use features and to adjust the sample areas according to field conditions. Detailed field observations and investigations were carried out and noted the land use features on the imagery.

- **Post Field Work**

  The base maps of the study area were prepared, with the help of Survey of India Topo sheets. Preliminary interpreted land use and the land cover features boundaries from IRS-P6 False Colour Composite were modified in light of field information and the final thematic details were transferred onto the base maps. The final interpreted and classified thematic map was catrographed. The cartographic map was colored with standard colour coding and detailed description of feature with standard symbols. All the classes noted and marked by the standard legend on the map.

- **Final Output**

  The final output would be the land-use/land cover map and numerals were given different colour code for each category as shown in map. Area estimation of all features of Land use/Land cover categories was noted. As per the result maximum land use of the study area is Crop land. Hence good amount of rain water is directly filtrating through farm land. The land use pattern is shown in Figure**: 1.5.**

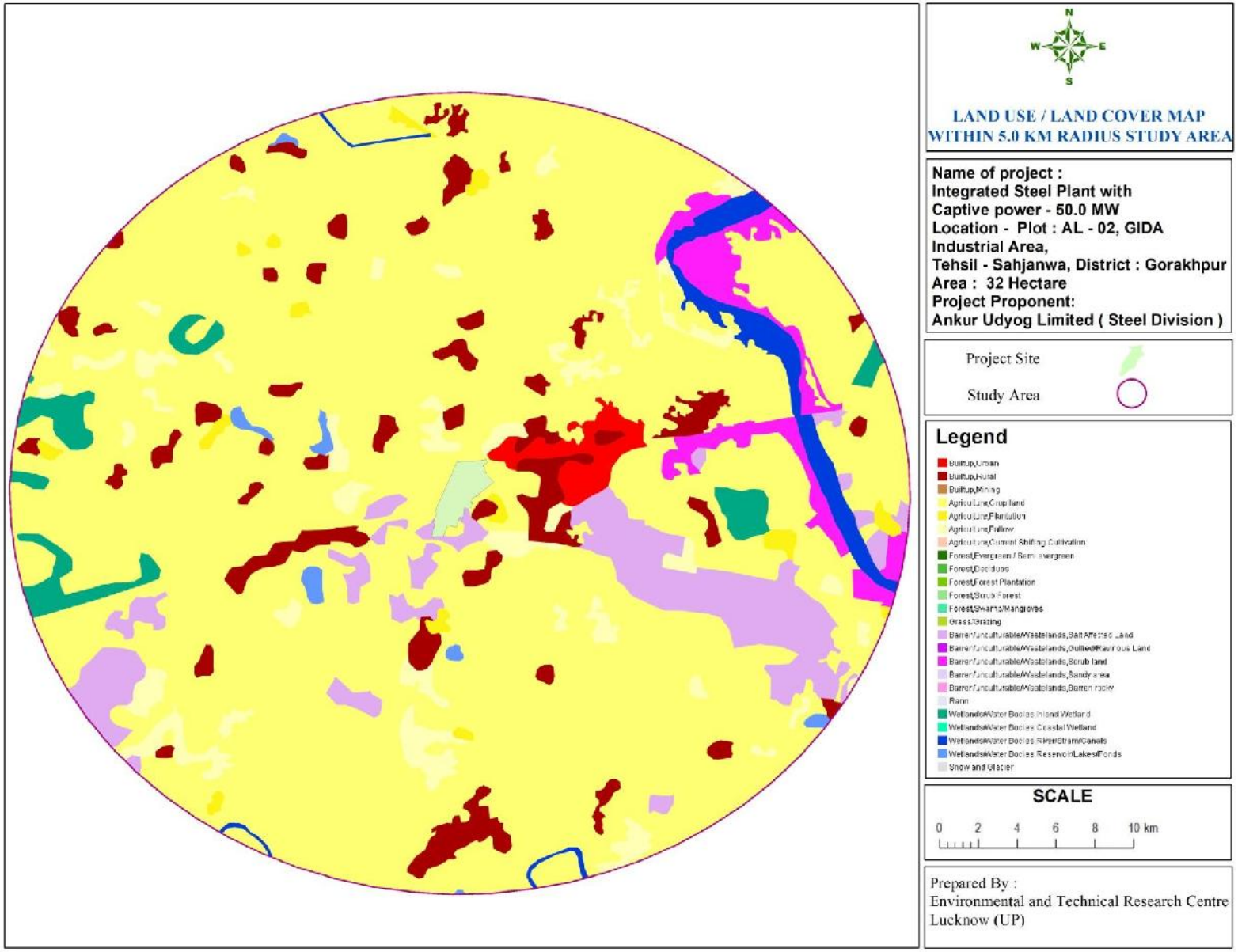


Fig : 1.11, Land Use / Land Cover of Study Area

1.17 GROUND WATER RESOURCES

With increasing population and development activities in Gorakhpur district, block : Sahjanwa as a whole more and more withdrawal of ground water is taking place to meet the ever increasing water requirement. Quantitative assessment of ground water availability in space and time is one of the vital component and pre requisite for planning ground water development in an area. As such it requires enormous data on various parameters including water level fluctuation, specific yield, draft etc. to assess ground water availability. Periodic assessment of ground water resources is being done by Central Ground water Board and the resources availability along with categorization of assessment units are available in the standard publications of CGWB as well as on the web site.

The dynamic ground water resource is replenishable annually by precipitation, irrigation return flow, and canal and tank seepage. The total ground water recharge includes the annual replenish able ground water recharge and potential recharge in shallow water zones. The 90.1 % of this resource can be utilized for irrigation purpose leaving 9.9 % for domestic and industrial uses.

The U.P. state ground water department after reconciliation with CGWB, has estimated block wise dynamic ground water resource for the year 2011 as per recommended methodology of GEC-1997.

Ground water draft estimate are based on the number of different type of ground water structures like state tube wells, private tube wells and pump sets, by which withdrawal of ground water is done on the basis of statistical data available, the block wise annual gross draft has been computed by multiplying its average discharge and annual working hours.

The level of ground water development in the district has been worked out for each block as the ratio of net annual draft to utilizable ground water resources (GW availability for irrigation).

$$\text{Level of GW development} = \frac{\text{Net Annual Draft}}{\text{Ground Water Availabili ty}}$$

1.17.1 Ground water Balance

The ground water balance for the district has been calculated from the following equation.

GW Balance= GW Availability-Net Annual GW Draft

The project area falls in Sahjanwa block which as per GEC'97 methodology falls under **Safe** category (as on 31.03.2011). The ground water resource potential of the block **Safe** is as below:

Net annual ground water availability	**: 7660.99 ham**
Existing ground water draft for all uses	**: 5398.82 ham**
Annual ground water draft for Irrigation development	**: 4863.54 ham**
Stage of ground water development	**: 68.44 %**
Category of block	**: Safe**

There is ample scope for ground water development hence the development should be done in proper scientific, planed and need basis manner.

There is ample of scope for ground water development but development should have done in proper scientific and planed manner. The decline observed in ground water levels in few parts of the district needs attention. Intensive monitoring of ground water levels should be carry on in whole district and adoption of suitable Artificial Recharge for water decline in area. For sustainable development of ground water Rain Water Harvesting and conservation techniques is imperative.

1.18 WATER REQUIREMENT AND ITS DEVELOPMENT

WATER BALANCE

To meet the requirement of proposed project a total of **1800.0** KL /Day of fresh ground water need to be abstracted. To meet the balance requirements for gardening, washing etc recycled of water from pond within premises and recycled treated is being used. Since the area falls in the Safe category and the ground water level of the area ranges from 4 - 5 m bgl, hence groundwater recharge proposed within premises. The annual proposed draft is **5,94,000** CUM/year.

To harvest rainwater, structure will be constructed within the project area. Further, for ground water monitoring piezometers will be installed in project premises and in nearby areas.

Water recycling is an essential component of managing our water resources efficiently and making the most of a resource that is often wasted. Water recycling adopts the concept of using water that is 'fit for purpose'. In practice this means using high quality water for

drinking and other personal uses, but not necessarily for purposes where alternative water sources can be safely used, such as toilet flushing, garden watering. Recycling of treated waste water shall be used in the project. The water balance chart of the project is given in **Fig: 8.1.**

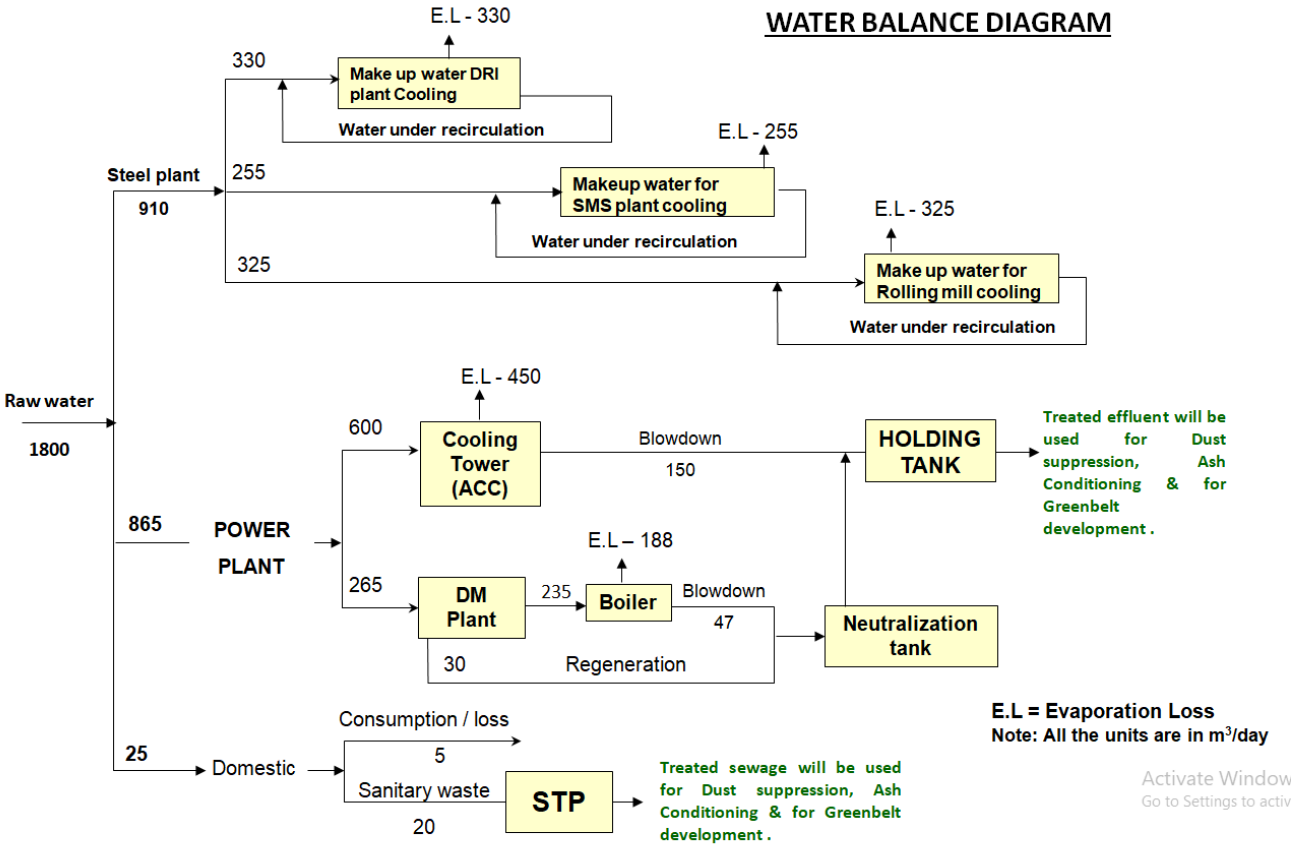


Fig: 8.1, Water Balance for proposed integrated steel plant

Ground water occurs under water table and semi-confined conditions. The marginal alluvial aquifer is capable of yielding 1200 -2400 lpm of fresh water. The ground water quality poses a problem in localised patches. Intensive monitoring of ground water levels and adoption of suitable artificial recharge, rain water harvesting and conservation techniques is imperative. The ground water quality in the district is fresh.

In the project area, cavity and tube wells are feasible for irrigation. As per hydrogeological investigation carried out in the area & study of primary and secondary data related to subsurface disposition of aquifers as well as geomorphological characteristics of the area following observations have been made which forms key factors for proposing ground water development and type of abstraction structures in the area. As this proposal is for the new

industry, hence 03 no proposed tube well (Out of three, two will be operation and another one will be standby) is sufficient as per the according to the hydrogeological study. Presence of high yielding aquifer zone between 80.0 – 160.0 mbgl will be established.

- The aquifer zone consists predominantly of fine to medium sand and expected to have good to moderate potential and yield prospect.
- As per hydro geological disposition & nature of aquifer zones, the expected discharge range between min. 1600 to max. 2400 LPM by gravel packed deep tube wells.
- Two number of bore well is proposed with the depth of 80.0 m bgl.
- Detail of Proposed bore well given in table below ;

Tubewell No.	Type of structure Name / year of construction	Depth Meter/ diameter	Depth Of water level [Meter]	Discharge [Cum/hr]	Operational hour [Day] Days in [year]	Mode of Lift name	Horse Power Of Pump
1.Tubewell N0.-1	2019	100 Mtr / 250 mm	5.5 m	144	7 hrs 330 days In year	Sub-mersible	40.0 H.P.
2.Tubewell (Standby)	2019	100Mtr / 250 mm	5.5 m	144	7 hrs 330 days In year	Sub-mersible	40.0 H.P.
3.Tubewell (Standby)	2019	100 Mtr / 250 mm	5.5	144	Standby	Sub-mersible	40.0 H.P.

1.19 Hydrogeological Controls of Groundwater

The groundwater availability is controlled by hydro-geological situation characterized by occurrence of alluvial formation. The hydro-geological set-up & the following distinct physiographic units influence the controls of ground water occurrence:

(I) Isolated & nearly closed alluvial basin.

(II) Newer flood plain deposits.

1.20 Groundwater development around the area

The present maximum groundwater users are using groundwater for irrigation & domestic purpose. The groundwater withdrawal units are mainly bore wells, operated by monoblock pump sets.

1.21 Feasibility & Design of Rain Water Harvesting

1.21.1 Introduction

The principal of rain water harvesting is collecting and using precipitation from a catchments surface. Rainwater harvesting is a method for artificial recharge of ground water. Artificial recharge to ground water is the process by which the ground water reservoir is augmented at a rate exceeding that obtaining under natural conditions of replenishment. Any man made scheme or facility that adds water to an aquifer may be considered to be an artificial recharge system.

The main aim of the implementation of rainwater harvesting are-

- **i.** To enhance availability of ground water by improving quantity as well as quality.
- **ii.** To provide an ideal solution to solve water problem since the ground water resources are inadequate.
- **iii.** To reduce the runoff that chocks the storm water drain.
- **iv.** To reduce flooding of roads.
- **v.** To reduce soil erosion.
- **vi.** To save energy per well for lifting of groundwater. A one-meter rise in water level saves about 0.40 KWH of electricity, at each ground water withdrawal structures.

Areas feasible for artificial recharge to groundwater has been demarcated based on the depth water level and showing decline trend in water level. The areas where water level is ranges from 5.5 – 6.5 m below ground level and showing declining trend are identified as suitable area for taking up artificial recharge to groundwater. The present water level around the project is between 5.5 – 6.5 meters, below ground water level. At present ground water conditions, swallower water level, percolation of surface run off, developed by rainfall, hence the rainwater harvesting system shall be implemented.

It is proposed to implement rainwater harvesting structures by diverting the runoff that is generated from roof sheds areas for artificial recharge. The runoff from paved and green areas will naturally percolate to the ground and augment ground water level.

In Indian conditions, intensity of rainfall adopted in design is usually in the range of 15 mm/hr to 30.0 mm/hr. The intensity of precipitation for design of drainage scheme has been taken 30.0 mm/hr. Rainwater harvesting structures will be constructed to harvest the run-off water from roof tops by laying a separate storm water drainage system for recharging of ground water.

Rain water harvesting structures will be provided in the plant to recharge the precious ground water. Rain harvesting pits will be constructed in consultation with Central Ground Water Board.

The following is the Plan for rain water harvesting measure at plant site.

Average annual rainfall = 1221 mm

Quantum of Rain water that can be harvested from the premises

a) Average annual rainfall = 1.221 m
b) Runoff co-efficient

Runoff co-efficient for Roof area = 90%

Runoff co-efficient for Roads and Paved area = 80%

Runoff co-efficient for Open area = 40%

Runoff co-efficient for Green belt area = 20%

Details of Rain water harvesting potential

S no.	Manufacturing unit	Total Area (in m^2)	Runoff Co-efficient	Avg. Rainfall in m	Rainwater Collection Potential (in m^3)
1	Roof top area (plant facilities & Storage sheds)	82556	0.9	1.221	90721
2	Internal roads	20234	0.8	1.221	19765
3	Greenbelt	109265	0.2	1.221	26683
4	Water Storage	3237	1.0	1.221	3953
5	RWH pond	809	1.0	1.221	988
6	Open areas	48562	0.4	1.221	23718
	TOTAL	**264664**			**165827**

From the above computation, it is suggested that a total annual quantum of 165827.0 cum. of rainwater can be fruitfully harvested by constructing suitable recharge structures. In order to design the recharge structures, hourly runoff of 30.0 mm/hr has been taken into account and the details are tabulated below.

Hourly Computation of Runoff (30 mm/hr)

S no.	Manufacturing unit	Total Area (in m^2)	Runoff Co-efficient	Rainfall in m	Rainwater Collection Potential (in m)
	Roof top area (plant facilities & Storage sheds)	82556	0.9	0.03	2229.0
2	Internal roads	20234	0.8	0.03	485.6
3	Greenbelt	109265	0.2	0.03	655.6

4	RWH pond	809	1.0	0.03	24.27
5	Open areas	48562	0.4	0.03	582.7
	TOTAL	**264664**			**3977.19**

Water available for recharge: 3977.19 m³/hour (considering only roof top)

By considering 15 Minutes retention time , volume available for recharge is : 994.27 M^3

One trench and two Bore well recharge capacity = 56.0 m³/hour

Total water available = 994.27 m³/hour

$$\text{Number of structure} = \frac{\text{Total water available}}{\text{Each structure Recharge capacity}} = \frac{994.27}{56.0} = 17.0.$$

17.0 number structures are suggested for rainwater harvesting.

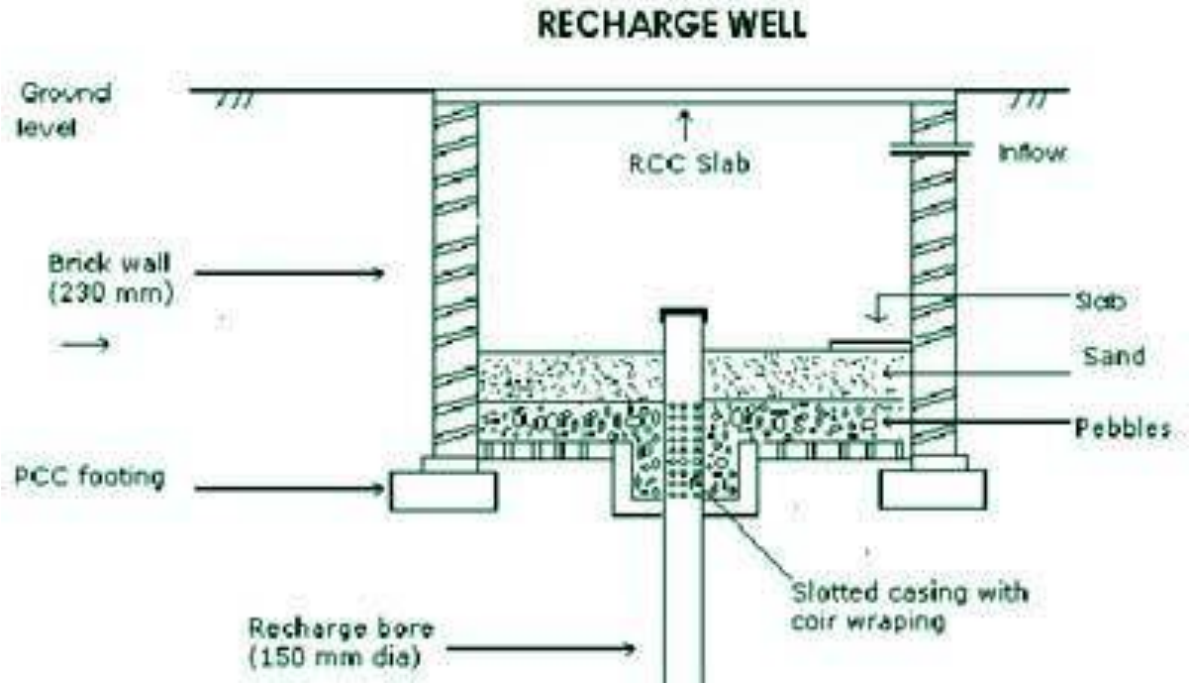


Fig:2.2, Rainwater harvesting structures

Total Fresh water requirement of the project – 1800.0 KLD

Total Annual Ground Water requirement: 594000.0 KLD (on operation days 330.0 for industrial operation)

As the proposed industry is non water intensive category and situated in safe Block as per CGWA (2011). Hence as per revised guidelines of CGWB for the abstraction of **594000.0**

KLD water, non water intensive industry should give proposal for adoption artificial recharge and must ensure the 50.0 % recycling and reuse of treated water.

Inside plant premises the amount of rain water annually recharge will be 165827 CUM. Industry will adopt the artificial recharge within premises and also ensure that industry will recycle 100 % of treated water and utilize in Green Belt and Ash quenching.

2.0 CONCLUSION

The premises of M/S Ankur Udyog Limited (Steel Division), a Integrated Steel plant, is situated in Plot No _ AL 2 , GIDA Industrial Area, Tehsil : Sahjanwa, Distt ; Gorakhpur, Uttar Pradesh well connected with road to major cities. The area falls in Sahjanwa Block. The total ground water requirement of plant **1800.0** m3/day or **594000.0** m^3 /year. Since the area is Non-notified and falls in Safe category, as per CGWA guideline NOC is required for ground water withdrawal subject to adoption of recycling of 50% of treated water and adoption of artificial recharge. The firm has proposed a recharge of **165827.0 m^3** /year in premises by constructing suitable artificial recharge structures.

Therefore, M/S Ankur Udyog Limited (Steel Division), a Integrated Steel plant, is situated in Plot No _ AL 2 , GIDA Industrial Area, Tehsil : Sahjanwa, Distt ; Gorakhpur, Uttar Pradesh follow the all terms and condition of CGWA for grant a NOC for ground water withdrawal.

ANNEXURE - 6

Gmail

Ankur Jalan <ankur1in@gmail.com>

NOCAP- Your Application No- 21-4/5813/UP/IND/2018 is Approved

no-reply@cgwa-noc.gov.in <no-reply@cgwa-noc.gov.in> Tue, Feb 26, 2019 at 12:10 PM
To: ankur1in@gmail.com

Dear NIKHIL JALAN / ankur1in@gmail.com,

Your Application Number 21-4/5813/UP/IND/2018 has been Approved and No Objection Certificate (NOC) No. CGWA/NOC/IND/ORIG/2019/4878 for ground water abstraction to M/s ANKUR UDYOG LIMITED (STEEL DIVISION) has been granted.

The NOC start date is 26/02/2019 and is valid upto 25/02/2021 .

Hardcopy of NOC shall be sent by speed post and scanned copy of same would be uploaded in NOCAP system. You can view/download scanned copy of NOC through your Login.

This is an auto-generated email. Do not reply to this email.

ANNEXURE - 6

Government of India
Central Ground Water Authority (CGWA)
Ministry of Water Resources, River Development and Ganga Rejuvenation

Application for Issue of NOC to Abstract Ground Water (NOCAP)

Welcome : ankurudyog
Previous Login Date Time: 28/02/2019 09:29:51 AM , **IP Address:** 47.8.183.69

Logout

Applicant Home | Apply | Feedback | Change Password | Profile

Information

Guidelines
Steps for Filling Online Application

Documents Required

Documents Required for Online Application
- Industrial
- Infrastructure
- Mining

Track Status

Application Status
- Online

Location

Area Type
Segment-B Area Type
Regional office Location
CGWA Headquarters

Reports

Applied for NOC - Online
NOC Issued-Online

Contact Us

Contact

Application Status

Application No :	21-4/5813/UP/IND/2018
Receive Date :	26/02/2019
Name of Industry :	ANKUR UDYOG LIMITED (STEEL DIVISION)
Application Processing Fee :	Rs. 1000.00/- (Rupees One Thousand Only) (**Submitted:** Yes)
Final Status	Approved

Current Status

Application Verification

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment	Copy of Application Received On
29/08/2018		**(Evaluation Officer)** Central Ground Water Board Northern Region	**(Evaluation Officer)** Central Ground Water Board Northern Region	27/11/2018	Approved	For Approval.	30/08/2018

Application Processing

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment	Ground Water Recom Per Day	Ground Water Recom Annual
27/11/2018	**(Evaluation Officer)** Central Ground Water Board Northern Region	**(Evaluation Officer)** Central Ground Water Board Northern Region	**(Approval Officer)** Central Ground Water Board Northern Region	28/11/2018	Forward	Forwarded to AO,CGWB,NR	1800.00	621875.00
28/11/2018	**(Evaluation Officer)** Central Ground Water Board Northern Region	**(Approval Officer)** Central Ground Water Board Northern Region	**(Regional Director)** Central Ground Water Board Northern Region	29/11/2018	Forward	Forwarded to RD, NR.	1800.00	621875.00
29/11/2018	**(Approval Officer)**	**(Regional Director)**	**(Evaluation Officer)**	29/11/2018	Forward	Forwarded to Member	1800.00	621875.00

	Central Ground Water Board Northern Region	Central Ground Water Board Northern Region	Central Ground Water Authority			Secretary, CGWA, New Delhi.		
29/11/2018	**(Regional Director)** Central Ground Water Board Northern Region	**(Evaluation Officer)** Central Ground Water Authority	**(Member Secretary)** Central Ground Water Authority	22/02/2019	Forward	May be considered for 1800 m3/day.	1800.00	621875.00
22/02/2019	**(Evaluation Officer)** Central Ground Water Authority	**(Member Secretary)** Central Ground Water Authority	**(Chairman)** Central Ground Water Authority	26/02/2019	Forward	May be considered for 1800 m3/day.	1800.00	621875.00
26/02/2019	**(Member Secretary)** Central Ground Water Authority	**(Chairman)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	26/02/2019	Approved	NOC approved for 1800 m3/d from 2 proposed TWs	1800.00	621875.00

NOC Processing

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment
26/02/2019	**(Chairman)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority	26/02/2019	Approved	NOC approved.

NOC Disbursement

Receive Date	From User Name	To User Name	Forwarded User Name	Action Date	Action Internal Status	Action Comment
26/02/2019	**(Approval Officer)** Central Ground Water Authority	**(Approval Officer)** Central Ground Water Authority		26/02/2019	Approved	NOC approved.

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