IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 569 OF 2023

IN THE MATTER OF :

ALOK KUMAR ....Appellant

Versus

STATE OF UTTAR PRADESH & ORS. ....Respondent(s)

INDEX

S.NO	PARTICULARS	PAGE NO.
1.	Action Taken Report in compliance with the order dated 02.11.2023	3-9
2.	A true copy of the IIT Delhi report is marked as Annexure - A	10- 158
3.	A true copy of the letter to the National Institute of Hydrology, Roorkee is marked as Annexure -B	159
4.	A copy of the email dated 11.12.2023 is attached herein in Annexure -C	160-161

Applicants

Through

Date:

Place: New Delhi

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F -13, GROUND FLOOR
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IN THE HON'BLE NATIONAL GREEN TRIBUNAL
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ALOK KUMAR ....Appellant

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UNION OF INDIA & ORS. ....Respondent(s)

ACTION TAKEN REPORT IN COMPLIANCE WITH THE ORDER DATED 02.11.2023

1. That this Action Taken Report is filed in compliance with the order dated 02.11.2023 passed by the Hon'ble National Green Tribunal. The respondent authorities vide order dated 02.11.2023 in O.A. No. 569/2023 titled Alok Kumar v. Union of India was directed "to place on record the demarcation report relating to demarcation of flood plain zone of river Hindon flowing within the limits of their district in reference to the notification dated 07.10.2016.

2. *That further the Hon'ble Court has ordered the District Magistrate, Gautam Budh Nagar, and District Magistrate, Ghaziabad to complete the exercise of identification and Demarcation of the flood plain zone area based on the*

directions of the tribunal issued earlier within a period of two months and to file the report on or before 10.01.2024.

3. That the issue pertaining to the above-said matter is related to the removal of unauthorized construction over the floodplain zone area of the Hindon River.

4. That via report dated 25.07.2023 it was submitted that on-site, there are many residential complexes and colonies. The subject area Plot no. 507(K + kha) total area of 0.6570 hectares is in the notified area of Greater Noida Development Authority and within the flood plain zone of river Hindon. Also, the plot no. 652 and 653 are also within the floodplain zone of river Hindan and are notified areas of the Noida Development Authority.

5. That the D.M Greater Noida/Gautam Budha Nagar in compliance with the order dated 27.07.2023 submitted the report dated 31.10.2023 which clearly mentions that there is no embankment(Bundh) constructed on the left bank of Hindon River from NH-24 to Charmurti Gaur Chowk (about 3.00 km under district Gautam Buddha Nagar). Due to the lack of embankment, the flood plain zone i not clear here. At present, a dense population, village multiplexes, and many residential societies have been built in this area from the river to village Shahberi, due to which a dam cannot be constructed to protect against floods in the said area.

6. That on the request of the Irrigation Department, the IIT Delhi had determined the flood plain of Hindon River based on 25-year frequency in the year 2019, according to which the submerged area ranges from 3196 m to 1800 m. As per research of IIT Delhi determining the submergence area as above will result in a large population coming into the flood plain zone. A true copy of the IIT Delhi report is marked as **Annexure - A**.

7. That the total length of the embankment on the right bank of Hindon River is 29.200 km and the total length of the embankment on the left bank is 31.200 km, out of which the flood plain zone is marked and demarcated in 28.200 km length.

8. That the Flood plain means such area of River Ganga or its tributaries which comes under water on either side of it due to floods corresponding to its greatest flow or with a flood of frequency once in hundred years as per the notification dated 07/10/2016 On "River Ganga (Rejuvenation, Protection, and Management) Authorities Order, 2016.

"According to the notification issued on 07.10.2016, the submerged area is to be demarcated and marked on both sides of the Hindon and Yamuna rivers in Ghaziabad and Gautam Buddha Nagar districts in relation to the last 100 years. As mentioned below

3(l) "flood plain" means such area of river Ganga or its tributaries which comes under water on either side of it due to floods corresponding to its greatest flow or with a flood of frequency once in a hundred years."

9. That The National Institute of Hydrology, Roorkee was contacted by the

authorities to determine via Letter no. 2604/ ICD/ NGT by Executive Engineer, Irrigation & Construction Division, Ghaziabad dated 20.11.2023 by the deponent to study the submergence area so that the submergence area could be determined logically and the work of marking/demarcation of the Hindon River could be done in compliance with the order dated 20.11.2023 of the Honorable National Green Tribunal, New Delhi. A True Copy of the letter to the National Institute of Hydrology, Roorkee is marked as **ANNEXURE - B.**

10. That the Executive Engineer, Irrigation Construction Division, Ghaziabad sent a letter no. 2604/SINKHAGA/NGT dated 20.11.2023 to Dr. Surjit Singh, Scientist-G, National Institute of Hydrology, Jal Research Vigyan Bhawan, Roorkee regarding the study proposal for determining the flood plain zone of Hindon River.

11. That the National Institute of Hydrology, Jal Vigyan Bhawan, Roorkee, informed through an e-mail dated 11.12.2023 that the study for Hindon River in Ghaziabad will take about 09 months to determine its submergence area. Also, will require a fund of 45.0 Lakh plus GST. A copy of the email dated 11.12.2023 is attached herein in **Annexure C.**

12. That the flood plain zone can be determined only after a survey and Flood Plain Zoning Study by the National Institute of Hydrology. The Demarcation can be done only after determining the submerged area.

7

13. That It is humbly submitted that it is possible to determine the submergence area only after the survey of the Hindon River and study of the flood plain zone by the National Institute of Hydrology, Water Resource Science Building, Roorkee.

PRAYER

That in the aforesaid facts and circumstances, it is most respectfully prayed this Hon'ble Tribunal may graciously be pleased to

a. Allow the concerned department to go ahead with the proposal of the National Institute of Hydrology, Jal Vigyan Bhawan, Roorkee, Uttarakhand, to complete the demarcation and identification as per 3(l) of the 07.10.2016 notification within a period of 9 months.
b. Pass such and further orders as this Hon'ble Tribunal may deem fit in the facts and circumstances of this case.

APPLICANTS

THROUGH

PRIYANKA SWAMI
STANDING COUNSEL OF UP
F-13, JANGPURA EXTENSION,
NEW DELHI 110014
8800656660

IN THE HON'BLE NATIONAL GREEN TRIBUNAL

8

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 569 OF 2023

IN THE MATTER OF :

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AFFIDAVIT IN SUPPORT OF ACTION TAKEN REPORT

I, Sanjay Singh, s/o Rajendra Singh aged about 45 years, posted as Executive Engineer, Irrigation Construction Division, Ghaziabad, do PRESENTLY AT DELHI hereby solemnly affirm and state an oath under That I am duly authorized and competent to affirm the present affidavit on behalf of the Department of Irrigation, which has been prepared based on my official records and under my instructions.

That I am fully conversant with the facts and circumstances of the present case on the basis of the records maintained in the office to enable me to file the present Affidavit on behalf of the Irrigation Department.

That in compliance with the order dated 02.11.2023 this short affidavit has been submitted accordingly.

NOTARY
Name: R.P. Bansal
Area: New Delhi
Regd. No.: 10678/14
Expiry Date : 25/06/2024
GOVT. OF INDIA

9

DEPONENT

VERIFICATION

Verified at New Delhi on this 8 JAN 2024 day of _____, 2024 that the contents of the above affidavit are true and correct to the best of my knowledge and based on the official records of the respondent. No part of it is false and nothing material has been concealed, therefore.

DEPONENTS

IDENTIFIED BY

NOTARY
Name: R.P. Bansal
Area: New Delhi
Regd. No.: 10678/14
Expiry Date : 28/06/2024
GOVT. OF INDIA

ATTESTED
Notary Public, Delhi
(As Presented)
8 JAN 2024

ANNEXURE. A

10

HYDRODYNAMIC SIMULATION AND MAPPING OF 25YR RETURN PERIOD FLOOD PLAIN OF RIVER HINDON

Study Sponsored by

IRRIGATION CONSTRUCTION DIVISION, GHAZIABAD

GOVERNMENT OF UTTAR PRADESH

FINAL REPORT

NOVEMBER 2019

DEPARTMENT OF CIVIL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, DELHI
HAUZ KHAS, NEW DELHI 110016, INDIA

11

HYDRODYNAMIC SIMULATION AND MAPPING OF 25YR RETURN PERIOD FLOOD PLAIN OF RIVER HINDON

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FINAL REPORT

NOVEMBER 2019

RAKESH KHOSA – PI

A.K. GOSAIN – Co PI

AKSHAT JAIN – MS(R)/S

HIMANSHU TYAGI - R/S

DEPARTMENT OF CIVIL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, DELHI
HAUZ KHAS, NEW DELHI 110016, INDIA

12

HYDRODYNAMIC SIMULATION AND MAPPING OF FLOOD PLAIN OF RIVER HINDON

PROLOGUE

This study draws extensively from the research work of our student Mr. Akshat Jain who is pursuing studies leading to the award of Masters by Research degree, also known by the nomenclature MS(R), in the field of Water Resources Engineering.

The credit for much of the analysis including (i) Probabilistic Frequency Analysis, (ii) Hydrologic Modelling &(iii) Hydrodynamic Modelling of Transport Phenomena of Flood Movement down the course of riverHindon and across its connected Flood Plains goes to Mr. Akshat Jain and this study constitutes a significant part of his MS(R) dissertation.

13

Table of Contents

Table of Figures 5

List of Tables 7

1.0 OBJECTIVES: 8

2.0 BACKGROUND DETAILS AND STUDY AREA 9

3.0 FLOOD PLAIN DEVELOPMENT 10

4.0 ISSUES ARISINGAND COMPONENTS OF THE STUDY 12

5.0 STUDY OF GRIDDED RAINFALL 12

6.0 FREQUENCY ANALYSIS RESULTS OF GRIDDED RAINFALL 14

7.0 SIGNIFICANT CONCLUSIONS FROM ANALYSIS OF GRIDDED RAINFALL 20

8.0 FREQUENCY ANALYSIS OF HINDON DISCHARGES OBSERVED AT GALETA STATION 21

9.0 COMPUTATION OF OUTLIER IN DISCHARGE DATA 27

9.1 Outlier testing using Grubs & Beck Test: 28

10.0 SUMMARY OF HISTORICAL RAINFALL/DISCHARGE RECORDS 34

11.0 RECONSTRUCTION OF VIRGIN FLOWS IN HINDON AT GALETA 35

12.0 COMPARISON OF OBSERVED VERSUS SIMULATED HYDROLOGY 40

13.0 FREQUENCY ANALYSIS OF SIMULATED DISCHARGE AT GALETA STATION 41

14.0 CALIBRATION OF THE HYDRODYNAMIC (iRIC) MODELLING FRAMEWORK 47

15.0 HYDRODYNAMIC SIMULATION OF WATER SURFACE PROFILES IN RIVER HINDON USING iRIC MODELLING FRAMEWORK 47

15.1 Existing scenario with embankments as existing (Scenario 1): 47

15.2 Hindonfloodplain isin its natural state (i.e. bereft ofembankments,associated bank protection and other built up assets as Scenario 2): 48

16.0 SIMULATED EXTENT OF FLOODING FOR SCENARIO 1: 49

17.0 SIMULATED FLOODING EXTENT FOR SCENARIO 2: 54

18.0 Conclusions &Recommendations: 58

19.0 CAVEAT: 59

20.0 Acknowledgement: 60

Appendix: Details of extent of 25 year Return Period flood event along the course of Hindon 62

Table of Figures

Figure 1: Hindon River along with sub-basins 8
Figure 2: Elevation Profile of Hindon Basin 11
Figure 3: Theissen Polygons 13
Figure 4.1 - Quantile-Frequency Plot For Gridded 1-Day Annual Maximum Rainfall.....15
Figure 4.2 - Quantile-Frequency Plot For Gridded 2-Day Annual Maximum Rainfall.....15
Figure 4.3 - Quantile-Frequency Plot For Gridded 3-Day Annual Maximum Rainfall.....16
Figure 4.4 - Quantile-Frequency Plot For Gridded 4-Day Annual Maximum Rainfall.....16
Figure 4.5 - Quantile-Frequency Plot For Gridded 5-Day Annual Maximum Rainfall.....17
Figure 4.6: Quantile-Frequency Plot For Gridded 6-Day Annual Maximum Rainfall..... 17
Figure 4.7 - Quantile-Frequency Plot For Gridded 7-Day Annual Maximum Rainfall.....18
Figure 4.8 - Quantile-Frequency Plot For Gridded 8-Day Annual Maximum Rainfall.....18
Figure 4.9 - Quantile-Frequency Plot For Gridded 9-Day Annual Maximum Rainfall.....19
Figure 4.10 - Quantile-Frequency Plot For Gridded 10-Day Annual Maximum Rainfall.....19
Figure 5.1 - Quantile-Frequency Plot For 1-Day Observed Discharge At Galeta..... 22
Figure 5.2 - Quantile-Frequency Plot For 2-Day Observed Discharge At Galeta..... 22
Figure 5.3 - Quantile-Frequency Plot For 3-Day Observed Discharge At Galeta..... 23
Figure 5.4 - Quantile-Frequency Plot For 4-Day Observed Discharge At Galeta..... 23
Figure 5.5 - Quantile-Frequency Plot For 5-Day Observed Discharge At Galeta..... 24
Figure 5.6 - Quantile-Frequency Plot For 6-Day Observed Discharge At Galeta..... 24
Figure 5.7 - Quantile-Frequency Plot For 7-Day Observed Discharge At Galeta..... 25
Figure 5.8 - Quantile-Frequency Plot For 8-Day Observed Discharge At Galeta..... 25
Figure 5.9 - Quantile-Frequency Plot For 9-Day Observed Discharge At Galeta..... 26
Figure 5.10 - Quantile-Frequency Plot For 10-Day Observed Discharge At Galeta..... 26
Figure 6.1 - QF Plot For 1-Day Observed Discharge At Galeta (Outlier Removed)..... 28
Figure 6.2 - QF Plot For 2-Day Observed Discharge At Galeta (Outlier Removed)..... 29
Figure 6.3 - QF Plot For 3-Day Observed Discharge At Galeta (Outlier Removed)..... 29
Figure 6.4 - QF Plot For 4-Day Observed Discharge At Galeta (Outlier Removed)..... 30
Figure 6.5 -QF Plot For 5-Day Observed Discharge At Galeta (Outlier Removed)..... 30
Figure 6.6 - QF Plot For 6-Day Observed Discharge At Galeta (Outlier Removed)..... 31
Figure 6.7 - QF Plot For 7-Day Observed Discharge At Galeta (Outlier Removed)..... 31
Figure 6.8 - QF Plot For 8-Day Observed Discharge At Galeta (Outlier Removed)..... 32
Figure 6.9 - QF Plot For 9-Day Observed Discharge At Galeta (Outlier Removed)..... 32

15

Figure 6.10 - QF Plot For 10-Day Observed Discharge At Galeta (Outlier Removed)..... 33
Figure 7: Land Use Pattern in Hindon Basin..... 37
Figure 8: Soil cover mix in Hindon Basin..... 38
Figure 9: Slope Values..... 39
Figure 10: Observed vs Simulated Discharge..... 40
Figure 11.1 Quantile-Frequency Plot For 1-Day Simulated Discharge At Galeta..... 41
Figure 11.2 - Quantile-Frequency Plot For 2-Day Simulated Discharge At Galeta..... 42
Figure 11.3 - Quantile-Frequency Plot For 3-Day Simulated Discharge At Galeta..... 42
Figure 11.4 - Quantile-Frequency Plot For 4-Day Simulated Discharge At Galeta..... 43
Figure 11.5 - Quantile-Frequency Plot For 5-Day Simulated Discharge At Galeta..... 43
Figure 11.6 - Quantile-Frequency Plot For 6-Day Simulated Discharge At Galeta..... 44
Figure 11.7 - Quantile-Frequency Plot For 7-Day Simulated Discharge At Galeta..... 44
Figure 11.8 - Quantile-Frequency Plot For 8-Day Simulated Discharge At Galeta..... 45
Figure 11.9 - Quantile-Frequency Plot For 9-Day Simulated Discharge At Galeta..... 45
Figure 11.10 - Quantile-Frequency Plot For 10-Day Simulated Discharge At Galeta..... 46
Figure 12 - Scenario 1 for Hindon Basin..... 50
Figure 13 - Scenario 1 for Ghaziabad/Noida Section of Hindon Basin..... 51
Figure 14 - Scenario 1 for Section from Hindon Cut to Budhana Canal..... 52
Figure 15 - Scenario 1 for section from Budhana Canal to Saharanpur..... 53
Figure 16 - Scenario 2 for Hindon Basin..... 54
Figure 17 - Scenario 2 for Section in Ghaziabad and Noida..... 55
Figure 18 - Scenario 2 for Section from Hindon Cut to Budhana Canal..... 56
Figure 19 - Scenario 2 for section from Budhana Canal to Saharanpur..... 57

16

List of Tables

Table 1 - Gridded Maximum Precipitation Events (1901-2013) 13
Table 2 - Rainfall Values Corresponding To Various Return Period & Corresponding Dates 20
Table 3 - Maximum Discharge Values Observed At Galeta (1971-2013) 21
Table 4 - Discharge Values Corresponding To Various Return Period & Corresponding Notional Dates 27
Table 5 - Rankings Of Top 15 Events Observed In Rainfall And Discharge 34
Table 6 - R^2, Nse And Pbias Values Of Swat Model 40
Table 7 - Simulated Depth Range And Extend Of Inundation Following A 7-Day, 25-Yearreturn Period Flood 48

17

SIMULATION OF 25YR RETURN PERIOD FLOOD PLAIN OF RIVER HINDON

1.0 OBJECTIVES:

The study seeks to establish the extent of water spread that the floodplains of Hindon are expected to experience following a 25 yearhydro-meteorological flood event. The water spread, on either side of river Hindon will be mapped over the latterriver'sentirecourse right uptoitsfinal outfall into river Yamuna, downstream of Okhla Barrage and between Momnathal and Tilwadavillages. The course of river Hindon is depicted as shown below in Figure 1.

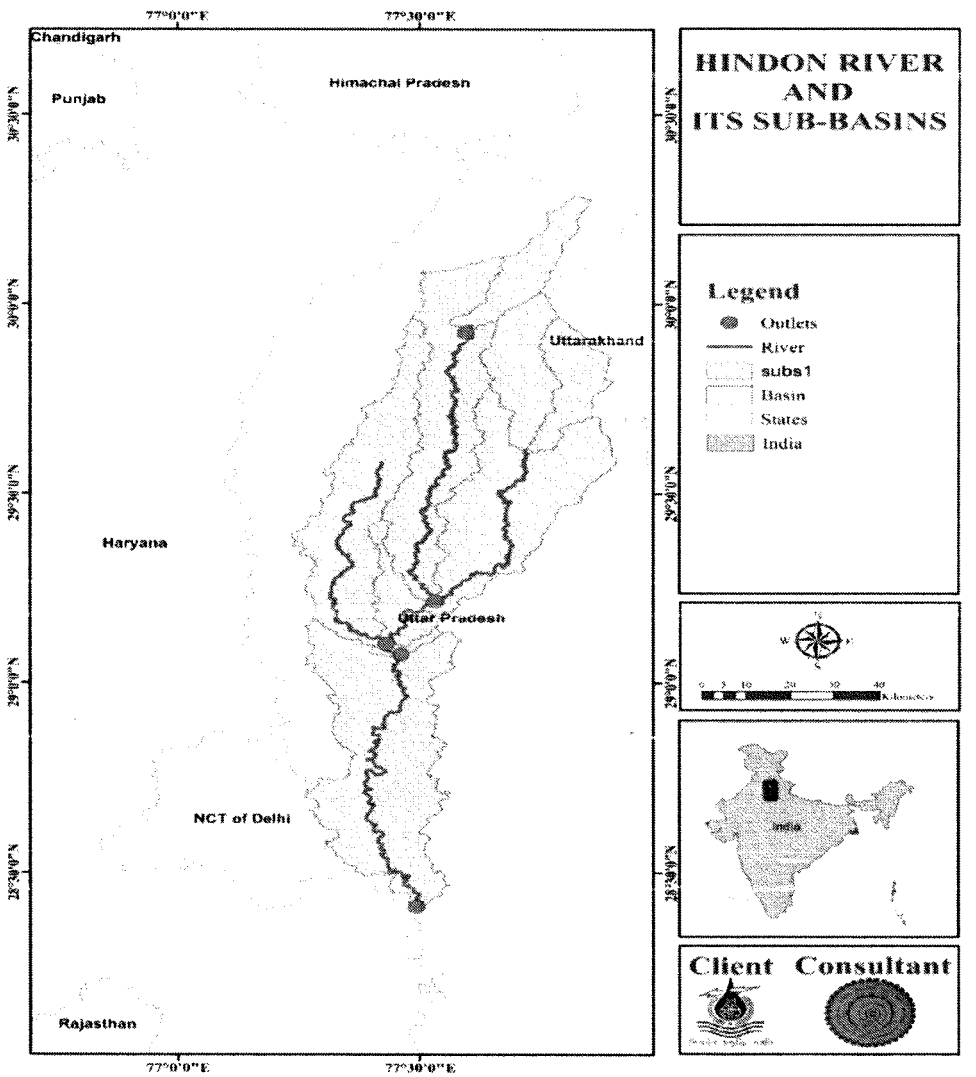


Figure 1: Hindon River along with sub-basins

18

2.0 BACKGROUND DETAILS AND STUDY AREA

Study domain comprises of Hindon river reach from its source to its confluence with Yamuna (as shown in Figure 1) and lies between coordinates 29.944042^{0}N to 28.410895^{o}N latitude and between 77.605678^0 E to 77.493746^{0}E longitude.

Hindon is a tributary of Yamuna with a catchment area of about 6105 km^2. It is entirely an intra-state river with its course falling within UP. The source of river Hindon lies in Saharanpur district of Uttar Pradesh in the upper Shivaliks of lower Himalayan range. Hindon is a purely rainfed river and it courses through six districts namely Saharanpur, Muzaffarnagar, Meerut, Baghpat, Ghaziabad and Gautam Buddha Nagar in West Uttar Pradesh. Two competing designated origins of Hindon are suggested in literature. The first is mentioned as PurKaTanda (or TandaPuru village) situated in tehsil Behat in north-east Saharanpur District. An alternative location is mentioned in the District Gazetteer Saharanpur (1981)whichrecords:"*The name Hindon is first applied to a small stream which rises near Aurangabad but the bulk of water is derived from a torrent, known in its upper reaches as Kaluwala Rao, and as Chahcha Rao in its downstream reach, which receives Khokra on its left bank at Khujnawar and joins the Hindon on the northern boundary of Pargana Haraura*".

The river, which has long been the main source of water for the agrarian communities of the aforementioned six districts, receives contributions from two main tributaries namely (i) Kali River (W) [after originating near Dhanakpur village, itjoinsHindon near Pithlokar village], and (ii) Krishni or Karsuni River [originating at Kairi village and having its confluence withHindon near Barnawa village]. Hindon Barrage, near the town of Ghaziabad, is an important regulatory feature on the main stem of Hindon. Additionally, there are a total of 23 bridges (including two railway bridges) that span the river at various locations along its entire course.

The basin is mainly agricultural and the towns of Saharanpur (near the origin of Hindon), Ghaziabad and NOIDA (near its confluence with Yamuna) are three major urban cum industrial clusters of the river basin which, physio-graphically, falls between the courses of Yamuna and Ganga and, for this reason, the available unconfined alluvial aquifers yield copious amounts of water. In addition to water for irrigation, Hindon waters are also serving demands arising from diverse and competing socio-economic sectors including industry as well as domestic.

19

3.0 FLOOD PLAIN DEVELOPMENT

Vast tenements and other types of unorganized housing are amongst the prominent 'squatters' present in the flood plain of river Hindon within the National Capital Territory of Delhi. Besides the accompanying pressure on the state infrastructure on account of demand for quality utility services, inevitably, these assets also face a high risk of exposure to both moderate to extreme flooding events. Understandably, it also becomes incumbent on the state to plan and provide protection to these assets from such and similar natural occurrences and their consequences.

It has been recorded that the exposed Hindonriver bedalso supports a diverse mix of agricultural activities. Additionally, encroachment of Hindon banks by a vast migrant population, wastes from Ghats, leachate from sanitary landfills, wastes from water works and sewage treatment plants, widespread construction and other activities, direct outfall of untreated municipal solid and liquid waste sewage and industrial effluents into the river, dumping of wastes generated during recurring events such as festivals like Dussehra and Eid are some of the leading causes of pollution in river Hindon and environmental damage of the Hindon bank and riverbed.

Engineered flood protection measures such as levees/dykes/embankments or bunds have been provided over a limited reach of Hindon but a natural consequence of these measures is that the river carries flood flows within a highly restricted water way.

For a river, the annual cycle of low flows and floods is an important fluvial phenomenon whereby the annually inundated floodplain responds with its own cycle of de-siltation following seasonal silting and these processes come together to promote an enhanced quality and biological integrity of aquatic and terrestrial ecosystems. River margins also support a delicate ecological balance amongst a diverse range of endemic communities by supporting interaction through the medium of land–water interface. However, large scale encroachment of riverine floodplains and, in some instances the riverbed itself, for developmental activities has resulted in a significant reduction in river margins together with an undesirable increase in unwanted waste return flow.

The problems associated with these developments are further exacerbated because of

- Conflict of unplanned developments with the natural drainage system,
- Disconnect between much of these developments with existing as well as proposed waste treatment plants,

20

- Discharge of both solid as well as liquid waste into the natural storm water collection and transport systems, and
- The reality of outfall of storm drainages into trunk sewers.

Naturally, water logging, flooding in urban areas and choking of wastewater drains is a regular feature and these episodes come with the attending consequence of loss of life, damage to and loss of property, human suffering, public inconveniences, risk of disease and epidemics and a widespread degradation of the riverbed environment.

The Digital Elevation Model of Hindon basin is presented below in Figure 2.

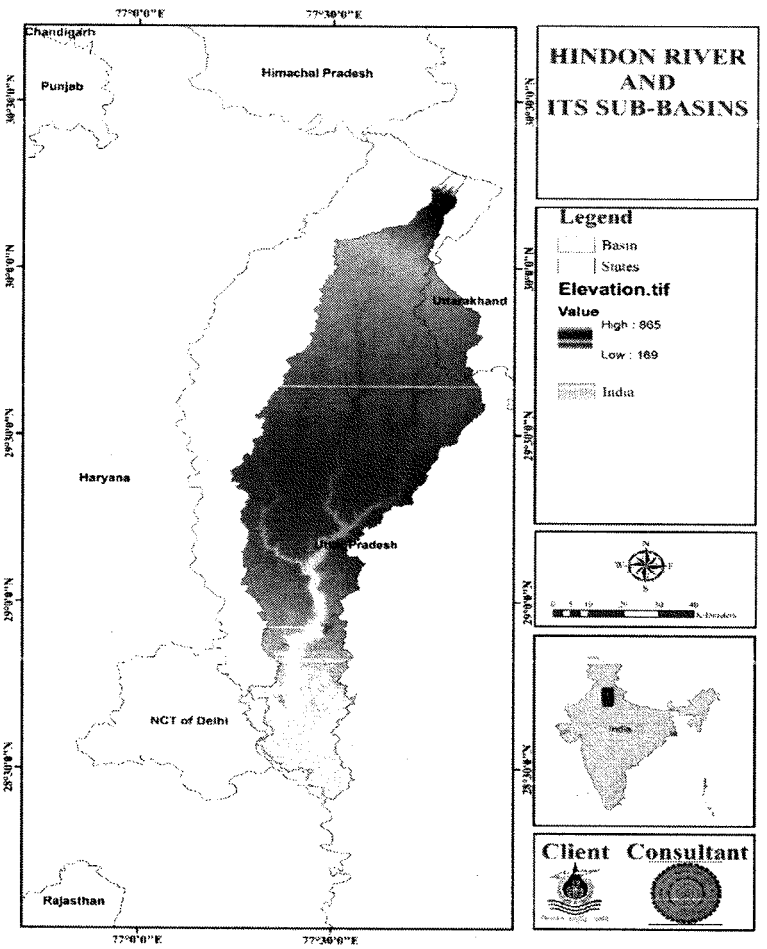


Figure 2: Elevation Profile of Hindon Basin

The mean annual rainfall over the region is about 816 mm and , over the period for which observations record is available, the variation in annual rainfall has been observed to range between a low of 298mm and an observed high of 1454 mm. Relative humidity is minimum

21

in dry weather months and, understandably, touches its maximum levels during the relatively wet monsoon months.

4.0 ISSUES ARISINGAND COMPONENTS OF THE STUDY

The study aims to simulate the hydrodynamic flood flows transport phenomena corresponding to a 25-year return period storm event of various durations down river Hindon and derivethe following hydrodynamic attributes of these flood events:(i) inundation depths, and (ii) accompanying water levels that are likely to result within the river's flood plain.

The overall study comprises of the following components:

(1) Establish the recurrence period of recorded extreme rainfall events of various specified storm durations.

(2) Develop a hydrologic rainfall-runoff simulation model to reconstruct the time series of Hindon flows.

(3) Reconstruct the time series of virgin (unregulated/unimpaired) Hindon flows.

(4) Establish the recurrence period of extreme flood events corresponding to the various specified storm durations.

(5) Establish a hydrodynamic modeling framework to simulate the resulting inundation depths across the flood plain of Hindon River corresponding to the identified 25year return periodextremestormrainfallevents ranging in durations from 1 to 10 days as has been recorded over the region of study.

5.0 STUDY OF GRIDDED RAINFALL

Time series of daily gridded (interpolated) rainfall data have been derived by IMD for the period from 1901 to 2013. The time series of daily rainfall for the study area was extracted from this master data base and the same was used to derive weighted basin average rainfall over the study area. Daily average rainfall over the entire basin based on the Theissen Polygon method was used as per Figure 3.

Time series of Annual Maximum rainfall were extracted separately for rainfall durations ranging from 1-day to 10-days and investigated for magnitude vs exceedance probability relationship by using standard hydrologic frequency analysis techniques. For the period from 1901 to 2013, the extreme recorded rainfall values for durations ranging from 1-10 days are presented in the accompanying Table 1 given below along with the dates on which these extreme events are likely to have occurred.

Table 1 - Gridded maximum precipitation events (1901-2013)

	Ist Max	Date of occurrence	IInd Max	Date of occurrence	IIIrd Max	Date of occurrence
1 day	165.04	16.09.1963	161.82	28.07.1983	157.1	18.09.1914
2 day	284.46	28-29.07.1983	255.34	15-16.09.1963	245.84	18-19.09.1914
3 day	324.85	27-29.07.1983	314.78	28-30.09.1924	281.63	18-20.09.1914
4 day	349.12	26-29.07.1983	324.11	27-30.09.1924	295.07	17-20.09.1914
5 day	367.29	25-29.07.1983	325.2	27-01.10.1924	295.1	17-21.09.1914
6 day	374.81	24-29.07.1983	325.2	26-01.10.1924	299.76	15-20.09.1914
7 day	375.32	23-29.07.1983	325.26	25-01.10.1924	303.53	07-13.10.1956
8 day	375.34	23-30.07.1983	327.41	23-30.09.1924	310.82	07-14.09.2002
9 day	375.35	22-30.07.1983	332.7	17-25.09.2005	328.96	22-30.09.1924
10 day	383.58	25-03.08.1983	337.53	16-25.09.2005	333.04	11-20.09.1914

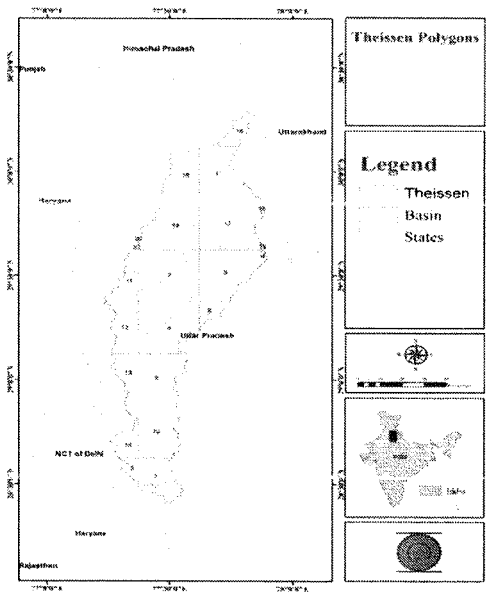


Figure 3:TheissenPolygons

23

6.0 FREQUENCYANALYSIS RESULTS OF GRIDDED RAINFALL

The primary objective of frequency analysis is to derive the magnitude (of extreme events) vsexpected frequency of occurrence relationships by fitting appropriate forms of some known probability density functions. Observed (historical) hydrological events that occur in a river basin over a period of time are analyzed for their frequencyof occurrence given the understanding that the occurrence of these events is uncertain in terms of their magnitude, time of occurrence also their spatial extent. In other words, it is a reasonable inference that the frequency of occurrence of the extremal values of these realized extreme hydrological events is not amenable to prediction. The uncertainty in the actual magnitudes as well as their actual time of occurrence renders these processes to be broadlyprobabilisticand appropriately therefore,their frequency of occurrence is amenable to characterization only in terms of their magnitude versus expected return period relationships.

The series of Annual Maximum rainfall depths for the selected durations were investigated for possible presence of outliers. The investigation did not reveal presence of outliers in the rainfall data available for the study and following this scrutiny, a detailed frequency analysis of the rainfall series was carried out by fitting various statistical distributions namely Extreme Value Type 1, (Gumbel) Distribution, Weibull Distribution, Generalized Extreme Value Distribution, Gamma distribution, Log-Pearson Type III distribution and 2 and 3 parameter Log-normal distribution. The distributions were fitted to the data using parameter estimation techniques that include Method of Moments, Maximum Likelihood, Probability Weighted Moments (PWM) and PWM based L-Moments.

For illustration purposes, graphical presentation of quantile vs expected frequency of its occurrenceas estimated from the available gridded 1 to 10-day annual maximum events are presented hereunder. It may be noted that these results are based on a 3-parameter log-normal distribution with parameters estimated using the Maximum Likelihood method.

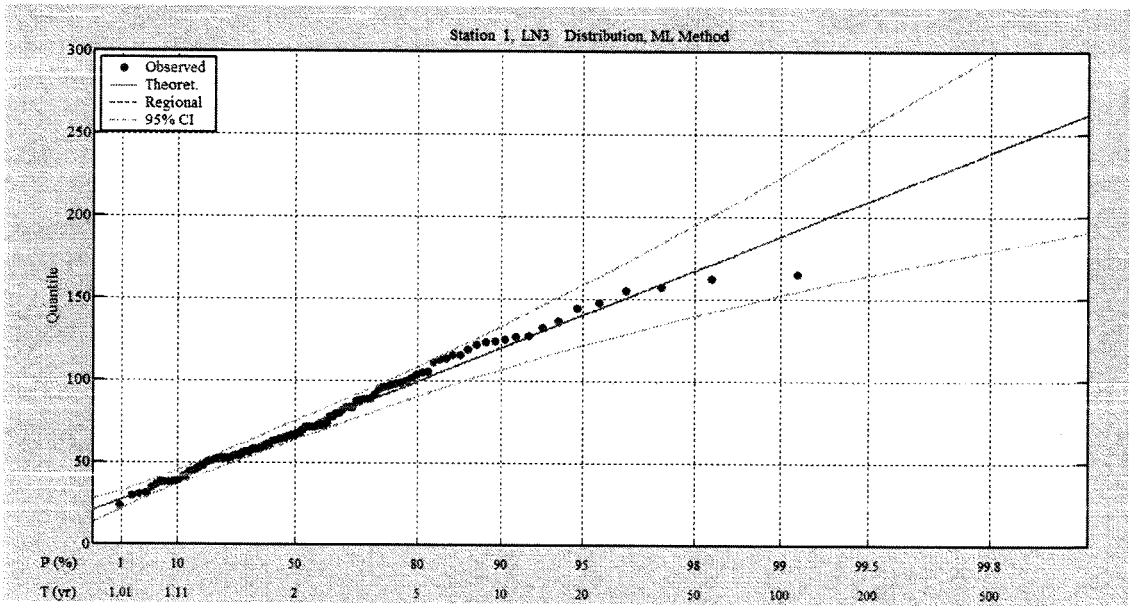


Figure 4.1- Quantile-frequency plot for gridded 1-day Annual Maximum Rainfall

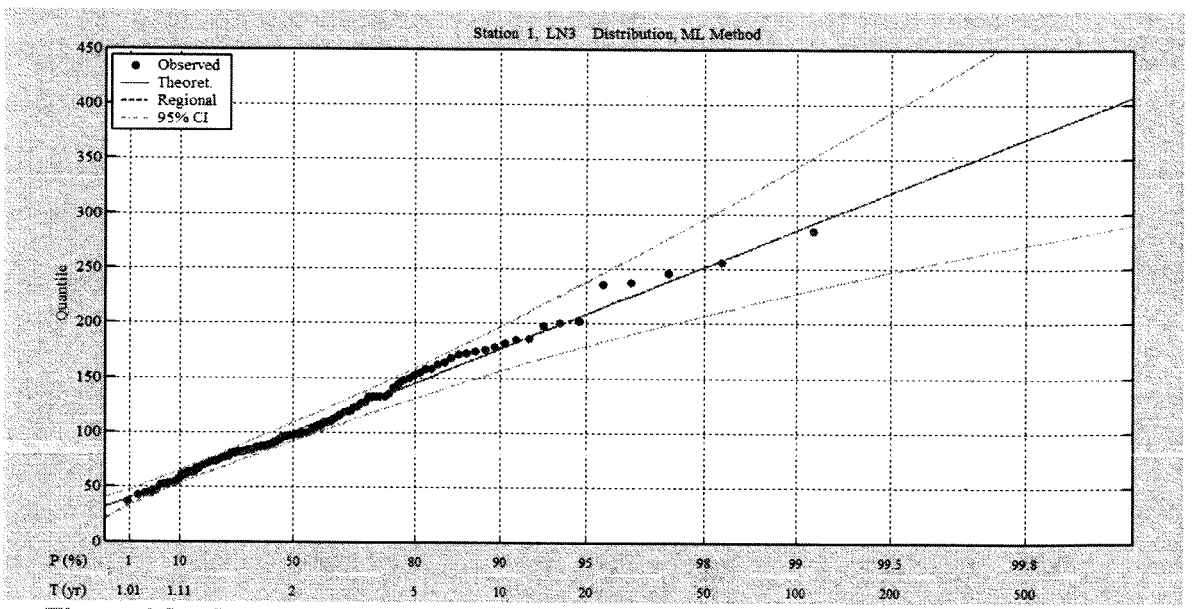


Figure 4.2 - Quantile-frequency plot for gridded 2-day Annual Maximum Rainfall

25

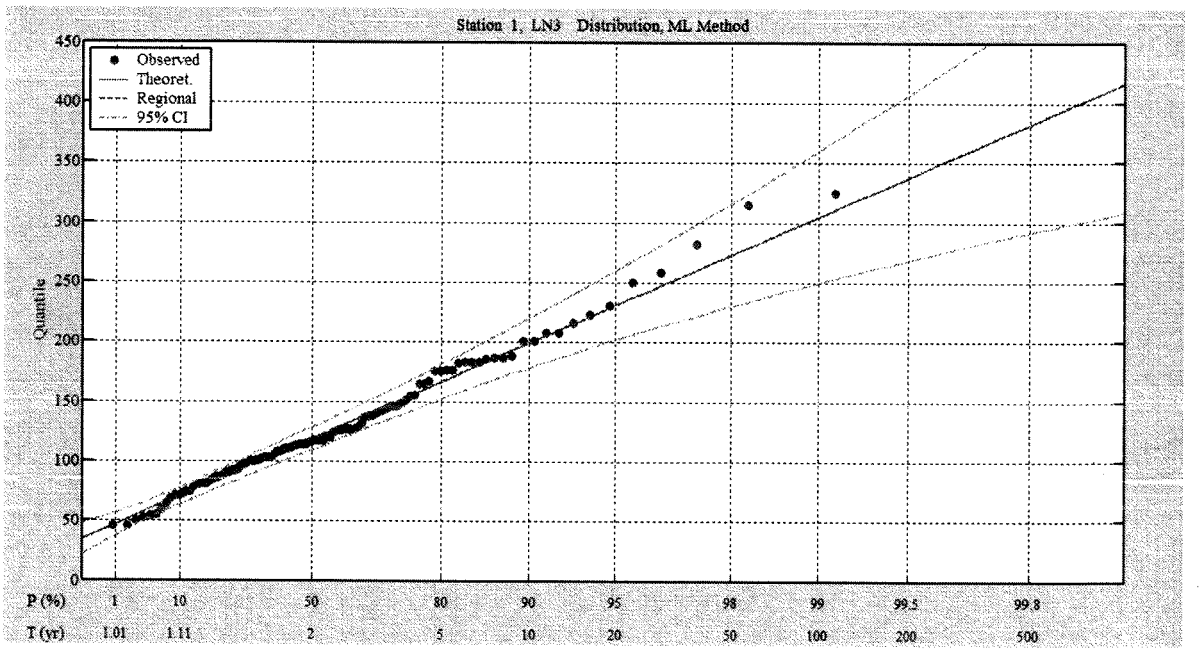


Figure 4.3- Quantile-frequency plot for gridded 3-day Annual Maximum Rainfall

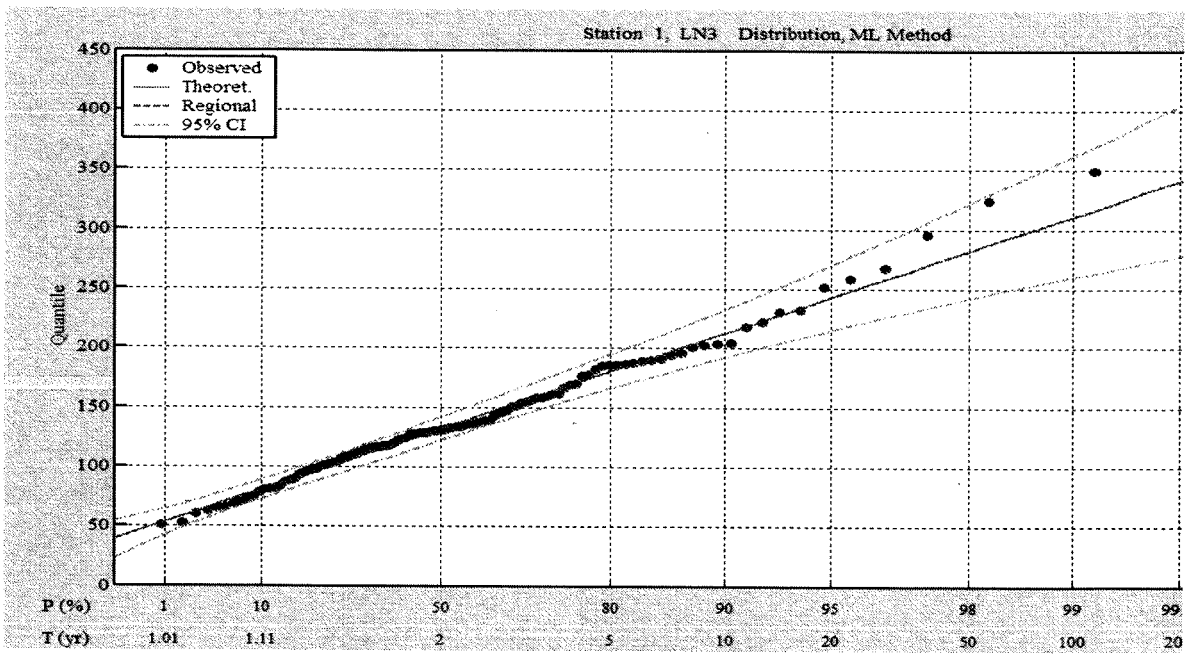


Figure 4.4- Quantile-frequency plot for gridded 4-day Annual Maximum Rainfall

26

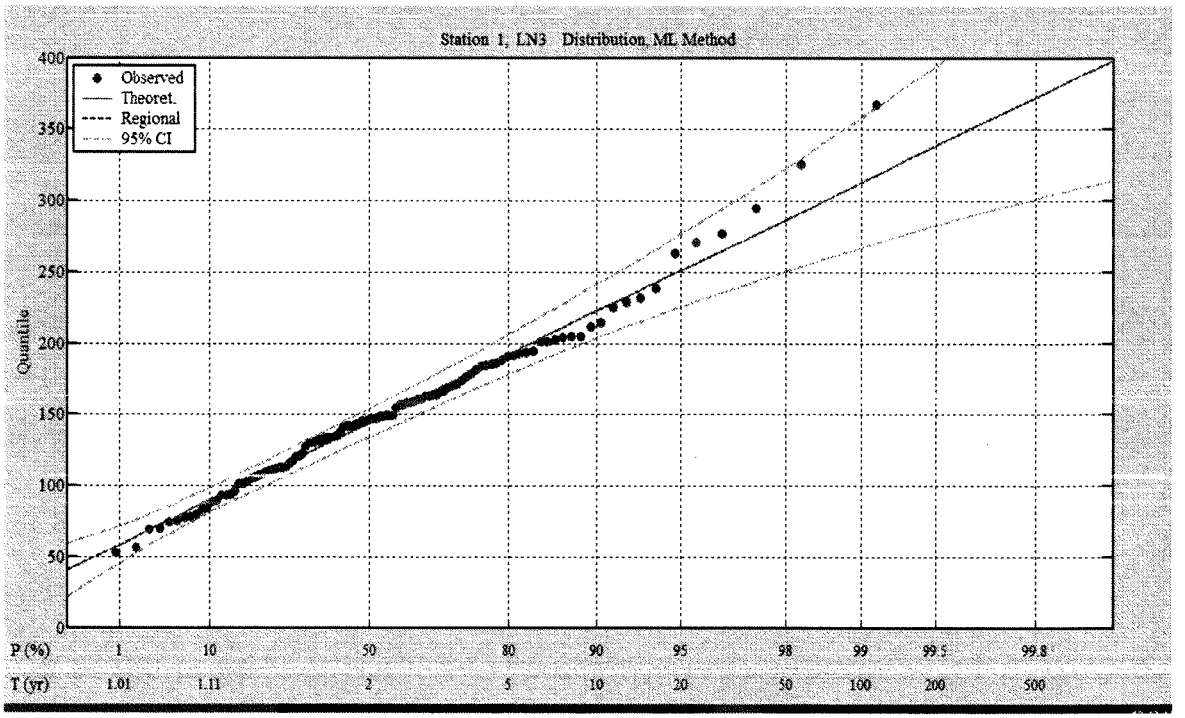


Figure 4.5- Quantile-frequency plot for gridded 5-day Annual Maximum Rainfall

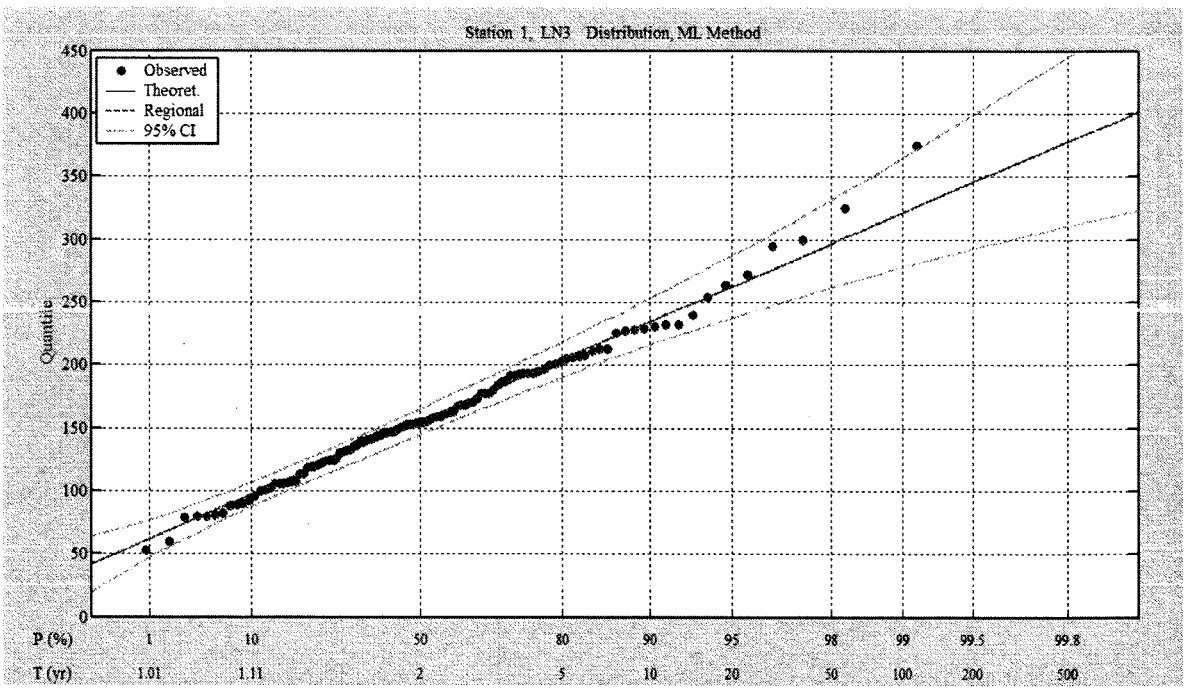


Figure 4.6:Quantile-frequency plot for gridded 6-day Annual Maximum Rainfall

27

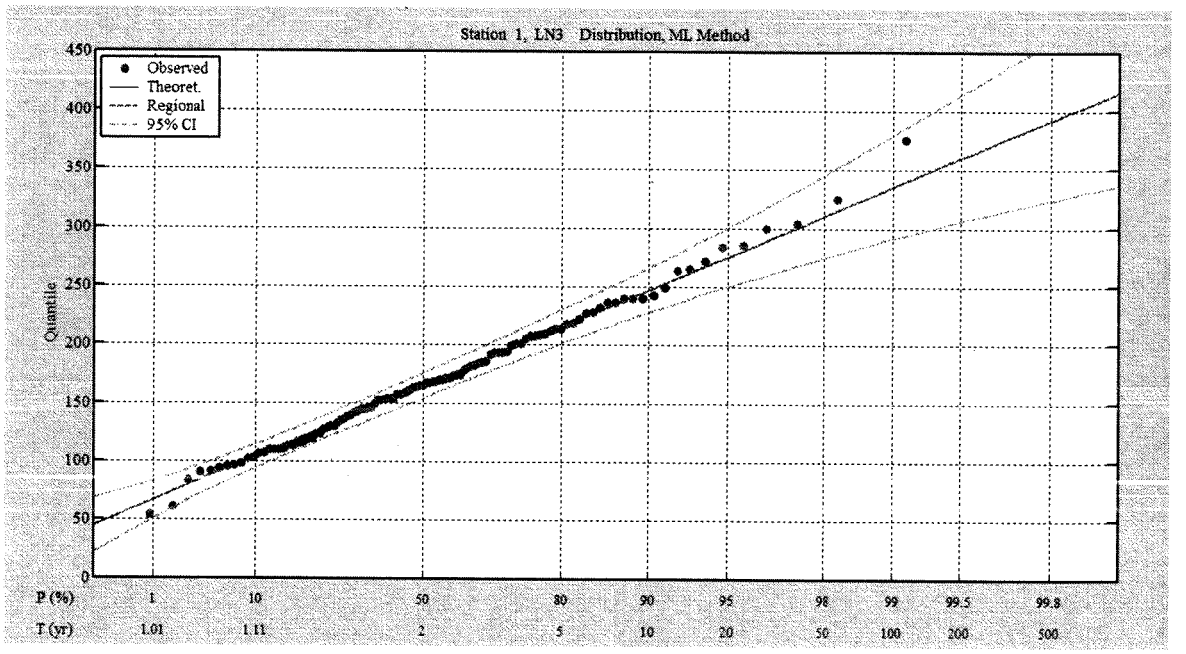


Figure 4.7- Quantile-frequency plot for gridded 7-day Annual Maximum Rainfall

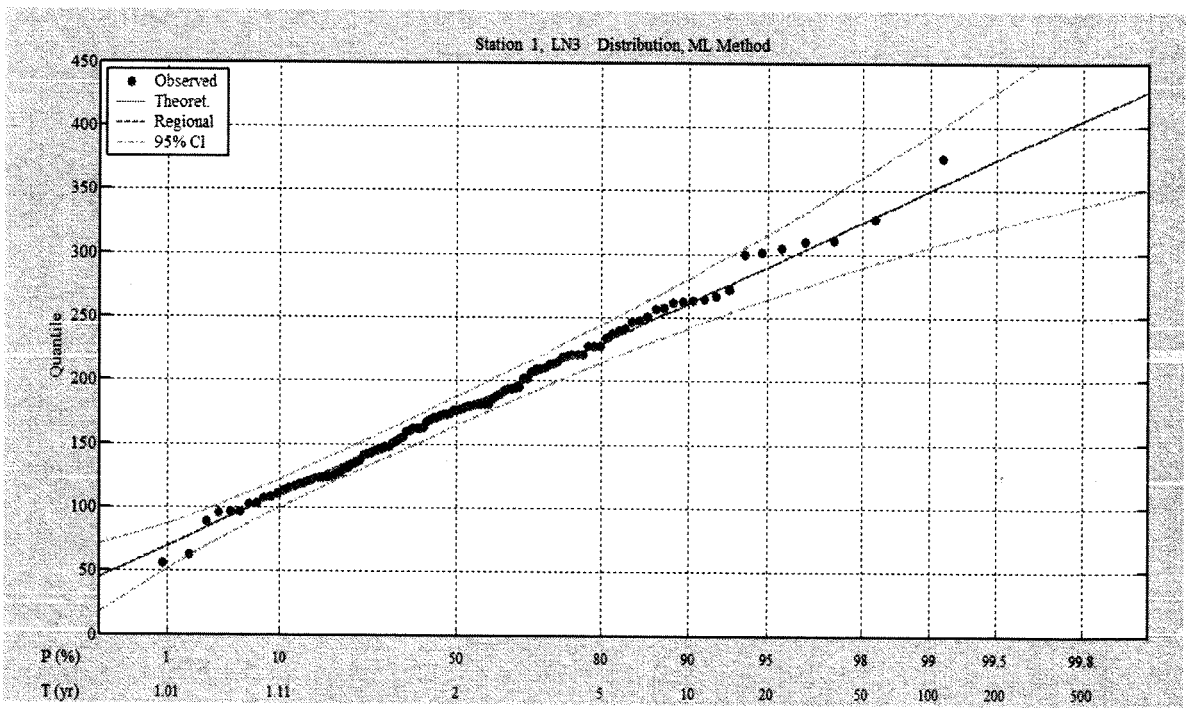


Figure 4.8- Quantile-frequency plot for gridded 8-day Annual Maximum Rainfall

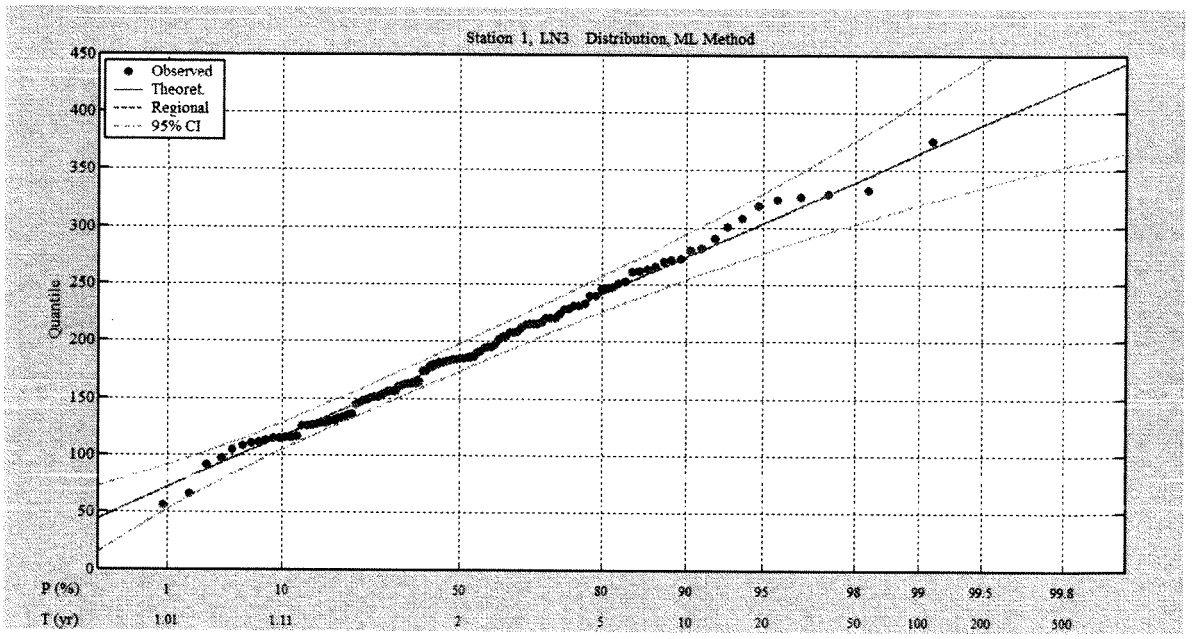


Figure 4.9- Quantile-frequency plot for gridded 9-day Annual Maximum Rainfall

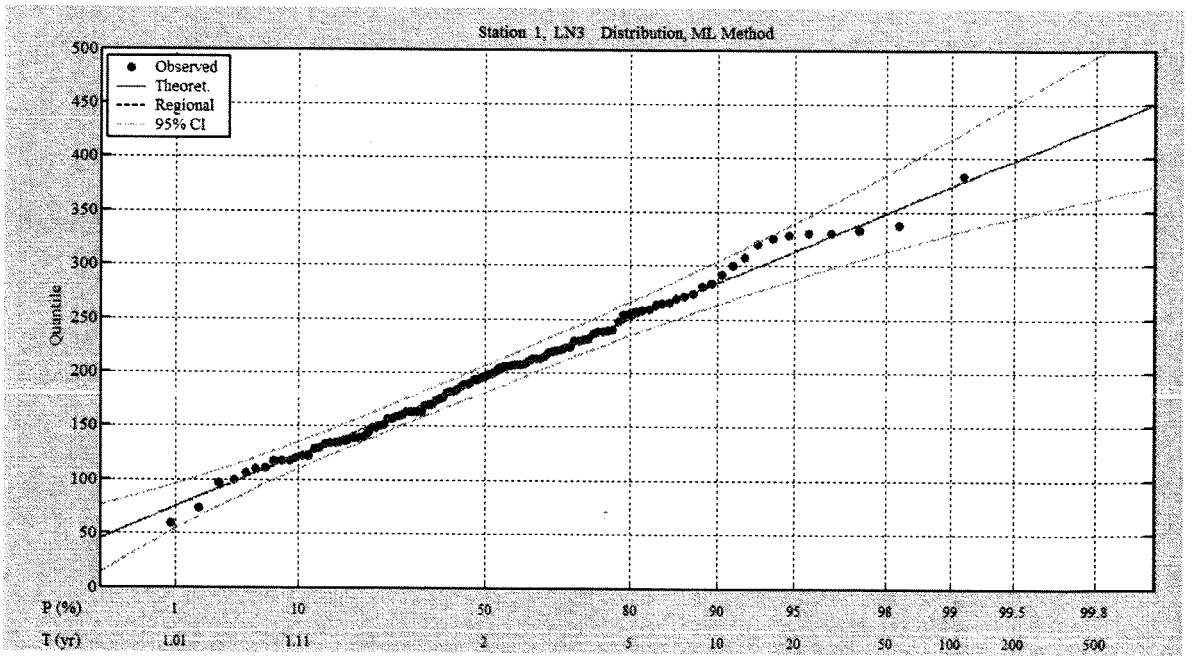


Figure 4.10- Quantile-frequency plot for gridded 10-day Annual Maximum Rainfall

7.0 SIGNIFICANT CONCLUSIONS FROM ANALYSIS OF GRIDDED RAINFALL

An elaborate frequency analysis of annual maximum gridded rainfall corresponding to integer durations ranging from 1-day to 10-days suggested that LN3 (LogNormal-3 parameter) distribution provides the best fit overall with reasonably small standard errors. Accordingly, therefore, the study assumes that the latter distribution best describes the statistical properties of the gridded extreme rainfall events for the study region and therefore has been adopted for quantification of the design storm event. Table 2 below gives the rainfall quantile estimates for return periods of 2, 10, 20, 25 and 50 years and for various integer durations as indicated above.

The study essentially establishes that the recorded extreme rainfall quantile estimates corresponding to the benchmark return period of 25 years have magnitudes of 146.49 mm, 218.62 mm, 241.18 mm, 262.49 mm and 273.48 mm, 281.59 mm, 291.74 mm, 306.84 mm, 325.08 mm and 330.05 mm respectively for integer durations ranging from 1-day to 10-days respectively. The corresponding notional dates of occurrence of these extreme storm events are also indicated in Table 2.

Table 2 - Rainfall values corresponding to various return period & corresponding dates

	2 yr	Date	5 yr	Date	10 yr	Date	25 yr	Date	50yr	Date
1 day	69.46	21.08.1960	99.18	28.06.1936	119.72	25.09.2005	146.49	02.09.1978	161.82	28.07.1983
2 day	100.32	11-10.07.1946	144.95	22-23.07.1975	176.52	01-02.10.1954	218.62	01-02.09.1978	251.29	15-16.09.1963
3 day	118.71	10-12.08.1966	166.76	06-08.09.2002	199.32	24-26.09.2005	241.18	01-03.09.1978	272.84	14-16.09.1963
4 day	132.00	18-21.09.2010	180.61	27-30.09.1958	212.44	10-13.07.2003	262.49	13-16.09.1963	315.98	26-29.07.1983
5 day	146.36	21-25.08.1965	190.51	04-08.09.2002	213.54	23-27.08.1967	273.48	12-16.09.1963	316.77	27-01.10.1924
6 day	154.49	24-29.08.1945	203.35	08-13.08.1988	229.71	25-30.06.1906	281.59	12-17.09.1963	318.07	26-01.10.1924
7 day	165.03	23-28.08.1945	214.39	18-24.09.1975	241.64	21-27.08.1991	291.74	07-13.09.2002	319.18	27-03.10.1924
8 day	176.34	24-31.08.1945	228.64	18-25.09.2005	263.06	09-16.09.1957	306.86	07-14.09.2002	322.76	23-30.09.1924
9 day	184.57	23-28.08.1945	246.17	23-31.07.1994	277.39	08-16.09.1963	325.08	08-16.08.1978	331.66	17-25.09.2005
10 day	196.07	24.08-02.09.1945	255.27	07-16.09.1932	287.87	01-09.08.1988	330.05	21.09 - 01.10.1924	336.27	16-25.09.2005

30

8.0 FREQUENCYANALYSIS OF HINDON DISCHARGESOBSERVEDAT GALETA STATION

The series of Annual Maximum discharge for the selected durations were investigated for possible presence of outliers that do not share observed characteristics of the rest of the discharge values. **The investigation didreveal presence of outlier in 1978** in the data available for study and following this scrutiny, a detailed frequency analysis of the was carried out by fitting various statistical distributions namely Extreme Value Type 1, (Gumbel) Distribution, Weibull Distribution, Generalized Extreme Value Distribution, Gamma distribution, Log-Pearson Type III distribution and 2 and 3 parameter Log-normal distribution. The distributions were fitted to the data using parameter estimation techniques that included Method of Moments, Maximum Likelihood, Probability Weighted Moments (PWM) and PWM based L-Moments.An elaborate frequency analysis of annual maximum observed flows corresponding to integer durations ranging from 1-day to 10-days suggested that LN3 (LogNormal-3 parameter) distribution provides good fit overall with reasonably small standard errors which is same as in gridded rainfall. The maximum values observed are as follows:

Table 3 - Maximum Discharge values observed at Galeta (1971-2013)

	Ist Max	Notional date of occurrence	IInd Max	Notional date of occurrence	IIIrd Max	Notional date of occurrence
1 day	7368.9	04.09.1978	1613.2	9/30/2005	1259.44	17.07.1973
2 day	11521.7	04-05.09.1978	3156.52	29-30.09.2005	2236.15	18-17.07.1973
3 day	13942.03	04-06.09.1978	4431.98	29.09-01.10.2005	3052.15	16-18.07.1973
4 day	16201.08	03-06.09.1978	5646.72	28.09-10.01.2005	3356.72	16-19.07.1973
5 day	16743.88	03-07.09.1978	6537.98	27.09-10.01.2005	3465.63	16-20.07.1973
6 day	17184.88	02-07.09.1978	7395.8	27.09-10.02.2005	3547.03	16-21.07.1973
7 day	17583.38	02-08.09.1978	8004.97	26.09-02.10.2005	3819.98	10-16.09.2002
8 day	17883.28	02-09.09.1978	8442.25	25.09-02.10.2005	4172.33	09-16.09.2002
9 day	18119.93	02-10.09.1978	8599.04	24.09-02.10.2005	4517.25	09-17.09.2002
10 day	18378.63	02-11.09.1978	8726.33	25.09-04.10.2005	4807.56	09-18.09.2002

31

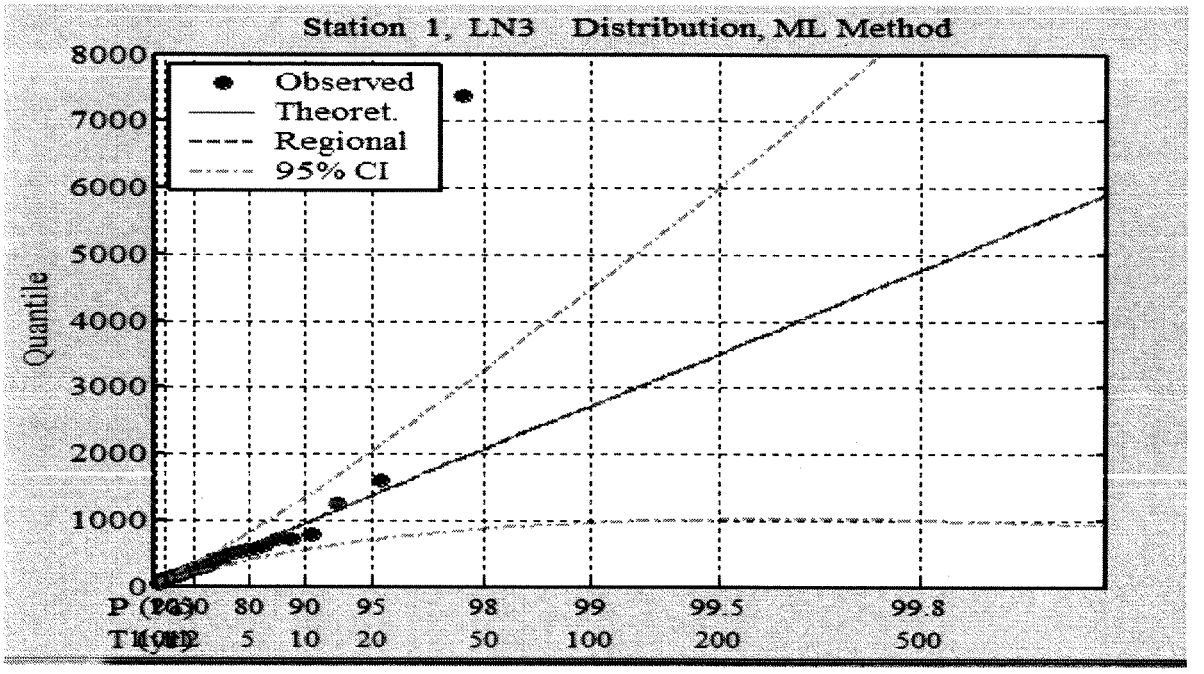


Figure 5. 1- Quantile-frequency plot for 1-day Observed Discharge at Galeta

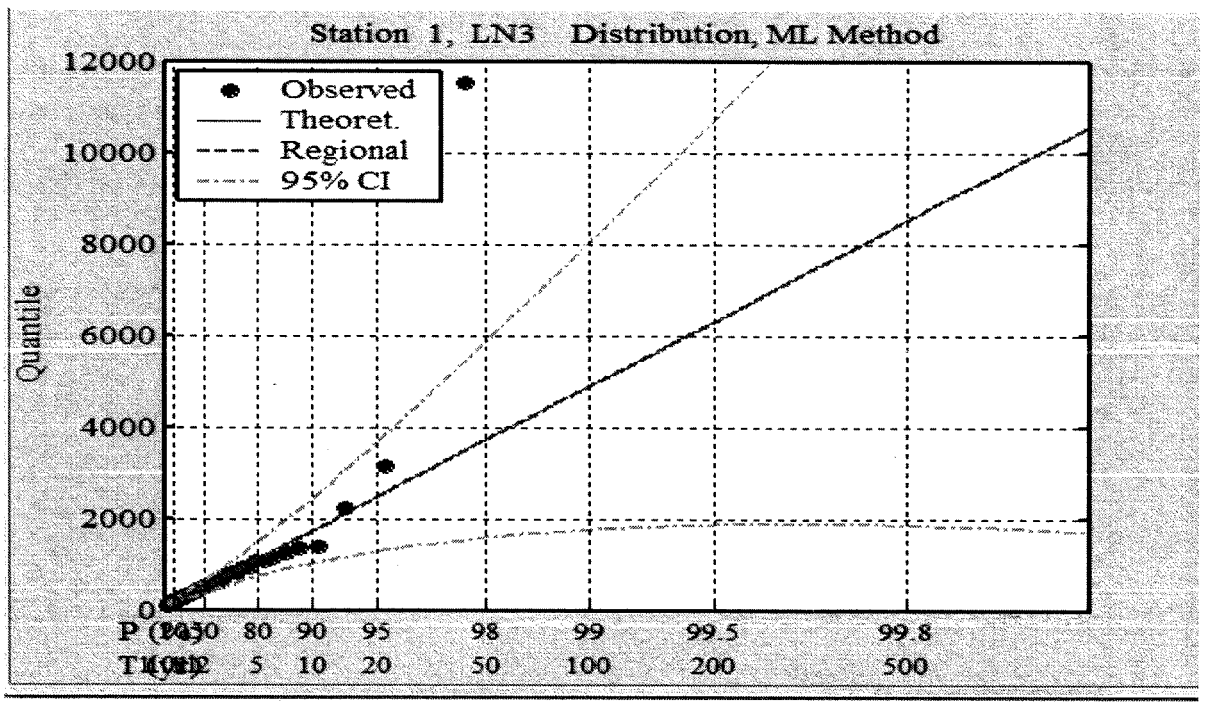


Figure 5. 2-Quantile-frequency plot for 2-day Observed Discharge at Galeta

32

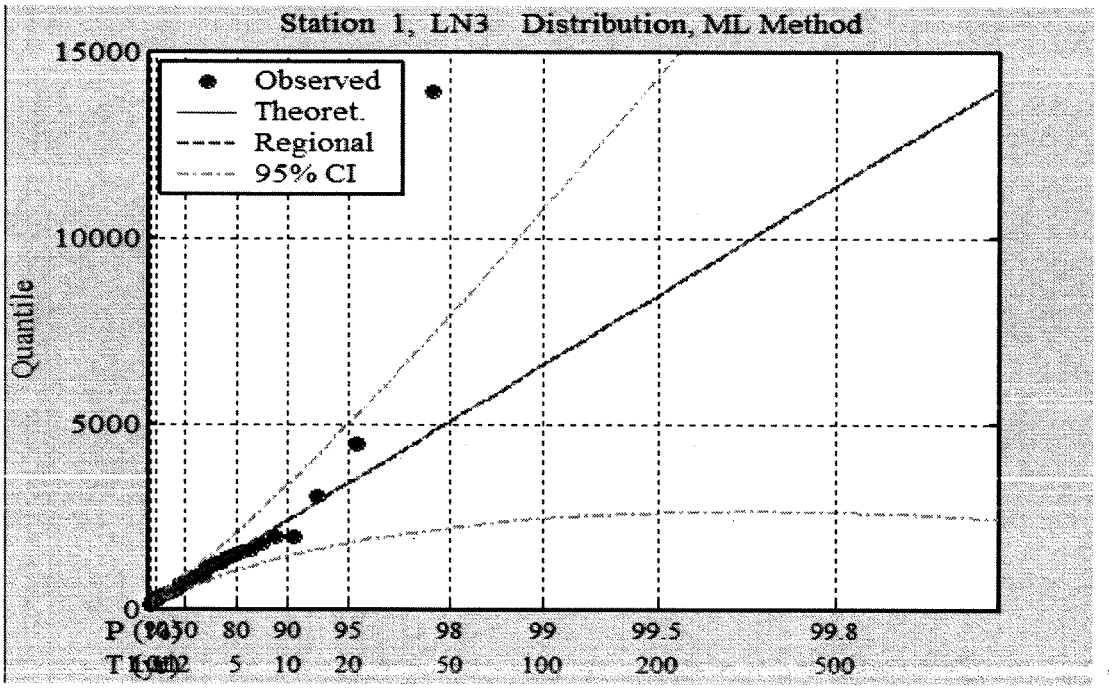


Figure 5. 3-Quantile-frequency plot for 3-day Observed Discharge at Galeta

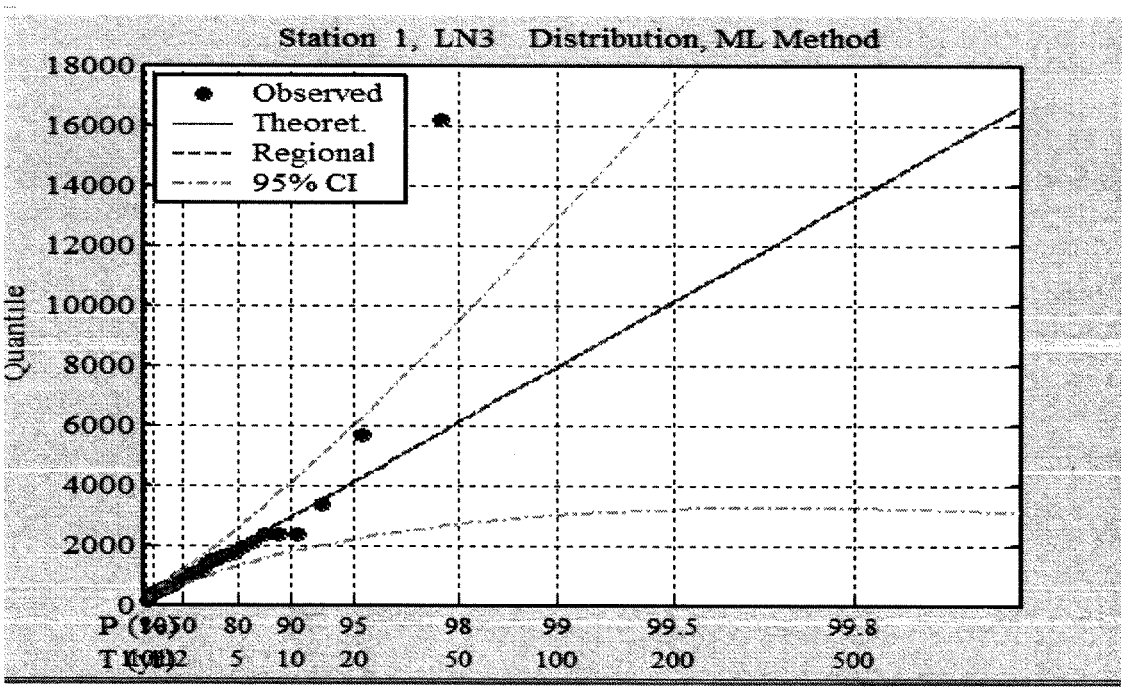


Figure 5. 4 - Quantile-frequency plot for 4-day Observed Discharge at Galeta

33

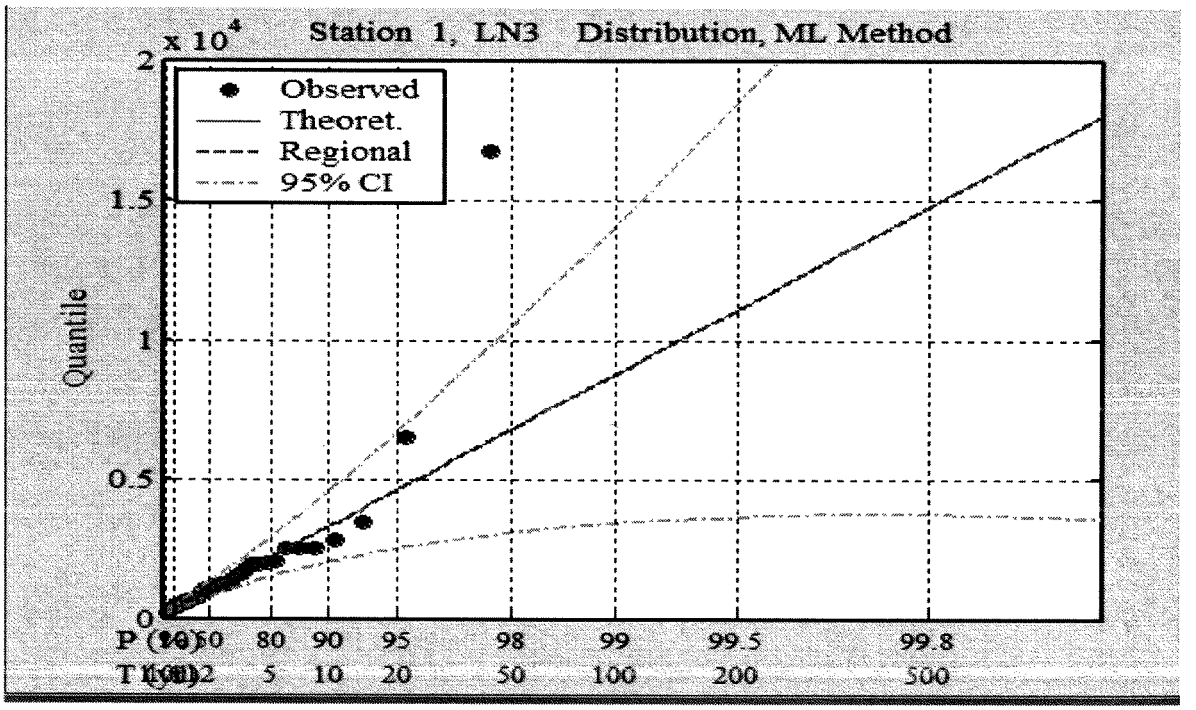


Figure 5. 5-Quantile-frequency plot for 5-day Observed Discharge at Galeta

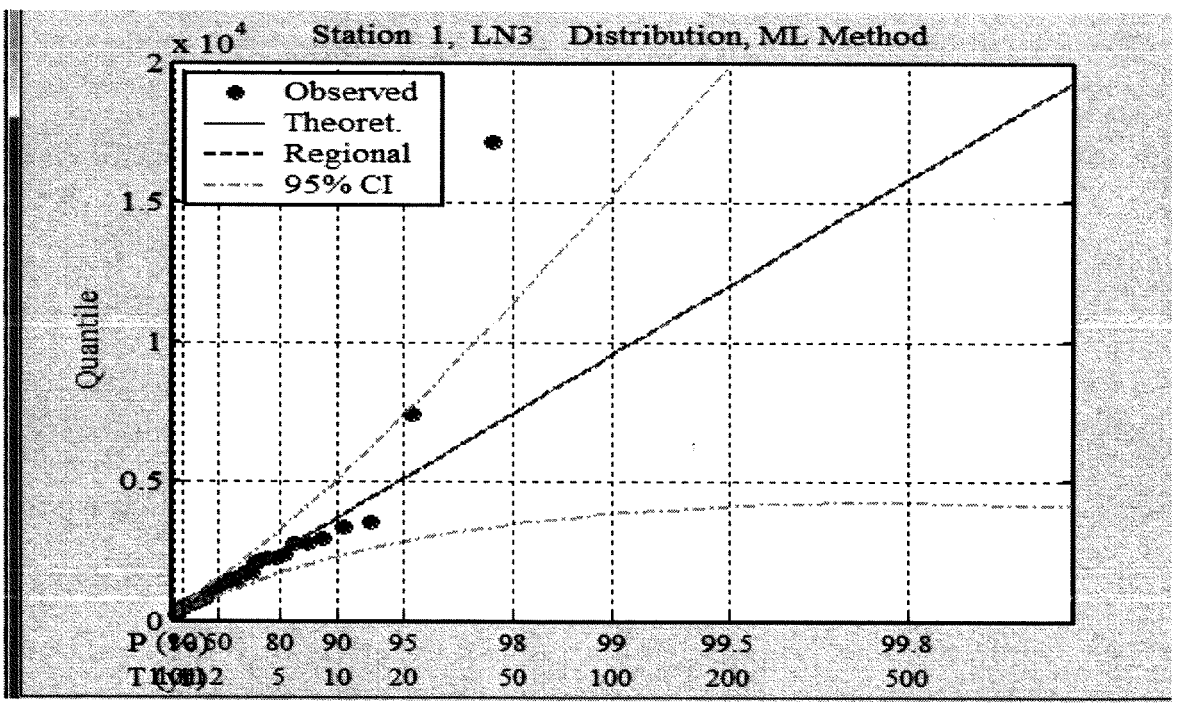


Figure 5. 6-Quantile-frequency plot for 6-day Observed Discharge at Galeta

34

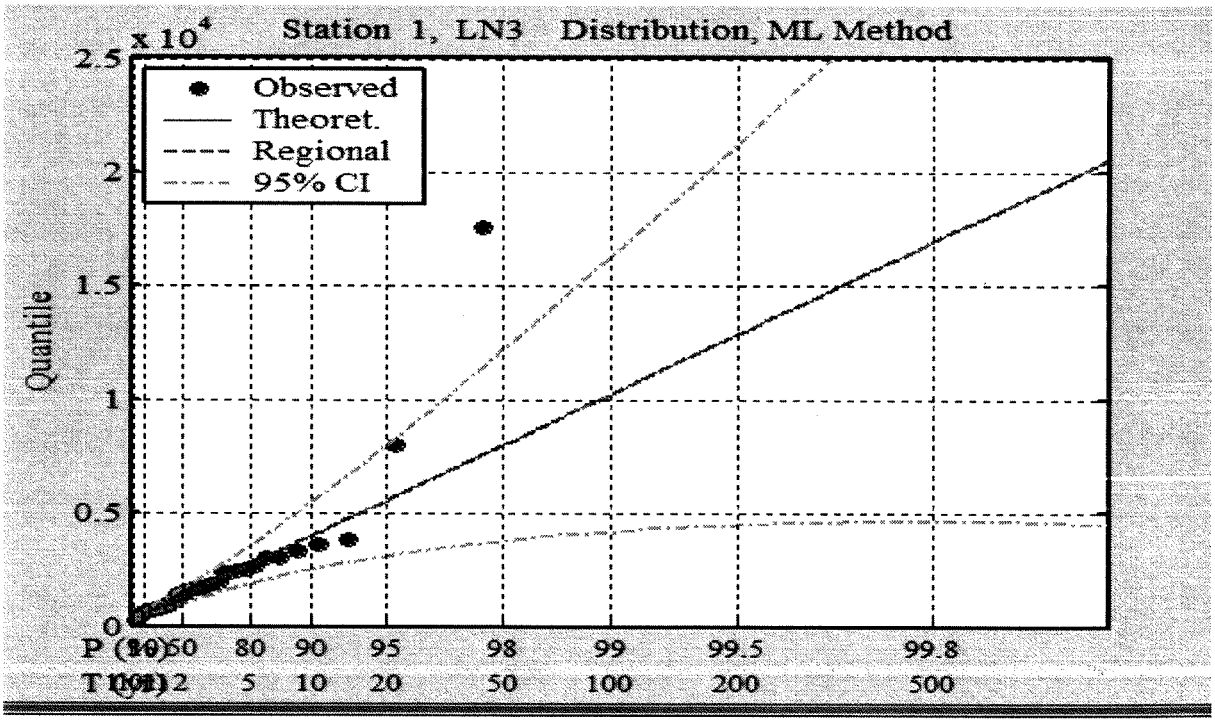


Figure 5. 7-Quantile-frequency plot for 7-day Observed Discharge at Galeta

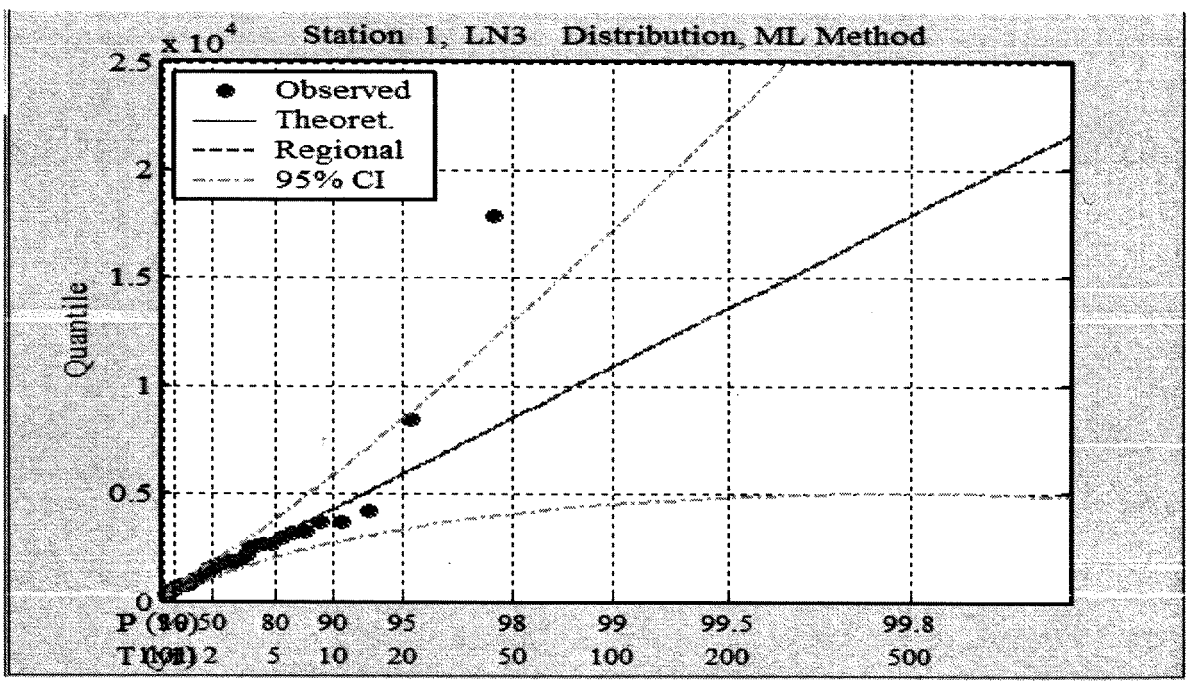


Figure 5. 8 -Quantile-frequency plot for 8-day Observed Discharge at Galeta

35

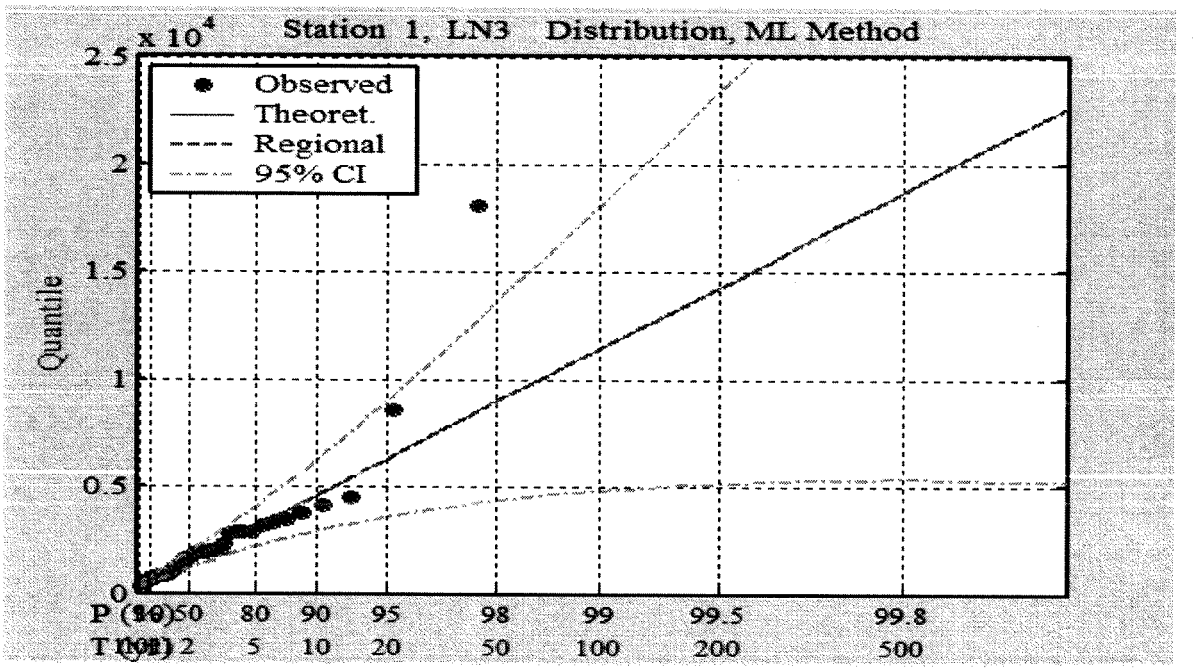


Figure 5. 9-Quantile-frequency plot for 9-day Observed Discharge at Galeta

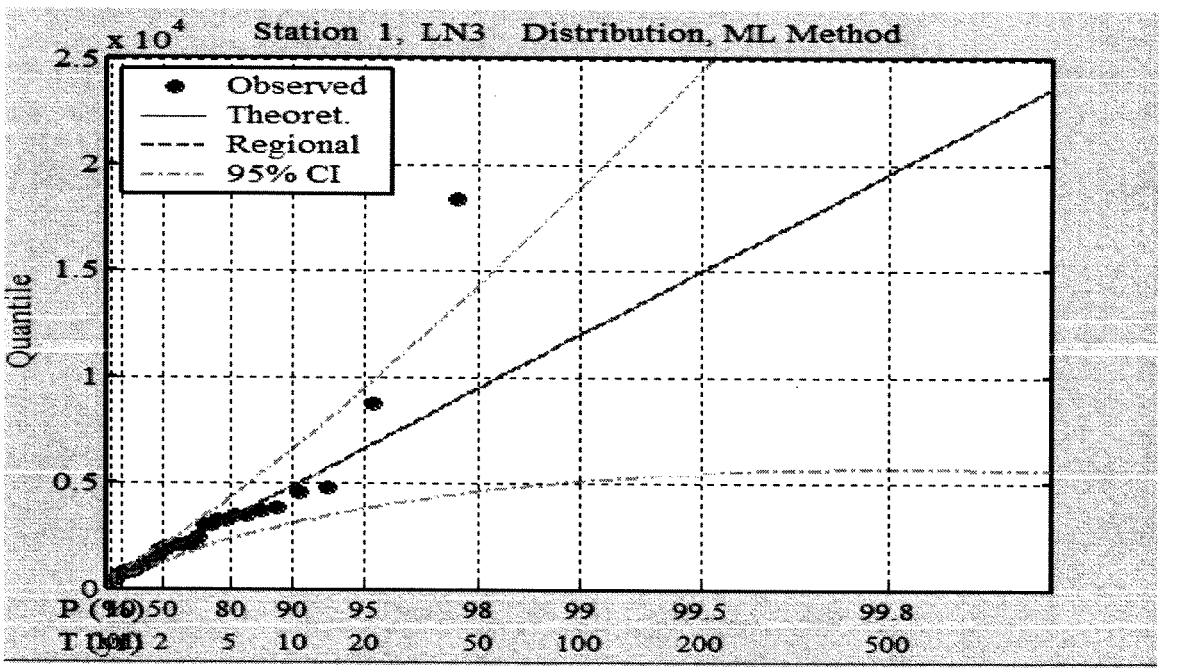


Figure 5. 10-Quantile-frequency plot for 10-day Observed Discharge at Galeta

36

Based on frequency analysis of discharge data conducted above, various discharge (in m^3/s) at return periods of 2 yr, 5 yr, 10 yr, 25 yr, 50 yr are as follows:

Table 4 - Discharge values corresponding to various return period & corresponding notional dates

	2 yr	Date	5 yr	Date	10 yr	Date	25 yr	Date	50yr	Date
1 day	274	13.09.1996	616	14.09.2002	952	--	1523	30.09.2005	2067	--
2 day	507	13-12.09.1996	1126	03-04.08.1988	1731	--	2755	29-30.09.2005	3720	--
3 day	721	07-05.09.2003	1570	02-04.08.1988	2392	--	3769	29.09-01.10.2005	5067	--
4 day	903	08-05.09.2003	1934	02-05.08.1988	2932	16-19.07.1973	4567	28.09-01.10.2005	6108	--
5 day	1064	08-04.09.2003	2226	01-05.08.1988	3322	16-20.07.1973	5125	27.09-01.10.2005	6799	--
6 day	1212	12-07.09.2000	2491	22-27.09.2010	3684	16-21.07.1973	5632	27.09-02.10.2005	7427	--
7 day	1345	10-04.09.2000	2733	21-27.09.2010	4018	10-16.09.2002	6106	26.09-02.10.2005	8022	--
8 day	1465	11-04.09.2003	2944	20-27.09.2010	4308	09-16.09.2002	6512	25.09-02.10.2005	8528	--
9 day	1580	12-04.09.2003	3146	19-27.09.2010	4582	09-17.09.2002	6895	25.09-03.10.2005	9005	--
10 day	1692	12-03.09.2003	3342	18-27.09.2010	4848	09-18.09.2002	7267	25.09-04.10.2005	9467	--

9.0 COMPUTATION OF OUTLIER IN DISCHARGE DATA

An observation which deviates significantly from the behavior of the remaining observationsin the available data set makes it incongruous with the rest of the sample set of observations and is indeed a reasonable ground for suspicionthatthis element may have been generated by a different mechanismor indeed may be a result of hitherto unknown or even indeed a recording error. Such an element is called an Outlier. Some of the usual reasons for an observation to be deemed to be an outlier include errors in recording the observation, measurement or instrument error, mixing of underlying populations and sampling errors, amongst others. Clearly, an examination of Figures 5.1 to 5.10 shows the largest recorded observation to be incompatible with the rest of the set and presents itself as a possible candidate outlier to be so established by carrying out tests as prescribed in literature.

37

9.1 Outlier testing using Grubs & Beck Test:

Sample values greater than x_H are considered to be high outliers, where

$$x_H = \exp(\bar{x} + k_N s)$$

In the aforementioned expression, $\bar{x}$ and s are mean and standard deviations of natural logarithm of the sample observations and k_N is the G-B Test Statistic which depends on the sample size (N) and is obtained from the expression given below as:

$$k_N = -3.62201 + 6.28446N^{1/4} - 2.49835N^{1/2} + 0.491436N^{3/4} - 0.037911N$$

Using the above described methodology, the peak event of 1978, that is discharge observed on 4th Sept 1978, comes out to be an outlier. For one day discharge event values, it emerges to be equivalent to 3.56 times higher than second highest value which occurred in 2005 as per observed data. Therefore, it is ignored in the further analysis.

An elaborate frequency analysis of annual maximum observed flows after excluding the outlier from further analysis, suggests that LN3 (LogNormal-3 parameter) distribution improved the overall fit for the entire range of integer durations ranging from 1-day to 10-days.

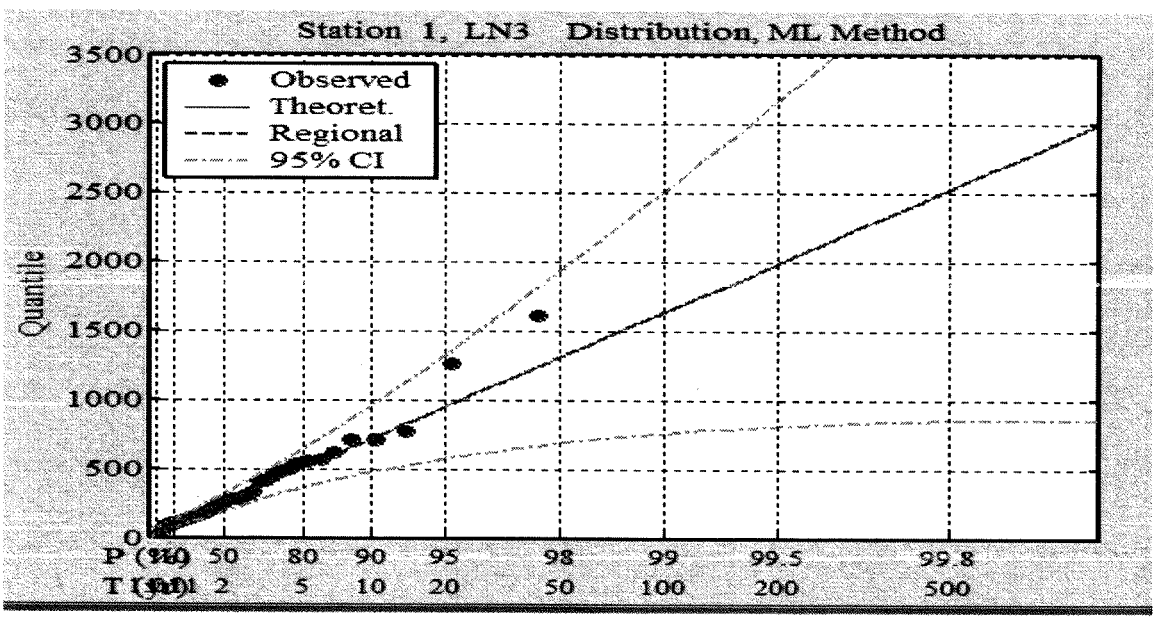


Figure 6. 1- Quantile-frequency plot for 1-day Observed Discharge at Galeta (Outlier Removed)

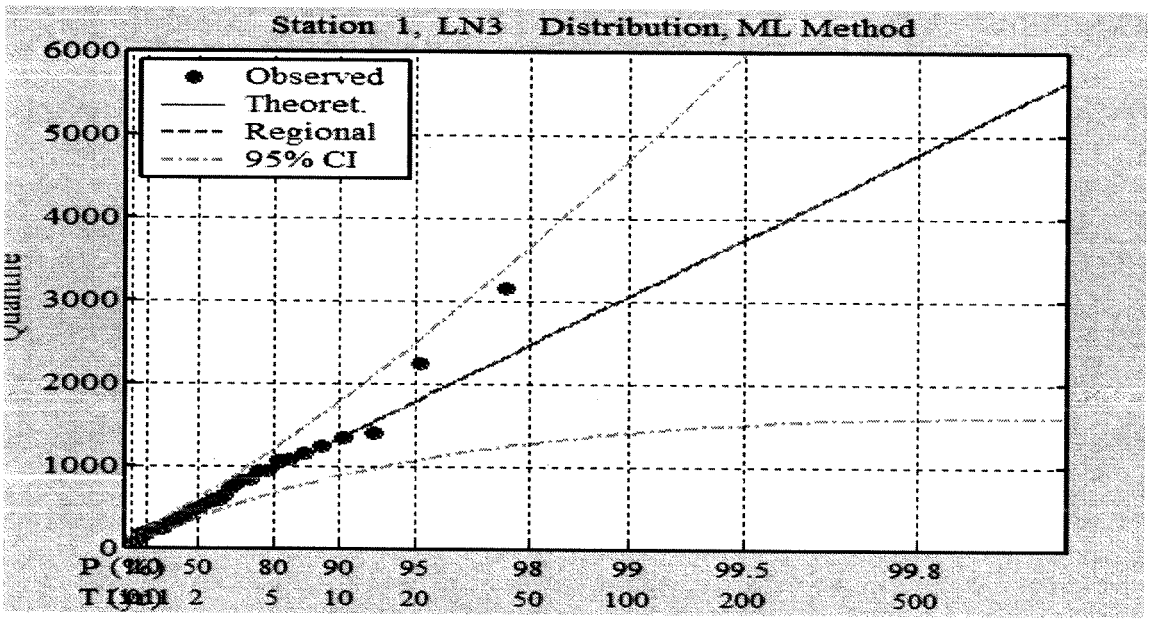


Figure 6. 2- Quantile-frequency plot for 2-day Observed Discharge at Galeta (Outlier Removed)

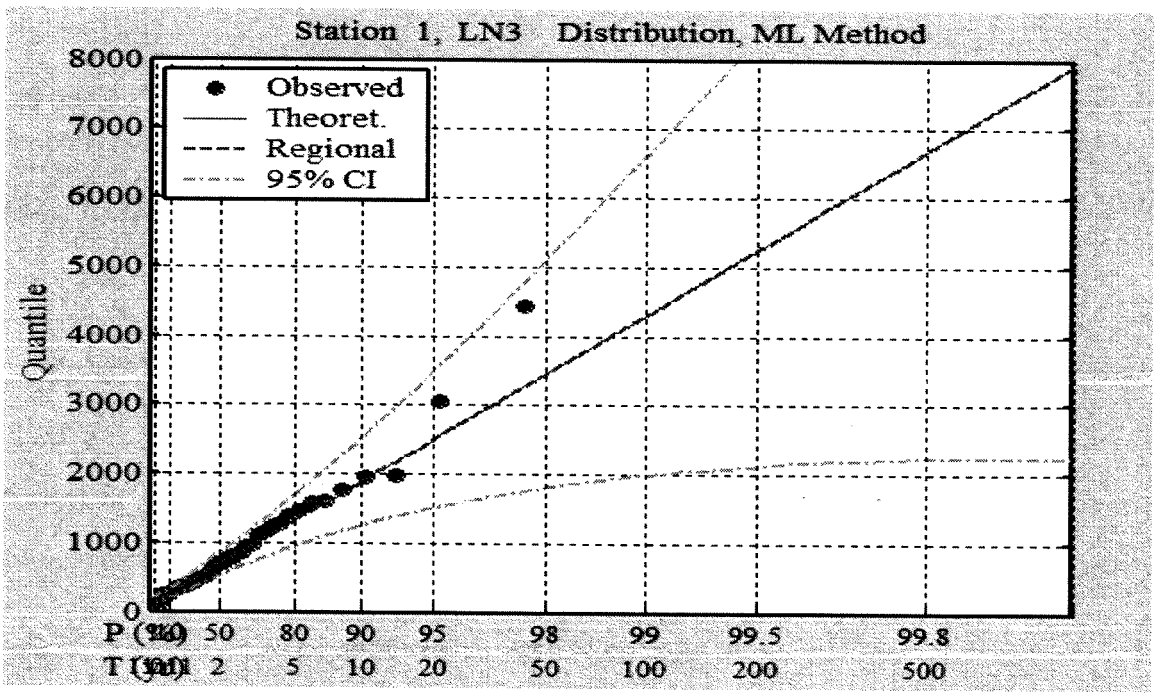


Figure 6. 3- Quantile-frequency plot for 3-day Observed Discharge at Galeta (Outlier Removed)

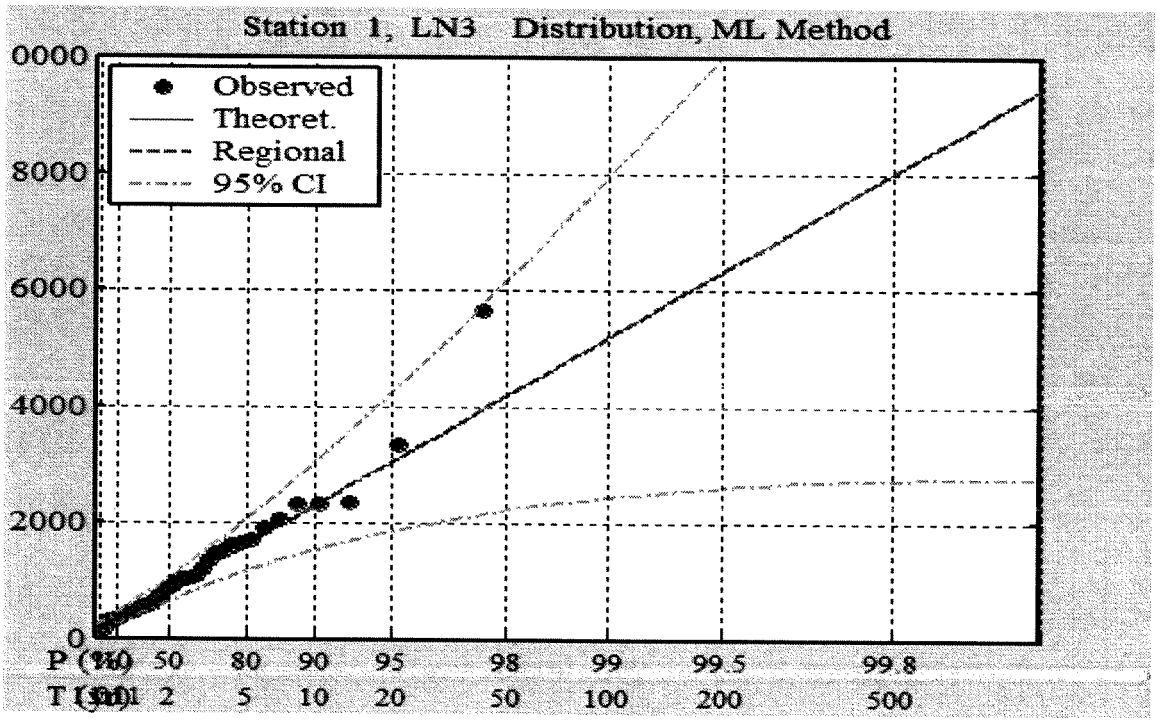


Figure 6. 4 - Quantile-frequency plot for 4-day Observed Discharge at Galeta (Outlier Removed)

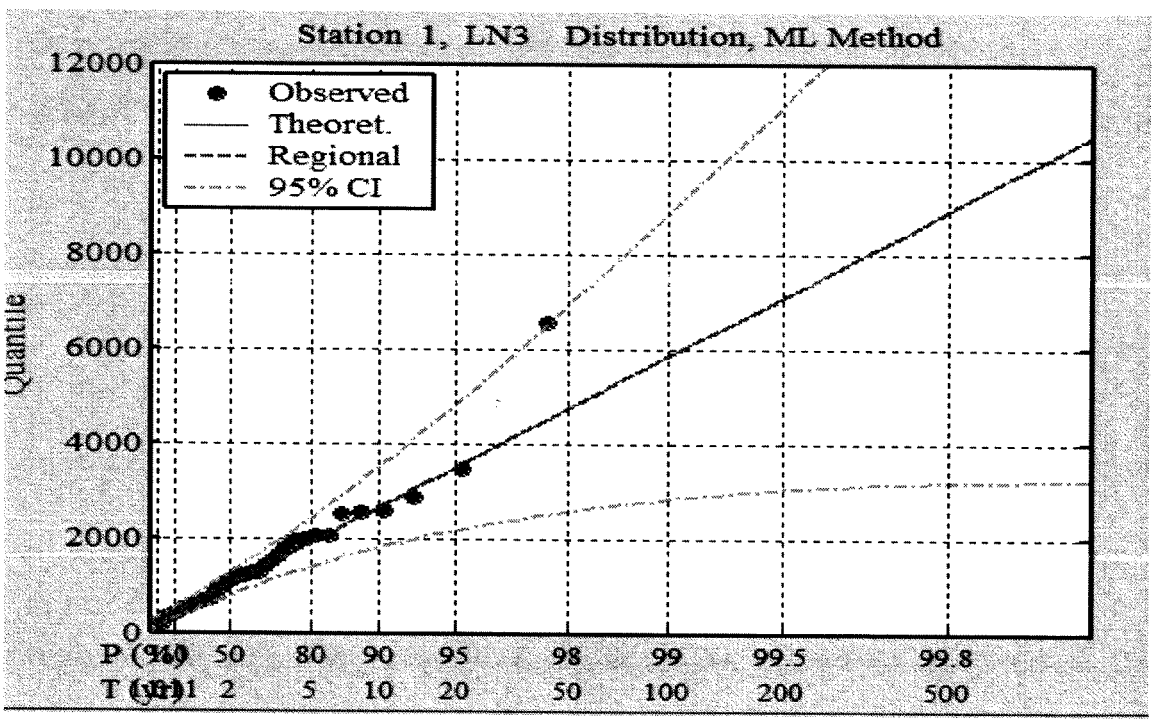


Figure 6. 5- Quantile-frequency plot for 5-day Observed Discharge at Galeta (Outlier Removed)

40

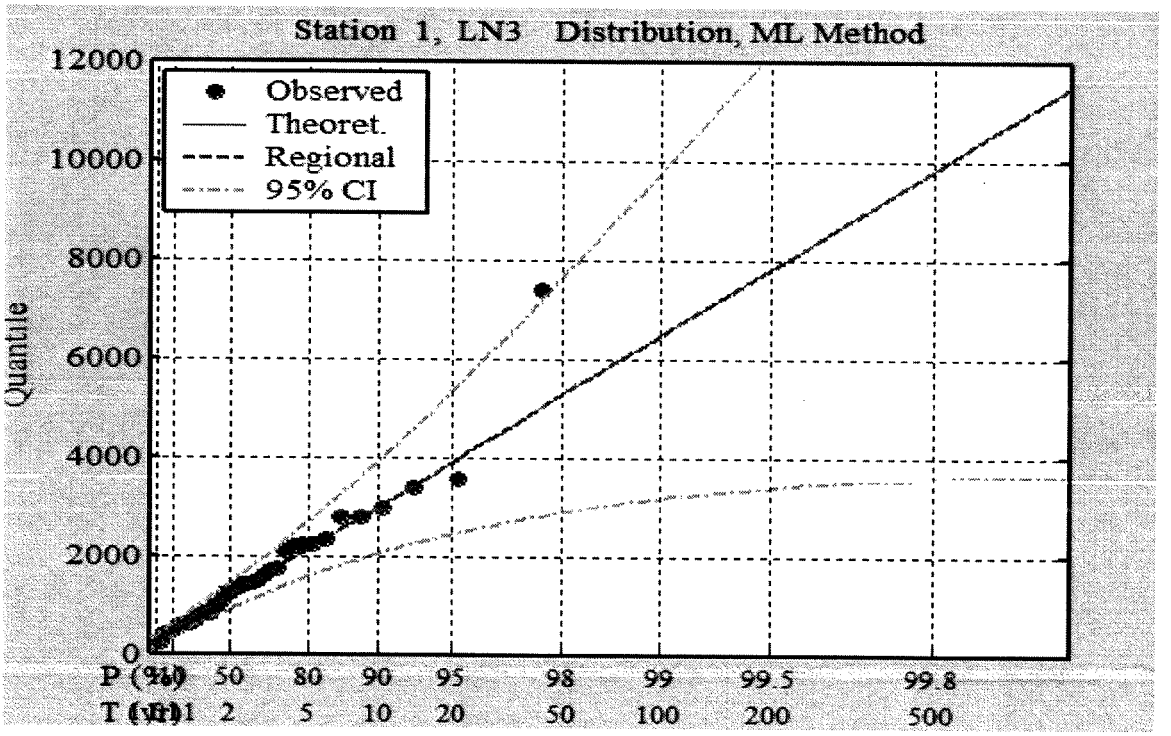


Figure 6. 6- Quantile-frequency plot for 6-day Observed Discharge at Galeta (Outlier Removed)

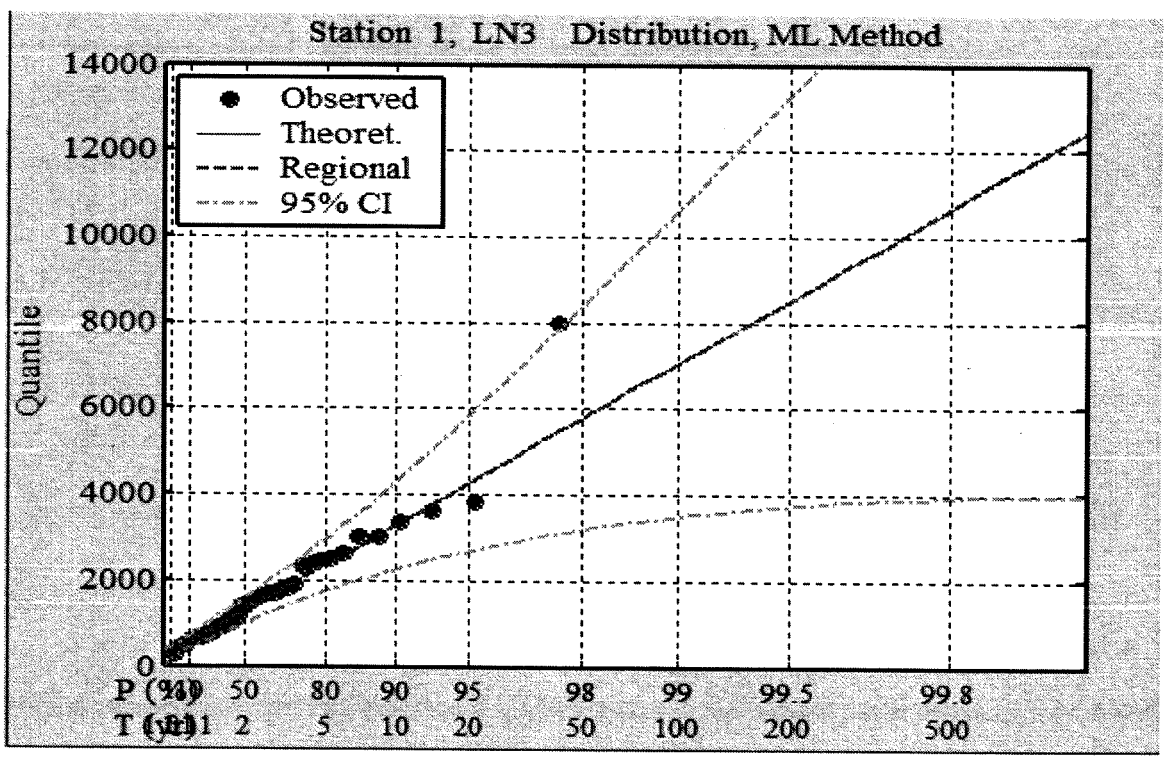


Figure 6. 7- Quantile-frequency plot for 7-day Observed Discharge at Galeta (Outlier Removed)

41

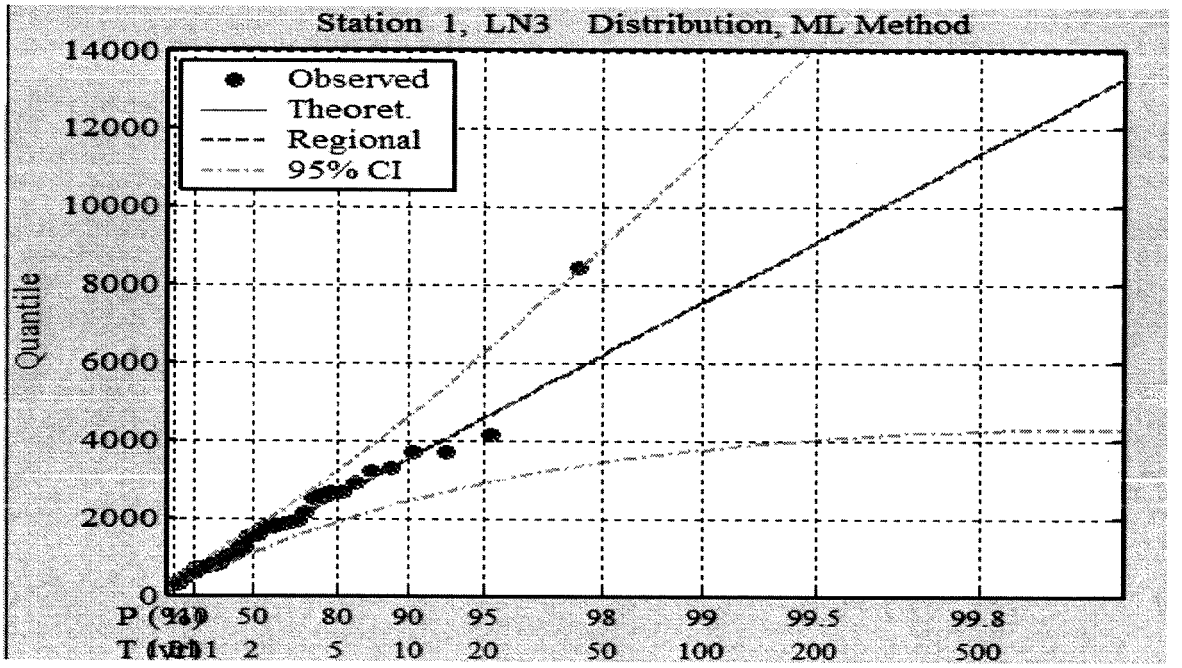


Figure 6. 8- Quantile-frequency plot for 8-day Observed Discharge at Galeta (Outlier Removed)

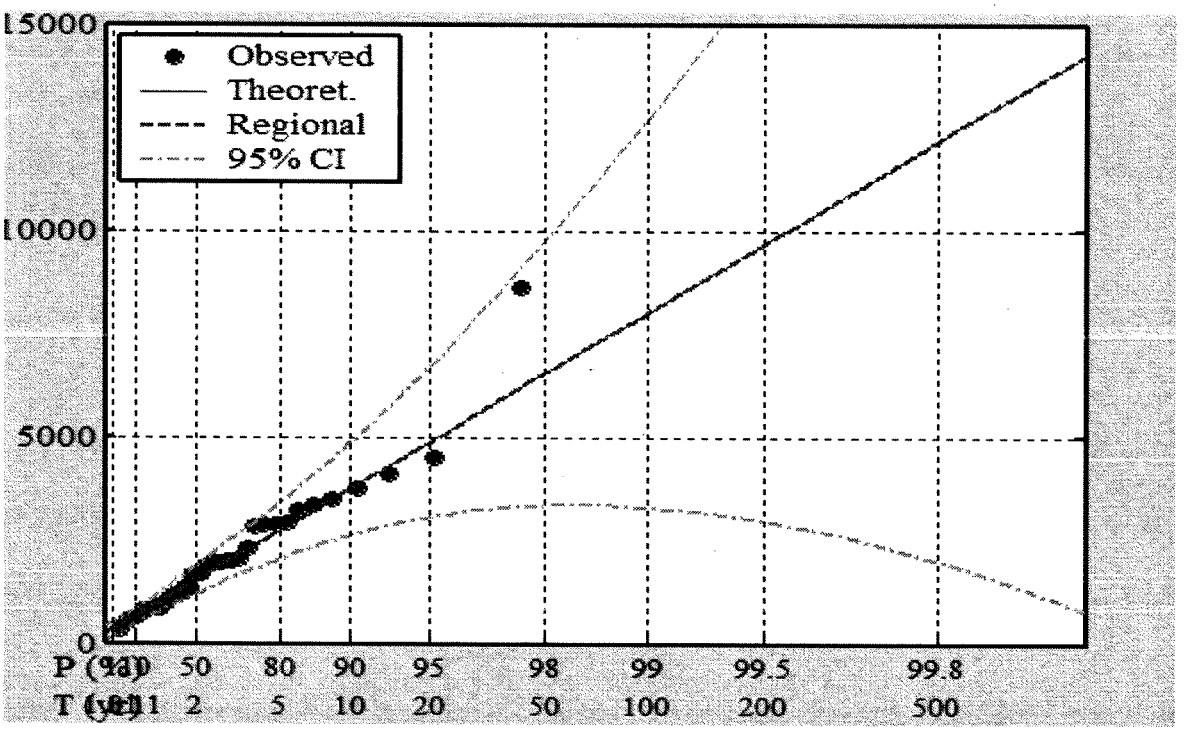


Figure 6. 9- Quantile-frequency plot for 9-day Observed Discharge at Galeta (Outlier Removed)

42

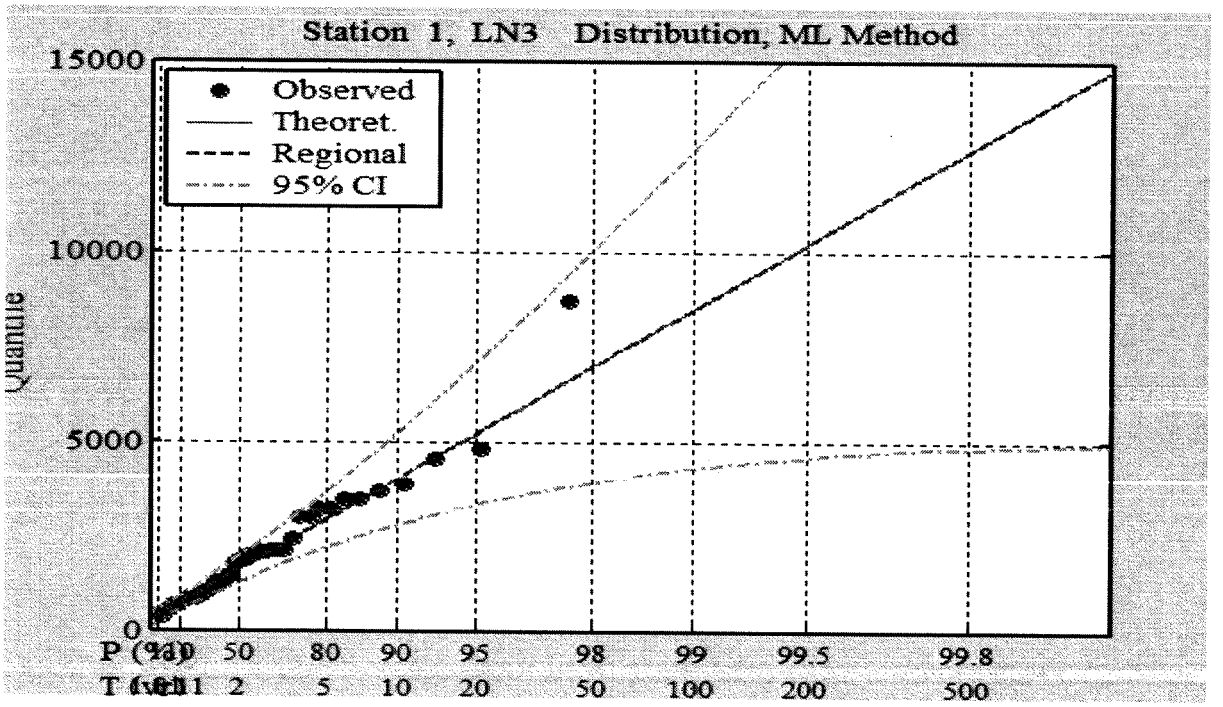


Figure 6. 10- Quantile-frequency plot for 10-day Observed Discharge at Galeta (Outlier Removed)

43

10.0 SUMMARY OF HISTORICAL RAINFALL/DISCHARGE RECORDS

Upon examining the time series of daily weighted basin average rainfall for the study area, the maximum 1-day rainfall was observed on 16th Sept 1963 whose averaged value was 163 mm, whereas the remaining extreme rainfall events ranging in durations from 2 days to 10 days were all observed in year 1983 during the month of July. In contrast, however, the maximum 1-D rainfall during the year 1978, wherein highest discharge was observed, was a relatively smaller value of 147 mm and the same was observed on 2nd Sept 1978.

Time series of daily discharge values in Hindon River are available at Galeta GD site of Central Water Commission from June 1971 to Jan 2012. Upon analysis, the maximum 1-D discharge was observed on 04.09.1978 whose value was 7368 m^3/s. The second highest value in the time series is observed as 1613.2 m^3/s which occurred on 30.09.2005.

The rankings of top 15 events observed in Rainfall and Discharge are given as under:

Table 5 - Rankings of top 15 events observed in Rainfall and Discharge

Rank	Rainfall Value	Date of Occurrence	Discharge Value	Date of Occurrence
1	165.05	9/16/1963	7368.9	9/4/1978
2	161.82	7/28/1983	1613.2	9/30/2005
3	157.11	9/18/1914	1259.44	7/17/1973
4	154.98	10/9/1956	774.35	8/10/1971
5	147.44	9/2/1978	711.51	8/21/1976
6	144.20	8/2/1902	708.01	8/3/1988
7	136.02	9/1/1912	621.97	9/14/2002
8	132.28	9/16/1916	566.9	7/31/1983
9	127.31	9/29/1924	553.02	9/6/1995
10	126.78	8/16/1994	536.11	7/30/1981
11	124.89	9/15/1957	499.18	9/11/1975
12	123.85	9/2/1989	479.39	9/26/2010
13	123.47	9/19/1933	442.16	8/19/1998
14	121.60	9/25/2005	415.45	8/18/1994
15	118.76	9/26/1964	412.29	9/4/1989

*Note: The length of series of rainfall values and discharge values are different.

11.0 RECONSTRUCTION OF VIRGIN FLOWS IN HINDON AT GALETA

SWAT (Soil & Water Assessment Tool) is a river basin scale model developed to quantify the hydrological consequences of varied land and water management practices in large non-homogeneousand complexwatersheds. SWAT is a continuous time model that operates on a daily time step at basin scale and uses a two-level disaggregation scheme. A preliminary sub-basin identification is carried out based on topographic criteria, followed by a further, higher level delineation based onavailable land use and soil type details. Areas having similarity across the three attributes of slope, soil type and land use form a Hydrologic Response Unit (HRU), a basic computational unit assumed to be homogeneous and based on a presumed similarity of its hydrologic responses.

A detailed hydrological model of the Hindon basin was setup on the SWAT modeling platform to simulate daily flows in Hindon and using recorded flows at the CWC observation site of Galeta as the benchmark for comparison.

Agricultureis a dominant practice across Hindonbasinand it is reasonable to expect that these practices would have an important effect on river basin's overall water balance. The river is a primary source of water for irrigation within the basin and sugarcane, which is known for its high round the year demand for water, is the main crop grown across the study basin. Substantial quantities of water are therefore abstracted from river Hindon and the underlyingbut connectedgroundwater reservoir throughout the catchment to supplement the supplies available from surface systems for crop irrigation. Understandably, in order for the model to be representative of the hydrological reality of the study area, it becomes imperative to capture the anthropogenic influences on the natural water cycle of Hindon basin in sufficient detail.

The rigor and realism with which such a capture is designed within the hydrological model framework is expected to influence the accuracy with which the observed hydrology can be simulated by the latter model. Accordingly, therefore, SWAT model setup of the Hindon basin wasreinforced with a realistic capture of regulatory as well as water usage pattern, and together with the model for waste returns emanating from

the corresponding commands as source areas for these returns. Further, during summer months, usage of groundwater has also been incorporated in hydrological balance model.

The land use pattern, soil classes and basin slope as has been incorporated in the hydrologic model setup is as per Figures 6, 7 and8.The SWAT simulation modelsetups were further calibrated for an enhanced simulation accuracy using the observed record of flows at Galeta GD station and, following a successful calibration, the model was run again to reconstruct the time series of virgin hydrology after switching off or disabling the anthropogenic branch cycle influences.

Water surface profiles are then derived by carrying out a hydrodynamic routing of the extracted design hydrograph for both the pre and post development scenarios.

46

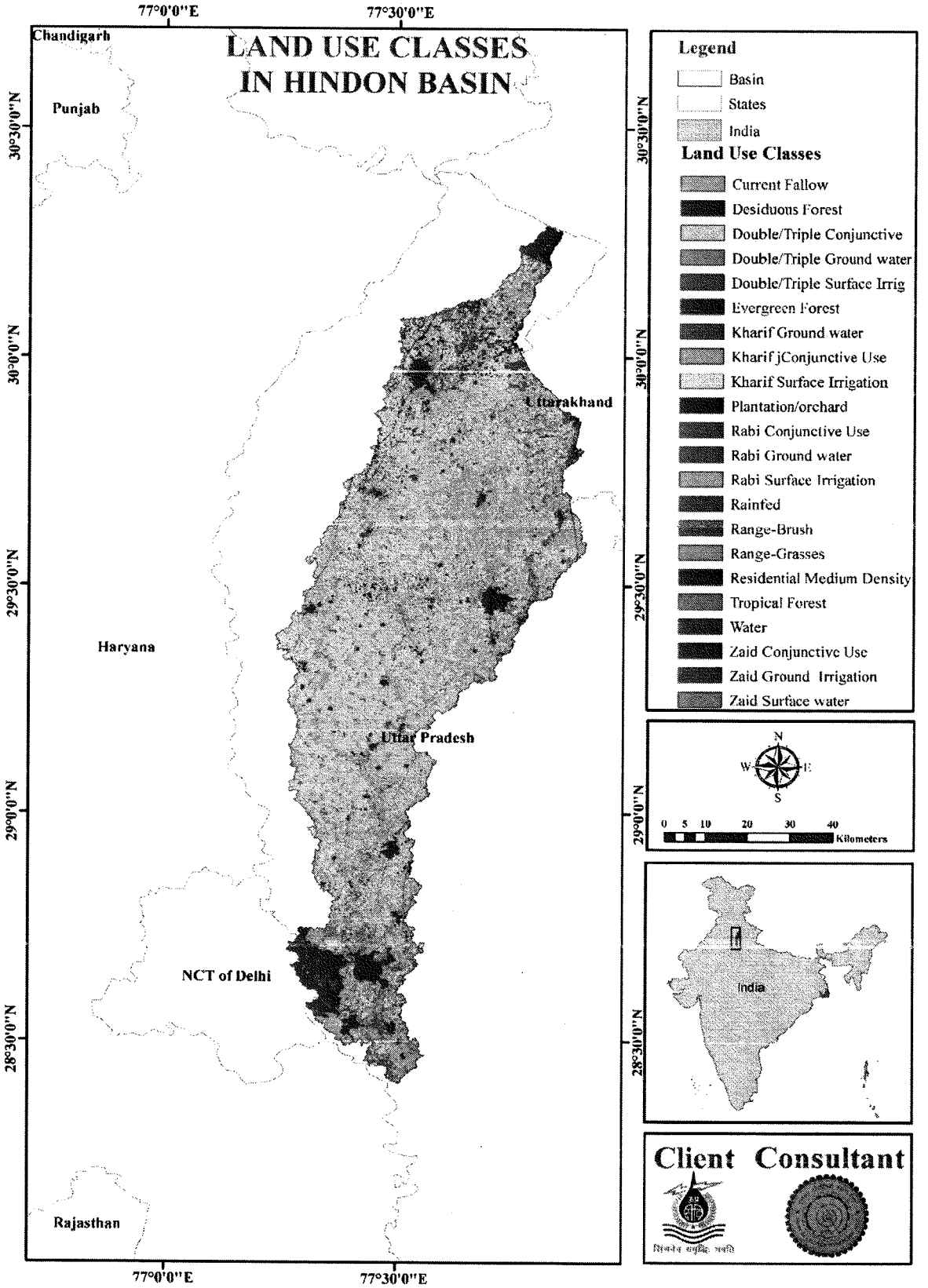


Figure 7: Land Use Pattern in Hindon Basin

47

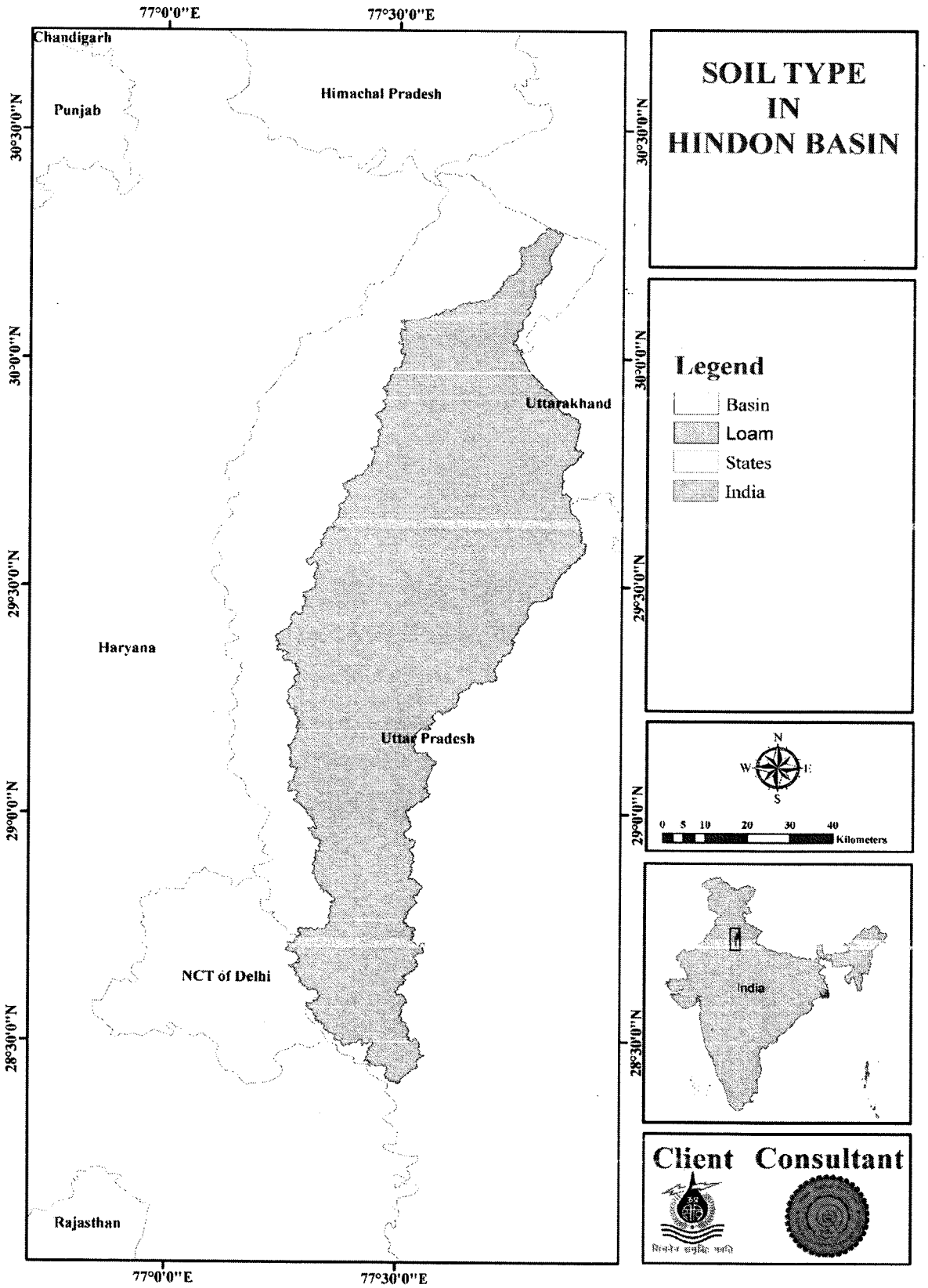


Figure 8: Soil cover mix in Hindon Basin

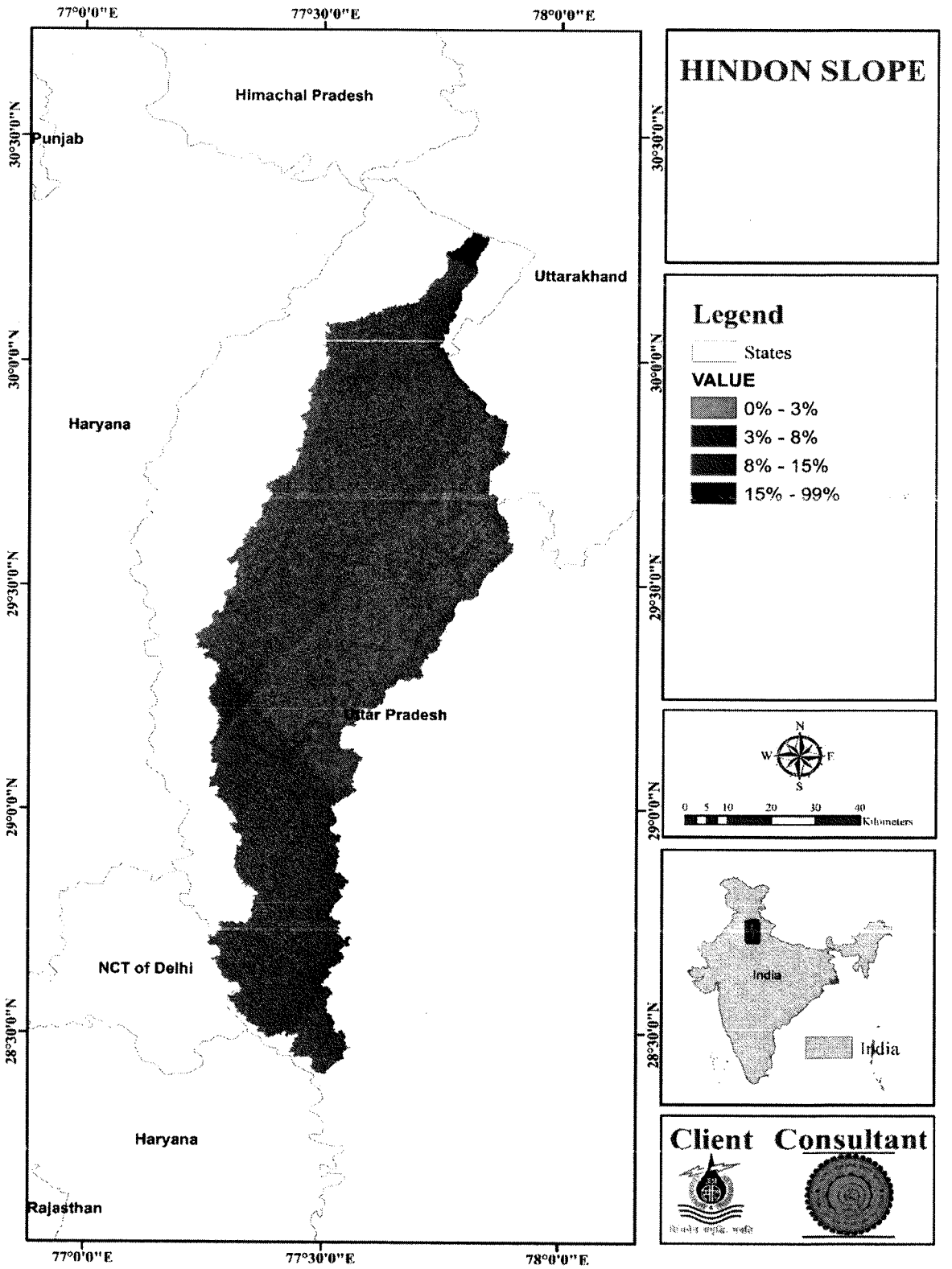


Figure 9: Slope Values

12.0 COMPARISON OF OBSERVED VERSUS SIMULATED HYDROLOGY

Two data series of average monthly flow, corresponding to June 1976 to November, 1999 and Dec 1999 to Dec 2006 were used for calibration and validation of SWAT Model.

Due to conditions prior to 1951 being unknown, warm up period from 01/01/1951 to 31/12/1960 is used. Warm up period becomes imperativein order to minimize the influence of initial, but unknown hydrologic conditions that are assumed for initiating model run for to derive simulations of the processes of interest.

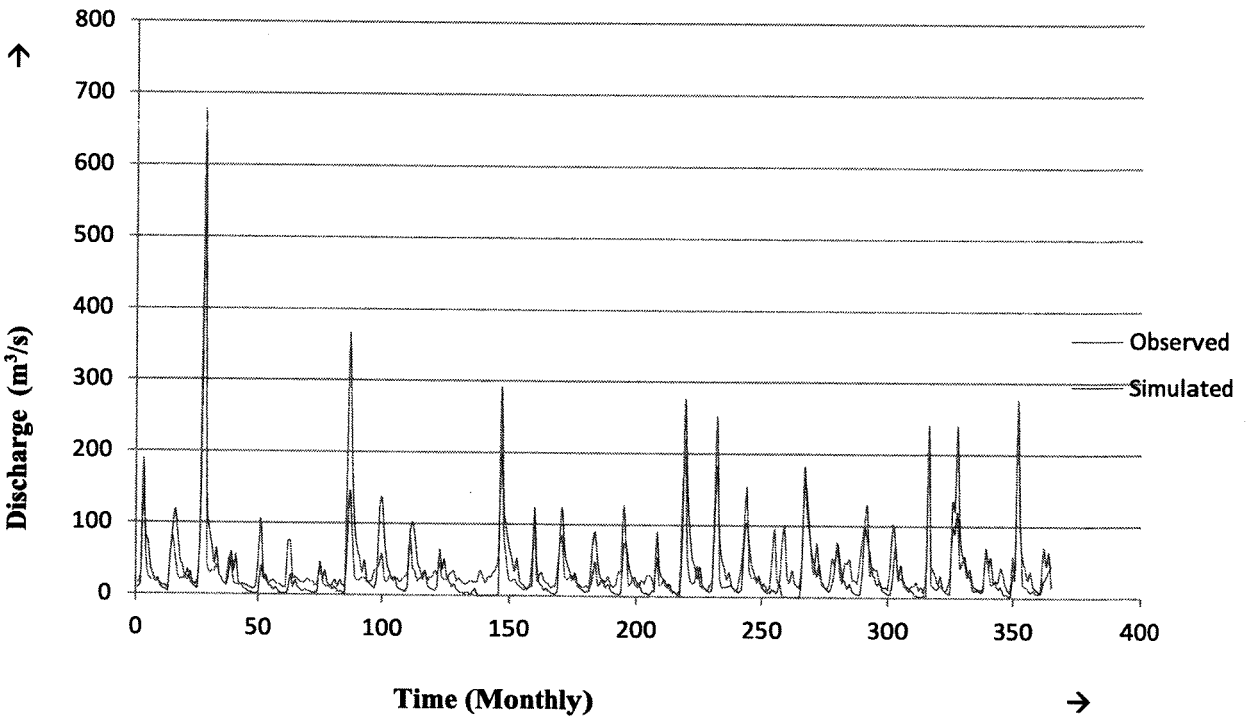


Figure 10: Observed vs Simulated Discharge

For above model, the R^2, Nash-Sutcliffe estimate and Percentage Bias values are given in table below:

Table 6 - R2, NSE and PBIAS values of SWAT Model

R sq values		NSE values		PBIAS
Calibration	Validation	Calibration	Validation	
0.68	0.73	0.605	0.662	-0.31%

51

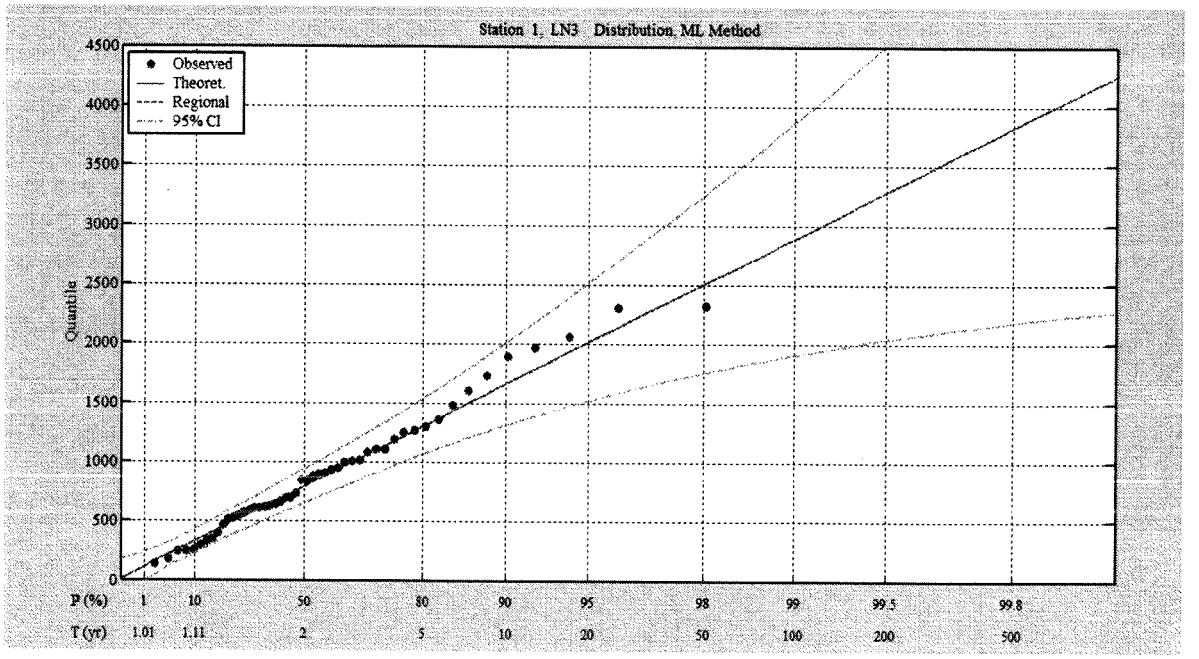


Figure 11. 2-Quantile-frequency plot for 2-day Simulated Discharge at Galeta

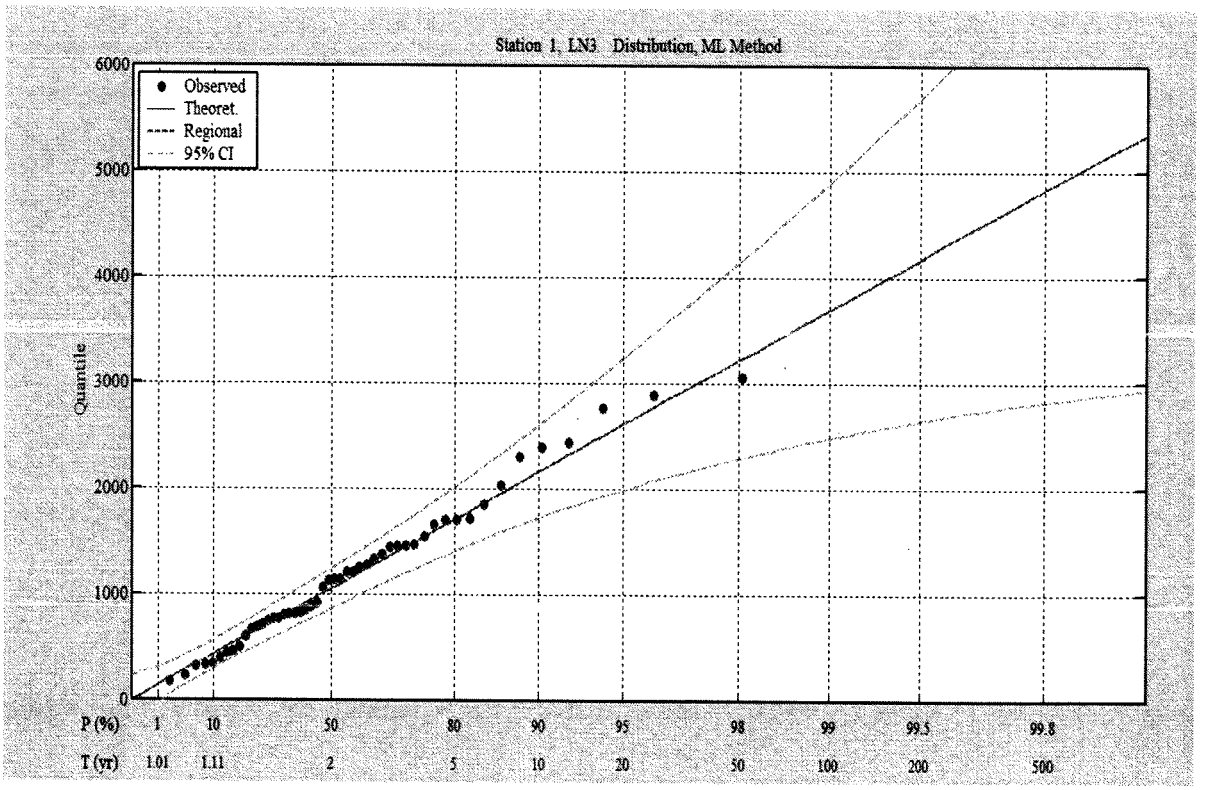


Figure 11. 3 - Quantile-frequency plot for 3-day Simulated Discharge at Galeta

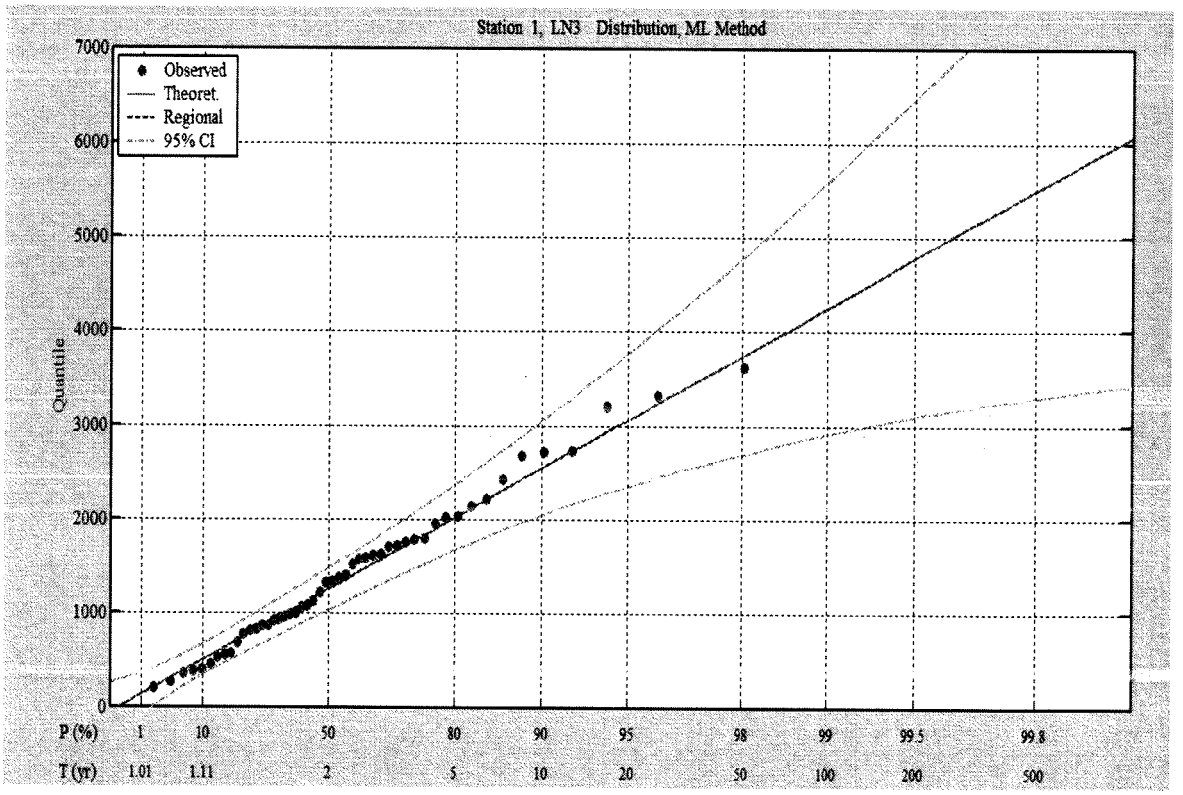


Figure 11. 4 - Quantile-frequency plot for 4-day Simulated Discharge at Galeta

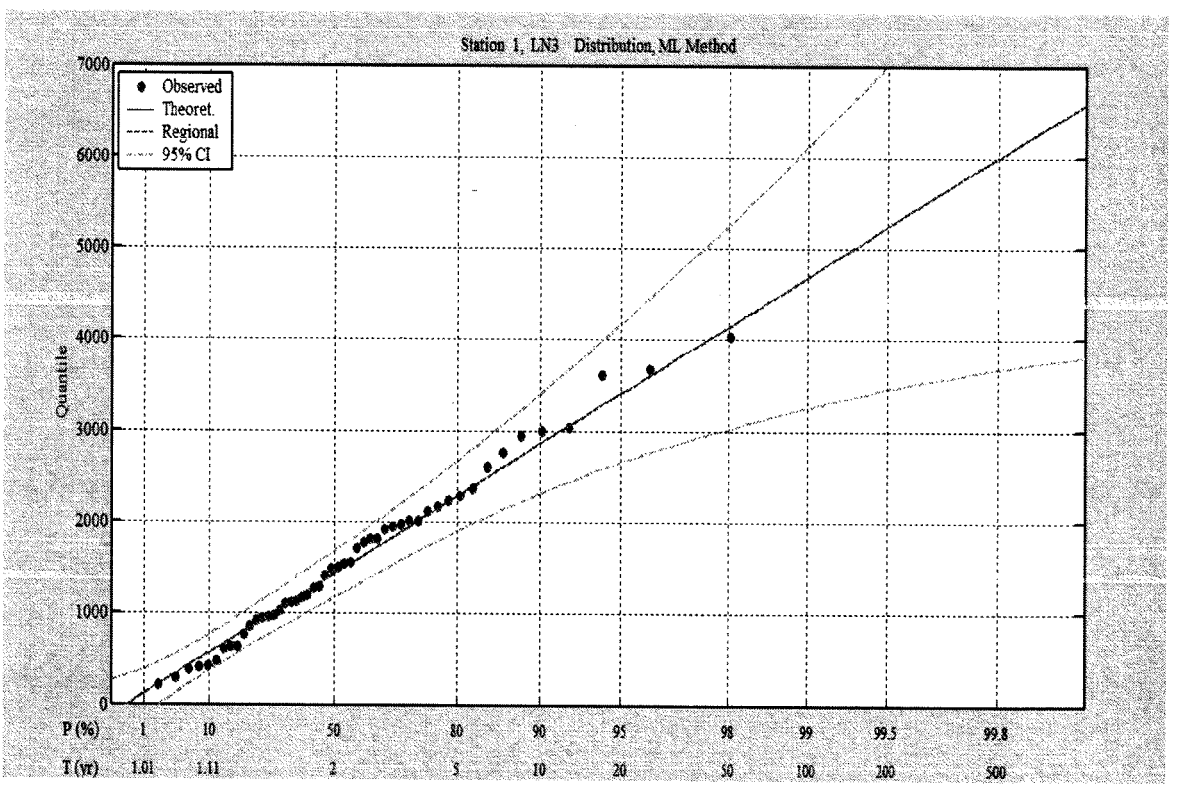


Figure 11. 5-Quantile-frequency plot for 5-day Simulated Discharge at Galeta

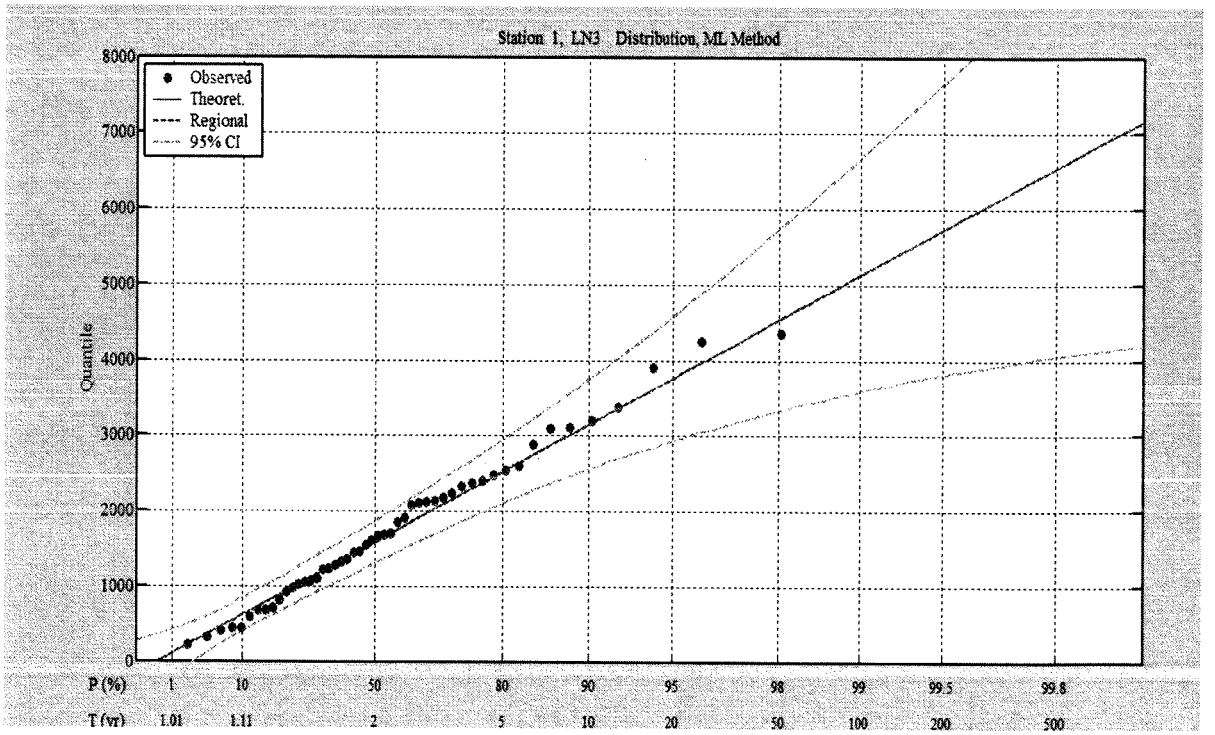


Figure 11. 6 - Quantile-frequency plot for 6-day Simulated Discharge at Galeta

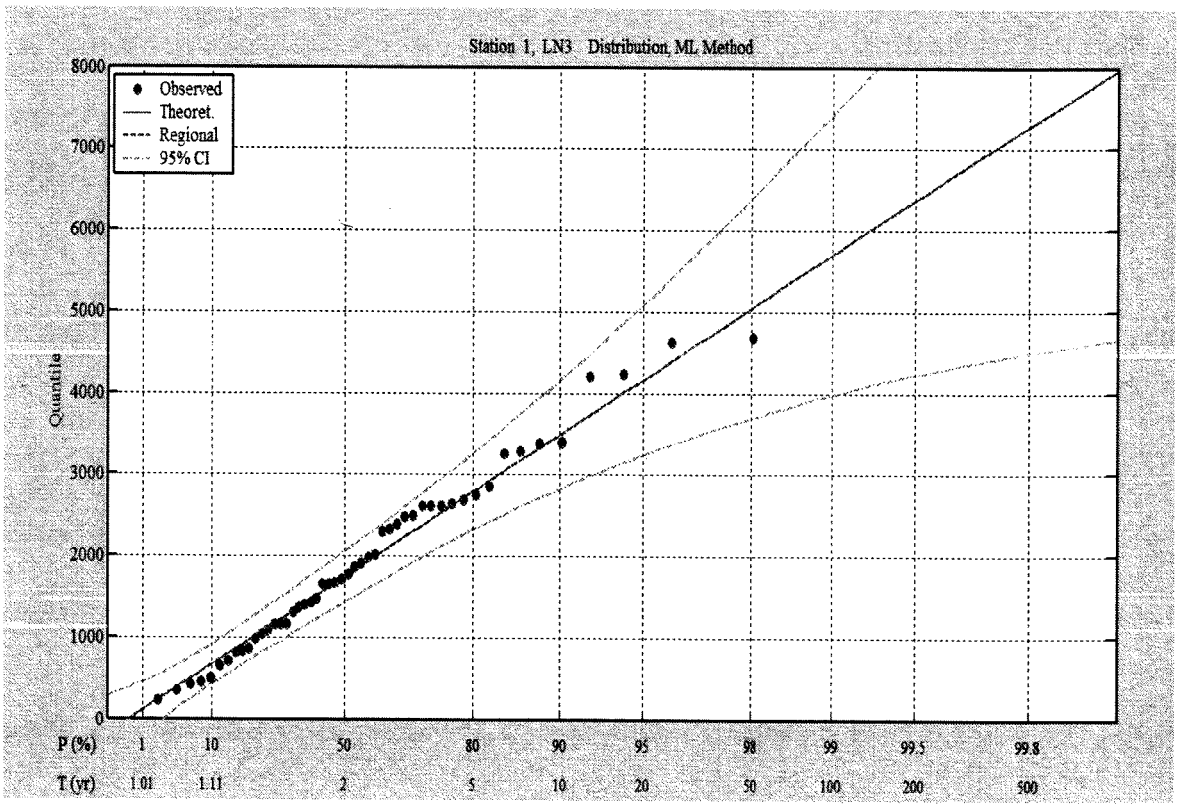


Figure 11. 7 - Quantile-frequency plot for 7-day Simulated Discharge at Galeta

54

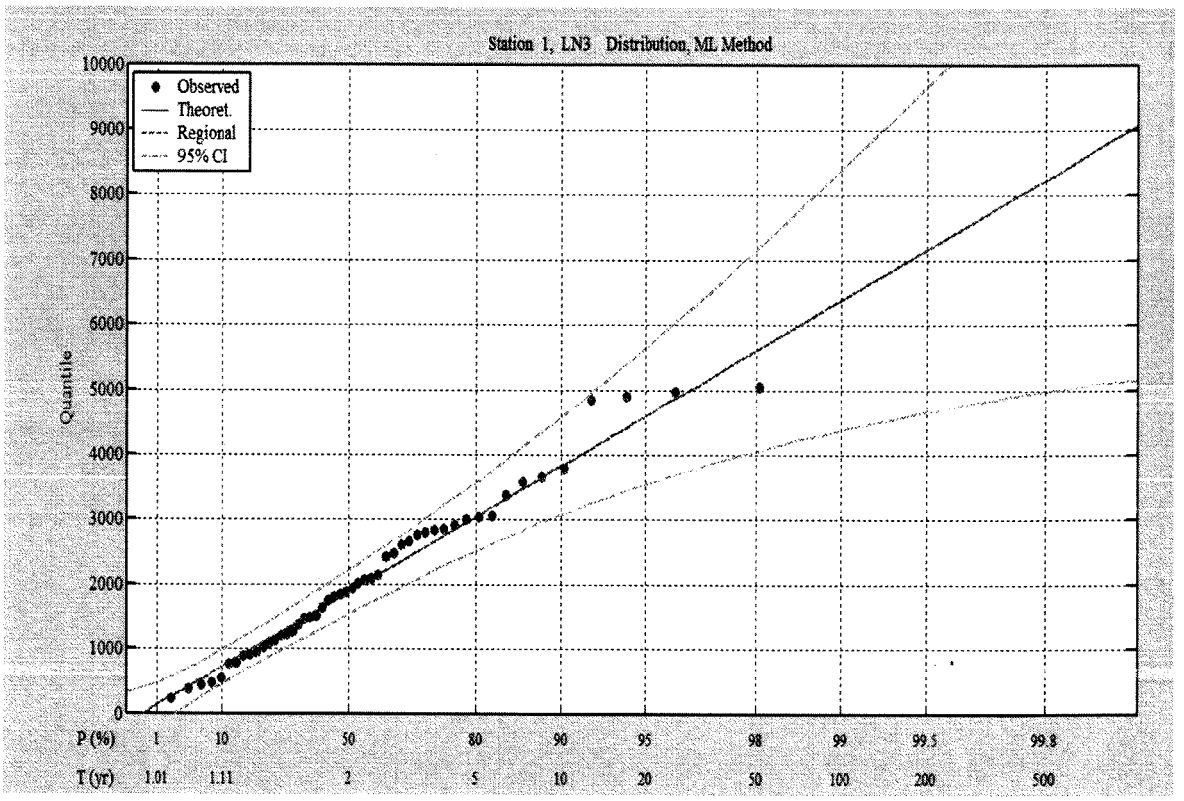


Figure 11. 8 - Quantile-frequency plot for 8-day Simulated Discharge at Galeta

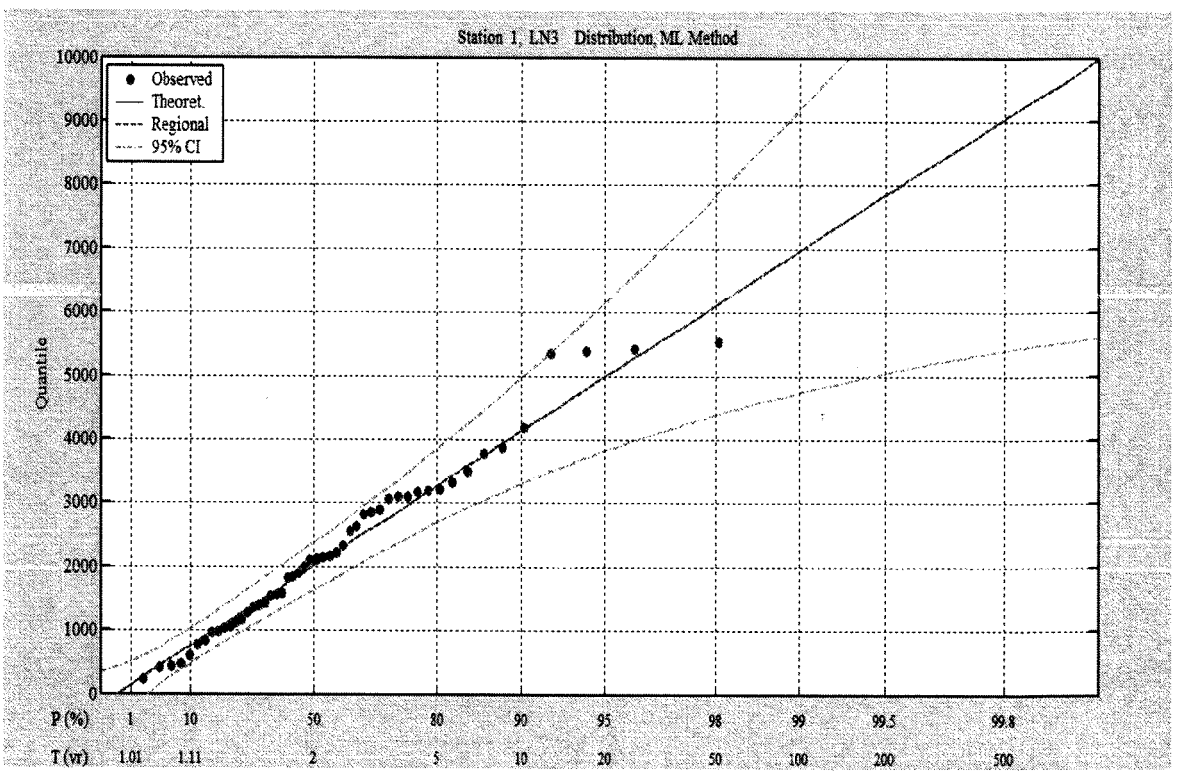


Figure 11. 9 - Quantile-frequency plot for 9-day Simulated Discharge at Galeta

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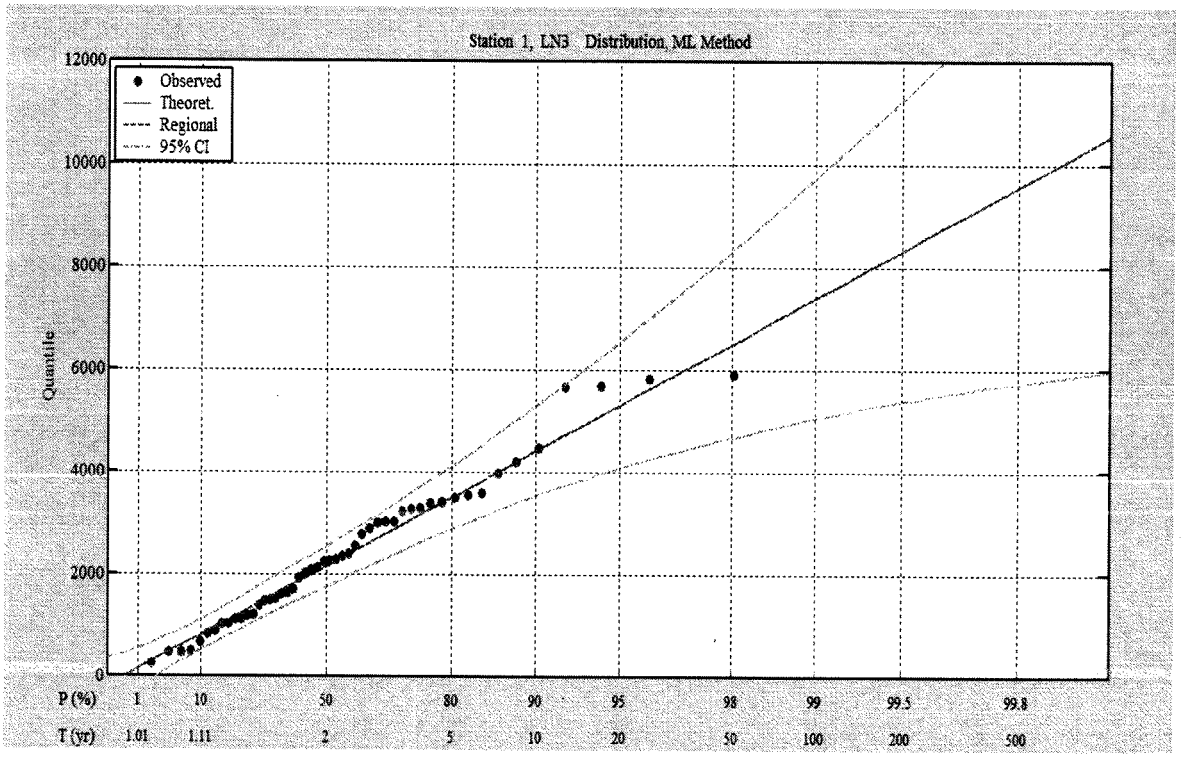


Figure 11. 10 - Quantile-frequency plot for 10-day Simulated Discharge at Galeta

56

14.0 CALIBRATION OFTHEHYDRODYNAMIC(iRIC)MODELLINGFRAMEWORK

iRIC (International River Interface Cooperative) modelling application provides an integrated river simulation environment and is a comprehensive, unified environment in which data necessary for river analysis solvers (hereafter: solvers) can be compiled and flood movement down river reaches can be simulated and visualized. In this study, the iRIC modeling platform has been used for the hydrodynamic simulation of river Hindon in order to simulate the water surface profiles.

The channel is discretized as a single vector along its centre line separate from the overlying flood-plain raster grid. At each point along the vector, the required channel parameters are the width, Manning's roughness value 'n' and bed elevation. The latter detail gives the bed slope and also the bankfull depth when the channel vector is combined with the flood-plain DEM. Each channel parameter can be specified at each point along the vector and the model interpolates linearly between these. Flows along the channel are simulated using the St.Venant equations and, when bankfull depth is exceeded, water spills out onto adjacent flood plains.

The model was applied successfully over the study reach after calibrating the model for Manning's roughness coefficient 'n' on the strength of comparison between observed and simulated water levels at Galeta GD site of CWC. The comparison has been made by comparing water levels of flood event of 25-year return period of simulated flows and observed flows.

15.0 HYDRODYNAMIC SIMULATION OF WATER SURFACE PROFILES IN RIVER HINDON USING iRIC MODELLING FRAMEWORK

The calibrated SWAT model was used to obtain inundation depths, taken as the difference between water and ground surface elevation. Simulation of water surface profiles was carried out for the following two scenarios:

15.1 Existing scenario with embankments as existing (Scenario 1):

57

This, as a currently prevailing scenario, has been developed with a predefined embankment coinciding with the designated boundary with a view to simulate the latter's influence on the extent of spread of flood flow across the Hindon floodplains following overbank spill. In other words, as per this scenario, the model setup confines the waterway to a restricted region between the boundaries which also therefore is the total available floodplain available across the entire study reach of the river.

15.2 Hindonfloodplain isin its natural state (i.e. bereft ofembankments,associated bank protection and other built up assets as Scenario 2):

In this scenario propagation of flood flows down the Hindon course and its movement across its flood plain was simulated with a model setup that assumed the study reach to be in its pristine state. The simulation, therefore, ignorespresence of the engineered embankments. The model setup for this scenario also disregarded presence of residential clusters and related utilities. The simulations therefore capture the flood flow transport phenomenon across Hindon when the latter would have been in its natural, pristine state thus allowing flood flows an unrestrained access to the entire expanse of the Hindonfloodplain.

Table: 7 below presents the simulated depth range and extent of inundations that are likely following a 7-Day, 25-year return period flood event in Hindon as flood courses down the river. The results are presented separately for the two simulated aforementioned scenarios namely Scenarios 1 and 2.

Table 7 - Simulated Depth Range and Extend of Inundation following a 7-Day, 25-YearReturn Period flood

58

S.No.	Range	Scenario 1- Existing Embankment Area in km²	Scenario 2 – Virgin Flow Area in km²
1	0.1 m - 0.5m	207.09	314.30
2	0.5 m – 1.0 m	181.19	315.83
3	1.0 m – 1.5 m	96.59	157.81
4	1.5 m – 2.0 m	59.79	59.47
5	2.0 m – 2.5 m	35.27	26.55
6	2.5 m – 3.0 m	20.78	11.98
7	3.0 m – 3.5 m	11.13	5.11
8	3.5 m – 4.5 m	10.63	4.04
9	4.5 m – 5.5 m	5.125	0.68
10	5.5 m – 6.5 m	6.511	0.06
11	>6.5 m (upto 7.9 m)	2.15	0

16.0 SIMULATED EXTENT OF FLOODING FOR SCENARIO 1:

a) **Hindon Basin:**

59

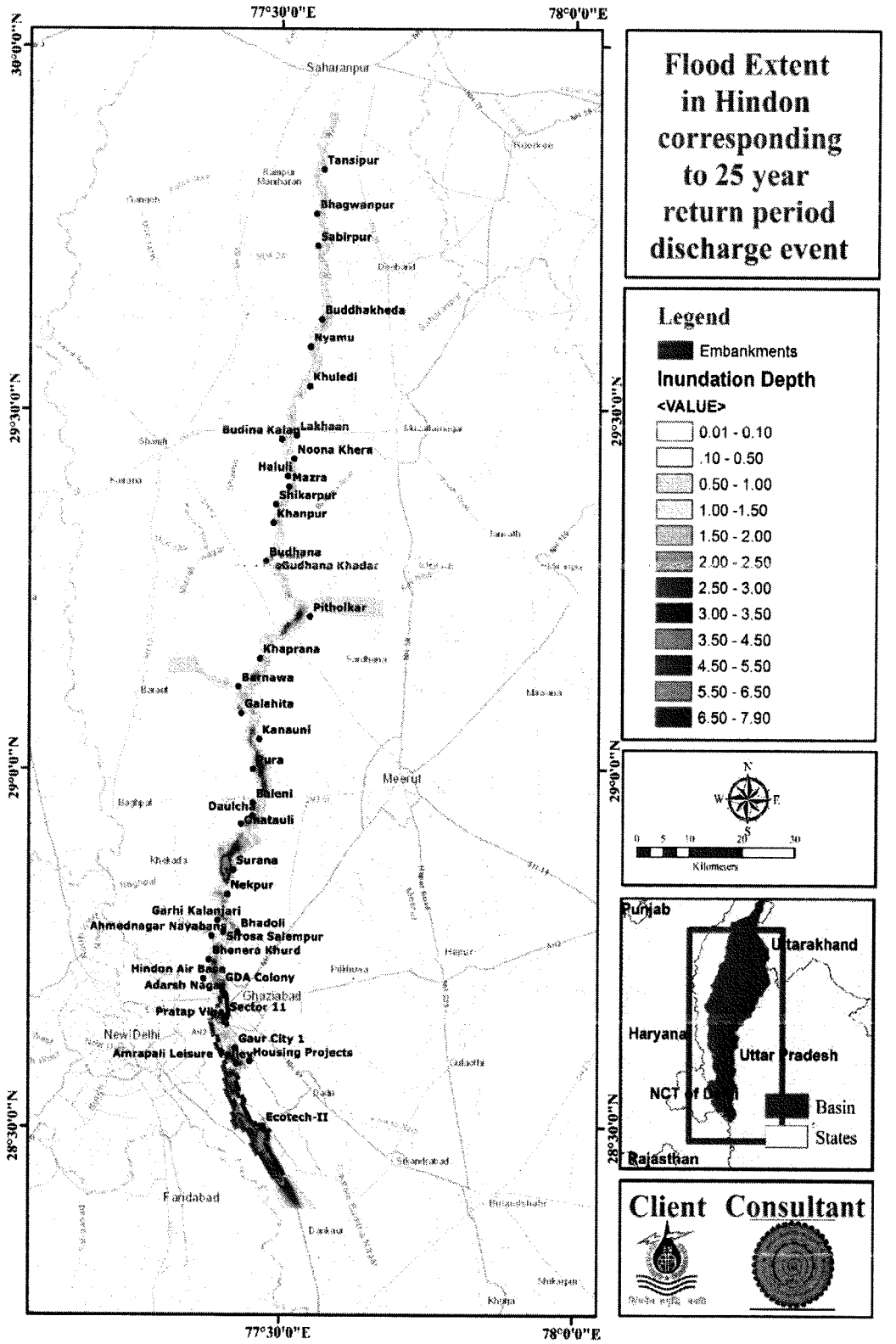


Figure 12 - Scenario 1 for Hindon Basin

b) GhaziabadSection:

60

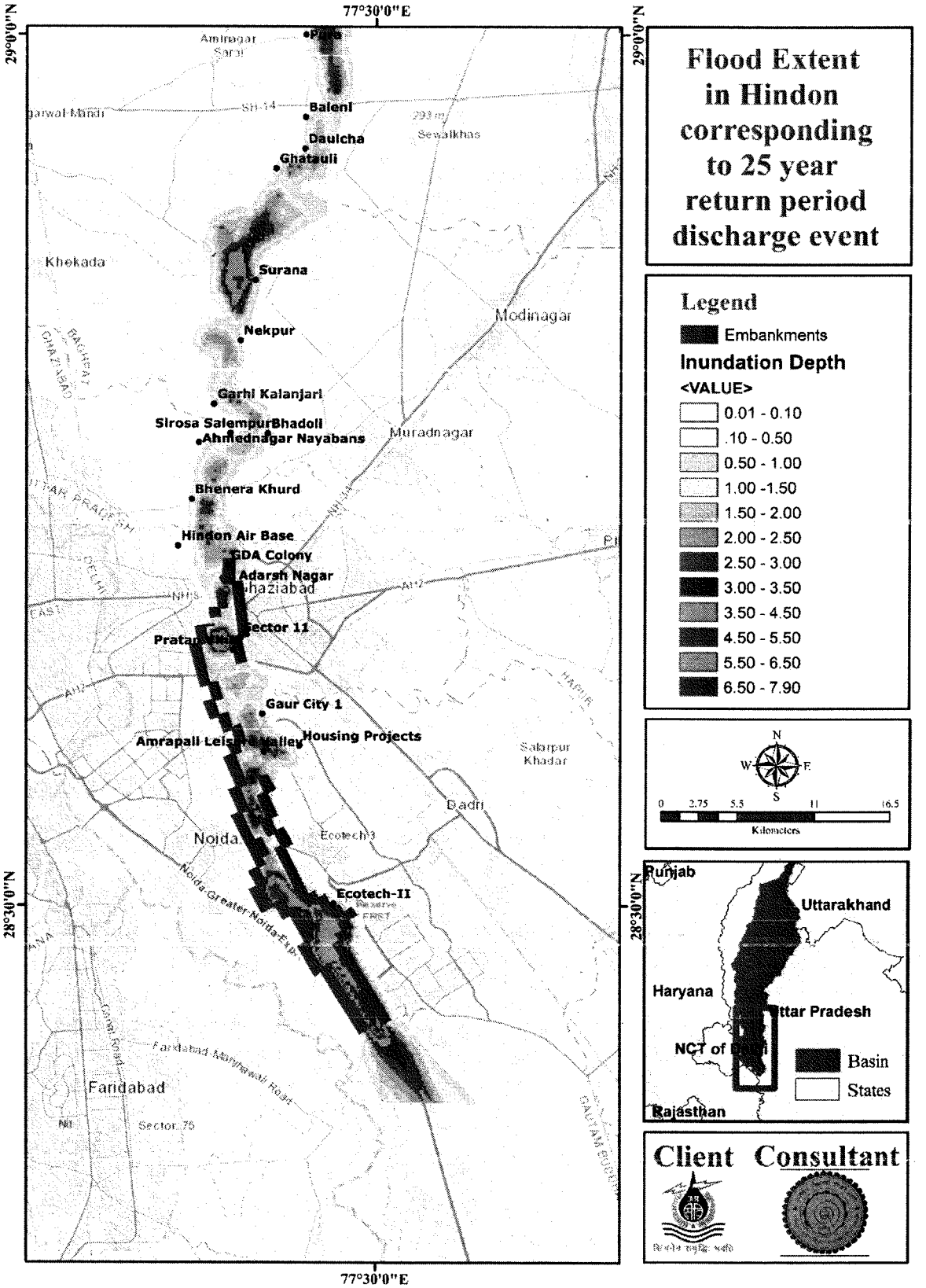


Figure 13 - Scenario 1 for Ghaziabad/Noida Section of Hindon Basin

c) Hindon Cut Canal to Budhana

61

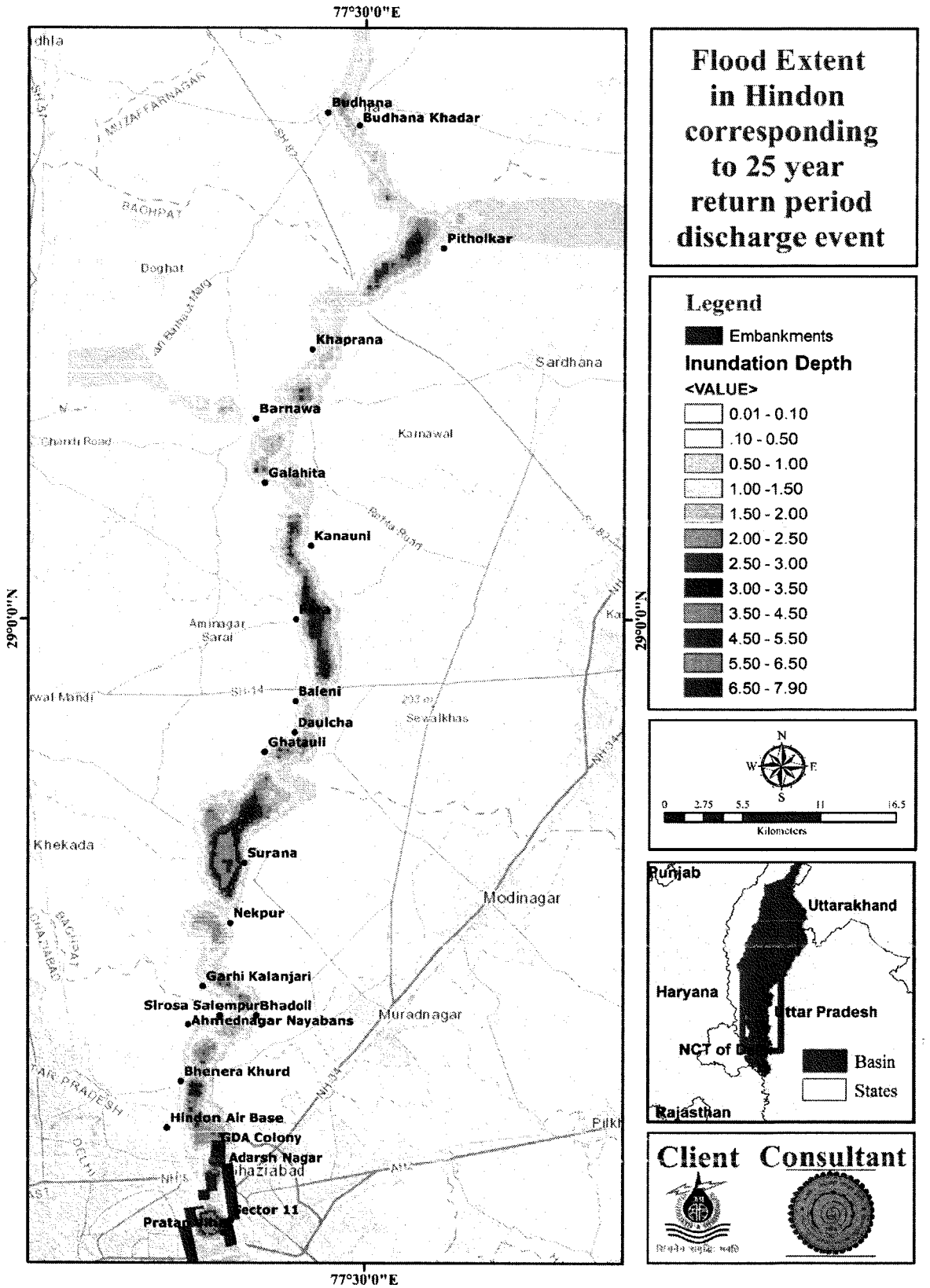


Figure 14 - Scenario 1 for Section from Hindon Cut to Budhana Canal

62

d) Budhana to Saharanpur Section:

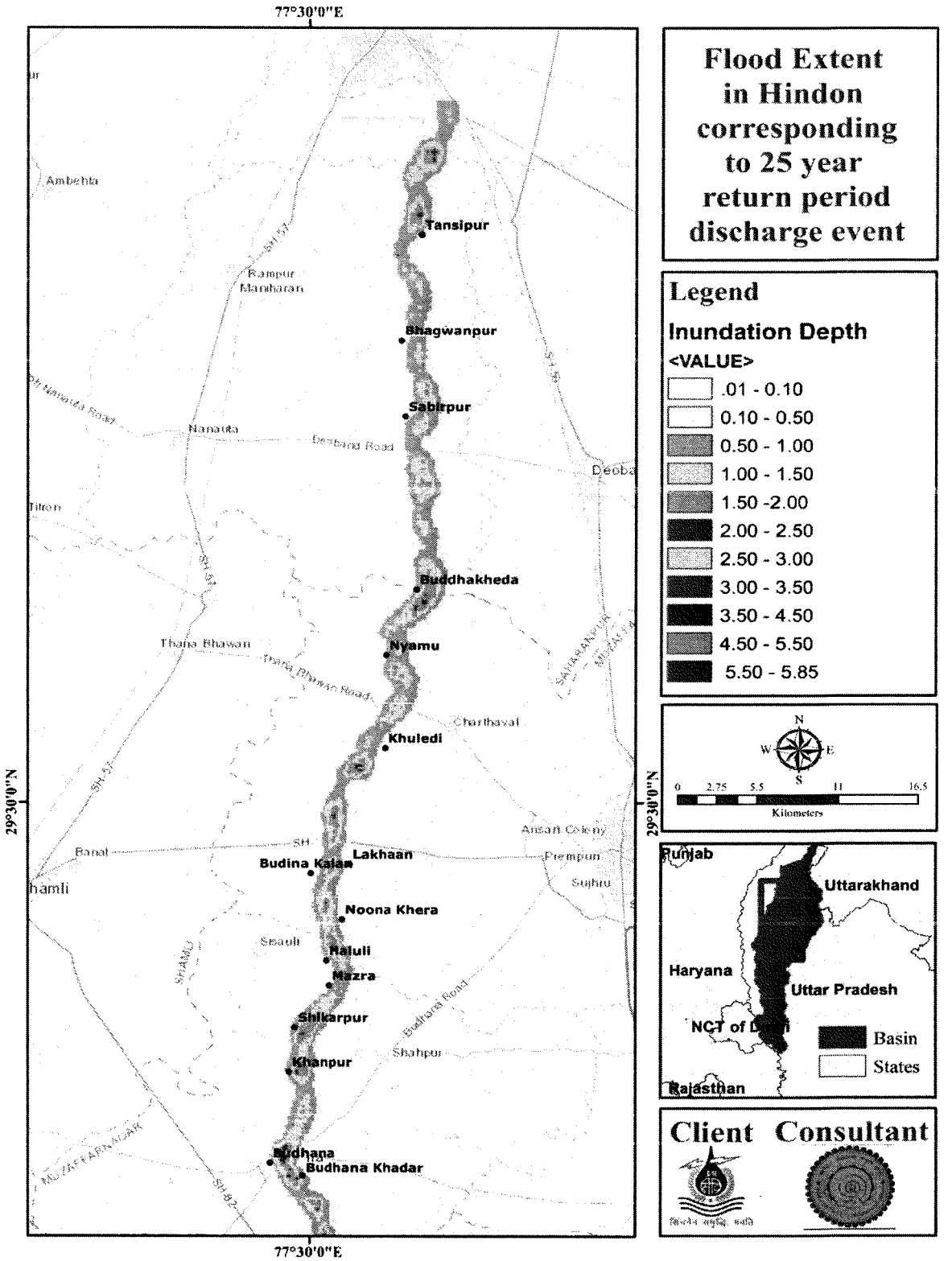


Figure 15 - Scenario 1 for section from Budhana Canal to Saharanpur

63

17.0 SIMULATED FLOODING EXTENT FOR SCENARIO 2:

a) Hindon Basin

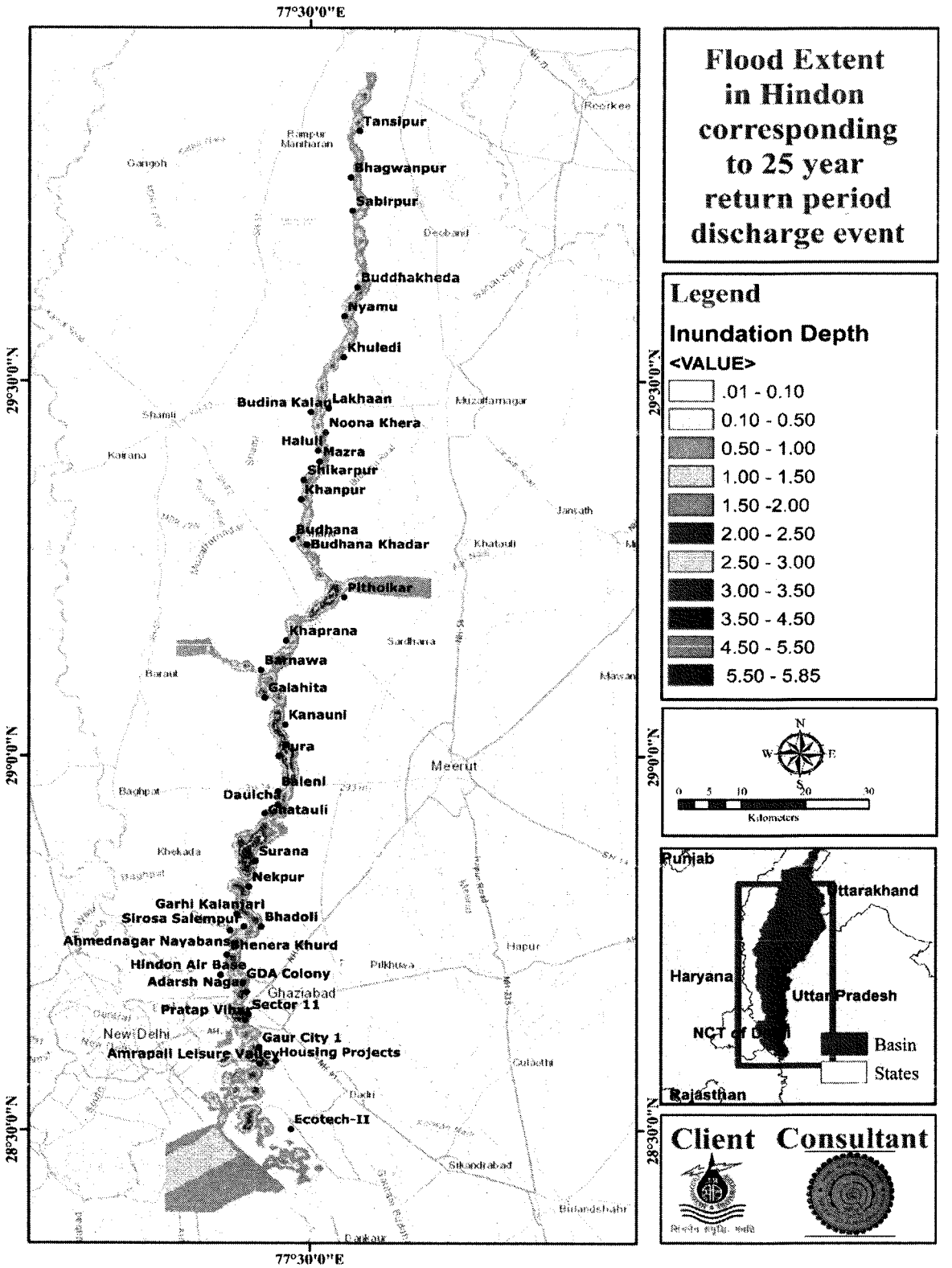


Figure 16 - Scenario 2 for Hindon Basin

64

b) Confluence with Yamuna to Ghaziabad (Hindon Cut Canal)

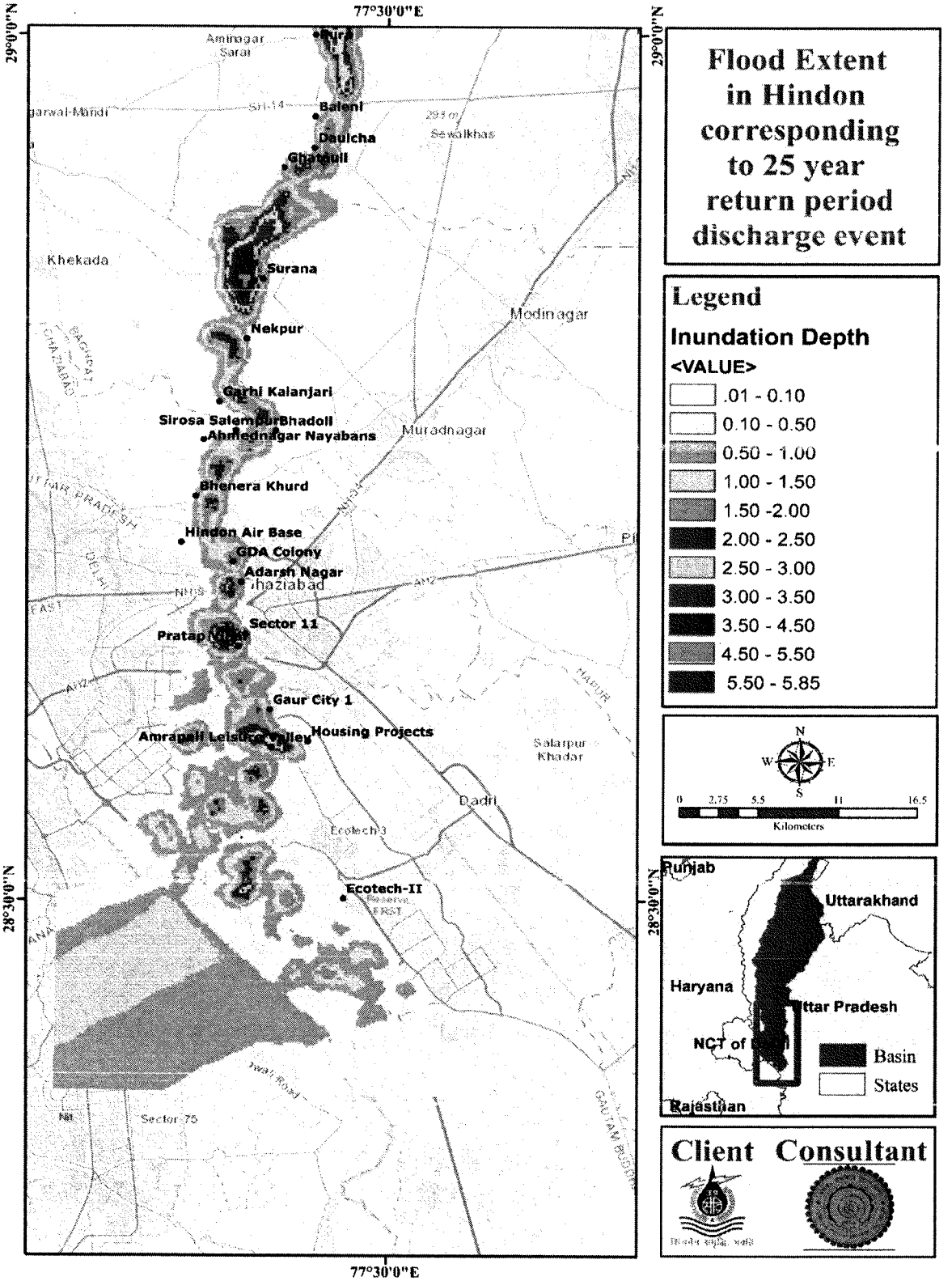


Figure 17 - Scenario 2 for Section in Ghaziabad and Noida

65

c) Hindon Cut to Budana Section

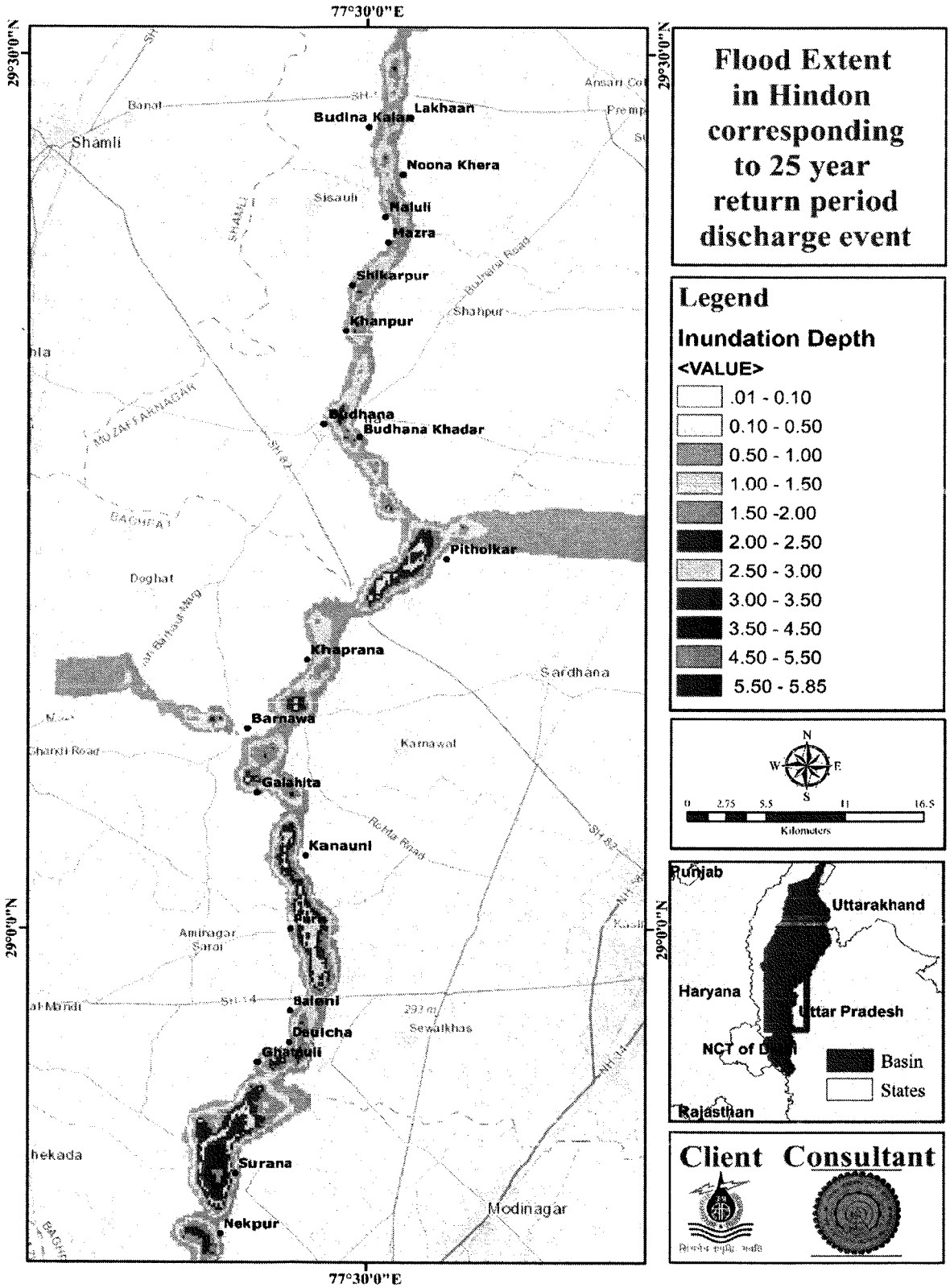


Figure 18 - Scenario 2 for Section from Hindon Cut to Budhana Canal

d) Budhana to Saharanpur Section

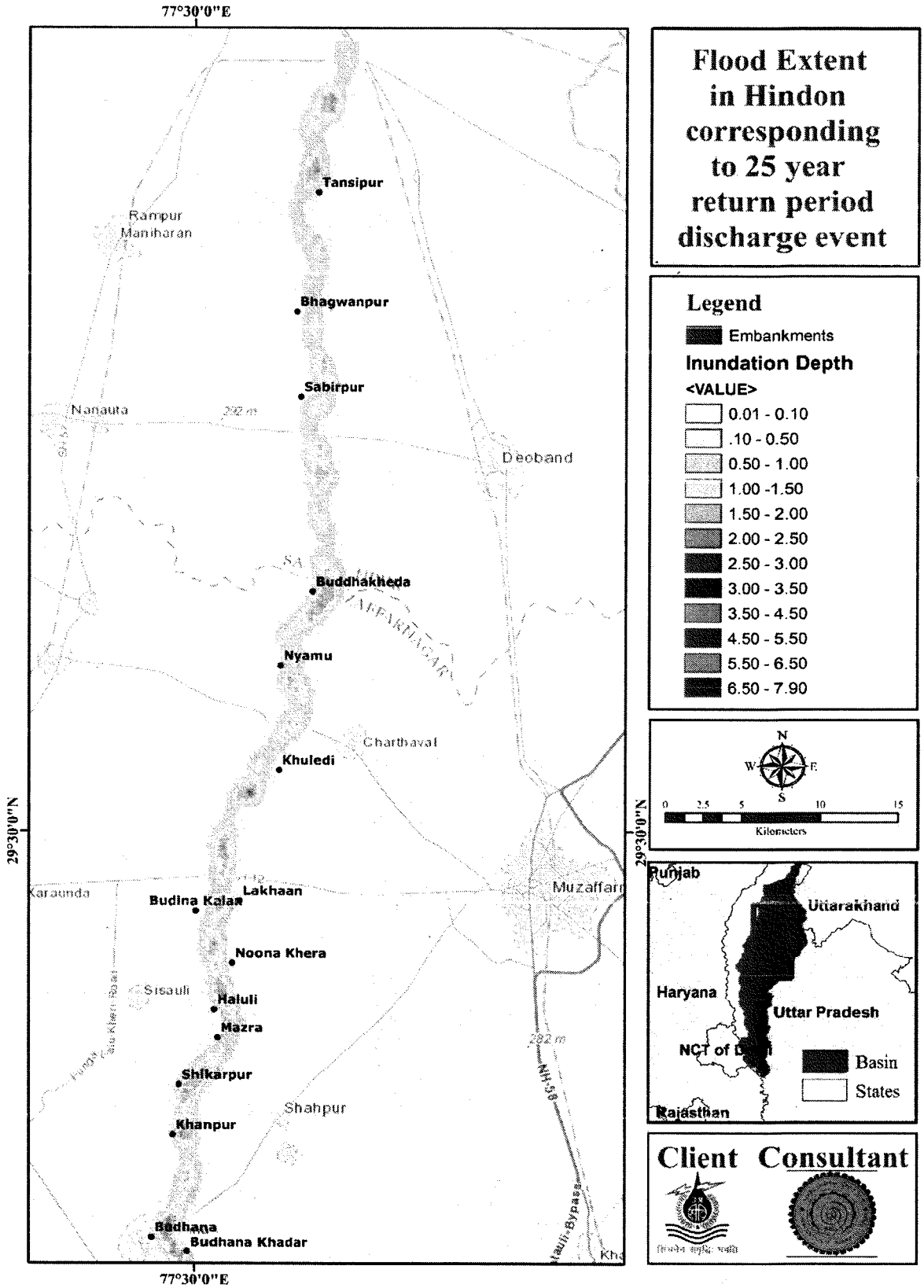


Figure 19 - Scenario 2 for section from Budhana Canal to Saharanpur

67

18.0 Conclusions &Recommendations:

This report has discussed the flood plains of Hindon River based on 25-year return period flood. The key issue in any flood plain zoning process is to reduce the flood risk for communities living adjacent to banks of the river. In this regard, it is to reiterate the fact that a substantial population lives in the flood plain as marked in the maps above.

Therefore, in view of this, it is recommended that following steps may be taken to better manage the flood risk and associated exigencies:

a) There is a need to establish a functional Flood Warning system across the entire Hindon basin with a special focus on the reach downstream of Hindon Cut Canal. The Flood Warning System should be capable of downlinking forecasts on expected rainfall over the basin using IMD's network of Doppler Radar. Further, Gauge to Gauge correlations together with Hydrodynamic Flood Flows transport model needs to be developed for the entire Hindon basin, including all important tributary systems, and integrated with the proposed Flood Warning system.

b) Efforts should be made to establish a network of local observation stations as part of an elaborate hydro-agro-meteorological data collection and recording system with a special focus on the station at Galeta and with additional sites identified based on an elaborate investigative study.

c) It is further recommended that studies leading to flood plain zoning corresponding to return periods of 5, 10, 50, and 100 years be commissioned in addition to the expected 25year return period flood plain delineation as has been accomplished in the present study. It is expected that such a study will enable the State to manage the flood plains of Hindonin a more objective manner and also permit zone specificregulation of flood plain activities by identifying those that are deemed permissible in contrast with those that need to be emphatically discouraged.

d) Further, the mechanism of efficient storage and retrieval of hydro-meteorological data such as rainfall, stage and discharge of daily/sub-daily flow, manually or electronically, at the important locations such as before entry and after exit of any major human settlements needs to be made.

e) There is a need to suspend all construction activity along the banks of River Hindon till adequate structural measures for flood control and flood containment are established. It merits mention that large floods, especially those having an expected return period of 25 years or longer, pose a grave challenge to habitations and other socio-economic infrastructure located nut just along the banks of river but also beyond in the connected flood plain.

f) Hindon basin supports large scale exploitation of surface as well as ground water along much of its course, especially from Saharanpur and down till its eventual confluence with Yamuna. It is suggested that resources be invested towards development of a comprehensive, Multi-Objective Integrated Water Resource Management Plan for the Hindon Basin. It is expected that such an initiative, upon conclusion, will provide a better framework for a sustainable Water Resources Management paradigm that also addresses multi-sectoral concerns for Water Security.

19.0 CAVEAT:

Hydrological modelling of the study basin's complex hydrological cycle and the basin's innate ability to deliver flood runoff into the latter system's drainage system is indeed challenging and entails approximations that may not always be reasonable and realistic. These approximations understandably impair the quality of model derived simulations.

Further, among other factors, the modelling efficiency is also essentially controlled by the quality of input data and its availability. With regard to the present study, lack of adequate and quality data was indeed a serious challenge and the results presented herein are expected to reflect that.

An important part of this study was to put together a credible framework to study the hydrodynamic transport phenomena of flood propagation across the various elements of the drainage network of Hindon basin.

Accordingly, hydrodynamic simulation of water surface profiles in river Hindon is based on the numerical solution of the governing St. Venant's equations. These equations are derived based on certain fundamental assumptions and may often represent a highly idealized physical system.

20.0 Acknowledgement:

We are grateful to Government of Uttar Pradesh for having reposed faith in us and entrusted us with the task of carrying out this challenging study. Studies, such as this one, need facilitation in various forms and at various levels and demand an active involvement of all stakeholders that represent the collective interests of the client organization.

Particular mention must also be made of the role of NGT and the Hon'ble Tribunals interest in setting exacting standards against which river basin management protocols must be benchmarked. Accordingly, we record our appreciation of the leadership role of the Hon'ble Tribunal that led to this study.

It is indeed a sombre moment as we record the role of the Late Mr. Ravindra Singh Yadav, Executive Engineer, Irrigation Const, Division, Ghaziabad who was the prime mover of this study. His passing away in January, 2018 was as tragic as it was unforeseen and our reminiscences of his involvement and keen initiatives in ensuring a smooth progress of the present study is as much a homage to his memory as it is to his drive and motivation.

Mr. Neeraj Lamba, succeeded Late Mr. Ravindra Singh Yadav as the nodal officer for this study. We also record the valuable contributions to the study by Mr. Lamba who had to work tirelessly and relentlessly for more than eighteen months to finally get the paperwork done for administrative clearance of release of grants that were committed by Government of UP to IIT Delhi as fee for this study.

We are also appreciative of the contribution made to the study by Mr. Parvez, formerly Assistant Engineer, Ghaziabad Division of UP Irrigation and Mr. Satish as the incumbent Assistant Engineer with the Ghaziabad Division of UP Irrigation.

70

We are also appreciative of the contribution made to the study by a number of students and staff of the Department of Civil Engineering, IIT Delhi.

Details of Extent of Flood Plain Corresponding to 25 Year Return Period Flood

ID	Left Side of Main Stem				Centre Line		Right Side of Main Stem				
	Longitude (decimal Degrees)	Latitude (decimal Degrees)	Flood Extent on Left Bank (in meters) (Eastern Side)	Angle	Longitude (decimal Degrees)	Latitude (decimal Degrees)	Angle	Flood Extent on Right Bank (in meters) (Western Side)	Longitude (decimal Degrees)	Latitude (decimal Degrees)	Chainage
1	77.5970747	29.9011427	260.81	0 degree with respect to East	77.5943760	29.9011958	180 degree with respect to East	1443.345	77.5794410	29.9014889	**Downstream of Saharanpur Town, Chainage = 394868.3 m**
2	77.5976082	29.9000720	462.23	0 degree with respect to East	77.5928254	29.9001661	180 degree with respect to East	1309.992	77.5792704	29.9004320	Chainage = 278454.62m
3	77.5974731	29.8993242	593.55	0 degree with respect to East	77.5913315	29.8994451	180 degree with respect to East	1219.023	77.5787178	29.8996924	Chainage = 278289.61m
4	77.5972156	29.8980680	711.66	0 degree with respect to East	77.5898520	29.8982129	180 degree with respect to East	1119.176	77.5782716	29.8984399	Chainage = 278091.86m
5	77.5971088	29.8968253	812.81	0 degree with respect to East	77.5886987	29.8969907	180 degree with respect to East	971.741	77.5786440	29.8971877	Chainage = 277916.4m
6	77.5970319	29.8950848	789.62	0 degree with respect to East	77.5888618	29.8952455	180 degree with respect to East	1027.879	77.5782264	29.8954539	Chainage = 277722.23m
7	77.5968594	29.8946043	893.86	0 degree with respect to East	77.5876108	29.8947861	180 degree with respect to East	931.955	77.5779680	29.8949750	Chainage = 277591.06m
8	77.5966571	29.8941438	1044.51	0 degree with respect to East	77.5858499	29.8943562	180 degree with respect to East	790.822	77.5776674	29.8945165	Chainage = 277414.36m
9	77.5964637	29.8931961	1163.34	0 degree with respect to East	77.5844270	29.8934326	180 degree with respect to East	687.343	77.5773153	29.8935718	Chainage = 277242.92m
10	77.5960507	29.8916661	1208.85	0 degree with respect to East	77.5835434	29.8919117	180 degree with respect to East	687.176	77.5764335	29.8920509	Chainage = 277053.89m

482

11	77.5939312	29.8901696	1089.41	0 degree with respect to East	77.5826598	29.8903908	180 degree with respect to East	679.929	77.5756250	29.8905284	Chainage = 276864.86m
12	77.5943125	29.8903746	1283.93	0 degree with respect to East	77.5810285	29.8906353	180 degree with respect to East	503.438	77.5758197	29.8907371	Chainage = 276704.92m
13	77.5932973	29.8895093	1341.64	0 degree with respect to East	77.5794163	29.8897816	180 degree with respect to East	402.500	77.5752519	29.8898630	Chainage = 276522.63m
14	77.5924821	29.8878926	1245.49	0 degree with respect to East	77.5795961	29.8881453	180 degree with respect to East	419.623	77.5752546	29.8882301	Chainage = 276340.35m
15	77.5923140	29.8860798	1222.41	0 degree with respect to East	77.5796671	29.8863279	180 degree with respect to East	605.571	77.5734018	29.8864503	Chainage = 276138.7m
16	77.5916482	29.8846443	1166.99	0 degree with respect to East	77.5795748	29.8848811	180 degree with respect to East	1087.958	77.5683189	29.8851008	Chainage = 275978.02m
17	77.5910602	29.8829307	1071.48	0 degree with respect to East	77.5799750	29.8831481	180 degree with respect to East	1315.947	77.5663606	29.8834137	Chainage = 275781.99m
18	77.5899975	29.8814317	885.60	0 degree with respect to East	77.5808356	29.8816113	180 degree with respect to East	1465.413	77.5656750	29.8819071	Chainage = 275592.37m
19	77.5885723	29.8796723	722.65	0 degree with respect to East	77.5810963	29.8798188	180 degree with respect to East	1539.085	77.5651739	29.8801295	Chainage = 275392.01m
20	77.5886193	29.8780274	790.60	0 degree with respect to East	77.5804404	29.8781877	180 degree with respect to East	1468.492	77.5652485	29.8784840	Chainage = 275200.34m
21	77.5889394	29.8766284	937.25	0 degree with respect to East	77.5792436	29.8768184	180 degree with respect to East	1407.290	77.5646851	29.8771023	Chainage = 275009.47m
22	77.5888487	29.8757700	1069.14	0 degree with respect to East	77.5777886	29.8759866	180 degree with respect to East	1424.139	77.5630558	29.8762738	Chainage = 274841.3m
23	77.5886813	29.8754255	1227.16	0 degree with respect to East	77.5759865	29.8756741	180 degree with respect to East	1317.846	77.5623534	29.8759396	Chainage = 274663.73m
24	77.5883829	29.8747092	1359.73	0 degree with respect to East	77.5743167	29.8749845	180 degree with respect to East	1233.141	77.5615599	29.8752328	Chainage = 274485.16m
25	77.5884032	29.8741738	1513.47	0 degree with respect to East	77.5727468	29.8744801	180 degree with respect to East	1110.267	77.5612612	29.8747037	Chainage = 274323.46m
26	77.5884735	29.8733581	1677.82	0 degree with respect to East	77.5711170	29.8736975	180 degree with respect to East	979.710	77.5609821	29.8738947	Chainage = 274143.63m
27	77.5883488	29.8716410	1685.70	0 degree with respect to East	77.5709111	29.8719821	180 degree with respect to East	1038.666	77.5601665	29.8721910	Chainage = 273952.36m
28	77.5880899	29.8709701	1500.44	0 degree with respect to East	77.5725687	29.8712737	180 degree with respect to East	1268.430	77.5594474	29.8715289	Chainage = 273773.93m

29	77.5884030	29.8717664	1420.15	0 degree with respect to East	77.5737122	29.8720539	180 degree with respect to East	1300.305	77.5602610	29.8723156	Chainage = 273633.58m
30	77.5882668	29.8714305	1269.27	0 degree with respect to East	77.5751370	29.8716874	180 degree with respect to East	1463.548	77.5599971	29.8719821	Chainage = 273490.01m
31	77.5878673	29.8701756	1330.24	0 degree with respect to East	77.5741068	29.8704448	180 degree with respect to East	1440.235	77.5592084	29.8707347	Chainage = 273320.02m
32	77.5877833	29.8698674	1200.39	0 degree with respect to East	77.5753662	29.8701104	180 degree with respect to East	1561.612	77.5592122	29.8704248	Chainage = 273192.79m
33	77.5872510	29.8685791	1224.09	0 degree with respect to East	77.5745888	29.8688269	180 degree with respect to East	1434.212	77.5597528	29.8691156	Chainage = 273031.84m
34	77.5872510	29.8685791	1410.19	0 degree with respect to East	77.5726637	29.8688644	180 degree with respect to East	1248.115	77.5597528	29.8691156	Chainage = 272845.74m
35	77.5867352	29.8677868	1502.97	0 degree with respect to East	77.5711884	29.8680907	180 degree with respect to East	1228.027	77.5584853	29.8683377	Chainage = 272679.33m
36	77.5862930	29.8675279	1637.18	0 degree with respect to East	77.5693579	29.8678589	180 degree with respect to East	1102.460	77.5579538	29.8680805	Chainage = 272500.56m
37	77.5867352	29.8677868	1839.51	0 degree with respect to East	77.5677071	29.8681585	180 degree with respect to East	891.485	77.5584853	29.8683377	Chainage = 272337.59m
38	77.5869557	29.8680803	1985.79	0 degree with respect to East	77.5664144	29.8684816	180 degree with respect to East	677.234	77.5594089	29.8686177	Chainage = 272207.62m
39	77.5842092	29.8665004	1668.58	0 degree with respect to East	77.5669494	29.8668374	180 degree with respect to East	984.398	77.5567666	29.8670351	Chainage = 272018.1m
40	77.5829098	29.8650742	1444.96	0 degree with respect to East	77.5679634	29.8653660	180 degree with respect to East	1129.990	77.5562748	29.8655930	Chainage = 271827.77m
41	77.5820160	29.8638224	1220.99	0 degree with respect to East	77.5693864	29.8640690	180 degree with respect to East	1266.863	77.5562822	29.8643236	Chainage = 271628.77m
42	77.5791747	29.8624263	848.29	0 degree with respect to East	77.5704004	29.8625976	180 degree with respect to East	1366.547	77.5562652	29.8628722	Chainage = 271438.44m
43	77.5778062	29.8610959	717.17	0 degree with respect to East	77.5703882	29.8612406	180 degree with respect to East	1356.482	77.5563574	29.8615132	Chainage = 271287.96m
44	77.5775142	29.8597423	615.66	0 degree with respect to East	77.5711463	29.8598666	180 degree with respect to East	1416.294	77.5564970	29.8601512	Chainage = 271118.89m
45	77.5778848	29.8580122	698.50	0 degree with respect to East	77.5706602	29.8581532	180 degree with respect to East	1310.609	77.5571043	29.8584166	Chainage = 270923.17m
46	77.5778172	29.8563829	758.16	0 degree with respect to East	77.5699755	29.8565359	180 degree with respect to East	1010.169	77.5595273	29.8567390	Chainage = 270732.01m

47	77.5780126	29.8551179	887.97	0 degree with respect to East	77.5688284	29.8552970	180 degree with respect to East	826.005	77.5602851	29.8554631	Chainage = 270555.46m
48	77.5783571	29.8544681	1061.56	0 degree with respect to East	77.5673777	29.8546821	180 degree with respect to East	695.164	77.5601877	29.8548218	Chainage = 270399.54m
49	77.5785030	29.8530135	977.64	0 degree with respect to East	77.5683916	29.8532107	180 degree with respect to East	824.304	77.5598661	29.8533764	Chainage = 270209.2m
50	77.5784977	29.8515619	879.11	0 degree with respect to East	77.5694056	29.8517393	180 degree with respect to East	817.607	77.5609494	29.8519036	Chainage = 270018.86m
51	77.5786215	29.8508261	733.00	0 degree with respect to East	77.5710405	29.8509740	180 degree with respect to East	967.553	77.5610336	29.8511686	Chainage = 269839.48m
52	77.5787209	29.8505567	566.72	0 degree with respect to East	77.5728597	29.8506711	180 degree with respect to East	1143.048	77.5610378	29.8509010	Chainage = 269660.44m
53	77.5788602	29.8501736	408.60	0 degree with respect to East	77.5746343	29.8502561	180 degree with respect to East	1335.126	77.5608259	29.8505248	Chainage = 269482.84m
54	77.5790239	29.8487420	381.18	0 degree with respect to East	77.5750816	29.8488190	180 degree with respect to East	1527.034	77.5592887	29.8491262	Chainage = 269317.72m
55	77.5788838	29.8473689	486.87	0 degree with respect to East	77.5738485	29.8474672	180 degree with respect to East	1494.054	77.5583969	29.8477676	Chainage = 269126.2m
56	77.5791545	29.8460395	608.11	0 degree with respect to East	77.5728655	29.8461623	180 degree with respect to East	1475.209	77.5576089	29.8464588	Chainage = 268953.09m
57	77.5794342	29.8449600	782.25	0 degree with respect to East	77.5713443	29.8451179	180 degree with respect to East	1341.065	77.5574751	29.8453874	Chainage = 268765.9m
58	77.5793539	29.8439174	892.84	0 degree with respect to East	77.5701204	29.8440976	180 degree with respect to East	1232.134	77.5573779	29.8443451	Chainage = 268602.19m
59	77.5790324	29.8423089	872.47	0 degree with respect to East	77.5700097	29.8424849	180 degree with respect to East	1249.260	77.5570904	29.8427358	Chainage = 268423.04m
60	77.5792632	29.8408354	800.50	0 degree with respect to East	77.5709850	29.8409969	180 degree with respect to East	1360.833	77.5569120	29.8412703	Chainage = 268233m
61	77.5790033	29.8394260	669.24	0 degree with respect to East	77.5720826	29.8395611	180 degree with respect to East	1500.527	77.5565652	29.8398625	Chainage = 268041.66m
62	77.5787949	29.8385181	797.48	0 degree with respect to East	77.5705480	29.8386789	180 degree with respect to East	1348.877	77.5565990	29.8389499	Chainage = 267863.96m
63	77.5789313	29.8391919	929.75	0 degree with respect to East	77.5693165	29.8393794	180 degree with respect to East	1236.527	77.5565292	29.8396277	Chainage = 267721.81m
64	77.5791717	29.8398482	1073.62	0 degree with respect to East	77.5680692	29.8400647	180 degree with respect to East	1106.527	77.5566261	29.8402868	Chainage = 267579.27m

485

65	77.5787906	29.8384935	1128.21	0 degree with respect to East	77.5671237	29.8387210	180 degree with respect to East	1016.728	77.5566095	29.8389250	Chainage = 267404.47m
66	77.5784968	29.8368667	1095.32	0 degree with respect to East	77.5671701	29.8370874	180 degree with respect to East	1026.706	77.5565528	29.8372935	Chainage = 267223.27m
67	77.5784697	29.8366576	950.74	0 degree with respect to East	77.5686381	29.8368493	180 degree with respect to East	1172.442	77.5565138	29.8370847	Chainage = 267078.91m
68	77.5786499	29.8375550	888.51	0 degree with respect to East	77.5694618	29.8377342	180 degree with respect to East	1235.449	77.5566859	29.8379823	Chainage = 266952.54m
69	77.5781659	29.8359691	774.82	0 degree with respect to East	77.5701536	29.8361254	180 degree with respect to East	1360.682	77.5560829	29.8363986	Chainage = 266762.01m
70	77.5746705	29.8343675	494.84	0 degree with respect to East	77.5695535	29.8344672	180 degree with respect to East	1417.085	77.5548997	29.8347516	Chainage = 266569.2m
71	77.5741945	29.8329305	553.42	0 degree with respect to East	77.5684718	29.8330420	180 degree with respect to East	1332.788	77.5546899	29.8333094	Chainage = 266379.69m
72	77.5741666	29.8327236	729.79	0 degree with respect to East	77.5666202	29.8328705	180 degree with respect to East	1156.148	77.5546649	29.8331024	Chainage = 266199.66m
73	77.5742408	29.8332571	870.09	0 degree with respect to East	77.5652436	29.8334322	180 degree with respect to East	1018.359	77.5547131	29.8336365	Chainage = 266052.71m
74	77.5742392	29.8332458	1055.70	0 degree with respect to East	77.5633226	29.8334582	180 degree with respect to East	832.671	77.5547122	29.8336251	Chainage = 265866.96m
75	77.5741548	29.8324563	1206.65	0 degree with respect to East	77.5616774	29.8326990	180 degree with respect to East	700.935	77.5544293	29.8328395	Chainage = 265686.99m
76	77.5741976	29.8329522	1347.69	0 degree with respect to East	77.5602616	29.8332233	180 degree with respect to East	538.726	77.5546908	29.8333312	Chainage = 265538.28m
77	77.5741189	29.8319715	1407.32	0 degree with respect to East	77.5595666	29.8322544	180 degree with respect to East	561.242	77.5537630	29.8323668	Chainage = 265411.56m
78	77.5736438	29.8308223	1235.81	0 degree with respect to East	77.5608650	29.8310708	180 degree with respect to East	776.192	77.5528388	29.8312263	Chainage = 265229.94m
79	77.5698382	29.8290888	846.92	0 degree with respect to East	77.5610808	29.8292590	180 degree with respect to East	857.414	77.5522149	29.8294307	Chainage = 265027.95m
80	77.5693757	29.8273129	836.27	0 degree with respect to East	77.5607287	29.8274809	180 degree with respect to East	843.143	77.5520105	29.8276497	Chainage = 264827.85m
81	77.5683056	29.8259405	848.45	0 degree with respect to East	77.5595327	29.8261109	180 degree with respect to East	749.861	77.5517792	29.8262610	Chainage = 264636.93m
82	77.5676921	29.8252014	933.54	0 degree with respect to East	77.5580394	29.8253887	180 degree with respect to East	603.994	77.5517941	29.8255096	Chainage = 264471.82m

83	77.5674869	29.8245613	1077.84	0 degree with respect to East	77.5563422	29.8247776	180 degree with respect to East	437.185	77.5518217	29.8248650	Chainage = 264294.28m
84	77.5673986	29.8243020	1245.69	0 degree with respect to East	77.5545184	29.8245519	180 degree with respect to East	258.758	77.5518429	29.8246036	Chainage = 264116.17m
85	77.5675396	29.8247162	1389.29	0 degree with respect to East	77.5531746	29.8249948	180 degree with respect to East	133.377	77.5517955	29.8250214	Chainage = 263977.27m
86	77.5666557	29.8231662	1265.65	0 degree with respect to East	77.5535693	29.8234200	180 degree with respect to East	177.977	77.5517291	29.8234556	Chainage = 263798.52m
87	77.5662274	29.8217479	1120.72	0 degree with respect to East	77.5546397	29.8219726	180 degree with respect to East	290.806	77.5516329	29.8220307	Chainage = 263607.54m
88	77.5648410	29.8201796	919.68	0 degree with respect to East	77.5553322	29.8203640	180 degree with respect to East	333.527	77.5518837	29.8204307	Chainage = 263417.01m
89	77.5666582	29.8184951	1040.19	0 degree with respect to East	77.5559034	29.8187037	180 degree with respect to East	389.792	77.5518733	29.8187816	Chainage = 263224.8m
90	77.5675230	29.8169114	1050.74	0 degree with respect to East	77.5566594	29.8171222	180 degree with respect to East	441.295	77.5520968	29.8172104	Chainage = 263034.8m
91	77.5678571	29.8158375	937.71	0 degree with respect to East	77.5581623	29.8160257	180 degree with respect to East	571.574	77.5522528	29.8161400	Chainage = 262845.32m
92	77.5686759	29.8143678	919.26	0 degree with respect to East	77.5591720	29.8145524	180 degree with respect to East	671.292	77.5522316	29.8146867	Chainage = 262654.99m
93	77.5698875	29.8125568	1011.22	0 degree with respect to East	77.5594330	29.8127598	180 degree with respect to East	698.181	77.5522148	29.8128995	Chainage = 262454.62m
94	77.5696863	29.8109114	936.53	0 degree with respect to East	77.5600042	29.8110995	180 degree with respect to East	752.054	77.5522291	29.8112500	Chainage = 262262.4m
95	77.5740616	29.8091770	1304.52	0 degree with respect to East	77.5605753	29.8094391	180 degree with respect to East	787.735	77.5524315	29.8095968	Chainage = 262070.18m
96	77.5753526	29.8078141	1342.70	0 degree with respect to East	77.5614718	29.8080840	180 degree with respect to East	840.789	77.5527796	29.8082523	Chainage = 261896.7m
97	77.5756795	29.8069425	1221.23	0 degree with respect to East	77.5630545	29.8071881	180 degree with respect to East	964.329	77.5530853	29.8073811	Chainage = 261714.22m
98	77.5760805	29.8064718	1091.53	0 degree with respect to East	77.5647965	29.8066914	180 degree with respect to East	1120.630	77.5532114	29.8069159	Chainage = 261536.99m
99	77.5756614	29.8070150	915.18	0 degree with respect to East	77.5662004	29.8071992	180 degree with respect to East	1270.720	77.5530636	29.8074538	Chainage = 261390.01m
100	77.5757020	29.8068515	739.13	0 degree with respect to East	77.5680611	29.8070003	180 degree with respect to East	1445.996	77.5531124	29.8072901	Chainage = 261208.72m

101	77.5774784	29.8053746	874.43	0 degree with respect to East	77.5684387	29.8055507	180 degree with respect to East	1433.527	77.5536192	29.8058380	Chainage = 261043.87m
102	77.5778749	29.8047568	993.76	0 degree with respect to East	77.5676017	29.8049569	180 degree with respect to East	1278.032	77.5543896	29.8052131	Chainage = 260939.52m
103	77.5784824	29.8031114	1017.10	0 degree with respect to East	77.5679682	29.8033162	180 degree with respect to East	1097.415	77.5566236	29.8035363	Chainage = 260754.16m
104	77.5787565	29.8014071	1095.64	0 degree with respect to East	77.5674305	29.8016277	180 degree with respect to East	619.868	77.5610227	29.8017521	Chainage = 260559.84m
105	77.5790013	29.7997580	1182.71	0 degree with respect to East	77.5667754	29.7999961	180 degree with respect to East	582.336	77.5607557	29.8001129	Chainage = 260368.14m
106	77.5789441	29.7988834	1026.34	0 degree with respect to East	77.5683348	29.7990901	180 degree with respect to East	689.609	77.5612062	29.7992285	Chainage = 260186.92m
107	77.5788183	29.7973551	993.05	0 degree with respect to East	77.5685532	29.7975551	180 degree with respect to East	647.725	77.5618577	29.7976851	Chainage = 260015.4m
108	77.5788139	29.7973237	1140.21	0 degree with respect to East	77.5670277	29.7975533	180 degree with respect to East	499.364	77.5618658	29.7976535	Chainage = 259867.85m
109	77.5787901	29.7970722	1315.52	0 degree with respect to East	77.5651918	29.7973369	180 degree with respect to East	315.536	77.5619301	29.7974002	Chainage = 259688.68m
110	77.5789739	29.7959831	1343.51	0 degree with respect to East	77.5650863	29.7962535	180 degree with respect to East	318.517	77.5617938	29.7963174	Chainage = 259568.11m
111	77.5789771	29.7947529	1204.69	0 degree with respect to East	77.5665246	29.7949954	180 degree with respect to East	460.734	77.5617621	29.7950878	Chainage = 259371.1m
112	77.5788657	29.7940919	1033.07	0 degree with respect to East	77.5681873	29.7942999	180 degree with respect to East	602.967	77.5619546	29.7944209	Chainage = 259192.75m
113	77.5788150	29.7925759	1063.90	0 degree with respect to East	77.5678181	29.7927901	180 degree with respect to East	555.160	77.5620797	29.7929015	Chainage = 259021.56m
114	77.5788725	29.7914377	947.14	0 degree with respect to East	77.5690826	29.7916284	180 degree with respect to East	722.259	77.5616171	29.7917734	Chainage = 258843.93m
115	77.5788822	29.7909025	798.62	0 degree with respect to East	77.5706276	29.7910634	180 degree with respect to East	903.805	77.5612856	29.7912448	Chainage = 258681.89m
116	77.5788879	29.7907841	617.45	0 degree with respect to East	77.5725058	29.7909085	180 degree with respect to East	1093.345	77.5612047	29.7911281	Chainage = 258499.41m
117	77.5787647	29.7895673	685.01	0 degree with respect to East	77.5716844	29.7897053	180 degree with respect to East	1049.327	77.5608383	29.7899160	Chainage = 258344.13m
118	77.5786904	29.7888026	823.97	0 degree with respect to East	77.5701738	29.7889686	180 degree with respect to East	909.581	77.5607723	29.7891511	Chainage = 258176.73m

488

27

119	77.5786318	29.7871571	762.49	0 degree with respect to East	77.5707509	29.7873107	180 degree with respect to East	1108.136	77.5592973	29.7875331	Chainage = 257984.61m
120	77.5782451	29.7853744	700.45	0 degree with respect to East	77.5710055	29.7855154	180 degree with respect to East	1270.605	77.5578728	29.7857703	Chainage = 257784.02m
121	77.5779496	29.7837357	735.24	0 degree with respect to East	77.5703505	29.7838837	180 degree with respect to East	1240.308	77.5575312	29.7841324	Chainage = 257592.31m
122	77.5773544	29.7818216	682.43	0 degree with respect to East	77.5703013	29.7819589	180 degree with respect to East	1200.378	77.5578949	29.7821997	Chainage = 257378.82m
123	77.5757742	29.7802235	469.85	0 degree with respect to East	77.5709183	29.7803181	180 degree with respect to East	1202.185	77.5584934	29.7805592	Chainage = 257187.33m
124	77.5760884	29.7788237	389.50	0 degree with respect to East	77.5720630	29.7789021	180 degree with respect to East	1282.783	77.5588053	29.7791595	Chainage = 256995.2m
125	77.5769165	29.7772971	384.57	0 degree with respect to East	77.5729420	29.7773746	180 degree with respect to East	1205.156	77.5604869	29.7776165	Chainage = 256805.66m
126	77.5773070	29.7756442	485.58	0 degree with respect to East	77.5722888	29.7757420	180 degree with respect to East	1022.362	77.5617229	29.7759472	Chainage = 256613.91m
127	77.5774097	29.7742691	380.30	0 degree with respect to East	77.5734795	29.7743456	180 degree with respect to East	1121.292	77.5618915	29.7745708	Chainage = 256420.92m
128	77.5774073	29.7740791	232.04	0 degree with respect to East	77.5750093	29.7741259	180 degree with respect to East	1270.982	77.5618743	29.7743811	Chainage = 256270.94m
129	77.5774120	29.7738115	91.91	0 degree with respect to East	77.5764621	29.7738301	180 degree with respect to East	1413.160	77.5618577	29.7741140	Chainage = 256126.62m
130	77.5775465	29.7727876	42.22	0 degree with respect to East	77.5779829	29.7727791	180 degree with respect to East	1595.425	77.5614951	29.7730997	Chainage = 255938.93m
131	77.5779357	29.7711558	65.25	0 degree with respect to East	77.5786100	29.7711426	180 degree with respect to East	1625.741	77.5618092	29.7714693	Chainage = 255747.58m
132	77.5780001	29.7696506	33.67	0 degree with respect to East	77.5776521	29.7696574	180 degree with respect to East	1547.291	77.5616623	29.7699682	Chainage = 255558.6m
133	77.5779155	29.7684518	130.74	0 degree with respect to East	77.5765645	29.7684782	180 degree with respect to East	1494.943	77.5611158	29.7687784	Chainage = 255390.76m
134	77.5779160	29.7675894	267.89	0 degree with respect to East	77.5751477	29.7676433	180 degree with respect to East	1359.743	77.5610963	29.7679163	Chainage = 255225.36m
135	77.5778930	29.7671987	414.90	0 degree with respect to East	77.5736055	29.7672822	180 degree with respect to East	1198.902	77.5612162	29.7675229	Chainage = 255070.88m
136	77.5779251	29.7676492	559.54	0 degree with respect to East	77.5721429	29.7677618	180 degree with respect to East	1068.834	77.5610977	29.7679763	Chainage = 254919.72m

489

137	77.5779204	29.7681842	692.30	0 degree with respect to East	77.5707663	29.7683236	180 degree with respect to East	934.452	77.5611097	29.7685110	Chainage = 254772.69m
138	77.5779265	29.7678569	867.96	0 degree with respect to East	77.5689571	29.7680315	180 degree with respect to East	760.083	77.5611024	29.7681839	Chainage = 254594.69m
139	77.5778921	29.7673823	1018.59	0 degree with respect to East	77.5673661	29.7675872	180 degree with respect to East	604.055	77.5611239	29.7677083	Chainage = 254433.08m
140	77.5778921	29.7673823	1169.18	0 degree with respect to East	77.5658100	29.7676174	180 degree with respect to East	453.467	77.5611239	29.7677083	Chainage = 254282.49m
141	77.5780033	29.7664445	1272.67	0 degree with respect to East	77.5648519	29.7667003	180 degree with respect to East	338.667	77.5613521	29.7667682	Chainage = 254144.89m
142	77.5779912	29.7647193	1232.77	0 degree with respect to East	77.5652523	29.7649671	180 degree with respect to East	412.932	77.5609852	29.7650499	Chainage = 253948.83m
143	77.5780804	29.7630777	1243.93	0 degree with respect to East	77.5652264	29.7633278	180 degree with respect to East	427.649	77.5608073	29.7634134	Chainage = 253767.03m
144	77.5780019	29.7614322	1240.41	0 degree with respect to East	77.5651845	29.7616816	180 degree with respect to East	393.307	77.5611203	29.7617604	Chainage = 253584.44m
145	77.5779124	29.7595483	1244.87	0 degree with respect to East	77.5650491	29.7597985	180 degree with respect to East	440.803	77.5604942	29.7598868	Chainage = 253375.22m
146	77.5776976	29.7581031	1228.02	0 degree with respect to East	77.5650086	29.7583499	180 degree with respect to East	405.072	77.5608230	29.7584310	Chainage = 253214.54m
147	77.5776613	29.7567427	1106.64	0 degree with respect to East	77.5662267	29.7569652	180 degree with respect to East	503.638	77.5610227	29.7570661	Chainage = 253020.98m
148	77.5776463	29.7553819	987.33	0 degree with respect to East	77.5674447	29.7555804	180 degree with respect to East	648.765	77.5607412	29.7557104	Chainage = 252827.42m
149	77.5776425	29.7549562	1132.73	0 degree with respect to East	77.5659386	29.7551839	180 degree with respect to East	510.168	77.5606672	29.7552861	Chainage = 252675.2m
150	77.5776627	29.7544122	1239.70	0 degree with respect to East	77.5648535	29.7546613	180 degree with respect to East	396.442	77.5607573	29.7547407	Chainage = 252555.28m
151	77.5776934	29.7535458	1089.52	0 degree with respect to East	77.5664360	29.7537648	180 degree with respect to East	504.432	77.5612239	29.7538659	Chainage = 252372.73m
152	77.5776682	29.7524784	941.69	0 degree with respect to East	77.5679384	29.7526678	180 degree with respect to East	639.331	77.5613326	29.7527959	Chainage = 252183.17m
153	77.5777335	29.7520157	779.38	0 degree with respect to East	77.5696808	29.7521725	180 degree with respect to East	803.681	77.5613769	29.7523336	Chainage = 252005.85m
154	77.5792070	29.7504123	850.50	0 degree with respect to East	77.5704196	29.7505835	180 degree with respect to East	867.482	77.5614566	29.7507574	Chainage = 251815.7m

490

155	77.5797824	29.7494232	768.03	0 degree with respect to East	77.5718472	29.7495778	180 degree with respect to East	964.143	77.5618856	29.7497712	Chainage = 251638.17m
156	77.5795433	29.7486089	590.95	0 degree with respect to East	77.5734376	29.7487279	180 degree with respect to East	1096.891	77.5621046	29.7489479	Chainage = 251457.7m
157	77.5819469	29.7467511	803.42	0 degree with respect to East	77.5736462	29.7469129	180 degree with respect to East	1035.397	77.5629487	29.7471207	Chainage = 251255.43m
158	77.5827857	29.7451924	841.85	0 degree with respect to East	77.5740881	29.7453620	180 degree with respect to East	937.458	77.5644027	29.7455501	Chainage = 251078.21m
159	77.5829593	29.7436463	804.30	0 degree with respect to East	77.5746498	29.7438083	180 degree with respect to East	884.766	77.5655089	29.7439860	Chainage = 250897.56m
160	77.5833813	29.7422991	899.91	0 degree with respect to East	77.5740841	29.7424804	180 degree with respect to East	868.509	77.5651113	29.7426547	Chainage = 250740.46m
161	77.5836918	29.7413403	1067.61	0 degree with respect to East	77.5726622	29.7415553	180 degree with respect to East	772.971	77.5646765	29.7417104	Chainage = 250568.83m
162	77.5836967	29.7410545	1244.63	0 degree with respect to East	77.5708383	29.7413050	180 degree with respect to East	587.373	77.5647700	29.7414229	Chainage = 250390.16m
163	77.5835766	29.7401295	1225.58	0 degree with respect to East	77.5709151	29.7403763	180 degree with respect to East	546.545	77.5652687	29.7404859	Chainage = 250286.9m
164	77.5834454	29.7396705	1044.24	0 degree with respect to East	77.5726574	29.7398808	180 degree with respect to East	699.311	77.5654328	29.7400211	Chainage = 250109.57m
165	77.5836521	29.7381247	1042.81	0 degree with respect to East	77.5728791	29.7383347	180 degree with respect to East	734.209	77.5652941	29.7384820	Chainage = 249936.79m
166	77.5853015	29.7368466	1314.02	0 degree with respect to East	77.5717268	29.7371113	180 degree with respect to East	672.841	77.5647759	29.7372462	Chainage = 249761.18m
167	77.5869745	29.7353641	1580.00	0 degree with respect to East	77.5706523	29.7356823	180 degree with respect to East	488.389	77.5656070	29.7357802	Chainage = 249571.65m
168	77.5873872	29.7340274	1516.58	0 degree with respect to East	77.5717204	29.7343330	180 degree with respect to East	581.805	77.5657101	29.7344497	Chainage = 249389.79m
169	77.5874216	29.7336466	1348.13	0 degree with respect to East	77.5734949	29.7339182	180 degree with respect to East	754.708	77.5656985	29.7340697	Chainage = 249212m
170	77.5874978	29.7322437	1282.53	0 degree with respect to East	77.5742491	29.7325022	180 degree with respect to East	825.095	77.5657257	29.7326678	Chainage = 249038.85m
171	77.5875162	29.7308797	1406.32	0 degree with respect to East	77.5729889	29.7311630	180 degree with respect to East	664.587	77.5661237	29.7312964	Chainage = 248846.69m
172	77.5874490	29.7297463	1543.41	0 degree with respect to East	77.5715057	29.7300572	180 degree with respect to East	521.411	77.5661195	29.7301618	Chainage = 248657.89m

173	77.5873377	29.7293403	1705.01	0 degree with respect to East	77.5697251	29.7296836	180 degree with respect to East	360.960	77.5659964	29.7297560	Chainage = 248480.66m
174	77.5872330	29.7285904	1839.41	0 degree with respect to East	77.5682322	29.7289607	180 degree with respect to East	260.066	77.5655457	29.7290128	Chainage = 248315.42m
175	77.5862626	29.7270554	1768.99	0 degree with respect to East	77.5679895	29.7274113	180 degree with respect to East	352.182	77.5643515	29.7274819	Chainage = 248142.02m
176	77.5835052	29.7254596	1446.83	0 degree with respect to East	77.5685601	29.7257506	180 degree with respect to East	447.831	77.5639342	29.7258403	Chainage = 247949.76m
177	77.5836198	29.7235317	1462.71	0 degree with respect to East	77.5685111	29.7238258	180 degree with respect to East	751.756	77.5607459	29.7239764	Chainage = 247736.27m
178	77.5834358	29.7230314	1606.17	0 degree with respect to East	77.5668453	29.7233543	180 degree with respect to East	605.218	77.5605938	29.7234754	Chainage = 247566.78m
179	77.5824066	29.7214891	1528.31	0 degree with respect to East	77.5666206	29.7217962	180 degree with respect to East	627.033	77.5601438	29.7219217	Chainage = 247392.65m
180	77.5822430	29.7199737	1548.43	0 degree with respect to East	77.5662493	29.7202848	180 degree with respect to East	642.806	77.5596097	29.7204134	Chainage = 247221.24m
181	77.5822594	29.7202179	1389.75	0 degree with respect to East	77.5679047	29.7204972	180 degree with respect to East	792.903	77.5597147	29.7206559	Chainage = 247059.3m
182	77.5823405	29.7191098	1353.93	0 degree with respect to East	77.5683560	29.7193819	180 degree with respect to East	869.601	77.5593739	29.7195560	Chainage = 246928.14m
183	77.5822263	29.7184908	1488.64	0 degree with respect to East	77.5668505	29.7187899	180 degree with respect to East	727.253	77.5593387	29.7189355	Chainage = 246768.32m
184	77.5821951	29.7184365	1653.72	0 degree with respect to East	77.5651142	29.7187688	180 degree with respect to East	557.971	77.5593509	29.7188804	Chainage = 246600.24m
185	77.5813909	29.7167290	1622.88	0 degree with respect to East	77.5646287	29.7170550	180 degree with respect to East	497.892	77.5594861	29.7171545	Chainage = 246404.48m
186	77.5807431	29.7153869	1684.06	0 degree with respect to East	77.5633493	29.7157250	180 degree with respect to East	417.240	77.5590398	29.7158084	Chainage = 246211.9m
187	77.5778212	29.7138845	1389.13	0 degree with respect to East	77.5634737	29.7141632	180 degree with respect to East	432.616	77.5590055	29.7142497	Chainage = 246038.3m
188	77.5768443	29.7132768	1148.49	0 degree with respect to East	77.5649824	29.7135073	180 degree with respect to East	570.030	77.5590949	29.7136213	Chainage = 245875.16m
189	77.5749767	29.7117566	952.01	0 degree with respect to East	77.5651441	29.7119476	180 degree with respect to East	591.981	77.5590300	29.7120660	Chainage = 245701.5m
190	77.5748915	29.7107316	810.40	0 degree with respect to East	77.5665216	29.7108941	180 degree with respect to East	745.061	77.5588266	29.7110432	Chainage = 245524.23m

492

191	77.5749320	29.7098217	685.57	0 degree with respect to East	77.5678514	29.7099592	180 degree with respect to East	876.760	77.5587962	29.7101346	Chainage = 245358.95m
192	77.5749966	29.7087199	798.72	0 degree with respect to East	77.5667476	29.7088801	180 degree with respect to East	737.310	77.5591327	29.7090276	Chainage = 245198.53m
193	77.5757499	29.7069860	860.71	0 degree with respect to East	77.5668608	29.7071587	180 degree with respect to East	754.386	77.5590698	29.7073095	Chainage = 245007.32m
194	77.5768602	29.7060979	1123.94	0 degree with respect to East	77.5652526	29.7063233	180 degree with respect to East	617.966	77.5588705	29.7064469	Chainage = 244826.17m
195	77.5771290	29.7058730	1328.84	0 degree with respect to East	77.5634053	29.7061396	180 degree with respect to East	430.156	77.5589628	29.7062255	Chainage = 244646.19m
196	77.5772491	29.7057746	1523.58	0 degree with respect to East	77.5615143	29.7060801	180 degree with respect to East	242.682	77.5590080	29.7061286	Chainage = 244463.01m
197	77.5799961	29.7038854	1813.11	0 degree with respect to East	77.5612714	29.7042491	180 degree with respect to East	175.251	77.5594615	29.7042841	Chainage = 244258.62m
198	77.5803654	29.7028675	1956.02	0 degree with respect to East	77.5601652	29.7032598	180 degree with respect to East	68.112	77.5594618	29.7032734	Chainage = 244105.32m
199	77.5806354	29.7017105	2078.89	0 degree with respect to East	77.5591665	29.7021273	180 degree with respect to East	18.148	77.5593539	29.7021237	Chainage = 243946.83m
200	77.5809828	29.7002513	2014.41	0 degree with respect to East	77.5601800	29.7006552	180 degree with respect to East	82.106	77.5593321	29.7006716	Chainage = 243756.38m
201	77.5809660	29.7004676	1856.14	0 degree with respect to East	77.5617977	29.7008399	180 degree with respect to East	236.022	77.5593603	29.7008871	Chainage = 243598.44m
202	77.5809119	29.7009844	1713.14	0 degree with respect to East	77.5632202	29.7013282	180 degree with respect to East	380.486	77.5592909	29.7014042	Chainage = 243450.47m
203	77.5809119	29.7009844	1546.16	0 degree with respect to East	77.5649446	29.7012948	180 degree with respect to East	547.466	77.5592909	29.7014042	Chainage = 243283.49m
204	77.5809657	29.7004743	1384.49	0 degree with respect to East	77.5666682	29.7007523	180 degree with respect to East	707.782	77.5593588	29.7008938	Chainage = 243106.13m
205	77.5809819	29.6994057	1240.62	0 degree with respect to East	77.5681703	29.6996548	180 degree with respect to East	856.330	77.5593270	29.6998261	Chainage = 242916.51m
206	77.5808992	29.6984540	1364.18	0 degree with respect to East	77.5668116	29.6987279	180 degree with respect to East	739.560	77.5591743	29.6988758	Chainage = 242749.58m
207	77.5812618	29.6969985	1452.24	0 degree with respect to East	77.5662651	29.6972901	180 degree with respect to East	719.667	77.5588333	29.6974340	Chainage = 242581.6m
208	77.5814229	29.6958579	1559.70	0 degree with respect to East	77.5653167	29.6961710	180 degree with respect to East	624.198	77.5588709	29.6962958	Chainage = 242427.23m

209	77.5808747	29.6945652	1616.22	0 degree with respect to East	77.5641850	29.6948895	180 degree with respect to East	516.249	77.5588540	29.6949927	Chainage = 242247.8m
210	77.5810378	29.6930777	1627.88	0 degree with respect to East	77.5642280	29.6934044	180 degree with respect to East	517.124	77.5588881	29.6935077	Chainage = 242083.07m
211	77.5822563	29.6920967	1612.46	0 degree with respect to East	77.5656058	29.6924204	180 degree with respect to East	628.219	77.5591187	29.6925460	Chainage = 241910.74m
212	77.5826819	29.6918550	1476.21	0 degree with respect to East	77.5674384	29.6921515	180 degree with respect to East	800.033	77.5591772	29.6923114	Chainage = 241730.82m
213	77.5818024	29.6923065	1245.58	0 degree with respect to East	77.5689404	29.6925567	180 degree with respect to East	956.013	77.5590684	29.6927479	Chainage = 241578.62m
214	77.5809136	29.6936368	1215.57	0 degree with respect to East	77.5683613	29.6938810	180 degree with respect to East	922.385	77.5588364	29.6940654	Chainage = 241421.44m
215	77.5809698	29.6948308	1131.27	0 degree with respect to East	77.5692880	29.6950581	180 degree with respect to East	1009.500	77.5588634	29.6952600	Chainage = 241263.05m
216	77.5809029	29.6937786	978.77	0 degree with respect to East	77.5707959	29.6939753	180 degree with respect to East	1158.410	77.5588337	29.6942070	Chainage = 241074.03m
217	77.5824874	29.6919709	1164.44	0 degree with respect to East	77.5704633	29.6922049	180 degree with respect to East	1095.680	77.5591491	29.6924241	Chainage = 240875.09m
218	77.5842092	29.6904255	1245.97	0 degree with respect to East	77.5713434	29.6906760	180 degree with respect to East	1162.998	77.5593343	29.6909087	Chainage = 240685.34m
219	77.5847318	29.6891400	1410.90	0 degree with respect to East	77.5701631	29.6894236	180 degree with respect to East	1013.301	77.5596999	29.6896263	Chainage = 240505.5m
220	77.5846088	29.6896774	1532.30	0 degree with respect to East	77.5687865	29.6899853	180 degree with respect to East	902.984	77.5594623	29.6901659	Chainage = 240358.38m
221	77.5847291	29.6891577	1712.64	0 degree with respect to East	77.5670447	29.6895018	180 degree with respect to East	713.389	77.5596783	29.6896444	Chainage = 240181.42m
222	77.5851728	29.6873326	1740.60	0 degree with respect to East	77.5672001	29.6876823	180 degree with respect to East	552.524	77.5614949	29.6877928	Chainage = 239979.1m
223	77.5854341	29.6864612	1612.70	0 degree with respect to East	77.5687822	29.6867853	180 degree with respect to East	637.248	77.5622022	29.6869128	Chainage = 239796.46m
224	77.5851939	29.6856535	1713.71	0 degree with respect to East	77.5674991	29.6859978	180 degree with respect to East	482.893	77.5625130	29.6860944	Chainage = 239644.61m
225	77.5851597	29.6853867	1887.67	0 degree with respect to East	77.5656688	29.6857658	180 degree with respect to East	302.836	77.5625419	29.6858264	Chainage = 239465.54m
226	77.5850897	29.6847047	2043.89	0 degree with respect to East	77.5639858	29.6851150	180 degree with respect to East	155.743	77.5623777	29.6851462	Chainage = 239287.32m

227	77.5851885	29.6829779	2041.21	0 degree with respect to East	77.5641127	29.6833877	180 degree with respect to East	230.582	77.5617319	29.6834338	Chainage = 239095.39m
228	77.5849538	29.6816458	1899.61	0 degree with respect to East	77.5653402	29.6820272	180 degree with respect to East	290.748	77.5623382	29.6820853	Chainage = 238903.33m
229	77.5847486	29.6811628	1711.98	0 degree with respect to East	77.5670725	29.6815066	180 degree with respect to East	459.187	77.5623313	29.6815985	Chainage = 238725.95m
230	77.5844557	29.6801001	1538.15	0 degree with respect to East	77.5685745	29.6804091	180 degree with respect to East	610.364	77.5622725	29.6805312	Chainage = 238536.31m
231	77.5841528	29.6792396	1355.61	0 degree with respect to East	77.5701565	29.6795120	180 degree with respect to East	791.347	77.5619859	29.6796703	Chainage = 238353.66m
232	77.5838905	29.6781763	1184.74	0 degree with respect to East	77.5716585	29.6784144	180 degree with respect to East	909.367	77.5622695	29.6785964	Chainage = 238164.01m
233	77.5830343	29.6771358	955.92	0 degree with respect to East	77.5731649	29.6773279	180 degree with respect to East	1041.096	77.5624159	29.6775363	Chainage = 237974.82m
234	77.5806041	29.6760124	595.30	0 degree with respect to East	77.5744580	29.6761320	180 degree with respect to East	1162.611	77.5624546	29.6763648	Chainage = 237792.43m
235	77.5805530	29.6745874	486.42	0 degree with respect to East	77.5755310	29.6746851	180 degree with respect to East	1260.116	77.5625211	29.6749375	Chainage = 237601.29m
236	77.5797912	29.6731865	395.57	0 degree with respect to East	77.5757073	29.6732660	180 degree with respect to East	1256.640	77.5627335	29.6735177	Chainage = 237443m
237	77.5794186	29.6726588	527.59	0 degree with respect to East	77.5739717	29.6727647	180 degree with respect to East	1085.407	77.5627658	29.6729820	Chainage = 237265.98m
238	77.5792402	29.6723947	687.59	0 degree with respect to East	77.5721414	29.6725328	180 degree with respect to East	909.156	77.5627552	29.6727148	Chainage = 237086.88m
239	77.5789523	29.6719636	831.19	0 degree with respect to East	77.5703711	29.6721304	180 degree with respect to East	739.830	77.5627330	29.6722784	Chainage = 236909.73m
240	77.5788512	29.6709847	953.34	0 degree with respect to East	77.5690090	29.6711759	180 degree with respect to East	612.374	77.5626869	29.6712984	Chainage = 236740.62m
241	77.5792306	29.6695567	1064.46	0 degree with respect to East	77.5682413	29.6697703	180 degree with respect to East	557.150	77.5624893	29.6698817	Chainage = 236567.93m
242	77.5791449	29.6681259	989.86	0 degree with respect to East	77.5689259	29.6683245	180 degree with respect to East	646.255	77.5622542	29.6684537	Chainage = 236394.44m
243	77.5788850	29.6667842	1054.72	0 degree with respect to East	77.5679966	29.6669957	180 degree with respect to East	558.407	77.5622318	29.6671074	Chainage = 236221.79m
244	77.5807510	29.6651155	1300.05	0 degree with respect to East	77.5673301	29.6653763	180 degree with respect to East	489.362	77.5622782	29.6654742	Chainage = 236030.97m

245	77.5820638	29.6636466	1327.07	0 degree with respect to East	77.5683643	29.6639129	180 degree with respect to East	591.251	77.5622606	29.6640311	Chainage = 235840.28m
246	77.5818742	29.6640132	1174.29	0 degree with respect to East	77.5697518	29.6642489	180 degree with respect to East	728.072	77.5622356	29.6643945	Chainage = 235700.84m
247	77.5802542	29.6653580	954.81	0 degree with respect to East	77.5703974	29.6655496	180 degree with respect to East	788.010	77.5622624	29.6657072	Chainage = 235543.64m
248	77.5817102	29.6642784	1009.48	0 degree with respect to East	77.5712891	29.6644811	180 degree with respect to East	875.741	77.5622485	29.6646563	Chainage = 235397.03m
249	77.5823937	29.6626484	1132.90	0 degree with respect to East	77.5706986	29.6628759	180 degree with respect to East	814.172	77.5622938	29.6630387	Chainage = 235210.07m
250	77.5825440	29.6611954	1146.07	0 degree with respect to East	77.5707133	29.6614255	180 degree with respect to East	760.723	77.5628603	29.6615777	Chainage = 235049.24m
251	77.5835052	29.6600067	1353.39	0 degree with respect to East	77.5695344	29.6602784	180 degree with respect to East	518.583	77.5641811	29.6603822	Chainage = 234878.31m
252	77.5841835	29.6591910	1578.06	0 degree with respect to East	77.5678936	29.6595078	180 degree with respect to East	300.776	77.5647887	29.6595679	Chainage = 234697.88m
253	77.5852985	29.6579694	1743.65	0 degree with respect to East	77.5672995	29.6583194	180 degree with respect to East	233.148	77.5648928	29.6583660	Chainage = 234554.09m
254	77.5853525	29.6578307	1567.67	0 degree with respect to East	77.5691701	29.6581455	180 degree with respect to East	417.723	77.5648581	29.6582291	Chainage = 234371.9m
255	77.5855610	29.6563630	1534.53	0 degree with respect to East	77.5697210	29.6566712	180 degree with respect to East	479.222	77.5647742	29.6567671	Chainage = 234199.94m
256	77.5856296	29.6551503	1465.25	0 degree with respect to East	77.5705048	29.6554446	180 degree with respect to East	493.712	77.5654085	29.6555434	Chainage = 234044.17m
257	77.5857503	29.6543455	1337.56	0 degree with respect to East	77.5719438	29.6546142	180 degree with respect to East	604.620	77.5657027	29.6547352	Chainage = 233877.13m
258	77.5855938	29.6556488	1258.60	0 degree with respect to East	77.5726021	29.6559017	180 degree with respect to East	727.163	77.5650960	29.6560472	Chainage = 233720.77m
259	77.5855603	29.6564892	1132.04	0 degree with respect to East	77.5738749	29.6567167	180 degree with respect to East	881.390	77.5647768	29.6568931	Chainage = 233567.92m
260	77.5855957	29.6556241	1014.75	0 degree with respect to East	77.5751211	29.6558281	180 degree with respect to East	969.476	77.5651138	29.6560223	Chainage = 233412.11m
261	77.5857503	29.6543455	1051.90	0 degree with respect to East	77.5748924	29.6545569	180 degree with respect to East	890.274	77.5657027	29.6547352	Chainage = 233269.42m
262	77.5858380	29.6536577	1198.21	0 degree with respect to East	77.5734699	29.6538985	180 degree with respect to East	734.449	77.5658888	29.6540455	Chainage = 233113.49m

263	77.5858345	29.6520784	1275.00	0 degree with respect to East	77.5726740	29.6523346	180 degree with respect to East	543.479	77.5670642	29.6524434	Chainage = 232923.72m
264	77.5855280	29.6508378	1349.28	0 degree with respect to East	77.5716009	29.6511088	180 degree with respect to East	276.502	77.5687469	29.6511642	Chainage = 232752.61m
265	77.5853523	29.6495705	1194.54	0 degree with respect to East	77.5730227	29.6498105	180 degree with respect to East	339.427	77.5695192	29.6498785	Chainage = 232553.38m
266	77.5853850	29.6481224	1295.30	0 degree with respect to East	77.5720156	29.6483826	180 degree with respect to East	317.352	77.5687400	29.6484461	Chainage = 232367.41m
267	77.5854276	29.6470152	1204.57	0 degree with respect to East	77.5729946	29.6472572	180 degree with respect to East	641.516	77.5663732	29.6473856	Chainage = 232210.67m
268	77.5858893	29.6454941	1164.09	0 degree with respect to East	77.5738744	29.6457280	180 degree with respect to East	854.996	77.5650496	29.6458991	Chainage = 232020.89m
269	77.5858836	29.6435941	1173.66	0 degree with respect to East	77.5737701	29.6438299	180 degree with respect to East	909.311	77.5643850	29.6440118	Chainage = 231810.18m
270	77.5866793	29.6421313	1355.48	0 degree with respect to East	77.5726895	29.6424036	180 degree with respect to East	845.600	77.5639620	29.6425727	Chainage = 231620.52m
271	77.5883259	29.6409575	1648.53	0 degree with respect to East	77.5713117	29.6412887	180 degree with respect to East	735.310	77.5637226	29.6414357	Chainage = 231438.6m
272	77.5894281	29.6395679	1876.60	0 degree with respect to East	77.5700603	29.6399449	180 degree with respect to East	617.947	77.5636825	29.6400684	Chainage = 231246.51m
273	77.5895597	29.6385360	2011.26	0 degree with respect to East	77.5688023	29.6389399	180 degree with respect to East	493.626	77.5637077	29.6390386	Chainage = 231081.38m
274	77.5897817	29.6370195	1947.55	0 degree with respect to East	77.5696821	29.6374107	180 degree with respect to East	573.478	77.5637634	29.6375253	Chainage = 230891.6m
275	77.5899255	29.6354291	2036.93	0 degree with respect to East	77.5689039	29.6358382	180 degree with respect to East	481.103	77.5639387	29.6359344	Chainage = 230701.64m
276	77.5896794	29.6338690	2034.42	0 degree with respect to East	77.5686839	29.6342775	180 degree with respect to East	338.507	77.5651904	29.6343452	Chainage = 230527.27m
277	77.5897558	29.6325294	1918.72	0 degree with respect to East	77.5699547	29.6329148	180 degree with respect to East	341.598	77.5664294	29.6329831	Chainage = 230332.36m
278	77.5900580	29.6316567	1794.75	0 degree with respect to East	77.5715364	29.6320174	180 degree with respect to East	453.003	77.5668615	29.6321080	Chainage = 230149.65m
279	77.5899974	29.6315252	1607.43	0 degree with respect to East	77.5734089	29.6318483	180 degree with respect to East	638.117	77.5668236	29.6319760	Chainage = 229967.29m
280	77.5898486	29.6312506	1433.44	0 degree with respect to East	77.5750558	29.6315388	180 degree with respect to East	806.975	77.5667278	29.6317003	Chainage = 229804.1m

281	77.5892472	29.6295366	1336.40	0 degree with respect to East	77.5754560	29.6298053	180 degree with respect to East	912.789	77.5660362	29.6299880	Chainage = 229608.01m
282	77.5892879	29.6278208	1359.09	0 degree with respect to East	77.5752628	29.6280940	180 degree with respect to East	869.695	77.5662879	29.6282681	Chainage = 229417.33m
283	77.5888092	29.6260447	1346.78	0 degree with respect to East	77.5749113	29.6263154	180 degree with respect to East	883.714	77.5657919	29.6264922	Chainage = 229217.18m
284	77.5883384	29.6241994	1320.80	0 degree with respect to East	77.5747088	29.6244648	180 degree with respect to East	936.400	77.5650459	29.6246521	Chainage = 229011.04m
285	77.5884401	29.6226580	1416.16	0 degree with respect to East	77.5738267	29.6229425	180 degree with respect to East	826.257	77.5653005	29.6231077	Chainage = 228821.84m
286	77.5877713	29.6214037	1478.34	0 degree with respect to East	77.5725166	29.6217006	180 degree with respect to East	844.179	77.5638055	29.6218693	Chainage = 228634.55m
287	77.5873976	29.6201684	1569.95	0 degree with respect to East	77.5711977	29.6204835	180 degree with respect to East	1010.827	77.5607671	29.6206854	Chainage = 228448.7m
288	77.5869020	29.6187257	1444.86	0 degree with respect to East	77.5719931	29.6190158	180 degree with respect to East	1159.171	77.5600320	29.6192473	Chainage = 228268.62m
289	77.5858565	29.6172933	1245.37	0 degree with respect to East	77.5730062	29.6175433	180 degree with respect to East	1378.354	77.5587836	29.6178185	Chainage = 228078.11m
290	77.5833200	29.6157105	1036.60	0 degree with respect to East	77.5726240	29.6159185	180 degree with respect to East	1493.739	77.5572110	29.6162166	Chainage = 227894.18m
291	77.5830387	29.6145977	1112.71	0 degree with respect to East	77.5715576	29.6148208	180 degree with respect to East	1634.619	77.5546911	29.6151469	Chainage = 227734.52m
292	77.5816102	29.6129715	919.88	0 degree with respect to East	77.5721188	29.6131559	180 degree with respect to East	1883.411	77.5526855	29.6135314	Chainage = 227542.06m
293	77.5813117	29.6127022	1014.57	0 degree with respect to East	77.5708435	29.6129055	180 degree with respect to East	1799.763	77.5522733	29.6132642	Chainage = 227415.4m
294	77.5814731	29.6128478	1186.12	0 degree with respect to East	77.5692347	29.6130855	180 degree with respect to East	1622.240	77.5524962	29.6134087	Chainage = 227258.25m
295	77.5808960	29.6121752	1293.28	0 degree with respect to East	77.5675520	29.6124343	180 degree with respect to East	1510.146	77.5519702	29.6127351	Chainage = 227079.93m
296	77.5801717	29.6108720	1261.59	0 degree with respect to East	77.5671549	29.6111246	180 degree with respect to East	1659.923	77.5500278	29.6114551	Chainage = 226929.7m
297	77.5781205	29.6095542	1090.99	0 degree with respect to East	77.5668640	29.6097726	180 degree with respect to East	1788.047	77.5484152	29.6101284	Chainage = 226777.15m
298	77.5759450	29.6087688	1006.15	0 degree with respect to East	77.5655639	29.6089701	180 degree with respect to East	1723.170	77.5477847	29.6093128	Chainage = 226622.92m

299	77.5753123	29.6080038	1104.71	0 degree with respect to East	77.5639144	29.6082246	180 degree with respect to East	1574.407	77.5476702	29.6085377	Chainage = 226442.98m
300	77.5755331	29.6082670	1286.11	0 degree with respect to East	77.5622636	29.6085240	180 degree with respect to East	1414.708	77.5476670	29.6088053	Chainage = 226279.61m
301	77.5760633	29.6089087	1459.30	0 degree with respect to East	77.5610068	29.6092003	180 degree with respect to East	1273.396	77.5478681	29.6094534	Chainage = 226136.59m
302	77.5794234	29.6101569	1841.04	0 degree with respect to East	77.5604280	29.6105251	180 degree with respect to East	1101.765	77.5490601	29.6107441	Chainage = 225979.36m
303	77.5806016	29.6117536	1921.58	0 degree with respect to East	77.5607749	29.6121380	180 degree with respect to East	868.960	77.5518089	29.6123108	Chainage = 225797.38m
304	77.5808960	29.6121752	2094.22	0 degree with respect to East	77.5592879	29.6125940	180 degree with respect to East	709.208	77.5519702	29.6127351	Chainage = 225644.68m
305	77.5803488	29.6113250	2194.69	0 degree with respect to East	77.5577042	29.6117637	180 degree with respect to East	640.026	77.5511003	29.6118909	Chainage = 225465.73m
306	77.5786326	29.6096525	1985.26	0 degree with respect to East	77.5581492	29.6100492	180 degree with respect to East	935.409	77.5484978	29.6102351	Chainage = 225270.79m
307	77.5754104	29.6081208	1605.58	0 degree with respect to East	77.5588447	29.6084415	180 degree with respect to East	1083.182	77.5476688	29.6086566	Chainage = 225080.2m
308	77.5749129	29.6066740	1638.56	0 degree with respect to East	77.5580072	29.6070012	180 degree with respect to East	1053.403	77.5471386	29.6072104	Chainage = 224901.06m
309	77.5749393	29.6069517	1800.05	0 degree with respect to East	77.5563672	29.6073110	180 degree with respect to East	881.113	77.5472763	29.6074859	Chainage = 224738.48m
310	77.5750915	29.6077406	1922.72	0 degree with respect to East	77.5552537	29.6081243	180 degree with respect to East	742.393	77.5475939	29.6082717	Chainage = 224597.86m
311	77.5754919	29.6082179	2093.24	0 degree with respect to East	77.5538947	29.6086356	180 degree with respect to East	603.530	77.5476676	29.6087554	Chainage = 224454.48m
312	77.5749442	29.6070034	2156.26	0 degree with respect to East	77.5526969	29.6074335	180 degree with respect to East	523.340	77.5472973	29.6075373	Chainage = 224277.74m
313	77.5746119	29.6061425	2244.81	0 degree with respect to East	77.5514512	29.6065901	180 degree with respect to East	460.567	77.5466993	29.6066815	Chainage = 224125.05m
314	77.5702111	29.6047156	1733.02	0 degree with respect to East	77.5523310	29.6050609	180 degree with respect to East	819.692	77.5438739	29.6052233	Chainage = 223935.25m
315	77.5694539	29.6032251	1752.29	0 degree with respect to East	77.5513753	29.6035741	180 degree with respect to East	847.389	77.5426325	29.6037420	Chainage = 223746.15m
316	77.5683813	29.6016373	1584.01	0 degree with respect to East	77.5520391	29.6019528	180 degree with respect to East	933.537	77.5424077	29.6021377	Chainage = 223555.21m

317	77.5642906	29.6002636	1089.30	0 degree with respect to East	77.5530524	29.6004803	180 degree with respect to East	1069.672	77.5420166	29.6006923	Chainage = 223364.69m
318	77.5661029	29.5988906	1141.74	0 degree with respect to East	77.5543239	29.5991179	180 degree with respect to East	1219.288	77.5417448	29.5993596	Chainage = 223169.74m
319	77.5660950	29.5985149	1294.33	0 degree with respect to East	77.5527419	29.5987726	180 degree with respect to East	1055.258	77.5418550	29.5989816	Chainage = 223011.72m
320	77.5662584	29.5971562	1434.11	0 degree with respect to East	77.5514633	29.5974416	180 degree with respect to East	843.353	77.5427628	29.5976086	Chainage = 222819.02m
321	77.5664867	29.5959235	1571.72	0 degree with respect to East	77.5502722	29.5962362	180 degree with respect to East	573.748	77.5443531	29.5963499	Chainage = 222642.42m
322	77.5666092	29.5944159	1676.25	0 degree with respect to East	77.5493165	29.5947493	180 degree with respect to East	415.795	77.5450271	29.5948317	Chainage = 222453.32m
323	77.5667427	29.5927263	1641.95	0 degree with respect to East	77.5498042	29.5930530	180 degree with respect to East	405.508	77.5456209	29.5931333	Chainage = 222259.37m
324	77.5665666	29.5918557	1471.83	0 degree with respect to East	77.5513832	29.5921486	180 degree with respect to East	474.769	77.5464854	29.5922427	Chainage = 222076.42m
325	77.5664319	29.5909981	1305.20	0 degree with respect to East	77.5529676	29.5912579	180 degree with respect to East	526.616	77.5475350	29.5913623	Chainage = 221893.85m
326	77.5664062	29.5905213	1134.43	0 degree with respect to East	77.5547036	29.5907472	180 degree with respect to East	641.687	77.5480840	29.5908745	Chainage = 221716.33m
327	77.5663508	29.5893765	1002.76	0 degree with respect to East	77.5560066	29.5895762	180 degree with respect to East	733.278	77.5484422	29.5897217	Chainage = 221535.2m
328	77.5657980	29.5878581	886.51	0 degree with respect to East	77.5566532	29.5880346	180 degree with respect to East	839.794	77.5479902	29.5882013	Chainage = 221353.14m
329	77.5653162	29.5864219	841.17	0 degree with respect to East	77.5566391	29.5865894	180 degree with respect to East	862.398	77.5477431	29.5867606	Chainage = 221192.89m
330	77.5655388	29.5851881	974.97	0 degree with respect to East	77.5554817	29.5853821	180 degree with respect to East	745.313	77.5477935	29.5855300	Chainage = 221018.23m
331	77.5660384	29.5839144	1134.43	0 degree with respect to East	77.5543366	29.5841402	180 degree with respect to East	669.414	77.5474314	29.5842729	Chainage = 220841.35m
332	77.5654480	29.5822914	1034.93	0 degree with respect to East	77.5547728	29.5824973	180 degree with respect to East	784.823	77.5466772	29.5826529	Chainage = 220654.34m
333	77.5686816	29.5803258	1348.19	0 degree with respect to East	77.5547752	29.5805942	180 degree with respect to East	804.271	77.5464792	29.5807537	Chainage = 220443.32m
334	77.5695954	29.5792245	1569.29	0 degree with respect to East	77.5534087	29.5795370	180 degree with respect to East	727.982	77.5458997	29.5796812	Chainage = 220266.44m

500

335	77.5689293	29.5800399	1611.60	0 degree with respect to East	77.5523060	29.5803607	180 degree with respect to East	581.550	77.5463074	29.5804759	Chainage = 220125.86m
336	77.5693084	29.5795448	1737.05	0 degree with respect to East	77.5513911	29.5798905	180 degree with respect to East	519.992	77.5460275	29.5799936	Chainage = 220022.99m
337	77.5711782	29.5782214	1784.03	0 degree with respect to East	77.5527766	29.5785766	180 degree with respect to East	697.645	77.5455806	29.5787149	Chainage = 219824.85m
338	77.5722321	29.5770334	1760.73	0 degree with respect to East	77.5540711	29.5773842	180 degree with respect to East	819.222	77.5456212	29.5775466	Chainage = 219642.57m
339	77.5721660	29.5771154	1584.06	0 degree with respect to East	77.5558273	29.5774311	180 degree with respect to East	989.533	77.5456207	29.5776273	Chainage = 219472.27m
340	77.5724086	29.5754771	1596.87	0 degree with respect to East	77.5559380	29.5757953	180 degree with respect to East	1012.901	77.5454905	29.5759961	Chainage = 219290.57m
341	77.5727173	29.5740188	1695.46	0 degree with respect to East	77.5552301	29.5743566	180 degree with respect to East	959.556	77.5453330	29.5745468	Chainage = 219116.91m
342	77.5726334	29.5727456	1611.07	0 degree with respect to East	77.5560169	29.5730667	180 degree with respect to East	982.014	77.5458882	29.5732614	Chainage = 218954.81m
343	77.5724532	29.5721490	1430.00	0 degree with respect to East	77.5577042	29.5724340	180 degree with respect to East	971.836	77.5476806	29.5726268	Chainage = 218776.84m
344	77.5723945	29.5716802	1255.72	0 degree with respect to East	77.5594431	29.5719306	180 degree with respect to East	1080.606	77.5482977	29.5721451	Chainage = 218599.28m
345	77.5723945	29.5716802	1104.62	0 degree with respect to East	77.5610016	29.5719006	180 degree with respect to East	1231.704	77.5482977	29.5721451	Chainage = 218448.18m
346	77.5723022	29.5707646	1010.82	0 degree with respect to East	77.5618768	29.5709662	180 degree with respect to East	1274.909	77.5487275	29.5712194	Chainage = 218314.27m
347	77.5723259	29.5691720	1087.65	0 degree with respect to East	77.5611083	29.5693890	180 degree with respect to East	1208.645	77.5486426	29.5696289	Chainage = 218124.17m
348	77.5716974	29.5682162	1147.94	0 degree with respect to East	77.5598581	29.5684451	180 degree with respect to East	1032.338	77.5492109	29.5686500	Chainage = 217964.04m
349	77.5714323	29.5677064	1260.23	0 degree with respect to East	77.5584348	29.5679576	180 degree with respect to East	831.956	77.5498544	29.5681227	Chainage = 217815.86m
350	77.5710862	29.5662532	1129.96	0 degree with respect to East	77.5594326	29.5664784	180 degree with respect to East	663.157	77.5525932	29.5666101	Chainage = 217625.45m
351	77.5709481	29.5650207	1047.06	0 degree with respect to East	77.5601496	29.5652294	180 degree with respect to East	767.832	77.5522307	29.5653819	Chainage = 217470.49m
352	77.5709481	29.5650207	1233.71	0 degree with respect to East	77.5582246	29.5652665	180 degree with respect to East	581.177	77.5522307	29.5653819	Chainage = 217283.83m

501

90

353	77.5708967	29.5647542	1406.19	0 degree with respect to East	77.5563944	29.5650343	180 degree with respect to East	508.904	77.5511459	29.5651353	Chainage = 217104.56m
354	77.5708689	29.5646098	1585.17	0 degree with respect to East	77.5545207	29.5649254	180 degree with respect to East	410.652	77.5502856	29.5650069	Chainage = 216922.53m
355	77.5707828	29.5642214	1733.99	0 degree with respect to East	77.5528999	29.5645665	180 degree with respect to East	325.343	77.5495445	29.5646310	Chainage = 216760.44m
356	77.5703613	29.5636063	1858.35	0 degree with respect to East	77.5511959	29.5639761	180 degree with respect to East	247.782	77.5486404	29.5640251	Chainage = 216582.75m
357	77.5699277	29.5623432	1957.92	0 degree with respect to East	77.5497356	29.5627326	180 degree with respect to East	164.691	77.5480371	29.5627652	Chainage = 216385.14m
358	77.5697607	29.5606298	1960.76	0 degree with respect to East	77.5495397	29.5610197	180 degree with respect to East	233.231	77.5471344	29.5610658	Chainage = 216194.25m
359	77.5691820	29.5591924	1979.84	0 degree with respect to East	77.5487645	29.5595860	180 degree with respect to East	203.046	77.5466705	29.5596262	Chainage = 216018.41m
360	77.5689215	29.5584815	2107.13	0 degree with respect to East	77.5471915	29.5589002	180 degree with respect to East	76.591	77.5464017	29.5589154	Chainage = 215848.02m
361	77.5685873	29.5568175	2083.66	0 degree with respect to East	77.5470996	29.5572315	180 degree with respect to East	156.869	77.5454819	29.5572626	Chainage = 215662.77m
362	77.5680239	29.5550629	1998.86	0 degree with respect to East	77.5474112	29.5554600	180 degree with respect to East	251.446	77.5448181	29.5555098	Chainage = 215464.03m
363	77.5671905	29.5532910	1892.76	0 degree with respect to East	77.5476721	29.5536670	180 degree with respect to East	308.948	77.5444862	29.5537281	Chainage = 215263.61m
364	77.5666050	29.5518641	1883.91	0 degree with respect to East	77.5471782	29.5522382	180 degree with respect to East	406.448	77.5429868	29.5523185	Chainage = 215098.1m
365	77.5659393	29.5510794	1954.84	0 degree with respect to East	77.5457812	29.5514674	180 degree with respect to East	394.921	77.5417088	29.5515455	Chainage = 214937.96m
366	77.5633141	29.5494821	1704.29	0 degree with respect to East	77.5457399	29.5498202	180 degree with respect to East	573.829	77.5398227	29.5499336	Chainage = 214755.27m
367	77.5617041	29.5477561	1575.95	0 degree with respect to East	77.5454536	29.5480686	180 degree with respect to East	678.858	77.5384534	29.5482027	Chainage = 214559.07m
368	77.5603797	29.5467672	1299.80	0 degree with respect to East	77.5469768	29.5470250	180 degree with respect to East	876.444	77.5379393	29.5471980	Chainage = 214371.44m
369	77.5613347	29.5474481	1261.94	0 degree with respect to East	77.5483221	29.5476985	180 degree with respect to East	974.670	77.5382717	29.5478910	Chainage = 214221.13m
370	77.5621891	29.5480698	1212.22	0 degree with respect to East	77.5496892	29.5483104	180 degree with respect to East	1064.001	77.5387176	29.5485207	Chainage = 214072.23m

502

371	77.5617613	29.5478099	994.50	0 degree with respect to East	77.5515065	29.5480073	180 degree with respect to East	1260.700	77.5385066	29.5482565	Chainage = 213892.86m
372	77.5602480	29.5466840	978.62	0 degree with respect to East	77.5501570	29.5468781	180 degree with respect to East	1186.859	77.5379187	29.5471126	Chainage = 213711.76m
373	77.5591323	29.5452950	982.97	0 degree with respect to East	77.5489965	29.5454900	180 degree with respect to East	1155.670	77.5370800	29.5457182	Chainage = 213521.09m
374	77.5555822	29.5437862	716.34	0 degree with respect to East	77.5481959	29.5439282	180 degree with respect to East	1436.019	77.5333887	29.5442115	Chainage = 213331.31m
375	77.5542657	29.5431399	736.18	0 degree with respect to East	77.5466749	29.5432857	180 degree with respect to East	1372.824	77.5325194	29.5435564	Chainage = 213167.53m
376	77.5539048	29.5426040	869.20	0 degree with respect to East	77.5449425	29.5427760	180 degree with respect to East	1246.287	77.5320918	29.5430217	Chainage = 212990.3m
377	77.5535600	29.5412409	956.85	0 degree with respect to East	77.5436940	29.5414303	180 degree with respect to East	1227.440	77.5310378	29.5416721	Chainage = 212798.15m
378	77.5535142	29.5410143	1117.60	0 degree with respect to East	77.5419907	29.5412354	180 degree with respect to East	1077.572	77.5308799	29.5414476	Chainage = 212631.59m
379	77.5535681	29.5412808	1282.93	0 degree with respect to East	77.5403398	29.5415345	180 degree with respect to East	899.163	77.5310685	29.5417115	Chainage = 212468.11m
380	77.5536219	29.5415472	1448.27	0 degree with respect to East	77.5386888	29.5418335	180 degree with respect to East	716.604	77.5312999	29.5419746	Chainage = 212304.63m
381	77.5532402	29.5402601	1491.68	0 degree with respect to East	77.5378597	29.5405549	180 degree with respect to East	714.696	77.5304905	29.5406955	Chainage = 212141.64m
382	77.5518885	29.5386357	1305.30	0 degree with respect to East	77.5384300	29.5388936	180 degree with respect to East	831.207	77.5298596	29.5390571	Chainage = 211949.31m
383	77.5517421	29.5383733	1416.94	0 degree with respect to East	77.5371325	29.5386532	180 degree with respect to East	718.686	77.5297222	29.5387946	Chainage = 211820.7m
384	77.5513181	29.5375789	1534.91	0 degree with respect to East	77.5354922	29.5378820	180 degree with respect to East	597.941	77.5293270	29.5379996	Chainage = 211640.13m
385	77.5502034	29.5360989	1444.66	0 degree with respect to East	77.5353083	29.5363840	180 degree with respect to East	622.928	77.5288855	29.5365065	Chainage = 211473.08m
386	77.5485063	29.5346649	1345.76	0 degree with respect to East	77.5346311	29.5349304	180 degree with respect to East	587.780	77.5285708	29.5350459	Chainage = 211299.04m
387	77.5477876	29.5337232	1374.39	0 degree with respect to East	77.5336172	29.5339943	180 degree with respect to East	517.150	77.5282853	29.5340959	Chainage = 211156.07m
388	77.5452857	29.5318913	1126.43	0 degree with respect to East	77.5336722	29.5321133	180 degree with respect to East	578.965	77.5277030	29.5322271	Chainage = 210947.44m

503

92

389	77.5445028	29.5301206	1084.47	0 degree with respect to East	77.5333220	29.5303343	180 degree with respect to East	605.483	77.5270794	29.5304532	Chainage = 210747.27m
390	77.5443499	29.5284731	1014.34	0 degree with respect to East	77.5338923	29.5286730	180 degree with respect to East	812.575	77.5255148	29.5288325	Chainage = 210554.93m
391	77.5433372	29.5267068	950.11	0 degree with respect to East	77.5335421	29.5268939	180 degree with respect to East	811.760	77.5251731	29.5270533	Chainage = 210354.76m
392	77.5433623	29.5249182	927.22	0 degree with respect to East	77.5338032	29.5251009	180 degree with respect to East	1289.396	77.5205102	29.5253537	Chainage = 210154.33m
393	77.5432645	29.5238231	791.12	0 degree with respect to East	77.5351087	29.5239789	180 degree with respect to East	1497.227	77.5196733	29.5242726	Chainage = 209976.84m
394	77.5430614	29.5235594	594.96	0 degree with respect to East	77.5369278	29.5236767	180 degree with respect to East	1687.759	77.5195282	29.5240078	Chainage = 209797.27m
395	77.5421930	29.5224358	404.71	0 degree with respect to East	77.5380208	29.5225156	180 degree with respect to East	1856.632	77.5188804	29.5228798	Chainage = 209630.5m
396	77.5420732	29.5212150	509.77	0 degree with respect to East	77.5368180	29.5213154	180 degree with respect to East	1821.765	77.5180372	29.5216727	Chainage = 209453.54m
397	77.5421044	29.5201002	661.18	0 degree with respect to East	77.5352884	29.5202304	180 degree with respect to East	1697.043	77.5177936	29.5205631	Chainage = 209262.55m
398	77.5417952	29.5192023	770.72	0 degree with respect to East	77.5338500	29.5193541	180 degree with respect to East	1585.440	77.5175059	29.5196647	Chainage = 209092.54m
399	77.5408615	29.5178013	790.98	0 degree with respect to East	77.5327076	29.5179570	180 degree with respect to East	1555.254	77.5166748	29.5182617	Chainage = 208902.09m
400	77.5407658	29.5160503	822.57	0 degree with respect to East	77.5322864	29.5162122	180 degree with respect to East	1548.877	77.5163196	29.5165155	Chainage = 208704.35m
401	77.5405530	29.5158497	981.62	0 degree with respect to East	77.5304340	29.5160428	180 degree with respect to East	1372.722	77.5162832	29.5163115	Chainage = 208523.72m
402	77.5407113	29.5169400	956.43	0 degree with respect to East	77.5308518	29.5171281	180 degree with respect to East	1400.709	77.5164124	29.5174024	Chainage = 208396.74m
403	77.5409929	29.5179814	1007.14	0 degree with respect to East	77.5306107	29.5181795	180 degree with respect to East	1338.525	77.5168121	29.5184416	Chainage = 208277.84m
404	77.5406900	29.5171573	1102.12	0 degree with respect to East	77.5293287	29.5173741	180 degree with respect to East	1250.397	77.5164387	29.5176189	Chainage = 208124.76m
405	77.5407044	29.5170100	1222.49	0 degree with respect to East	77.5281023	29.5172503	180 degree with respect to East	1133.159	77.5164209	29.5174721	Chainage = 208005.02m
406	77.5409929	29.5179814	1340.12	0 degree with respect to East	77.5271781	29.5182449	180 degree with respect to East	1005.547	77.5168121	29.5184416	Chainage = 207862.92m

504

43

407	77.5409050	29.5178609	1506.77	0 degree with respect to East	77.5253722	29.5181570	180 degree with respect to East	839.944	77.5167133	29.5183213	Chainage = 207687.51m
408	77.5407058	29.5169963	1608.17	0 degree with respect to East	77.5241278	29.5173123	180 degree with respect to East	747.773	77.5164192	29.5174585	Chainage = 207534.75m
409	77.5402816	29.5153563	1571.02	0 degree with respect to East	77.5240869	29.5156649	180 degree with respect to East	761.674	77.5162351	29.5158139	Chainage = 207352.04m
410	77.5389063	29.5139169	1342.01	0 degree with respect to East	77.5250724	29.5141805	180 degree with respect to East	908.214	77.5157102	29.5143581	Chainage = 207161.7m
411	77.5377772	29.5124252	1263.96	0 degree with respect to East	77.5247481	29.5126734	180 degree with respect to East	927.821	77.5151838	29.5128547	Chainage = 206991.65m
412	77.5384011	29.5129920	1453.71	0 degree with respect to East	77.5234159	29.5132774	180 degree with respect to East	784.954	77.5153244	29.5134308	Chainage = 206846.12m
413	77.5382636	29.5128538	1540.44	0 degree with respect to East	77.5223844	29.5131562	180 degree with respect to East	689.365	77.5152782	29.5132909	Chainage = 206745.18m
414	77.5323059	29.5115182	1021.04	0 degree with respect to East	77.5217809	29.5117184	180 degree with respect to East	650.419	77.5150763	29.5118455	Chainage = 206575.35m
415	77.5278406	29.5106467	534.90	0 degree with respect to East	77.5223268	29.5107515	180 degree with respect to East	733.347	77.5147674	29.5108948	Chainage = 206455.78m
416	77.5264828	29.5090385	382.77	0 degree with respect to East	77.5225372	29.5091134	180 degree with respect to East	840.719	77.5138712	29.5092776	Chainage = 206273m
417	77.5255693	29.5077842	156.24	0 degree with respect to East	77.5239587	29.5078148	180 degree with respect to East	1012.696	77.5135201	29.5080126	Chainage = 206073.64m
418	77.5259093	29.5065292	254.62	0 degree with respect to East	77.5232847	29.5065791	180 degree with respect to East	999.227	77.5129850	29.5067742	Chainage = 205921.82m
419	77.5263581	29.5056875	456.22	0 degree with respect to East	77.5216556	29.5057768	180 degree with respect to East	915.063	77.5122235	29.5059555	Chainage = 205740.48m
420	77.5263581	29.5056875	642.99	0 degree with respect to East	77.5197305	29.5058133	180 degree with respect to East	728.302	77.5122235	29.5059555	Chainage = 205553.72m
421	77.5269571	29.5048310	714.85	0 degree with respect to East	77.5195888	29.5049709	180 degree with respect to East	793.167	77.5114132	29.5051256	Chainage = 205459.3m
422	77.5271831	29.5036661	610.92	0 degree with respect to East	77.5208862	29.5037857	180 degree with respect to East	939.123	77.5112063	29.5039689	Chainage = 205277.35m
423	77.5274326	29.5022080	536.82	0 degree with respect to East	77.5218995	29.5023131	180 degree with respect to East	1129.444	77.5102581	29.5025334	Chainage = 205086.77m
424	77.5275736	29.5008493	464.76	0 degree with respect to East	77.5227833	29.5009403	180 degree with respect to East	1479.930	77.5075295	29.5012289	Chainage = 204912.07m

505

425	77.5274975	29.4990857	489.27	0 degree with respect to East	77.5224546	29.4991814	180 degree with respect to East	1580.721	77.5061622	29.4994896	Chainage = 204714.46m
426	77.5272746	29.4976075	411.91	0 degree with respect to East	77.5230291	29.4976882	180 degree with respect to East	1676.534	77.5057494	29.4980150	Chainage = 204539.75m
427	77.5272478	29.4958971	458.96	0 degree with respect to East	77.5225175	29.4959869	180 degree with respect to East	1610.900	77.5059146	29.4963010	Chainage = 204344.7m
428	77.5265748	29.4949830	548.50	0 degree with respect to East	77.5209217	29.4950904	180 degree with respect to East	1388.169	77.5066144	29.4953609	Chainage = 204160.72m
429	77.5265748	29.4949830	735.28	0 degree with respect to East	77.5189966	29.4951269	180 degree with respect to East	1201.388	77.5066144	29.4953609	Chainage = 203973.94m
430	77.5261776	29.4939205	687.43	0 degree with respect to East	77.5190927	29.4940550	180 degree with respect to East	1300.010	77.5056942	29.4943082	Chainage = 203854.73m
431	77.5261466	29.4928511	538.75	0 degree with respect to East	77.5205941	29.4929565	180 degree with respect to East	1432.475	77.5058305	29.4932356	Chainage = 203664.87m
432	77.5260286	29.4933788	390.23	0 degree with respect to East	77.5220068	29.4934552	180 degree with respect to East	1599.759	77.5055191	29.4937669	Chainage = 203517.09m
433	77.5263215	29.4921851	302.88	0 degree with respect to East	77.5231999	29.4922443	180 degree with respect to East	1665.238	77.5060376	29.4925690	Chainage = 203339.83m
434	77.5260598	29.4909802	382.01	0 degree with respect to East	77.5221228	29.4910549	180 degree with respect to East	1514.784	77.5065112	29.4913502	Chainage = 203171.57m
435	77.5250554	29.4901596	426.32	0 degree with respect to East	77.5206617	29.4902430	180 degree with respect to East	1376.282	77.5064777	29.4905112	Chainage = 203003.66m
436	77.5248251	29.4897025	574.86	0 degree with respect to East	77.5189006	29.4898149	180 degree with respect to East	1208.039	77.5064505	29.4900502	Chainage = 202826.34m
437	77.5248177	29.4896843	724.49	0 degree with respect to East	77.5173511	29.4898259	180 degree with respect to East	1057.693	77.5064505	29.4900319	Chainage = 202676.02m
438	77.5250347	29.4884158	888.77	0 degree with respect to East	77.5158753	29.4885894	180 degree with respect to East	949.231	77.5060926	29.4887742	Chainage = 202477.79m
439	77.5263970	29.4865119	1035.59	0 degree with respect to East	77.5157247	29.4867142	180 degree with respect to East	834.889	77.5071206	29.4868768	Chainage = 202269.36m
440	77.5268261	29.4849342	1156.52	0 degree with respect to East	77.5149077	29.4851602	180 degree with respect to East	614.394	77.5085760	29.4852798	Chainage = 202079.69m
441	77.5267086	29.4833928	1093.58	0 degree with respect to East	77.5154389	29.4836065	180 degree with respect to East	744.963	77.5077618	29.4837515	Chainage = 201899.87m
442	77.5267554	29.4823221	952.43	0 degree with respect to East	77.5169404	29.4825082	180 degree with respect to East	903.170	77.5076329	29.4826841	Chainage = 201710.01m

506

443	77.5266076	29.4815679	796.70	0 degree with respect to East	77.5183976	29.4817237	180 degree with respect to East	1037.845	77.5077024	29.4819258	Chainage = 201544.02m
444	77.5262985	29.4808202	624.56	0 degree with respect to East	77.5198624	29.4809423	180 degree with respect to East	1165.464	77.5078521	29.4811694	Chainage = 201377.59m
445	77.5256490	29.4794851	593.95	0 degree with respect to East	77.5195283	29.4796012	180 degree with respect to East	1187.457	77.5072916	29.4798325	Chainage = 201225.39m
446	77.5257289	29.4782222	745.05	0 degree with respect to East	77.5180514	29.4783678	180 degree with respect to East	1101.447	77.5067011	29.4785823	Chainage = 201027.31m
447	77.5247979	29.4766052	612.93	0 degree with respect to East	77.5184819	29.4767249	180 degree with respect to East	1148.070	77.5066514	29.4769485	Chainage = 200840.42m
448	77.5242049	29.4752323	470.71	0 degree with respect to East	77.5193545	29.4753243	180 degree with respect to East	1250.446	77.5064692	29.4755678	Chainage = 200663.54m
449	77.5240511	29.4738234	355.86	0 degree with respect to East	77.5203842	29.4738929	180 degree with respect to East	1351.258	77.5064603	29.4741561	Chainage = 200476m
450	77.5229917	29.4722921	176.04	0 degree with respect to East	77.5211777	29.4723265	180 degree with respect to East	1319.061	77.5075858	29.4725835	Chainage = 200286.02m
451	77.5222228	29.4705185	76.06	0 degree with respect to East	77.5214390	29.4705334	180 degree with respect to East	1263.924	77.5084155	29.4707796	Chainage = 200085.58m
452	77.5240579	29.4685580	258.79	0 degree with respect to East	77.5213914	29.4686086	180 degree with respect to East	1376.510	77.5072080	29.4688767	Chainage = 199872.1m
453	77.5249724	29.4669969	432.25	0 degree with respect to East	77.5205187	29.4670813	180 degree with respect to East	1283.044	77.5072986	29.4673312	Chainage = 199682.77m
454	77.5249467	29.4662431	574.50	0 degree with respect to East	77.5190274	29.4663553	180 degree with respect to East	1158.497	77.5070906	29.4665808	Chainage = 199517.18m
455	77.5247881	29.4653829	716.18	0 degree with respect to East	77.5174090	29.4655227	180 degree with respect to East	1082.873	77.5062516	29.4657334	Chainage = 199335.02m
456	77.5248951	29.4645188	867.58	0 degree with respect to East	77.5159560	29.4646882	180 degree with respect to East	983.060	77.5058271	29.4648794	Chainage = 199166.38m
457	77.5249220	29.4633614	1017.14	0 degree with respect to East	77.5144421	29.4635599	180 degree with respect to East	851.262	77.5056712	29.4637254	Chainage = 198973.43m
458	77.5241003	29.4618368	1022.86	0 degree with respect to East	77.5135616	29.4620364	180 degree with respect to East	797.482	77.5053450	29.4621914	Chainage = 198784.13m
459	77.5237101	29.4601844	986.55	0 degree with respect to East	77.5135457	29.4603768	180 degree with respect to East	915.835	77.5041098	29.4605548	Chainage = 198600.11m
460	77.5235651	29.4585388	976.44	0 degree with respect to East	77.5135051	29.4587292	180 degree with respect to East	905.837	77.5041723	29.4589052	Chainage = 198417.38m

507

461	77.5221896	29.4570586	935.51	0 degree with respect to East	77.5125513	29.4572410	180 degree with respect to East	862.365	77.5036666	29.4574085	Chainage = 198228.18m
462	77.5218814	29.4562831	815.94	0 degree with respect to East	77.5134751	29.4564422	180 degree with respect to East	994.453	77.5032296	29.4566354	Chainage = 198102.17m
463	77.5220436	29.4568151	695.46	0 degree with respect to East	77.5148785	29.4569507	180 degree with respect to East	1098.764	77.5035583	29.4571642	Chainage = 197954.77m
464	77.5220362	29.4553464	702.05	0 degree with respect to East	77.5148033	29.4554833	180 degree with respect to East	1166.515	77.5027852	29.4557099	Chainage = 197791.9m
465	77.5210212	29.4538255	689.00	0 degree with respect to East	77.5139229	29.4539598	180 degree with respect to East	1122.645	77.5023569	29.4541778	Chainage = 197602.59m
466	77.5205655	29.4533654	815.46	0 degree with respect to East	77.5121644	29.4535243	180 degree with respect to East	969.653	77.5021747	29.4537126	Chainage = 197425.24m
467	77.5209417	29.4537456	1000.32	0 degree with respect to East	77.5106360	29.4539404	180 degree with respect to East	806.677	77.5023253	29.4540970	Chainage = 197269.91m
468	77.5215483	29.4544169	1178.17	0 degree with respect to East	77.5094103	29.4546463	180 degree with respect to East	670.928	77.5024981	29.4547765	Chainage = 197127.52m
469	77.5220856	29.4552092	1337.38	0 degree with respect to East	77.5083073	29.4554697	180 degree with respect to East	542.263	77.5027206	29.4555749	Chainage = 196986.84m
470	77.5218427	29.4564494	1377.80	0 degree with respect to East	77.5076478	29.4567177	180 degree with respect to East	421.437	77.5033058	29.4567995	Chainage = 196834.38m
471	77.5228277	29.4580508	1439.85	0 degree with respect to East	77.5079932	29.4583313	180 degree with respect to East	383.260	77.5040445	29.4584057	Chainage = 196652.36m
472	77.5234882	29.4584981	1580.16	0 degree with respect to East	77.5072081	29.4588059	180 degree with respect to East	295.700	77.5041616	29.4588632	Chainage = 196559.78m
473	77.5223663	29.4573621	1547.03	0 degree with respect to East	77.5064276	29.4576633	180 degree with respect to East	255.810	77.5037921	29.4577130	Chainage = 196412.18m
474	77.5219426	29.4557334	1567.13	0 degree with respect to East	77.5057971	29.4560385	180 degree with respect to East	274.324	77.5029708	29.4560917	Chainage = 196221.9m
475	77.5218292	29.4546790	1691.28	0 degree with respect to East	77.5044049	29.4550082	180 degree with respect to East	179.352	77.5025571	29.4550429	Chainage = 196044.98m
476	77.5207182	29.4535211	1690.90	0 degree with respect to East	77.5032980	29.4538500	180 degree with respect to East	103.049	77.5022363	29.4538700	Chainage = 195877.56m
477	77.5199751	29.4520289	1711.34	0 degree with respect to East	77.5023445	29.4523616	180 degree with respect to East	83.419	77.5014851	29.4523778	Chainage = 195688.36m
478	77.5200079	29.4503057	1674.85	0 degree with respect to East	77.5027535	29.4506313	180 degree with respect to East	179.874	77.5009005	29.4506662	Chainage = 195492.44m

508

479	77.5200197	29.4500893	1542.40	0 degree with respect to East	77.5041299	29.4503893	180 degree with respect to East	316.155	77.5008729	29.4504505	Chainage = 195356.2m
480	77.5200445	29.4514033	1482.34	0 degree with respect to East	77.5047732	29.4516916	180 degree with respect to East	362.507	77.5010386	29.4517619	Chainage = 195198.88m
481	77.5200604	29.4510974	1365.99	0 degree with respect to East	77.5059878	29.4513632	180 degree with respect to East	485.943	77.5009815	29.4514574	Chainage = 195075.52m
482	77.5195891	29.4495386	1364.77	0 degree with respect to East	77.5055293	29.4498041	180 degree with respect to East	482.730	77.5005562	29.4498976	Chainage = 194897.01m
483	77.5190348	29.4482843	1454.20	0 degree with respect to East	77.5040539	29.4485671	180 degree with respect to East	390.981	77.5000260	29.4486428	Chainage = 194698.73m
484	77.5200640	29.4467442	1643.68	0 degree with respect to East	77.5031313	29.4470638	180 degree with respect to East	338.053	77.4996488	29.4471292	Chainage = 194509.52m
485	77.5210268	29.4455456	1615.45	0 degree with respect to East	77.5043851	29.4458598	180 degree with respect to East	471.534	77.4995276	29.4459512	Chainage = 194328.89m
486	77.5210832	29.4444744	1475.21	0 degree with respect to East	77.5058865	29.4447614	180 degree with respect to East	617.125	77.4995291	29.4448810	Chainage = 194138.99m
487	77.5209284	29.4434071	1314.46	0 degree with respect to East	77.5073877	29.4436629	180 degree with respect to East	741.750	77.4997467	29.4438067	Chainage = 193949.09m
488	77.5207823	29.4420066	1190.96	0 degree with respect to East	77.5085141	29.4422384	180 degree with respect to East	801.731	77.5002552	29.4423938	Chainage = 193757m
489	77.5207472	29.4403588	1191.50	0 degree with respect to East	77.5084735	29.4405907	180 degree with respect to East	717.179	77.5010858	29.4407297	Chainage = 193574.26m
490	77.5206788	29.4399877	1018.70	0 degree with respect to East	77.5101853	29.4401860	180 degree with respect to East	873.218	77.5011902	29.4403554	Chainage = 193402.18m
491	77.5207309	29.4402421	862.66	0 degree with respect to East	77.5118447	29.4404102	180 degree with respect to East	1040.224	77.5011293	29.4406120	Chainage = 193239.22m
492	77.5200673	29.4391845	652.51	0 degree with respect to East	77.5133459	29.4393116	180 degree with respect to East	1203.997	77.5009436	29.4395452	Chainage = 193049.31m
493	77.5196461	29.4378103	497.67	0 degree with respect to East	77.5145197	29.4379072	180 degree with respect to East	1380.690	77.5002975	29.4381751	Chainage = 192856.37m
494	77.5208154	29.4362629	528.43	0 degree with respect to East	77.5153723	29.4363659	180 degree with respect to East	1464.057	77.5002916	29.4366501	Chainage = 192666.49m
495	77.5218097	29.4348836	711.56	0 degree with respect to East	77.5144803	29.4350222	180 degree with respect to East	1342.798	77.5006488	29.4352828	Chainage = 192494.18m
496	77.5218604	29.4343476	868.83	0 degree with respect to East	77.5129112	29.4345168	180 degree with respect to East	1139.924	77.5011695	29.4347380	Chainage = 192331.9m

509

86

497	77.5217799	29.4338141	1029.44	0 degree with respect to East	77.5111763	29.4340145	180 degree with respect to East	945.466	77.5014376	29.4341979	Chainage = 192154.54m
498	77.5216459	29.4324243	1119.81	0 degree with respect to East	77.5101116	29.4326423	180 degree with respect to East	795.516	77.5019176	29.4327966	Chainage = 191970.61m
499	77.5218655	29.4309068	1055.80	0 degree with respect to East	77.5109907	29.4311124	180 degree with respect to East	816.443	77.5025813	29.4312707	Chainage = 191780.72m
500	77.5210536	29.4291856	1021.28	0 degree with respect to East	77.5105346	29.4293844	180 degree with respect to East	717.328	77.5031462	29.4295235	Chainage = 191584.07m
501	77.5207004	29.4287518	1158.68	0 degree with respect to East	77.5087662	29.4289772	180 degree with respect to East	547.548	77.5031265	29.4290834	Chainage = 191406.58m
502	77.5209509	29.4273857	1269.39	0 degree with respect to East	77.5078765	29.4276326	180 degree with respect to East	405.537	77.5036996	29.4277112	Chainage = 191234.29m
503	77.5214253	29.4269119	1146.43	0 degree with respect to East	77.5096175	29.4271350	180 degree with respect to East	558.990	77.5038600	29.4272435	Chainage = 191056.52m
504	77.5221166	29.4263566	1061.43	0 degree with respect to East	77.5111843	29.4265632	180 degree with respect to East	670.657	77.5042768	29.4266933	Chainage = 190891.74m
505	77.5236509	29.4247696	1134.75	0 degree with respect to East	77.5119636	29.4249907	180 degree with respect to East	660.229	77.5051636	29.4251188	Chainage = 190701.68m
506	77.5233019	29.4232317	1022.32	0 degree with respect to East	77.5127728	29.4234309	180 degree with respect to East	753.144	77.5050159	29.4235770	Chainage = 190511.73m
507	77.5233570	29.4216599	1074.45	0 degree with respect to East	77.5122911	29.4218692	180 degree with respect to East	779.195	77.5042660	29.4220204	Chainage = 190332.37m
508	77.5245911	29.4200305	1129.17	0 degree with respect to East	77.5129620	29.4202505	180 degree with respect to East	836.025	77.5043517	29.4204127	Chainage = 190141.43m
509	77.5241991	29.4205939	980.81	0 degree with respect to East	77.5140977	29.4207850	180 degree with respect to East	954.939	77.5042628	29.4209703	Chainage = 190016.26m
510	77.5238394	29.4209345	790.57	0 degree with respect to East	77.5156973	29.4210886	180 degree with respect to East	1111.070	77.5042543	29.4213043	Chainage = 189857.37m
511	77.5244474	29.4202138	689.97	0 degree with respect to East	77.5173415	29.4203483	180 degree with respect to East	1264.388	77.5043195	29.4205939	Chainage = 189677.9m
512	77.5257923	29.4183105	814.72	0 degree with respect to East	77.5174018	29.4184694	180 degree with respect to East	1263.916	77.5043849	29.4187149	Chainage = 189469.49m
513	77.5258517	29.4166608	824.44	0 degree with respect to East	77.5173611	29.4168216	180 degree with respect to East	1184.165	77.5051658	29.4170516	Chainage = 189286.74m
514	77.5266249	29.4149069	943.28	0 degree with respect to East	77.5169107	29.4150909	180 degree with respect to East	1043.689	77.5061623	29.4152936	Chainage = 189089.92m

510

99

515	77.5281253	29.4135216	1212.99	0 degree with respect to East	77.5156337	29.4137582	180 degree with respect to East	893.640	77.5064307	29.4139317	Chainage = 188897.04m
516	77.5285249	29.4118819	1318.02	0 degree with respect to East	77.5149518	29.4121389	180 degree with respect to East	847.454	77.5062246	29.4123034	Chainage = 188705.68m
517	77.5287579	29.4100205	1359.71	0 degree with respect to East	77.5147557	29.4102857	180 degree with respect to East	672.787	77.5078274	29.4104163	Chainage = 188499.31m
518	77.5291970	29.4090623	1260.95	0 degree with respect to East	77.5162119	29.4093083	180 degree with respect to East	677.932	77.5092307	29.4094400	Chainage = 188321.17m
519	77.5293656	29.4087916	1100.69	0 degree with respect to East	77.5180310	29.4090064	180 degree with respect to East	837.658	77.5094049	29.4091692	Chainage = 188141.42m
520	77.5301577	29.4076224	1056.52	0 degree with respect to East	77.5192780	29.4078287	180 degree with respect to East	783.706	77.5112076	29.4079811	Chainage = 187963.35m
521	77.5303658	29.4068686	963.40	0 degree with respect to East	77.5204452	29.4070568	180 degree with respect to East	684.273	77.5133988	29.4071899	Chainage = 187821.34m
522	77.5301136	29.4074398	803.69	0 degree with respect to East	77.5218375	29.4075968	180 degree with respect to East	853.683	77.5130465	29.4077630	Chainage = 187673.5m
523	77.5305992	29.4061001	805.72	0 degree with respect to East	77.5223024	29.4062575	180 degree with respect to East	850.237	77.5135471	29.4064230	Chainage = 187518.29m
524	77.5307349	29.4044854	760.83	0 degree with respect to East	77.5229004	29.4046340	180 degree with respect to East	993.159	77.5126735	29.4048273	Chainage = 187329.15m
525	77.5307518	29.4039500	596.11	0 degree with respect to East	77.5246135	29.4040665	180 degree with respect to East	1170.310	77.5125625	29.4042944	Chainage = 187151.32m
526	77.5307375	29.4033912	502.89	0 degree with respect to East	77.5255591	29.4034895	180 degree with respect to East	1235.046	77.5128416	29.4037301	Chainage = 187039.42m
527	77.5301539	29.4016038	477.54	0 degree with respect to East	77.5252367	29.4016971	180 degree with respect to East	1164.726	77.5132435	29.4019239	Chainage = 186838.22m
528	77.5296750	29.3998268	464.97	0 degree with respect to East	77.5248872	29.3999177	180 degree with respect to East	1093.407	77.5136286	29.4001306	Chainage = 186638.02m
529	77.5291452	29.3983302	506.11	0 degree with respect to East	77.5239340	29.3984291	180 degree with respect to East	903.254	77.5146334	29.3986050	Chainage = 186448.78m
530	77.5287219	29.3978358	620.48	0 degree with respect to East	77.5223331	29.3979569	180 degree with respect to East	707.440	77.5150488	29.3980947	Chainage = 186284.76m
531	77.5287219	29.3978358	807.44	0 degree with respect to East	77.5204080	29.3979934	180 degree with respect to East	520.481	77.5150488	29.3980947	Chainage = 186097.8m
532	77.5293592	29.3986262	976.45	0 degree with respect to East	77.5193050	29.3988168	180 degree with respect to East	485.769	77.5143032	29.3989113	Chainage = 185957.07m

511

533	77.5285368	29.3974653	971.11	0 degree with respect to East	77.5185377	29.3976547	180 degree with respect to East	320.899	77.5152335	29.3977171	Chainage = 185808.23m
534	77.5280239	29.3961814	787.93	0 degree with respect to East	77.5199109	29.3963351	180 degree with respect to East	456.620	77.5152093	29.3964240	Chainage = 185610.27m
535	77.5280162	29.3946596	763.48	0 degree with respect to East	77.5201552	29.3948086	180 degree with respect to East	614.329	77.5138299	29.3949281	Chainage = 185439.35m
536	77.5272133	29.3935135	559.55	0 degree with respect to East	77.5214521	29.3936227	180 degree with respect to East	790.924	77.5133086	29.3937766	Chainage = 185257.28m
537	77.5269742	29.3930537	663.78	0 degree with respect to East	77.5201398	29.3931832	180 degree with respect to East	655.906	77.5133864	29.3933108	Chainage = 185120.85m
538	77.5266987	29.3918588	758.64	0 degree with respect to East	77.5188878	29.3920067	180 degree with respect to East	572.412	77.5129942	29.3921180	Chainage = 184942.53m
539	77.5266137	29.3901799	761.28	0 degree with respect to East	77.5187757	29.3903283	180 degree with respect to East	1050.503	77.5079597	29.3905323	Chainage = 184756.11m
540	77.5265639	29.3900544	898.15	0 degree with respect to East	77.5173166	29.3902295	180 degree with respect to East	915.545	77.5078902	29.3904073	Chainage = 184614.01m
541	77.5266846	29.3907561	1026.80	0 degree with respect to East	77.5161127	29.3909562	180 degree with respect to East	737.502	77.5085193	29.3910994	Chainage = 184472.02m
542	77.5266073	29.3901638	1163.93	0 degree with respect to East	77.5146236	29.3903905	180 degree with respect to East	648.482	77.5079469	29.3905164	Chainage = 184314.41m
543	77.5255451	29.3891723	1186.88	0 degree with respect to East	77.5133252	29.3894034	180 degree with respect to East	595.084	77.5071983	29.3895188	Chainage = 184147.45m
544	77.5251061	29.3875342	1207.49	0 degree with respect to East	77.5126741	29.3877693	180 degree with respect to East	782.284	77.5046199	29.3879209	Chainage = 183955.54m
545	77.5247029	29.3858954	1231.60	0 degree with respect to East	77.5120230	29.3861351	180 degree with respect to East	779.187	77.5040009	29.3862861	Chainage = 183763.63m
546	77.5232030	29.3841919	1108.03	0 degree with respect to East	77.5117954	29.3844074	180 degree with respect to East	1135.118	77.5001089	29.3846272	Chainage = 183570.8m
547	77.5227837	29.3827459	968.92	0 degree with respect to East	77.5128085	29.3829344	180 degree with respect to East	1340.063	77.4990121	29.3831938	Chainage = 183380.13m
548	77.5222804	29.3818867	771.04	0 degree with respect to East	77.5143425	29.3820367	180 degree with respect to East	1543.420	77.4984527	29.3823356	Chainage = 183200.97m
549	77.5209349	29.3803947	730.68	0 degree with respect to East	77.5134126	29.3805368	180 degree with respect to East	1639.314	77.4965358	29.3808540	Chainage = 183011.72m
550	77.5201367	29.3789380	753.07	0 degree with respect to East	77.5123840	29.3790843	180 degree with respect to East	1601.002	77.4959019	29.3793941	Chainage = 182822.21m

512

101

551	77.5190470	29.3776015	771.24	0 degree with respect to East	77.5111073	29.3777514	180 degree with respect to East	1789.260	77.4926873	29.3780972	Chainage = 182629.29m
552	77.5185683	29.3771621	896.25	0 degree with respect to East	77.5093418	29.3773361	180 degree with respect to East	1690.816	77.4919352	29.3776628	Chainage = 182451.75m
553	77.5185683	29.3771621	1083.24	0 degree with respect to East	77.5074167	29.3773724	180 degree with respect to East	1503.820	77.4919352	29.3776628	Chainage = 182264.75m
554	77.5165223	29.3756051	936.46	0 degree with respect to East	77.5068820	29.3757868	180 degree with respect to East	1551.470	77.4909102	29.3760863	Chainage = 182081.43m
555	77.5142225	29.3740098	654.99	0 degree with respect to East	77.5074799	29.3741369	180 degree with respect to East	1734.724	77.4896219	29.3744717	Chainage = 181889.49m
556	77.5134021	29.3727528	437.26	0 degree with respect to East	77.5089008	29.3728376	180 degree with respect to East	1940.480	77.4889249	29.3732121	Chainage = 181690m
557	77.5132790	29.3713061	521.02	0 degree with respect to East	77.5079157	29.3714071	180 degree with respect to East	1891.991	77.4884391	29.3717721	Chainage = 181504.76m
558	77.5121413	29.3701711	541.45	0 degree with respect to East	77.5065677	29.3702760	180 degree with respect to East	1817.744	77.4878557	29.3706266	Chainage = 181323.47m
559	77.5116521	29.3695347	658.63	0 degree with respect to East	77.5048723	29.3696623	180 degree with respect to East	1692.537	77.4874492	29.3699886	Chainage = 181145.3m
560	77.5116521	29.3695347	845.63	0 degree with respect to East	77.5029472	29.3696984	180 degree with respect to East	1505.528	77.4874492	29.3699886	Chainage = 180958.29m
561	77.5115196	29.3691958	1007.98	0 degree with respect to East	77.5011436	29.3693910	180 degree with respect to East	1346.908	77.4872785	29.3696504	Chainage = 180779.83m
562	77.5112069	29.3684730	1123.33	0 degree with respect to East	77.4996435	29.3686904	180 degree with respect to East	1242.279	77.4868555	29.3689296	Chainage = 180614.72m
563	77.5112720	29.3686055	1303.37	0 degree with respect to East	77.4978554	29.3688576	180 degree with respect to East	1065.090	77.4868914	29.3690626	Chainage = 180440.06m
564	77.5114597	29.3690033	1468.68	0 degree with respect to East	77.4963413	29.3692873	180 degree with respect to East	893.509	77.4871435	29.3694592	Chainage = 180285.48m
565	77.5111678	29.3682553	1585.19	0 degree with respect to East	77.4948501	29.3685617	180 degree with respect to East	776.201	77.4868599	29.3687110	Chainage = 180119.8m
566	77.5102362	29.3665123	1533.98	0 degree with respect to East	77.4944459	29.3668087	180 degree with respect to East	767.330	77.4865472	29.3669563	Chainage = 179921.51m
567	77.5089276	29.3647508	1440.76	0 degree with respect to East	77.4940971	29.3650291	180 degree with respect to East	826.557	77.4855889	29.3651880	Chainage = 179721.31m
568	77.5079675	29.3632309	1267.42	0 degree with respect to East	77.4949216	29.3634757	180 degree with respect to East	889.550	77.4857650	29.3636467	Chainage = 179531.36m

513

102

569	77.5042055	29.3619397	838.10	0 degree with respect to East	77.4955788	29.3621015	180 degree with respect to East	990.062	77.4853877	29.3622918	Chainage = 179366.16m
570	77.5042665	29.3622799	994.03	0 degree with respect to East	77.4940348	29.3624717	180 degree with respect to East	833.575	77.4854545	29.3626320	Chainage = 179210.68m
571	77.5041887	29.3621847	1131.15	0 degree with respect to East	77.4925456	29.3624029	180 degree with respect to East	691.588	77.4854268	29.3625358	Chainage = 179065.83m
572	77.5044166	29.3613404	1243.92	0 degree with respect to East	77.4916127	29.3615804	180 degree with respect to East	595.373	77.4854844	29.3616948	Chainage = 178937.27m
573	77.5056527	29.3601203	1282.04	0 degree with respect to East	77.4924566	29.3603677	180 degree with respect to East	647.423	77.4857926	29.3604921	Chainage = 178779.8m
574	77.5045322	29.3582894	1161.66	0 degree with respect to East	77.4925754	29.3585134	180 degree with respect to East	452.047	77.4879225	29.3586004	Chainage = 178573.89m
575	77.5047744	29.3570909	1119.97	0 degree with respect to East	77.4932468	29.3573069	180 degree with respect to East	496.988	77.4881314	29.3574025	Chainage = 178425.06m
576	77.5048639	29.3565541	962.23	0 degree with respect to East	77.4949600	29.3567399	180 degree with respect to East	693.838	77.4878185	29.3568733	Chainage = 178247.17m
577	77.5050013	29.3557860	818.02	0 degree with respect to East	77.4965818	29.3559439	180 degree with respect to East	912.090	77.4871939	29.3561194	Chainage = 178066.6m
578	77.5051983	29.3544577	806.56	0 degree with respect to East	77.4968969	29.3546134	180 degree with respect to East	957.984	77.4870368	29.3547977	Chainage = 177915.94m
579	77.5049309	29.3536102	919.04	0 degree with respect to East	77.4954718	29.3537876	180 degree with respect to East	805.340	77.4871829	29.3539425	Chainage = 177749.97m
580	77.5047724	29.3530045	1065.20	0 degree with respect to East	77.4938090	29.3532100	180 degree with respect to East	646.522	77.4871548	29.3533343	Chainage = 177576.22m
581	77.5045571	29.3522796	897.13	0 degree with respect to East	77.4953237	29.3524528	180 degree with respect to East	823.292	77.4868501	29.3526111	Chainage = 177406.82m
582	77.5045176	29.3517454	726.84	0 degree with respect to East	77.4970368	29.3518857	180 degree with respect to East	1030.187	77.4864338	29.3520838	Chainage = 177228.93m
583	77.5048284	29.3508455	641.09	0 degree with respect to East	77.4982303	29.3509693	180 degree with respect to East	1210.257	77.4857742	29.3512021	Chainage = 177074.77m
584	77.5040763	29.3494081	568.20	0 degree with respect to East	77.4982284	29.3495178	180 degree with respect to East	1222.507	77.4856463	29.3497529	Chainage = 176913.82m
585	77.5037415	29.3477803	536.35	0 degree with respect to East	77.4982216	29.3478838	180 degree with respect to East	1284.840	77.4849982	29.3481309	Chainage = 176732.65m
586	77.5046870	29.3462177	549.60	0 degree with respect to East	77.4990307	29.3463238	180 degree with respect to East	1433.752	77.4842750	29.3465995	Chainage = 176542.66m

514

103

587	77.5053379	29.3450420	690.75	0 degree with respect to East	77.4982291	29.3451754	180 degree with respect to East	1375.007	77.4840781	29.3454397	Chainage = 176393.4m
588	77.5058063	29.3444982	904.81	0 degree with respect to East	77.4964944	29.3446728	180 degree with respect to East	1211.328	77.4840280	29.3449056	Chainage = 176215.91m
589	77.5058873	29.3442292	1090.50	0 degree with respect to East	77.4946646	29.3444396	180 degree with respect to East	1037.832	77.4839837	29.3446389	Chainage = 176036.28m
590	77.5058656	29.3438673	1262.91	0 degree with respect to East	77.4928685	29.3441108	180 degree with respect to East	872.517	77.4838890	29.3442784	Chainage = 175858.03m
591	77.5058339	29.3426195	1371.52	0 degree with respect to East	77.4917191	29.3428840	180 degree with respect to East	802.888	77.4834563	29.3430381	Chainage = 175682.04m
592	77.5056867	29.3413556	1455.82	0 degree with respect to East	77.4907046	29.3416362	180 degree with respect to East	713.315	77.4833637	29.3417731	Chainage = 175512.17m
593	77.5055347	29.3403513	1317.59	0 degree with respect to East	77.4919754	29.3406053	180 degree with respect to East	823.995	77.4834955	29.3407635	Chainage = 175343.93m
594	77.5049718	29.3387107	1207.51	0 degree with respect to East	77.4925455	29.3389435	180 degree with respect to East	824.901	77.4840565	29.3391019	Chainage = 175151.52m
595	77.5046495	29.3369641	1202.75	0 degree with respect to East	77.4922723	29.3371959	180 degree with respect to East	657.731	77.4855037	29.3373223	Chainage = 174955.95m
596	77.5039512	29.3352925	1086.84	0 degree with respect to East	77.4927671	29.3355020	180 degree with respect to East	519.209	77.4874241	29.3356017	Chainage = 174762.07m
597	77.5041321	29.3335029	1138.32	0 degree with respect to East	77.4924185	29.3337223	180 degree with respect to East	163.245	77.4907386	29.3337537	Chainage = 174561.86m
598	77.5051450	29.3319699	1151.38	0 degree with respect to East	77.4932971	29.3321919	180 degree with respect to East	316.549	77.4900397	29.3322527	Chainage = 174371.91m
599	77.5059752	29.3303076	1295.28	0 degree with respect to East	77.4926467	29.3305573	180 degree with respect to East	270.308	77.4898652	29.3306093	Chainage = 174179.98m
600	77.5065394	29.3285085	1324.71	0 degree with respect to East	77.4929084	29.3287640	180 degree with respect to East	315.501	77.4896619	29.3288246	Chainage = 173979.52m
601	77.5065730	29.3272300	1227.33	0 degree with respect to East	77.4939441	29.3274667	180 degree with respect to East	489.147	77.4889109	29.3275607	Chainage = 173803.97m
602	77.5063406	29.3261633	1058.91	0 degree with respect to East	77.4954449	29.3263676	180 degree with respect to East	653.784	77.4887176	29.3264932	Chainage = 173613.93m
603	77.5061826	29.3244487	1062.45	0 degree with respect to East	77.4952505	29.3246536	180 degree with respect to East	659.946	77.4884600	29.3247804	Chainage = 173422.96m
604	77.5060118	29.3225370	1048.08	0 degree with respect to East	77.4952279	29.3227391	180 degree with respect to East	759.699	77.4874111	29.3228850	Chainage = 173210.67m

515

104

605	77.5053003	29.3210054	900.31	0 degree with respect to East	77.4960370	29.3211790	180 degree with respect to East	829.945	77.4874975	29.3213385	Chainage = 173020.67m
606	77.5052899	29.3206989	724.01	0 degree with respect to East	77.4978406	29.3208386	180 degree with respect to East	1015.472	77.4873922	29.3210338	Chainage = 172841.4m
607	77.5052265	29.3193625	738.76	0 degree with respect to East	77.4976255	29.3195050	180 degree with respect to East	1058.881	77.4867306	29.3197085	Chainage = 172692.07m
608	77.5046789	29.3181453	830.18	0 degree with respect to East	77.4961374	29.3183053	180 degree with respect to East	961.158	77.4862481	29.3184900	Chainage = 172495.6m
609	77.5043432	29.3175065	962.34	0 degree with respect to East	77.4944419	29.3176919	180 degree with respect to East	783.875	77.4863768	29.3178424	Chainage = 172317.37m
610	77.5043432	29.3175065	1149.44	0 degree with respect to East	77.4925169	29.3177279	180 degree with respect to East	596.773	77.4863768	29.3178424	Chainage = 172130.27m
611	77.5042567	29.3160851	1152.65	0 degree with respect to East	77.4923975	29.3163071	180 degree with respect to East	607.064	77.4861516	29.3164236	Chainage = 171972.31m
612	77.5042404	29.3149699	1014.90	0 degree with respect to East	77.4937985	29.3151655	180 degree with respect to East	820.771	77.4853540	29.3153230	Chainage = 171786.41m
613	77.5033730	29.3140469	788.01	0 degree with respect to East	77.4952657	29.3141988	180 degree with respect to East	990.439	77.4850756	29.3143889	Chainage = 171608.05m
614	77.5029954	29.3129839	760.21	0 degree with respect to East	77.4951742	29.3131304	180 degree with respect to East	989.588	77.4849929	29.3133204	Chainage = 171489.26m
615	77.5028909	29.3124562	918.84	0 degree with respect to East	77.4934377	29.3126331	180 degree with respect to East	818.382	77.4850179	29.3127902	Chainage = 171311.74m
616	77.5028343	29.3121844	1091.01	0 degree with respect to East	77.4916098	29.3123945	180 degree with respect to East	645.370	77.4849700	29.3125183	Chainage = 171132.15m
617	77.5028080	29.3119322	1266.82	0 degree with respect to East	77.4897747	29.3121760	180 degree with respect to East	475.902	77.4848785	29.3122673	Chainage = 170952.19m
618	77.5022739	29.3103032	1279.75	0 degree with respect to East	77.4891078	29.3105494	180 degree with respect to East	521.239	77.4837452	29.3106493	Chainage = 170760.55m
619	77.5013823	29.3085314	1167.67	0 degree with respect to East	77.4893695	29.3087560	180 degree with respect to East	546.775	77.4837442	29.3088608	Chainage = 170560.08m
620	77.5009930	29.3067502	1104.41	0 degree with respect to East	77.4896311	29.3069626	180 degree with respect to East	688.037	77.4825527	29.3070945	Chainage = 170359.61m
621	77.5001105	29.3049782	993.21	0 degree with respect to East	77.4898928	29.3051692	180 degree with respect to East	788.638	77.4817796	29.3053203	Chainage = 170159.14m
622	77.4992453	29.3030687	913.67	0 degree with respect to East	77.4898461	29.3032444	180 degree with respect to East	1206.680	77.4774324	29.3034754	Chainage = 169945.67m

516

623	77.4980351	29.3013029	770.61	0 degree with respect to East	77.4901077	29.3014510	180 degree with respect to East	1386.239	77.4758471	29.3017163	Chainage = 169745.2m
624	77.4974131	29.2999753	802.81	0 degree with respect to East	77.4891546	29.3001296	180 degree with respect to East	1332.295	77.4754491	29.3003845	Chainage = 169571.86m
625	77.4964379	29.2991958	867.54	0 degree with respect to East	77.4875136	29.2993624	180 degree with respect to East	1360.845	77.4735145	29.2996225	Chainage = 169391.11m
626	77.4955964	29.2989440	963.61	0 degree with respect to East	77.4856838	29.2991290	180 degree with respect to East	1217.922	77.4731549	29.2993617	Chainage = 169211.4m
627	77.4950417	29.2984286	1078.62	0 degree with respect to East	77.4839460	29.2986355	180 degree with respect to East	1088.173	77.4727519	29.2988434	Chainage = 169033.86m
628	77.4942409	29.2970967	900.23	0 degree with respect to East	77.4849805	29.2972694	180 degree with respect to East	1255.568	77.4720646	29.2975092	Chainage = 168852.06m
629	77.4950879	29.2958773	882.59	0 degree with respect to East	77.4860091	29.2960467	180 degree with respect to East	1376.277	77.4718516	29.2963096	Chainage = 168683.61m
630	77.4940648	29.2944013	878.23	0 degree with respect to East	77.4850308	29.2945697	180 degree with respect to East	1277.123	77.4718936	29.2948136	Chainage = 168494.25m
631	77.4940782	29.2944246	1031.60	0 degree with respect to East	77.4834666	29.2946224	180 degree with respect to East	1125.658	77.4718873	29.2948373	Chainage = 168342.1m
632	77.4940782	29.2944246	1218.75	0 degree with respect to East	77.4815415	29.2946582	180 degree with respect to East	938.514	77.4718873	29.2948373	Chainage = 168154.96m
633	77.4944758	29.2949522	1391.28	0 degree with respect to East	77.4801642	29.2952188	180 degree with respect to East	804.682	77.4718867	29.2953724	Chainage = 168007.37m
634	77.4948622	29.2953711	1573.57	0 degree with respect to East	77.4786755	29.2956727	180 degree with respect to East	667.658	77.4718075	29.2958000	Chainage = 167854.18m
635	77.4942241	29.2946987	1660.39	0 degree with respect to East	77.4771444	29.2950168	180 degree with respect to East	513.306	77.4718642	29.2951146	Chainage = 167688.55m
636	77.4935464	29.2930787	1656.69	0 degree with respect to East	77.4765049	29.2933960	180 degree with respect to East	366.672	77.4727331	29.2934659	Chainage = 167498.4m
637	77.4939734	29.2915257	1619.56	0 degree with respect to East	77.4773142	29.2918359	180 degree with respect to East	318.463	77.4740384	29.2918966	Chainage = 167308.38m
638	77.4932497	29.2899942	1470.54	0 degree with respect to East	77.4781235	29.2902758	180 degree with respect to East	416.713	77.4738372	29.2903553	Chainage = 167118.36m
639	77.4959106	29.2884901	1630.76	0 degree with respect to East	77.4791367	29.2888027	180 degree with respect to East	464.651	77.4743572	29.2888913	Chainage = 166927.63m
640	77.4968522	29.2876029	1568.65	0 degree with respect to East	77.4807173	29.2879037	180 degree with respect to East	576.689	77.4747855	29.2880138	Chainage = 166744.5m

517

98

641	77.4975972	29.2869211	1479.66	0 degree with respect to East	77.4823777	29.2872049	180 degree with respect to East	390.631	77.4783598	29.2872796	Chainage = 166565.47m
642	77.4979453	29.2862467	1352.08	0 degree with respect to East	77.4840382	29.2865061	180 degree with respect to East	566.023	77.4782162	29.2866143	Chainage = 166386.44m
643	77.4982994	29.2851687	1240.63	0 degree with respect to East	77.4855388	29.2854068	180 degree with respect to East	816.703	77.4771385	29.2855629	Chainage = 166196.36m
644	77.4999374	29.2841493	1250.81	0 degree with respect to East	77.4870722	29.2843895	180 degree with respect to East	921.966	77.4775892	29.2845658	Chainage = 166009.45m
645	77.5001981	29.2836093	1109.61	0 degree with respect to East	77.4887853	29.2838225	180 degree with respect to East	1040.156	77.4780867	29.2840215	Chainage = 165831.46m
646	77.5006066	29.2829199	988.44	0 degree with respect to East	77.4904402	29.2831099	180 degree with respect to East	1165.877	77.4784487	29.2833331	Chainage = 165652.24m
647	77.5009010	29.2822403	856.99	0 degree with respect to East	77.4920867	29.2824051	180 degree with respect to East	1320.738	77.4785024	29.2826579	Chainage = 165474.14m
648	77.5008084	29.2806127	797.25	0 degree with respect to East	77.4926087	29.2807660	180 degree with respect to East	1379.844	77.4784167	29.2810302	Chainage = 165285.46m
649	77.5008519	29.2789405	800.72	0 degree with respect to East	77.4926166	29.2790945	180 degree with respect to East	1314.994	77.4790918	29.2793463	Chainage = 165100.13m
650	77.5009123	29.2786550	658.99	0 degree with respect to East	77.4941346	29.2787817	180 degree with respect to East	1400.302	77.4797326	29.2790499	Chainage = 164948.54m
651	77.5010329	29.2775003	666.85	0 degree with respect to East	77.4941745	29.2776286	180 degree with respect to East	1138.086	77.4824695	29.2778467	Chainage = 164820.62m
652	77.5006519	29.2758915	699.54	0 degree with respect to East	77.4934574	29.2760260	180 degree with respect to East	1089.930	77.4822478	29.2762348	Chainage = 164629.75m
653	77.5007091	29.2750088	858.82	0 degree with respect to East	77.4918765	29.2751739	180 degree with respect to East	931.837	77.4822929	29.2753524	Chainage = 164449.35m
654	77.5050321	29.2741718	1424.07	0 degree with respect to East	77.4903864	29.2744457	180 degree with respect to East	753.651	77.4826354	29.2745900	Chainage = 164283.51m
655	77.5096275	29.2728368	1982.65	0 degree with respect to East	77.4892374	29.2732184	180 degree with respect to East	581.679	77.4832552	29.2733297	Chainage = 164107.46m
656	77.5119476	29.2710593	2194.36	0 degree with respect to East	77.4893806	29.2714819	180 degree with respect to East	486.354	77.4843788	29.2715750	Chainage = 163914.42m
657	77.5132027	29.2697218	2227.41	0 degree with respect to East	77.4902961	29.2701508	180 degree with respect to East	352.228	77.4866738	29.2702183	Chainage = 163742.08m
658	77.5138717	29.2690408	2148.94	0 degree with respect to East	77.4917723	29.2694549	180 degree with respect to East	429.959	77.4873506	29.2695373	Chainage = 163579.14m

518

107

659	77.5135386	29.2694479	1967.37	0 degree with respect to East	77.4933063	29.2698272	180 degree with respect to East	618.234	77.4869484	29.2699457	Chainage = 163424.4m
660	77.5141320	29.2685331	1878.90	0 degree with respect to East	77.4948098	29.2688954	180 degree with respect to East	679.363	77.4878233	29.2690257	Chainage = 163245.41m
661	77.5144250	29.2671278	1833.30	0 degree with respect to East	77.4955720	29.2674813	180 degree with respect to East	677.693	77.4886027	29.2676113	Chainage = 163072m
662	77.5143914	29.2670242	1646.85	0 degree with respect to East	77.4974557	29.2673419	180 degree with respect to East	856.844	77.4886441	29.2675064	Chainage = 162888.21m
663	77.5143843	29.2670025	1459.81	0 degree with respect to East	77.4993721	29.2672842	180 degree with respect to East	1042.351	77.4886528	29.2674844	Chainage = 162701.79m
664	77.5143340	29.2663353	1293.49	0 degree with respect to East	77.5010324	29.2665850	180 degree with respect to East	1162.154	77.4890812	29.2668083	Chainage = 162522.73m
665	77.5145995	29.2647872	1320.80	0 degree with respect to East	77.5010171	29.2650422	180 degree with respect to East	944.632	77.4913030	29.2652237	Chainage = 162351.66m
666	77.5146383	29.2637204	1455.21	0 degree with respect to East	77.4996739	29.2640012	180 degree with respect to East	751.824	77.4919425	29.2641457	Chainage = 162177.37m
667	77.5146340	29.2634557	1277.80	0 degree with respect to East	77.5014940	29.2637024	180 degree with respect to East	913.237	77.4921028	29.2638779	Chainage = 161997.34m
668	77.5141624	29.2619194	1153.30	0 degree with respect to East	77.5023029	29.2621421	180 degree with respect to East	944.282	77.4925926	29.2623236	Chainage = 161807.3m
669	77.5141258	29.2611438	1008.79	0 degree with respect to East	77.5037524	29.2613387	180 degree with respect to East	999.034	77.4934792	29.2615308	Chainage = 161640.58m
670	77.5142365	29.2606067	852.98	0 degree with respect to East	77.5054653	29.2607715	180 degree with respect to East	1033.424	77.4948386	29.2609704	Chainage = 161462.56m
671	77.5143133	29.2603377	683.56	0 degree with respect to East	77.5072844	29.2604699	180 degree with respect to East	1173.969	77.4952124	29.2606959	Chainage = 161282.57m
672	77.5143956	29.2600687	514.66	0 degree with respect to East	77.5091034	29.2601682	180 degree with respect to East	1314.725	77.4955841	29.2604214	Chainage = 161102.58m
673	77.5138799	29.2587169	427.30	0 degree with respect to East	77.5094860	29.2587995	180 degree with respect to East	1261.189	77.4965174	29.2590425	Chainage = 160946.33m
674	77.5137888	29.2571984	508.37	0 degree with respect to East	77.5085614	29.2572967	180 degree with respect to East	1136.019	77.4968800	29.2575155	Chainage = 160757m
675	77.5153168	29.2557910	776.67	0 degree with respect to East	77.5073307	29.2559411	180 degree with respect to East	798.804	77.4991170	29.2560950	Chainage = 160564.88m
676	77.5169039	29.2542637	1025.75	0 degree with respect to East	77.5063567	29.2544620	180 degree with respect to East	541.072	77.5007932	29.2545662	Chainage = 160375.51m

519

108

677	77.5176968	29.2526017	1166.11	0 degree with respect to East	77.5057067	29.2528271	180 degree with respect to East	528.400	77.5002736	29.2529289	Chainage = 160183.54m
678	77.5183140	29.2514035	1351.00	0 degree with respect to East	77.5044230	29.2516645	180 degree with respect to East	401.146	77.5002984	29.2517418	Chainage = 160004.11m
679	77.5182673	29.2497698	1340.25	0 degree with respect to East	77.5044870	29.2500288	180 degree with respect to East	371.748	77.5006647	29.2501004	Chainage = 159822.64m
680					77.5060672	29.2491292	180 degree with respect to East	531.862	77.5005987	29.2492317	Chainage = 159639.45m
681					77.5075235	29.2483430	180 degree with respect to East	706.513	77.5002593	29.2484791	Chainage = 159473.16m
682					77.5091637	29.2475936	180 degree with respect to East	834.919	77.5005793	29.2477546	Chainage = 159293.33m
683					77.5107631	29.2475213	180 degree with respect to East	988.306	77.5006016	29.2477118	Chainage = 159137.6m
684					77.5123860	29.2478006	180 degree with respect to East	1162.030	77.5004383	29.2480247	Chainage = 158976.78m
685					77.5136585	29.2465543	180 degree with respect to East	1241.044	77.5008986	29.2467937	Chainage = 158791.29m
686					77.5143647	29.2451163	180 degree with respect to East	1302.644	77.5009717	29.2453677	Chainage = 158617.69m
687					77.5156396	29.2439205	180 degree with respect to East	1413.773	77.5011041	29.2441933	Chainage = 158436.17m
688					77.5167447	29.2426523	180 degree with respect to East	1472.254	77.5016082	29.2429365	Chainage = 158259.2m
689					77.5167043	29.2410037	180 degree with respect to East	1274.990	77.5035961	29.2412499	Chainage = 158076.36m
690					77.5175340	29.2394522	180 degree with respect to East	1393.881	77.5032037	29.2397213	Chainage = 157886.35m
691					77.5181512	29.2378102	180 degree with respect to East	1325.320	77.5045260	29.2380662	Chainage = 157694.65m
692					77.5166177	29.2367677	180 degree with respect to East	1158.330	77.5047094	29.2369914	Chainage = 157505.97m
693					77.5174971	29.2360107	180 degree with respect to East	1228.888	77.5048635	29.2362481	Chainage = 157386.14m
694					77.5187339	29.2366933	180 degree with respect to East	1363.091	77.5047205	29.2369566	Chainage = 157244.04m

520

69

695					77.5199984	29.2369224	180 degree with respect to East	1491.186	77.5046682	29.2372106	Chainage = 157118.46m
696					77.5206032	29.2352751	180 degree with respect to East	1509.444	77.5050855	29.2355668	Chainage = 156926.58m
697					77.5221296	29.2342412	180 degree with respect to East	1415.723	77.5075756	29.2345150	Chainage = 156739.02m
698					77.5238425	29.2336738	180 degree with respect to East	1413.319	77.5093133	29.2339473	Chainage = 156560.96m
699					77.5254231	29.2327754	180 degree with respect to East	589.924	77.5193586	29.2328898	Chainage = 156377.79m
700					77.5262285	29.2313796	180 degree with respect to East	690.831	77.5191268	29.2315136	Chainage = 156204.34m
701					77.5249986	29.2301911	180 degree with respect to East	567.615	77.5191636	29.2303012	Chainage = 156026.37m
702					77.5258420	29.2290882	180 degree with respect to East	594.535	77.5197303	29.2292036	Chainage = 155879.12m
703					77.5273485	29.2280046	180 degree with respect to East	730.704	77.5198372	29.2281464	Chainage = 155689.63m
704					77.5268994	29.2262887	180 degree with respect to East	714.131	77.5195585	29.2264272	Chainage = 155494.42m
705					77.5268260	29.2246558	180 degree with respect to East	696.407	77.5196675	29.2247909	Chainage = 155313.23m
706					77.5266278	29.2228035	180 degree with respect to East	722.578	77.5192004	29.2229437	Chainage = 155106.96m
707					77.5265806	29.2208787	180 degree with respect to East	764.429	77.5187231	29.2210270	Chainage = 154893.49m
708					77.5253318	29.2196993	180 degree with respect to East	629.414	77.5188622	29.2198213	Chainage = 154715.01m
709					77.5253520	29.2178032	180 degree with respect to East	775.969	77.5173761	29.2179536	Chainage = 154504.76m
710					77.5259566	29.2161558	180 degree with respect to East	734.420	77.5184079	29.2162982	Chainage = 154312.87m
711					77.5277049	29.2156771	180 degree with respect to East	918.034	77.5182690	29.2158551	Chainage = 154134.73m
712					77.5293691	29.2159132	180 degree with respect to East	1051.220	77.5185642	29.2161171	Chainage = 153970.75m

521

713					77.5309381	29.2164185	180 degree with respect to East	1273.124	77.5178523	29.2166655	Chainage = 153808.18m
714					77.5325537	29.2157580	180 degree with respect to East	1363.423	77.5185400	29.2160227	Chainage = 153634.8m
715					77.5322118	29.2142543	180 degree with respect to East	1693.570	77.5148049	29.2145827	Chainage = 153464.78m
716					77.5309481	29.2129306	180 degree with respect to East	1665.220	77.5138328	29.2132534	Chainage = 153273.34m
717					77.5294137	29.2120723	180 degree with respect to East	1512.381	77.5138694	29.2123654	Chainage = 153096.32m
718					77.5276731	29.2119324	180 degree with respect to East	1350.492	77.5137927	29.2121941	Chainage = 152926.3m
719					77.5260380	29.2122309	180 degree with respect to East	1185.597	77.5138524	29.2124605	Chainage = 152763.85m
720					77.5246769	29.2127916	180 degree with respect to East	1054.893	77.5138346	29.2129959	Chainage = 152617.58m
721					77.5233158	29.2133523	180 degree with respect to East	926.342	77.5137947	29.2135317	Chainage = 152471.31m
722					77.5224028	29.2121783	180 degree with respect to East	829.859	77.5138735	29.2123389	Chainage = 152313.73m
723					77.5229723	29.2105318	180 degree with respect to East	1357.024	77.5090249	29.2107942	Chainage = 152122.95m
724					77.5240884	29.2091179	180 degree with respect to East	1810.612	77.5054793	29.2094678	Chainage = 151932.26m
725					77.5246813	29.2074813	180 degree with respect to East	2007.249	77.5040515	29.2078692	Chainage = 151741.86m
726	77.5420415	29.2059121	1731.76	0 degree with respect to East	77.5242436	29.2062492	180 degree with respect to East	2071.832	77.5029504	29.2066494	Chainage = 151598.77m
727	77.5422171	29.2055039	1920.57	0 degree with respect to East	77.5224788	29.2058776	180 degree with respect to East	1938.544	77.5025554	29.2062519	Chainage = 151422.21m
728	77.5421882	29.2052369	2078.14	0 degree with respect to East	77.5208306	29.2056411	180 degree with respect to East	1800.325	77.5023278	29.2059886	Chainage = 151259.75m
729	77.5422171	29.2055039	2240.04	0 degree with respect to East	77.5191955	29.2059395	180 degree with respect to East	1619.080	77.5025554	29.2062519	Chainage = 151097.29m
730	77.5420933	29.2057737	2387.09	0 degree with respect to East	77.5175604	29.2062378	180 degree with respect to East	1434.595	77.5028163	29.2065145	Chainage = 150934.83m

522

731	77.5418170	29.2065815	2465.96	0 degree with respect to East	77.5164733	29.2070608	180 degree with respect to East	1247.698	77.5036499	29.2073015	Chainage = 150795.15m
732	77.5420559	29.2072778	2605.10	0 degree with respect to East	77.5152819	29.2077840	180 degree with respect to East	1085.788	77.5041225	29.2079934	Chainage = 150654.22m
733	77.5419614	29.2061567	2687.58	0 degree with respect to East	77.5143402	29.2066789	180 degree with respect to East	1083.865	77.5032006	29.2068878	Chainage = 150501.22m
734	77.5417692	29.2044994	2725.83	0 degree with respect to East	77.5137551	29.2050289	180 degree with respect to East	1309.745	77.5002943	29.2052812	Chainage = 150309.63m
735	77.5411882	29.2031158	2758.41	0 degree with respect to East	77.5128397	29.2036514	180 degree with respect to East	1327.786	77.4991936	29.2039070	Chainage = 150132.83m
736	77.5410776	29.2021268	2899.08	0 degree with respect to East	77.5112837	29.2026895	180 degree with respect to East	1225.478	77.4986892	29.2029254	Chainage = 149947.67m
737	77.5409022	29.2012486	3037.23	0 degree with respect to East	77.5096887	29.2018379	180 degree with respect to East	1111.365	77.4982670	29.2020517	Chainage = 149766.03m
738	77.5405410	29.2001854	3134.67	0 degree with respect to East	77.5083265	29.2007933	180 degree with respect to East	1021.322	77.4978303	29.2009897	Chainage = 149590.04m
739	77.5400047	29.1990708	3225.99	0 degree with respect to East	77.5068521	29.1996962	180 degree with respect to East	895.215	77.4976520	29.1998683	Chainage = 149401.96m
740	77.5379542	29.1975061	3095.51	0 degree with respect to East	77.5061429	29.1981058	180 degree with respect to East	872.209	77.4971794	29.1982735	Chainage = 149212.62m
741	77.5325017	29.1958955	2610.74	0 degree with respect to East	77.5056726	29.1964007	180 degree with respect to East	1149.588	77.4938587	29.1966215	Chainage = 149018.11m
742	77.5302246	29.1943600	2404.62	0 degree with respect to East	77.5055140	29.1948250	180 degree with respect to East	1158.505	77.4936086	29.1950475	Chainage = 148842.72m
743	77.5273686	29.1926548	2158.10	0 degree with respect to East	77.5051916	29.1930719	180 degree with respect to East	1213.447	77.4927219	29.1933048	Chainage = 148645.82m
744	77.5213417	29.1911431	1513.91	0 degree with respect to East	77.5057847	29.1914353	180 degree with respect to East	1352.635	77.4918848	29.1916949	Chainage = 148455.41m
745	77.5163026	29.1895804	972.87	0 degree with respect to East	77.5063056	29.1897680	180 degree with respect to East	1375.769	77.4921682	29.1900321	Chainage = 148263.73m
746	77.5161816	29.1879893	896.36	0 degree with respect to East	77.5069709	29.1881622	180 degree with respect to East	3751.156	77.4684242	29.1888789	Chainage = 148074.28m
747	77.5154620	29.1867483	911.76	0 degree with respect to East	77.5060932	29.1869241	180 degree with respect to East	3851.020	77.4665208	29.1876594	Chainage = 147912.61m
748	77.5155898	29.1869698	1087.65	0 degree with respect to East	77.5044134	29.1871795	180 degree with respect to East	3636.994	77.4670402	29.1878738	Chainage = 147746.74m

523

749	77.5156249	29.1870308	1237.20	0 degree with respect to East	77.5029118	29.1872692	180 degree with respect to East	3481.056	77.4671410	29.1879335	Chainage = 147600.3m
750	77.5156146	29.1870129	1421.36	0 degree with respect to East	77.5010092	29.1872867	180 degree with respect to East	3298.767	77.4671115	29.1879160	Chainage = 147415.17m
751	77.5156911	29.1871456	1601.23	0 degree with respect to East	77.4992374	29.1874539	180 degree with respect to East	3104.237	77.4673386	29.1880459	Chainage = 147241.79m
752	77.5159216	29.1875422	1769.49	0 degree with respect to East	77.4977389	29.1878829	180 degree with respect to East	2904.948	77.4678878	29.1884368	Chainage = 147088.43m
753	77.5156665	29.1871030	1915.05	0 degree with respect to East	77.4959881	29.1874715	180 degree with respect to East	2795.505	77.4672618	29.1880043	Chainage = 146912.09m
754	77.5143896	29.1855430	1863.94	0 degree with respect to East	77.4952366	29.1859015	180 degree with respect to East	2986.089	77.4645523	29.1864702	Chainage = 146723.28m
755	77.5137252	29.1849083	1955.87	0 degree with respect to East	77.4936277	29.1852843	180 degree with respect to East	2878.398	77.4640501	29.1858322	Chainage = 146552.43m
756	77.5138538	29.1851734	2127.52	0 degree with respect to East	77.4919925	29.1855823	180 degree with respect to East	2699.516	77.4642530	29.1860960	Chainage = 146389.94m
757	77.5141751	29.1854349	2317.91	0 degree with respect to East	77.4903573	29.1858803	180 degree with respect to East	2523.735	77.4644240	29.1863604	Chainage = 146227.45m
758	77.5150147	29.1859541	2532.09	0 degree with respect to East	77.4889961	29.1864406	180 degree with respect to East	2321.493	77.4651408	29.1868823	Chainage = 146081.16m
759	77.5153404	29.1864830	2696.24	0 degree with respect to East	77.4876348	29.1870010	180 degree with respect to East	2097.318	77.4660830	29.1874000	Chainage = 145934.87m
760	77.5157673	29.1872776	2843.59	0 degree with respect to East	77.4865474	29.1878238	180 degree with respect to East	1846.104	77.4675769	29.1881750	Chainage = 145795.17m
761	77.5162221	29.1881589	2984.94	0 degree with respect to East	77.4855493	29.1887322	180 degree with respect to East	1639.232	77.4687045	29.1890441	Chainage = 145655.27m
762	77.5162649	29.1888734	3103.61	0 degree with respect to East	77.4843726	29.1894693	180 degree with respect to East	709.451	77.4916629	29.1893338	Chainage = 145514.6m
763	77.5162809	29.1891406	3264.28	0 degree with respect to East	77.4827374	29.1897672	180 degree with respect to East	904.132	77.4920283	29.1895945	Chainage = 145352.12m
764	77.5162688	29.1899434	3368.90	0 degree with respect to East	77.4816499	29.1905900	180 degree with respect to East	1017.843	77.4921094	29.1903955	Chainage = 145212.43m
765	77.5209894	29.1909246	3907.41	0 degree with respect to East	77.4808364	29.1916751	180 degree with respect to East	1079.854	77.4919332	29.1914689	Chainage = 145068.41m
766	77.5229262	29.1916906	4201.69	0 degree with respect to East	77.4797489	29.1924979	180 degree with respect to East	1169.010	77.4917621	29.1922747	Chainage = 144928.72m

524

3

767	77.5218948	29.1914426	4277.81	0 degree with respect to East	77.4779353	29.1922640	180 degree with respect to East	1350.965	77.4918182	29.1920061	Chainage = 144750.37m
768	77.5214081	29.1911842	4406.95	0 degree with respect to East	77.4761216	29.1920300	180 degree with respect to East	1533.056	77.4918757	29.1917375	Chainage = 144572.02m
769	77.5212674	29.1910970	4575.91	0 degree with respect to East	77.4742446	29.1919748	180 degree with respect to East	1717.591	77.4918950	29.1916473	Chainage = 144389.31m
770	77.5162492	29.1901532	4205.13	0 degree with respect to East	77.4730370	29.1909589	180 degree with respect to East	1851.507	77.4920634	29.1906059	Chainage = 144226.55m
771	77.5163099	29.1892969	4367.17	0 degree with respect to East	77.4714328	29.1901334	180 degree with respect to East	2019.551	77.4921860	29.1897484	Chainage = 144045.63m
772	77.5162456	29.1885520	4504.71	0 degree with respect to East	77.4699555	29.1894145	180 degree with respect to East	62.442	77.4693138	29.1894263	Chainage = 143881.28m
773	77.5158867	29.1874823	4614.60	0 degree with respect to East	77.4684678	29.1883655	180 degree with respect to East	62.855	77.4678219	29.1883774	Chainage = 143695.6m
774	77.5150487	29.1860059	4625.56	0 degree with respect to East	77.4675179	29.1868908	180 degree with respect to East	224.601	77.4652099	29.1869334	Chainage = 143507.78m
775	77.5136007	29.1845409	4577.14	0 degree with respect to East	77.4665680	29.1854161	180 degree with respect to East	267.859	77.4638155	29.1854668	Chainage = 143319.96m
776	77.5112868	29.1829969	4424.40	0 degree with respect to East	77.4658243	29.1838424	180 degree with respect to East	326.638	77.4624679	29.1839042	Chainage = 143131.07m
777	77.5091333	29.1812228	4239.40	0 degree with respect to East	77.4655724	29.1820325	180 degree with respect to East	389.925	77.4615658	29.1821063	Chainage = 142928.91m
778	77.5058584	29.1795115	3895.21	0 degree with respect to East	77.4658347	29.1802549	180 degree with respect to East	453.087	77.4611791	29.1803406	Chainage = 142730.18m
779	77.5002285	29.1780570	3275.19	0 degree with respect to East	77.4665761	29.1786815	180 degree with respect to East	632.355	77.4600785	29.1788011	Chainage = 142541.4m
780	77.4946764	29.1767226	2636.07	0 degree with respect to East	77.4675913	29.1772247	180 degree with respect to East	760.597	77.4597761	29.1773686	Chainage = 142352.07m
781	77.4941517	29.1756645	2441.54	0 degree with respect to East	77.4690655	29.1761297	180 degree with respect to East	894.806	77.4598715	29.1762990	Chainage = 142164.14m
782	77.4932230	29.1746202	2206.32	0 degree with respect to East	77.4705539	29.1750406	180 degree with respect to East	1008.790	77.4601888	29.1752315	Chainage = 141975.58m
783	77.4924097	29.1740710	1979.48	0 degree with respect to East	77.4720715	29.1744482	180 degree with respect to East	1120.799	77.4605556	29.1746604	Chainage = 141813.96m
784	77.4924097	29.1740710	1793.67	0 degree with respect to East	77.4739806	29.1744129	180 degree with respect to East	1306.602	77.4605556	29.1746604	Chainage = 141628.16m

525

785	77.4919966	29.1738112	1577.98	0 degree with respect to East	77.4757836	29.1741121	180 degree with respect to East	1454.278	77.4608414	29.1743876	Chainage = 141449.57m
786	77.4919966	29.1738112	1392.18	0 degree with respect to East	77.4776927	29.1740768	180 degree with respect to East	1640.082	77.4608414	29.1743876	Chainage = 141263.76m
787	77.4910266	29.1732948	1132.59	0 degree with respect to East	77.4793899	29.1735109	180 degree with respect to East	1761.930	77.4612868	29.1738450	Chainage = 141087.09m
788	77.4903647	29.1718085	982.65	0 degree with respect to East	77.4802686	29.1719959	180 degree with respect to East	1735.014	77.4624423	29.1723251	Chainage = 140898.61m
789	77.4887662	29.1699285	831.55	0 degree with respect to East	77.4802227	29.1700871	180 degree with respect to East	1753.009	77.4622119	29.1704196	Chainage = 140686.92m
790	77.4858465	29.1684279	626.65	0 degree with respect to East	77.4794083	29.1685473	180 degree with respect to East	1629.827	77.4626633	29.1688564	Chainage = 140498.7m
791	77.4857190	29.1672829	744.11	0 degree with respect to East	77.4780740	29.1674246	180 degree with respect to East	1467.791	77.4629940	29.1677029	Chainage = 140318.83m
792	77.4858222	29.1664256	910.29	0 degree with respect to East	77.4764700	29.1665989	180 degree with respect to East	1302.469	77.4630886	29.1668458	Chainage = 140137.87m
793	77.4857841	29.1656335	1048.77	0 degree with respect to East	77.4750093	29.1658331	180 degree with respect to East	1146.263	77.4632328	29.1660503	Chainage = 139972.3m
794	77.4852845	29.1648338	1157.88	0 degree with respect to East	77.4733888	29.1650541	180 degree with respect to East	968.124	77.4634425	29.1652375	Chainage = 139792.5m
795	77.4850178	29.1640425	1290.12	0 degree with respect to East	77.4717637	29.1642879	180 degree with respect to East	777.081	77.4637802	29.1644351	Chainage = 139612.98m
796	77.4851061	29.1645167	1437.11	0 degree with respect to East	77.4703417	29.1647900	180 degree with respect to East	661.033	77.4635504	29.1649152	Chainage = 139463.82m
797	77.4852907	29.1648437	1572.53	0 degree with respect to East	77.4691351	29.1651426	180 degree with respect to East	554.415	77.4634391	29.1652476	Chainage = 139340.06m
798	77.4849892	29.1634979	1665.37	0 degree with respect to East	77.4678800	29.1638144	180 degree with respect to East	376.741	77.4640095	29.1638857	Chainage = 139148.73m
799	77.4854533	29.1615956	1711.52	0 degree with respect to East	77.4678702	29.1619208	180 degree with respect to East	318.188	77.4646013	29.1619810	Chainage = 138938.78m
800	77.4853524	29.1598814	1663.78	0 degree with respect to East	77.4682601	29.1601976	180 degree with respect to East	141.448	77.4668069	29.1602244	Chainage = 138743.99m
801	77.4854740	29.1583442	1598.03	0 degree with respect to East	77.4690574	29.1586479	180 degree with respect to East	113.734	77.4678890	29.1586695	Chainage = 138555.47m
802	77.4859216	29.1568000	1564.21	0 degree with respect to East	77.4698527	29.1570974	180 degree with respect to East	279.068	77.4669858	29.1571503	Chainage = 138366.94m

526

803	77.4855910	29.1551815	1474.08	0 degree with respect to East	77.4704482	29.1554618	180 degree with respect to East	392.724	77.4664138	29.1555362	Chainage = 138176.56m
804	77.4857439	29.1537343	1391.55	0 degree with respect to East	77.4714492	29.1539989	180 degree with respect to East	388.260	77.4674607	29.1540724	Chainage = 137987.36m
805	77.4859626	29.1521652	1341.83	0 degree with respect to East	77.4721788	29.1524204	180 degree with respect to East	837.743	77.4635731	29.1525790	Chainage = 137798.49m
806	77.4856421	29.1505352	1255.15	0 degree with respect to East	77.4727489	29.1507739	180 degree with respect to East	955.542	77.4629333	29.1509548	Chainage = 137607.69m
807	77.4855904	29.1487633	1224.62	0 degree with respect to East	77.4730111	29.1489962	180 degree with respect to East	987.630	77.4628660	29.1491832	Chainage = 137408.95m
808	77.4854596	29.1475335	1323.90	0 degree with respect to East	77.4718606	29.1477852	180 degree with respect to East	1322.939	77.4582713	29.1480353	Chainage = 137234.11m
809	77.4849318	29.1464000	1403.31	0 degree with respect to East	77.4705173	29.1466667	180 degree with respect to East	1441.130	77.4557140	29.1469390	Chainage = 137053.91m
810	77.4848430	29.1461216	1570.04	0 degree with respect to East	77.4687158	29.1464199	180 degree with respect to East	1298.796	77.4553747	29.1466651	Chainage = 136876.45m
811	77.4843972	29.1454965	1690.50	0 degree with respect to East	77.4670328	29.1458175	180 degree with respect to East	1188.484	77.4548248	29.1460418	Chainage = 136699.54m
812	77.4832394	29.1438353	1630.13	0 degree with respect to East	77.4664953	29.1441447	180 degree with respect to East	1214.397	77.4540213	29.1443739	Chainage = 136506.84m
813	77.4816565	29.1427772	1618.60	0 degree with respect to East	77.4650310	29.1430843					Chainage = 136322.07m
814	77.4822651	29.1432266	1807.81	0 degree with respect to East	77.4636961	29.1435695	180 degree with respect to East	995.175	77.4534739	29.1437572	Chainage = 136181.44m
815	77.4822651	29.1432267	1993.66	0 degree with respect to East	77.4617870	29.1436046					Chainage = 135995.58m
816	77.4822651	29.1432267	2143.57	0 degree with respect to East	77.4602472	29.1436329	180 degree with respect to East	659.410	77.4534740	29.1437572	Chainage = 135845.67m
817	77.4817486	29.1428893	2267.10	0 degree with respect to East	77.4584620	29.1433188	180 degree with respect to East	512.844	77.4531942	29.1434154	Chainage = 135668.45m
818	77.4808086	29.1416677	2286.18	0 degree with respect to East	77.4573263	29.1421006					Chainage = 135493.91m
819	77.4803295	29.1397768	2246.10	0 degree with respect to East	77.4572592	29.1402021	180 degree with respect to East	441.053	77.4527290	29.1402851	Chainage = 135283.32m
820	77.4800763	29.1378719	2225.92	0 degree with respect to East	77.4572138	29.1382932					Chainage = 135071.64m

527

116

821	77.4797099	29.1362714	2258.51	0 degree with respect to East	77.4565130	29.1366988	180 degree with respect to East	1215.285	77.4440307	29.1369271	Chainage = 134882.16m
822	77.4790592	29.1347665	2282.46	0 degree with respect to East	77.4556166	29.1351983	180 degree with respect to East	1192.493	77.4433685	29.1354223	Chainage = 134694.3m
823	77.4770069	29.1330338	2116.43	0 degree with respect to East	77.4552699	29.1334340					Chainage = 134495.8m
824	77.4763441	29.1312732	2026.37	0 degree with respect to East	77.4555323	29.1316563	180 degree with respect to East	1610.468	77.4389919	29.1319585	Chainage = 134297.06m
825	77.4760200	29.1296619	1935.23	0 degree with respect to East	77.4561446	29.1300277	180 degree with respect to East	1700.741	77.4386773	29.1303468	Chainage = 134106.91m
826	77.4754920	29.1284082	1746.72	0 degree with respect to East	77.4575530	29.1287384	180 degree with respect to East	1857.090	77.4384801	29.1290869	Chainage = 133908.84m
827	77.4751173	29.1273073	1800.95	0 degree with respect to East	77.4566214	29.1276478	180 degree with respect to East	1774.286	77.4383992	29.1279806	Chainage = 133757.69m
828	77.4751173	29.1273073	1986.84	0 degree with respect to East	77.4547124	29.1276827	180 degree with respect to East	1588.400	77.4383992	29.1279806	Chainage = 133571.8m
829	77.4751965	29.1275734	2153.77	0 degree with respect to East	77.4530771	29.1279802	180 degree with respect to East	1428.769	77.4384033	29.1282481	Chainage = 133409.23m
830	77.4751965	29.1275734	2339.66	0 degree with respect to East	77.4511680	29.1280151	180 degree with respect to East	1242.884	77.4384033	29.1282481	Chainage = 133223.34m
831	77.4751965	29.1275734	2525.54	0 degree with respect to East	77.4492589	29.1280501	180 degree with respect to East	1056.999	77.4384033	29.1282481	Chainage = 133037.46m
832	77.4752882	29.1278392	2693.69	0 degree with respect to East	77.4476236	29.1283475	180 degree with respect to East	895.371	77.4384279	29.1285152	Chainage = 132874.89m
833	77.4752882	29.1278392	2879.58	0 degree with respect to East	77.4457146	29.1283824	180 degree with respect to East	709.487	77.4384279	29.1285152	Chainage = 132689.01m
834	77.4753834	29.1281050	3048.07	0 degree with respect to East	77.4440793	29.1286797					Chainage = 132526.44m
835	77.4755596	29.1285967	3201.77	0 degree with respect to East	77.4426766	29.1292002	180 degree with respect to East	406.973	77.4384969	29.1292764	Chainage = 132378.21m
836	77.4757984	29.1291674	3353.58	0 degree with respect to East	77.4413562	29.1297995	180 degree with respect to East	267.187	77.4386120	29.1298495	Chainage = 132233.51m
837	77.4757241	29.1289900	3473.94	0 degree with respect to East	77.4400459	29.1296445	180 degree with respect to East	143.240	77.4385747	29.1296713	Chainage = 132104.8m
838	77.4751452	29.1274151	3490.41	0 degree with respect to East	77.4392983	29.1280726	180 degree with respect to East	88.577	77.4383886	29.1280891	Chainage = 131915.93m

528

117

839	77.4746316	29.1255149	3444.84	0 degree with respect to East	77.4392532	29.1261637	180 degree with respect to East	53.187	77.4387070	29.1261736	Chainage = 131704.25m
840	77.4730339	29.1237716	3263.75	0 degree with respect to East	77.4395160	29.1243860					Chainage = 131505.51m
841	77.4721612	29.1220149	3153.25	0 degree with respect to East	77.4397787	29.1226084	180 degree with respect to East	9.730	77.4396787	29.1226102	Chainage = 131306.77m
842	77.4710982	29.1203172	3012.04	0 degree with respect to East	77.4401663	29.1208840	180 degree with respect to East	4.792	77.4401171	29.1208849	Chainage = 131111.9m
843	77.4676406	29.1192284	2550.27	0 degree with respect to East	77.4414510	29.1197082	180 degree with respect to East	165.910	77.4397472	29.1197392	Chainage = 130931.24m
844	77.4658488	29.1181995	2230.88	0 degree with respect to East	77.4429394	29.1186191	180 degree with respect to East	350.942	77.4393354	29.1186847	Chainage = 130742.63m
845	77.4629263	29.1165371	1908.32	0 degree with respect to East	77.4433296	29.1168958					Chainage = 130547.83m
846	77.4612783	29.1152178	1817.42	0 degree with respect to East	77.4426153	29.1155593	180 degree with respect to East	476.466	77.4377225	29.1156484	Chainage = 130384.14m
847	77.4597486	29.1142986	1805.31	0 degree with respect to East	77.4412101	29.1146376	180 degree with respect to East	528.632	77.4357816	29.1147363	Chainage = 130213.38m
848	77.4571040	29.1128153	1607.88	0 degree with respect to East	77.4405932	29.1131170	180 degree with respect to East	609.484	77.4343345	29.1132309	Chainage = 130034.42m
849	77.4568794	29.1110130	1577.45	0 degree with respect to East	77.4406813	29.1113090	180 degree with respect to East	754.576	77.4329328	29.1114499	Chainage = 129833.78m
850	77.4562311	29.1100776	1651.17	0 degree with respect to East	77.4392761	29.1103872					Chainage = 129663.01m
851	77.4560742	29.1094658	1800.43	0 degree with respect to East	77.4375866	29.1098033					Chainage = 129486.23m
852	77.4560554	29.1091986	1975.23	0 degree with respect to East	77.4357730	29.1095688					Chainage = 129307.75m
853	77.4560217	29.1087166	2141.08	0 degree with respect to East	77.4340363	29.1091177					Chainage = 129131.42m
854	77.4560174	29.1086643	2324.76	0 degree with respect to East	77.4321460	29.1090996					Chainage = 128947.35m
855	77.4560131	29.1081164	2475.08	0 degree with respect to East	77.4305982	29.1085796					Chainage = 128786.01m
856	77.4560395	29.1066164	2568.65	0 degree with respect to East	77.4296642	29.1070970					Chainage = 128598.15m

529

857	77.4558075	29.1050541	2475.28	0 degree with respect to East	77.4303913	29.1055174	180 degree with respect to East	765.694	77.4225290	29.1056597	Chainage = 128409.24m
858	77.4555061	29.1034907	2375.68	0 degree with respect to East	77.4311130	29.1039354	180 degree with respect to East	756.076	77.4233496	29.1040759	Chainage = 128220.29m
859	77.4527275	29.1000151	2053.90	0 degree with respect to East	77.4316391	29.1003992	180 degree with respect to East	816.029	77.4232604	29.1005510	Chainage = 127824.91m
860	77.4529319	29.0985312	1988.26	0 degree with respect to East	77.4325178	29.0989032	180 degree with respect to East	825.227	77.4240448	29.0990566	Chainage = 127638.28m
861	77.4528832	29.0970520	1897.96	0 degree with respect to East	77.4333964	29.0974071	180 degree with respect to East	962.469	77.4235144	29.0975861	Chainage = 127451.64m
862	77.4521742	29.0955081	1760.17	0 degree with respect to East	77.4341025	29.0958374	180 degree with respect to East	1281.473	77.4209453	29.0960757	Chainage = 127264.52m
863	77.4522690	29.0940744	1673.29	0 degree with respect to East	77.4350895	29.0943876	180 degree with respect to East	1464.116	77.4200573	29.0946597	Chainage = 127077.23m
864	77.4528024	29.0932064	1834.91	0 degree with respect to East	77.4339637	29.0935497	180 degree with respect to East	1372.535	77.4198720	29.0938048	Chainage = 126933.54m
865	77.4528024	29.0932064	2018.98	0 degree with respect to East	77.4320739	29.0935840	180 degree with respect to East	1188.461	77.4198720	29.0938048	Chainage = 126749.47m
866	77.4528182	29.0929386	2195.29	0 degree with respect to East	77.4302796	29.0933490	180 degree with respect to East	1023.055	77.4197759	29.0935390	Chainage = 126572.81m
867	77.4528356	29.0926707	2371.75	0 degree with respect to East	77.4284853	29.0931140	180 degree with respect to East	859.777	77.4196580	29.0932736	Chainage = 126396.15m
868	77.4528356	29.0926707	2555.82	0 degree with respect to East	77.4265954	29.0931482	180 degree with respect to East	675.704	77.4196580	29.0932736	Chainage = 126212.08m
869	77.4528224	29.0928728	2709.67	0 degree with respect to East	77.4250028	29.0933788	180 degree with respect to East	511.913	77.4197470	29.0934738	Chainage = 126054.89m
870	77.4528356	29.0926707	2888.00	0 degree with respect to East	77.4231850	29.0932099	180 degree with respect to East	343.529	77.4196580	29.0932736	Chainage = 125876.89m
871	77.4526670	29.0913048	2957.77	0 degree with respect to East	77.4223006	29.0918568	180 degree with respect to East	307.412	77.4191444	29.0919138	Chainage = 125703.91m
872	77.4569121	29.0894734	3345.65	0 degree with respect to East	77.4225640	29.0900983	180 degree with respect to East	307.899	77.4194029	29.0901554	Chainage = 125507.27m
873	77.4605217	29.0878551	3627.48	0 degree with respect to East	77.4232808	29.0885333	180 degree with respect to East	406.529	77.4191072	29.0886086	Chainage = 125320.24m
874	77.4617068	29.0866029	3639.03	0 degree with respect to East	77.4243478	29.0872835	180 degree with respect to East	555.422	77.4186456	29.0873865	Chainage = 125147.05m

530

875	77.4623027	29.0857440	3545.74	0 degree with respect to East	77.4259018	29.0864075	180 degree with respect to East	657.052	77.4191563	29.0865294	Chainage = 124967.23m
876	77.4628946	29.0850868	3444.28	0 degree with respect to East	77.4275356	29.0857315	180 degree with respect to East	791.254	77.4194124	29.0858783	Chainage = 124791.35m
877	77.4643311	29.0842124	3432.88	0 degree with respect to East	77.4290895	29.0848554	180 degree with respect to East	923.693	77.4196067	29.0850268	Chainage = 124611.53m
878	77.4658317	29.0833369	3427.72	0 degree with respect to East	77.4306434	29.0839793	180 degree with respect to East	1077.967	77.4195770	29.0841794	Chainage = 124431.71m
879	77.4661388	29.0830879	3282.95	0 degree with respect to East	77.4324368	29.0837034	180 degree with respect to East	1257.587	77.4195264	29.0839369	Chainage = 124254.39m
880	77.4664962	29.0822540	3165.62	0 degree with respect to East	77.4339989	29.0828478	180 degree with respect to East	1392.749	77.4197011	29.0831065	Chainage = 124075.11m
881	77.4667424	29.0817144	3026.18	0 degree with respect to East	77.4356768	29.0822822	180 degree with respect to East	1540.140	77.4198659	29.0825685	Chainage = 123900.09m
882	77.4664962	29.0822540	2868.96	0 degree with respect to East	77.4370443	29.0827925	180 degree with respect to East	1689.404	77.4197011	29.0831065	Chainage = 123755.39m
883	77.4663940	29.0825234	2700.35	0 degree with respect to East	77.4386730	29.0830304	180 degree with respect to East	1855.644	77.4196231	29.0833754	Chainage = 123594.59m
884	77.4663940	29.0825234	2516.25	0 degree with respect to East	77.4405629	29.0829960	180 degree with respect to East	2039.737	77.4196231	29.0833754	Chainage = 123410.5m
885	77.4669537	29.0812782	2444.45	0 degree with respect to East	77.4418600	29.0817374	180 degree with respect to East	2124.940	77.4200459	29.0821329	Chainage = 123222.27m
886	77.4675006	29.0800934	2381.63	0 degree with respect to East	77.4430522	29.0805410	180 degree with respect to East	2140.792	77.4210756	29.0809395	Chainage = 123045.98m
887	77.4676835	29.0792893	2246.27	0 degree with respect to East	77.4446248	29.0797116	180 degree with respect to East	2235.386	77.4216773	29.0801280	Chainage = 122867.34m
888	77.4676835	29.0792893	2062.17	0 degree with respect to East	77.4465146	29.0796772	180 degree with respect to East	2419.485	77.4216773	29.0801279	Chainage = 122683.24m
889	77.4676835	29.0792893	1878.08	0 degree with respect to East	77.4484045	29.0796427	180 degree with respect to East	2603.585	77.4216773	29.0801280	Chainage = 122499.14m
890	77.4676214	29.0795580	1713.36	0 degree with respect to East	77.4500332	29.0798805	180 degree with respect to East	2772.570	77.4215712	29.0803974	Chainage = 122338.34m
891	77.4675499	29.0798269	1547.73	0 degree with respect to East	77.4516620	29.0801182	180 degree with respect to East	2949.485	77.4213838	29.0806683	Chainage = 122177.54m
892	77.4675003	29.0800953	1384.22	0 degree with respect to East	77.4532907	29.0803560	180 degree with respect to East	3138.379	77.4210734	29.0809415	Chainage = 122016.74m

531

26

893	77.4672025	29.0808290	1224.22	0 degree with respect to East	77.4546354	29.0810596	180 degree with respect to East	3344.490	77.4203019	29.0816836	Chainage = 121864.3m
894	77.4667424	29.0817144	1078.66	0 degree with respect to East	77.4556694	29.0819176	180 degree with respect to East	3487.660	77.4198659	29.0825685	Chainage = 121725.77m
895	77.4666202	29.0819842	908.09	0 degree with respect to East	77.4572981	29.0821553	180 degree with respect to East	3655.900	77.4197675	29.0828378	Chainage = 121564.97m
896	77.4671149	29.0809945	810.06	0 degree with respect to East	77.4587993	29.0811472	180 degree with respect to East	3760.786	77.4201923	29.0818495	Chainage = 121380.94m
897	77.4675744	29.0797350	719.04	0 degree with respect to East	77.4601932	29.0798706	180 degree with respect to East	3770.219	77.4214898	29.0805750	Chainage = 121184.82m
898	77.4677720	29.0782176	661.68	0 degree with respect to East	77.4609797	29.0783424	180 degree with respect to East	3686.377	77.4231376	29.0790314	Chainage = 120998.88m
899	77.4678967	29.0767950	609.95	0 degree with respect to East	77.4616355	29.0769101	180 degree with respect to East	2157.930	77.4394840	29.0773148	Chainage = 120827.71m
900	77.4684242	29.0752628	585.07	0 degree with respect to East	77.4624185	29.0753732	180 degree with respect to East	2154.487	77.4403027	29.0757774	Chainage = 120641.02m
901	77.4681552	29.0738234	603.70	0 degree with respect to East	77.4619584	29.0739373	180 degree with respect to East	2010.018	77.4413259	29.0743144	Chainage = 120475.64m
902	77.4680574	29.0724738	717.46	0 degree with respect to East	77.4606930	29.0726091	180 degree with respect to East	1472.669	77.4455765	29.0728856	Chainage = 120283.61m
903	77.4683096	29.0715186	879.26	0 degree with respect to East	77.4592845	29.0716844	180 degree with respect to East	1302.520	77.4459146	29.0719288	Chainage = 120112.34m
904	77.4683826	29.0704577	1035.94	0 degree with respect to East	77.4577494	29.0706529	180 degree with respect to East	1151.800	77.4459267	29.0708690	Chainage = 119924.1m
905	77.4683511	29.0699135	1200.34	0 degree with respect to East	77.4560304	29.0701397	180 degree with respect to East	999.859	77.4457674	29.0703272	Chainage = 119747.26m
906	77.4683511	29.0699135	1386.76	0 degree with respect to East	77.4541168	29.0701747	180 degree with respect to East	813.437	77.4457674	29.0703272	Chainage = 119560.84m
907	77.4682578	29.0696477	1538.66	0 degree with respect to East	77.4524644	29.0699374	180 degree with respect to East	639.583	77.4458995	29.0700573	Chainage = 119397.75m
908	77.4681646	29.0693819	1706.70	0 degree with respect to East	77.4506465	29.0697031	180 degree with respect to East	450.473	77.4460226	29.0697875	Chainage = 119218.78m
909	77.4680089	29.0688835	1860.52	0 degree with respect to East	77.4489120	29.0692334	180 degree with respect to East	262.418	77.4462184	29.0692826	Chainage = 119042m
910	77.4679962	29.0675426	1984.75	0 degree with respect to East	77.4476244	29.0679158	180 degree with respect to East	84.997	77.4467519	29.0679317	Chainage = 118849.46m

532

911	77.4677302	29.0660895	1863.27	0 degree with respect to East	77.4486055	29.0664399	180 degree with respect to East	257.203	77.4459656	29.0664881	Chainage = 118659.96m
912	77.4672163	29.0645607	1735.23	0 degree with respect to East	77.4494062	29.0648870	180 degree with respect to East	383.286	77.4454721	29.0649588	Chainage = 118470.95m
913	77.4667803	29.0631209	1594.93	0 degree with respect to East	77.4504103	29.0634209	180 degree with respect to East	470.430	77.4455819	29.0635090	Chainage = 118281.24m
914	77.4656630	29.0616032	1408.10	0 degree with respect to East	77.4512109	29.0618680	180 degree with respect to East	748.502	77.4435285	29.0620082	Chainage = 118092.23m
915	77.4642929	29.0600904	1196.55	0 degree with respect to East	77.4520121	29.0603154	180 degree with respect to East	1030.151	77.4414392	29.0605082	Chainage = 117903.22m
916	77.4642561	29.0585525	1115.06	0 degree with respect to East	77.4528120	29.0587622	180 degree with respect to East	1131.905	77.4411949	29.0589741	Chainage = 117714.21m
917	77.4648517	29.0570033	1095.10	0 degree with respect to East	77.4536126	29.0572093	180 degree with respect to East	1250.766	77.4407757	29.0574434	Chainage = 117525.2m
918	77.4645249	29.0557630	957.65	0 degree with respect to East	77.4546966	29.0559431	180 degree with respect to East	1393.683	77.4403931	29.0562040	Chainage = 117349.54m
919	77.4643361	29.0541043	888.43	0 degree with respect to East	77.4552183	29.0542715	180 degree with respect to East	1410.915	77.4407382	29.0545356	Chainage = 117157.36m
920	77.4646663	29.0524148	973.78	0 degree with respect to East	77.4546727	29.0525980	180 degree with respect to East	1399.761	77.4403073	29.0528600	Chainage = 116964.36m
921	77.4641807	29.0509808	1030.45	0 degree with respect to East	77.4536058	29.0511745	180 degree with respect to East	1325.235	77.4400054	29.0514225	Chainage = 116775.38m
922	77.4640338	29.0495581	1088.46	0 degree with respect to East	77.4528636	29.0497627	180 degree with respect to East	1177.051	77.4407841	29.0499830	Chainage = 116602.96m
923	77.4642341	29.0479286	1173.34	0 degree with respect to East	77.4521930	29.0481492	180 degree with respect to East	1216.618	77.4397077	29.0483767	Chainage = 116412.51m
924	77.4638581	29.0465839	1259.99	0 degree with respect to East	77.4509279	29.0468207	180 degree with respect to East	1279.476	77.4377977	29.0470598	Chainage = 116220.45m
925	77.4639130	29.0467200	1420.59	0 degree with respect to East	77.4493348	29.0469868	180 degree with respect to East	1107.906	77.4379652	29.0471938	Chainage = 116064.15m
926	77.4641103	29.0473391	1564.17	0 degree with respect to East	77.4480585	29.0476329	180 degree with respect to East	896.138	77.4388621	29.0478003	Chainage = 115920.66m
927	77.4642570	29.0480513	1693.63	0 degree with respect to East	77.4468765	29.0483693	180 degree with respect to East	672.294	77.4399772	29.0484950	Chainage = 115779.5m
928	77.4641053	29.0473159	1823.49	0 degree with respect to East	77.4453923	29.0476582	180 degree with respect to East	638.825	77.4388365	29.0477775	Chainage = 115614.8m

533

122

929	77.4635712	29.0457205	1782.30	0 degree with respect to East	77.4452812	29.0460550	180 degree with respect to East	766.332	77.4374169	29.0461980	Chainage = 115436.72m
930	77.4632020	29.0440768	1692.94	0 degree with respect to East	77.4458292	29.0443945	180 degree with respect to East	874.274	77.4368574	29.0445577	Chainage = 115245.03m
931	77.4623556	29.0427349	1492.80	0 degree with respect to East	77.4470369	29.0430150	180 degree with respect to East	1011.200	77.4366602	29.0432038	Chainage = 115052.07m
932	77.4600138	29.0415777	1148.82	0 degree with respect to East	77.4482250	29.0417932	180 degree with respect to East	1136.014	77.4365676	29.0420053	Chainage = 114873.89m
933	77.4612562	29.0397796	1303.65	0 degree with respect to East	77.4478788	29.0400242	180 degree with respect to East	1094.811	77.4366444	29.0402286	Chainage = 114674.88m
934	77.4630377	29.0382239	1564.35	0 degree with respect to East	77.4469854	29.0385174	180 degree with respect to East	999.643	77.4367277	29.0387040	Chainage = 114486.51m
935	77.4636305	29.0365872	1687.49	0 degree with respect to East	77.4463150	29.0369038	180 degree with respect to East	882.259	77.4372619	29.0370685	Chainage = 114296.06m
936	77.4642568	29.0354774	1864.51	0 degree with respect to East	77.4451250	29.0358272	180 degree with respect to East	750.900	77.4374199	29.0359673	Chainage = 114129.65m
937	77.4657483	29.0342457	2154.44	0 degree with respect to East	77.4436418	29.0346500	180 degree with respect to East	520.320	77.4383028	29.0347470	Chainage = 113934.92m
938	77.4655271	29.0325437	2181.28	0 degree with respect to East	77.4431456	29.0329528	180 degree with respect to East	272.119	77.4403535	29.0330036	Chainage = 113740.65m
939	77.4683673	29.0311230	2342.82	0 degree with respect to East	77.4443286	29.0315628	180 degree with respect to East	302.579	77.4412240	29.0316193	Chainage = 113548.2m
940	77.4694614	29.0294629	2393.76	0 degree with respect to East	77.4449004	29.0299124	180 degree with respect to East	392.646	77.4408717	29.0299857	Chainage = 113356.92m
941	77.4695668	29.0290459	2306.42	0 degree with respect to East	77.4459022	29.0294791	180 degree with respect to East	502.447	77.4407468	29.0295729	Chainage = 113248.13m
942	77.4692839	29.0300344	2174.97	0 degree with respect to East	77.4469677	29.0304430	180 degree with respect to East	577.912	77.4410380	29.0305509	Chainage = 113099.13m
943	77.4682437	29.0312285	1992.52	0 degree with respect to East	77.4477992	29.0316028	180 degree with respect to East	639.718	77.4412353	29.0317223	Chainage = 112947.15m
944	77.4677837	29.0316672	1792.31	0 degree with respect to East	77.4493935	29.0320039	180 degree with respect to East	799.835	77.4411866	29.0321534	Chainage = 112785.57m
945	77.4683693	29.0311213	1683.58	0 degree with respect to East	77.4510949	29.0314378	180 degree with respect to East	962.032	77.4412238	29.0316177	Chainage = 112608.31m
946	77.4686953	29.0308478	1539.20	0 degree with respect to East	77.4529023	29.0311373	180 degree with respect to East	1141.050	77.4411944	29.0313507	Chainage = 112429.07m

947	77.4689907	29.0305749	1391.84	0 degree with respect to East	77.4547098	29.0308367	180 degree with respect to East	1320.068	77.4411651	29.0310837	Chainage = 112249.83m
948	77.4692839	29.0300344	1254.60	0 degree with respect to East	77.4564112	29.0302705	180 degree with respect to East	1498.278	77.4410380	29.0305509	Chainage = 112072.56m
949	77.4695768	29.0290065	1136.18	0 degree with respect to East	77.4579192	29.0292204	180 degree with respect to East	1674.812	77.4407349	29.0295339	Chainage = 111885.08m
950	77.4694729	29.0276651	1005.27	0 degree with respect to East	77.4591587	29.0278544	180 degree with respect to East	1684.721	77.4418729	29.0281699	Chainage = 111691.37m
951	77.4701682	29.0258748	1047.51	0 degree with respect to East	77.4594208	29.0260721	180 degree with respect to East	1621.088	77.4427882	29.0263757	Chainage = 111492.12m
952	77.4701204	29.0242923	1034.49	0 degree with respect to East	77.4595067	29.0244872	180 degree with respect to East	1352.696	77.4456281	29.0247407	Chainage = 111316.2m
953	77.4699646	29.0227568	941.31	0 degree with respect to East	77.4603071	29.0229341	180 degree with respect to East	920.074	77.4508673	29.0231067	Chainage = 111127.17m
954	77.4725031	29.0212643	1183.69	0 degree with respect to East	77.4603591	29.0214874	180 degree with respect to East	1051.468	77.4495714	29.0216846	Chainage = 110966.69m
955	77.4728856	29.0208721	1394.07	0 degree with respect to East	77.4585832	29.0211347	180 degree with respect to East	895.514	77.4493956	29.0213026	Chainage = 110789.27m
956	77.4728856	29.0208721	1580.58	0 degree with respect to East	77.4566697	29.0211697	180 degree with respect to East	709.003	77.4493956	29.0213026	Chainage = 110602.76m
957	77.4732542	29.0201835	1763.15	0 degree with respect to East	77.4551653	29.0205155	180 degree with respect to East	590.969	77.4491022	29.0206262	Chainage = 110439.19m
958	77.4734846	29.0195234	1949.30	0 degree with respect to East	77.4534861	29.0198903	180 degree with respect to East	357.508	77.4498182	29.0199572	Chainage = 110261.48m
959	77.4736355	29.0192531	2141.20	0 degree with respect to East	77.4516682	29.0196559	180 degree with respect to East	157.088	77.4500565	29.0196853	Chainage = 110082.43m
960	77.4740730	29.0181749	2219.00	0 degree with respect to East	77.4513078	29.0185924	180 degree with respect to East	44.652	77.4508497	29.0186007	Chainage = 109959.4m
961	77.4749194	29.0171082	2155.63	0 degree with respect to East	77.4528045	29.0175139	180 degree with respect to East	249.474	77.4502451	29.0175607	Chainage = 109770.8m
962	77.4756903	29.0165399	2065.68	0 degree with respect to East	77.4544983	29.0169289	180 degree with respect to East	523.694	77.4491257	29.0170270	Chainage = 109593.45m
963	77.4769517	29.0157452	2031.95	0 degree with respect to East	77.4561060	29.0161281	180 degree with respect to East	712.937	77.4487919	29.0162616	Chainage = 109413.37m
964	77.4784219	29.0143605	2057.59	0 degree with respect to East	77.4573134	29.0147484	180 degree with respect to East	804.307	77.4490621	29.0148991	Chainage = 109220.38m

965	77.4799132	29.0125633	2235.49	0 degree with respect to East	77.4569801	29.0129848	180 degree with respect to East	786.687	77.4489096	29.0131322	Chainage = 109022.17m
966	77.4821708	29.0108850	2518.68	0 degree with respect to East	77.4563329	29.0113600	180 degree with respect to East	740.462	77.4487368	29.0114987	Chainage = 108831.3m
967	77.4833057	29.0095049	2751.11	0 degree with respect to East	77.4550839	29.0100237	180 degree with respect to East	415.108	77.4508255	29.0101014	Chainage = 108639.55m
968	77.4840642	29.0077154	2858.84	0 degree with respect to East	77.4547377	29.0082546	180 degree with respect to East	463.638	77.4499816	29.0083414	Chainage = 108440.53m
969	77.4844663	29.0064982	2784.34	0 degree with respect to East	77.4559044	29.0070235	180 degree with respect to East	589.276	77.4498595	29.0071338	Chainage = 108262.88m
970	77.4844147	29.0056349	2626.22	0 degree with respect to East	77.4574751	29.0061304	180 degree with respect to East	667.773	77.4506250	29.0062556	Chainage = 108080.56m
971	77.4844912	29.0045677	2488.37	0 degree with respect to East	77.4589660	29.0050373	180 degree with respect to East	751.905	77.4512529	29.0051783	Chainage = 107891.35m
972	77.4847571	29.0034065	2388.82	0 degree with respect to East	77.4602533	29.0038575	180 degree with respect to East	907.315	77.4509461	29.0040277	Chainage = 107710.1m
973	77.4848305	29.0018372	2324.47	0 degree with respect to East	77.4609871	29.0022761	180 degree with respect to East	1006.147	77.4506664	29.0024648	Chainage = 107520.74m
974	77.4843154	29.0000692	2248.74	0 degree with respect to East	77.4612492	29.0004937	180 degree with respect to East	951.946	77.4514846	29.0006723	Chainage = 107321.48m
975	77.4843973	28.9985943	2200.85	0 degree with respect to East	77.4618227	28.9990099	180 degree with respect to East	1018.163	77.4513790	28.9992009	Chainage = 107147.73m
976	77.4841787	28.9968208	2154.03	0 degree with respect to East	77.4620847	28.9972275	180 degree with respect to East	1042.623	77.4513903	28.9974231	Chainage = 106948.47m
977	77.4841053	28.9965873	2311.09	0 degree with respect to East	77.4604004	28.9970235	180 degree with respect to East	872.683	77.4514491	28.9971871	Chainage = 106782.75m
978	77.4842770	28.9971192	2460.99	0 degree with respect to East	77.4590344	28.9975836	180 degree with respect to East	748.942	77.4513524	28.9977240	Chainage = 106635.84m
979	77.4841887	28.9968512	2629.41	0 degree with respect to East	77.4572186	28.9973471	180 degree with respect to East	568.591	77.4513864	28.9974537	Chainage = 106456.92m
980	77.4837423	28.9950840	2619.68	0 degree with respect to East	77.4568725	28.9955780	180 degree with respect to East	508.389	77.4516579	28.9956733	Chainage = 106257.9m
981	77.4840303	28.9933011	2622.25	0 degree with respect to East	77.4571346	28.9937956	180 degree with respect to East	527.499	77.4517241	28.9938945	Chainage = 106058.64m
982	77.4839151	28.9920827	2499.66	0 degree with respect to East	77.4582771	28.9925542	180 degree with respect to East	593.383	77.4521909	28.9926654	Chainage = 105881.59m

536

25

983	77.4838479	28.9909040	2372.82	0 degree with respect to East	77.4595111	28.9913516	180 degree with respect to East	663.095	77.4527100	28.9914759	Chainage = 105702.02m
984	77.4844818	28.9894678	2331.60	0 degree with respect to East	77.4605681	28.9899078	180 degree with respect to East	691.390	77.4534769	28.9900374	Chainage = 105511.65m
985	77.4850524	28.9885024	2253.96	0 degree with respect to East	77.4619352	28.9889279	180 degree with respect to East	723.921	77.4545104	28.9890637	Chainage = 105339.71m
986	77.4851906	28.9874339	2122.11	0 degree with respect to East	77.4634259	28.9878346	180 degree with respect to East	758.895	77.4556425	28.9879771	Chainage = 105150.48m
987	77.4848678	28.9866746	1933.68	0 degree with respect to East	77.4650359	28.9870398	180 degree with respect to East	868.631	77.4561271	28.9872030	Chainage = 104970.49m
988	77.4848451	28.9864075	1755.24	0 degree with respect to East	77.4668433	28.9867391	180 degree with respect to East	1034.543	77.4562329	28.9869335	Chainage = 104791.18m
989	77.4849449	28.9858706	1599.10	0 degree with respect to East	77.4685446	28.9861728	180 degree with respect to East	1199.579	77.4562416	28.9863983	Chainage = 104613.85m
990	77.4850035	28.9856020	1428.60	0 degree with respect to East	77.4703519	28.9858721	180 degree with respect to East	1375.385	77.4562459	28.9861307	Chainage = 104434.53m
991	77.4862526	28.9842322	1526.51	0 degree with respect to East	77.4705970	28.9845209	180 degree with respect to East	1410.726	77.4561288	28.9847861	Chainage = 104282.83m
992	77.4873547	28.9825858	1699.38	0 degree with respect to East	77.4699265	28.9829072	180 degree with respect to East	960.977	77.4600710	28.9830880	Chainage = 104092.35m
993	77.4875595	28.9811387	1823.40	0 degree with respect to East	77.4688597	28.9814835	180 degree with respect to East	827.326	77.4603750	28.9816391	Chainage = 103903.32m
994	77.4875333	28.9800788	1970.50	0 degree with respect to East	77.4673250	28.9804513	180 degree with respect to East	1020.583	77.4568584	28.9806431	Chainage = 103714.97m
995	77.4874641	28.9794033	2110.63	0 degree with respect to East	77.4658189	28.9798021	180 degree with respect to East	926.177	77.4563205	28.9799760	Chainage = 103551.44m
996	77.4873690	28.9786714	2262.40	0 degree with respect to East	77.4641675	28.9790988	180 degree with respect to East	798.941	77.4559741	28.9792487	Chainage = 103372.56m
997	77.4873284	28.9771353	2255.24	0 degree with respect to East	77.4642007	28.9775613	180 degree with respect to East	855.198	77.4554304	28.9777218	Chainage = 103202.08m
998	77.4874257	28.9758355	2133.91	0 degree with respect to East	77.4655425	28.9762387	180 degree with respect to East	991.188	77.4553778	28.9764247	Chainage = 103005.57m
999	77.4872797	28.9741971	2064.19	0 degree with respect to East	77.4661118	28.9745871	180 degree with respect to East	1042.307	77.4554230	28.9747828	Chainage = 102814.23m
1000	77.4871926	28.9726124	1988.16	0 degree with respect to East	77.4668047	28.9729881	180 degree with respect to East	1057.430	77.4559610	28.9731867	Chainage = 102624.52m

537

1001	77.4869721	28.9709205	1923.23	0 degree with respect to East	77.4672504	28.9712839	180 degree with respect to East	962.418	77.4573812	28.9714647	Chainage = 102430.64m
1002	77.4865022	28.9694576	1784.68	0 degree with respect to East	77.4682014	28.9697948	180 degree with respect to East	789.939	77.4601011	28.9699433	Chainage = 102241.29m
1003	77.4847237	28.9681326	1493.54	0 degree with respect to East	77.4694086	28.9684148	180 degree with respect to East	854.413	77.4606472	28.9685754	Chainage = 102048.25m
1004	77.4843085	28.9671552	1304.57	0 degree with respect to East	77.4709312	28.9674017	180 degree with respect to East	1006.697	77.4606084	28.9675911	Chainage = 101862.09m
1005	77.4846316	28.9662035	1186.09	0 degree with respect to East	77.4724695	28.9664278	180 degree with respect to East	1179.516	77.4603747	28.9666496	Chainage = 101677.28m
1006	77.4843595	28.9655491	998.46	0 degree with respect to East	77.4741214	28.9657379	180 degree with respect to East	1309.679	77.4606919	28.9659843	Chainage = 101498.98m
1007	77.4836095	28.9646041	792.17	0 degree with respect to East	77.4754868	28.9647539	180 degree with respect to East	1393.666	77.4611962	28.9650163	Chainage = 101326.86m
1008	77.4825682	28.9629953	672.27	0 degree with respect to East	77.4756751	28.9631224	180 degree with respect to East	1388.030	77.4614425	28.9633837	Chainage = 101145.04m
1009	77.4823492	28.9620479	788.24	0 degree with respect to East	77.4742670	28.9621969	180 degree with respect to East	1257.535	77.4613726	28.9624335	Chainage = 100973.64m
1010	77.4819855	28.9613036	897.07	0 degree with respect to East	77.4727874	28.9614730	180 degree with respect to East	1147.691	77.4610194	28.9616889	Chainage = 100808.55m
1011	77.4802006	28.9599844	846.36	0 degree with respect to East	77.4715225	28.9601441	180 degree with respect to East	1052.013	77.4607357	28.9603420	Chainage = 100616.41m
1012	77.4773194	28.9585940	669.40	0 degree with respect to East	77.4704558	28.9587203	180 degree with respect to East	1004.255	77.4601588	28.9589091	Chainage = 100427.36m
1013	77.4779789	28.9571384	837.77	0 degree with respect to East	77.4693891	28.9572964	180 degree with respect to East	1054.501	77.4585771	28.9574945	Chainage = 100238.31m
1014	77.4791717	28.9560137	1086.16	0 degree with respect to East	77.4680352	28.9562185	180 degree with respect to East	987.392	77.4579114	28.9564040	Chainage = 100060.23m
1015	77.4795057	28.9549374	1251.94	0 degree with respect to East	77.4666697	28.9551735	180 degree with respect to East	807.079	77.4583947	28.9553250	Chainage = 99883.72m
1016	77.4796758	28.9538458	1399.98	0 degree with respect to East	77.4653221	28.9541097	180 degree with respect to East	1007.092	77.4549964	28.9542985	Chainage = 99707.15m
1017	77.4797518	28.9524071	1512.77	0 degree with respect to East	77.4642419	28.9526922	180 degree with respect to East	980.123	77.4541929	28.9528760	Chainage = 99517.96m
1018	77.4801576	28.9508402	1631.87	0 degree with respect to East	77.4634268	28.9511477	180 degree with respect to East	934.331	77.4538475	28.9513229	Chainage = 99329.18m

538

124

1019	77.4803242	28.9492002	1711.23	0 degree with respect to East	77.4627800	28.9495226	180 degree with respect to East	983.966	77.4526919	28.9497070	Chainage = 99138.29m
1020	77.4798005	28.9474367	1694.41	0 degree with respect to East	77.4624290	28.9477558	180 degree with respect to East	1181.365	77.4503173	28.9479770	Chainage = 98939.43m
1021	77.4784857	28.9458217	1628.79	0 degree with respect to East	77.4617872	28.9461283	180 degree with respect to East	1198.428	77.4495007	28.9463526	Chainage = 98748.44m
1022	77.4768362	28.9440765	1501.68	0 degree with respect to East	77.4614412	28.9443591	180 degree with respect to East	1185.089	77.4492917	28.9445809	Chainage = 98549.41m
1023	77.4762342	28.9423121	1476.73	0 degree with respect to East	77.4610952	28.9425899	180 degree with respect to East	1174.028	77.4490593	28.9428096	Chainage = 98350.38m
1024	77.4746692	28.9404267	1328.50	0 degree with respect to East	77.4610500	28.9406766	180 degree with respect to East	1103.956	77.4497326	28.9408832	Chainage = 98138.21m
1025	77.4740023	28.9385249	1267.89	0 degree with respect to East	77.4610048	28.9387633	180 degree with respect to East	921.696	77.4515560	28.9389358	Chainage = 97926.04m
1026	77.4708046	28.9369053	982.84	0 degree with respect to East	77.4607294	28.9370900	180 degree with respect to East	841.468	77.4521033	28.9372475	Chainage = 97738.59m
1027	77.4701999	28.9357904	1051.73	0 degree with respect to East	77.4594185	28.9359879	180 degree with respect to East	811.154	77.4511032	28.9361397	Chainage = 97561.75m
1028	77.4715355	28.9339903	1215.79	0 degree with respect to East	77.4590726	28.9342186	180 degree with respect to East	765.688	77.4512235	28.9343619	Chainage = 97362.72m
1029	77.4708300	28.9322255	1121.42	0 degree with respect to East	77.4593346	28.9324361	180 degree with respect to East	1919.526	77.4396578	28.9327944	Chainage = 97163.45m
1030	77.4706834	28.9303141	1111.55	0 degree with respect to East	77.4592894	28.9305228	180 degree with respect to East	2227.768	77.4364532	28.9309383	Chainage = 96951.28m
1031	77.4716317	28.9286554	1148.55	0 degree with respect to East	77.4598586	28.9288711	180 degree with respect to East	2437.783	77.4348700	28.9293256	Chainage = 96759.92m
1032	77.4691689	28.9267864	912.71	0 degree with respect to East	77.4598134	28.9269578	180 degree with respect to East	2780.644	77.4313108	28.9274758	Chainage = 96547.75m
1033	77.4704494	28.9251259	1100.73	0 degree with respect to East	77.4591669	28.9253326	180 degree with respect to East	2770.949	77.4307640	28.9258486	Chainage = 96356.84m
1034	77.4691300	28.9236201	1057.78	0 degree with respect to East	77.4582879	28.9238186	180 degree with respect to East	2735.148	77.4302524	28.9243278	Chainage = 96168.36m
1035	77.4685774	28.9230344	1169.76	0 degree with respect to East	77.4565875	28.9232538	180 degree with respect to East	2572.940	77.4302147	28.9237326	Chainage = 95991.07m
1036	77.4685774	28.9230344	1356.45	0 degree with respect to East	77.4546739	28.9232887	180 degree with respect to East	2386.253	77.4302147	28.9237326	Chainage = 95804.38m

539

128

1037	77.4685774	28.9230344	1543.14	0 degree with respect to East	77.4527604	28.9233236	180 degree with respect to East	2199.567	77.4302147	28.9237327	Chainage = 95617.69m
1038	77.4682727	28.9225979	1684.68	0 degree with respect to East	77.4510050	28.9229135	180 degree with respect to East	2037.342	77.4301222	28.9232922	Chainage = 95440.53m
1039	77.4679995	28.9220917	1817.79	0 degree with respect to East	77.4493675	28.9224321	180 degree with respect to East	1885.959	77.4300365	28.9227826	Chainage = 95272.13m
1040	77.4677471	28.9214444	1950.07	0 degree with respect to East	77.4477594	28.9218095	180 degree with respect to East	1740.166	77.4299229	28.9221327	Chainage = 95100.76m
1041	77.4678487	28.9211750	2137.33	0 degree with respect to East	77.4459416	28.9215750	180 degree with respect to East	1567.238	77.4298776	28.9218660	Chainage = 94921.55m
1042	77.4677471	28.9214444	2287.40	0 degree with respect to East	77.4443018	28.9218723	180 degree with respect to East	1402.831	77.4299229	28.9221327	Chainage = 94758.24m
1043	77.4677748	28.9217115	2450.08	0 degree with respect to East	77.4426620	28.9221696	180 degree with respect to East	1238.065	77.4299719	28.9223994	Chainage = 94594.93m
1044	77.4679312	28.9219761	2625.31	0 degree with respect to East	77.4410222	28.9224669	180 degree with respect to East	1073.687	77.4300169	28.9226661	Chainage = 94431.62m
1045	77.4677748	28.9217115	2787.41	0 degree with respect to East	77.4392044	28.9222323	180 degree with respect to East	900.733	77.4299719	28.9223994	Chainage = 94252.41m
1046	77.4677683	28.9213707	2961.57	0 degree with respect to East	77.4374128	28.9219239	180 degree with respect to East	731.938	77.4299105	28.9220596	Chainage = 94074.34m
1047	77.4682661	28.9203008	3159.83	0 degree with respect to East	77.4358788	28.9208909	180 degree with respect to East	605.041	77.4296772	28.9210030	Chainage = 93885.91m
1048	77.4670504	28.9187914	3126.63	0 degree with respect to East	77.4350038	28.9193750	180 degree with respect to East	525.455	77.4296181	28.9194724	Chainage = 93697.42m
1049	77.4660084	28.9171734	3088.06	0 degree with respect to East	77.4343577	28.9177496	180 degree with respect to East	512.902	77.4291007	28.9178446	Chainage = 93506.51m
1050	77.4647553	28.9154208	2999.55	0 degree with respect to East	77.4340123	28.9159803	180 degree with respect to East	635.225	77.4275016	28.9160978	Chainage = 93307.47m
1051	77.4609036	28.9139308	2703.05	0 degree with respect to East	77.4331998	28.9144344	180 degree with respect to East	560.373	77.4274564	28.9145381	Chainage = 93118.65m
1052	77.4614651	28.9127684	2888.19	0 degree with respect to East	77.4318641	28.9133064	180 degree with respect to East	540.416	77.4263253	28.9134064	Chainage = 92938.04m
1053	77.4635504	28.9118901	3249.05	0 degree with respect to East	77.4302512	28.9124954	180 degree with respect to East	678.845	77.4232936	28.9126208	Chainage = 92756.82m
1054	77.4644946	28.9111009	3484.81	0 degree with respect to East	77.4287794	28.9117501	180 degree with respect to East	590.230	77.4227301	28.9118591	Chainage = 92591.16m

540

129

1055	77.4651013	28.9096071	3639.80	0 degree with respect to East	77.4277981	28.9102850	180 degree with respect to East	552.405	77.4221366	28.9103870	Chainage = 92402.63m
1056	77.4654901	28.9078302	3712.73	0 degree with respect to East	77.4274401	28.9085217	180 degree with respect to East	616.553	77.4211213	28.9086355	Chainage = 92204.04m
1057	77.4691420	28.9060458	4115.14	0 degree with respect to East	77.4269687	28.9068127	180 degree with respect to East	582.093	77.4210031	28.9069201	Chainage = 92009.07m
1058	77.4705569	28.9043936	4318.61	0 degree with respect to East	77.4262991	28.9051985	180 degree with respect to East	647.100	77.4196674	28.9053179	Chainage = 91818.56m
1059	77.4716789	28.9027459	4456.68	0 degree with respect to East	77.4260069	28.9035766	180 degree with respect to East	685.841	77.4189782	28.9037031	Chainage = 91636.5m
1060	77.4717830	28.9008814	4459.95	0 degree with respect to East	77.4260783	28.9017127	180 degree with respect to East	2103.223	77.4045242	28.9020993	Chainage = 91429.74m
1061	77.4720127	28.8992358	4426.85	0 degree with respect to East	77.4266479	28.9000610	180 degree with respect to East	2630.388	77.3996918	28.9005441	Chainage = 91238.38m
1062	77.4717766	28.8973260	4408.23	0 degree with respect to East	77.4266034	28.8981477	180 degree with respect to East	2770.671	77.3982101	28.8986564	Chainage = 91026.21m
1063	77.4693659	28.8954561	4177.40	0 degree with respect to East	77.4265589	28.8962344	180 degree with respect to East	3314.260	77.3925955	28.8968421	Chainage = 90814.04m
1064	77.4668284	28.8938655	3992.86	0 degree with respect to East	77.4259130	28.8946088	180 degree with respect to East	3325.341	77.3918366	28.8952184	Chainage = 90623.12m
1065	77.4646921	28.8924059	3876.80	0 degree with respect to East	77.4249665	28.8931271	180 degree with respect to East	3381.292	77.3903173	28.8937466	Chainage = 90434.67m
1066	77.4597686	28.8908587	3459.39	0 degree with respect to East	77.4243207	28.8915015	180 degree with respect to East	3333.095	77.3901659	28.8921120	Chainage = 90243.75m
1067	77.4566410	28.8892786	3217.23	0 degree with respect to East	77.4236750	28.8898759	180 degree with respect to East	3397.170	77.3888640	28.8904979	Chainage = 90052.83m
1068	77.4500222	28.8876214	2545.70	0 degree with respect to East	77.4239375	28.8880934	180 degree with respect to East	3517.035	77.3878989	28.8887372	Chainage = 89853.56m
1069	77.4493400	28.8859923	2423.56	0 degree with respect to East	77.4245071	28.8864417	180 degree with respect to East	3496.225	77.3886823	28.8870818	Chainage = 89662.19m
1070	77.4485560	28.8851424	2213.88	0 degree with respect to East	77.4258718	28.8855529	180 degree with respect to East	3875.917	77.3861567	28.8862624	Chainage = 89496.54m
1071	77.4488744	28.8854042	2083.70	0 degree with respect to East	77.4275241	28.8857907	180 degree with respect to East	4017.414	77.3863591	28.8865263	Chainage = 89333.18m
1072	77.4449078	28.8844147	1550.92	0 degree with respect to East	77.4290166	28.8847022	180 degree with respect to East	4236.105	77.3856112	28.8854780	Chainage = 89144.05m

1073	77.4442631	28.8828125	1535.74	0 degree with respect to East	77.4285277	28.8830972	180 degree with respect to East	4246.250	77.3850190	28.8838746	Chainage = 88959.82m
1074	77.4436162	28.8820217	1631.33	0 degree with respect to East	77.4269015	28.8823239	180 degree with respect to East	4099.627	77.3848954	28.8830742	Chainage = 88779.46m
1075	77.4383515	28.8810001	1120.53	0 degree with respect to East	77.4268705	28.8812074	180 degree with respect to East	4099.706	77.3848641	28.8819577	Chainage = 88655.64m
1076	77.4376555	28.8797218	1037.97	0 degree with respect to East	77.4270206	28.8799139	180 degree with respect to East	4047.391	77.3855507	28.8806547	Chainage = 88511.49m
1077	77.4375279	28.8794566	1202.94	0 degree with respect to East	77.4252028	28.8796790	180 degree with respect to East	3861.006	77.3856427	28.8803855	Chainage = 88332.21m
1078	77.4375279	28.8794566	1389.70	0 degree with respect to East	77.4232893	28.8797135	180 degree with respect to East	3674.244	77.3856427	28.8803855	Chainage = 88145.45m
1079	77.4374003	28.8791914	1554.66	0 degree with respect to East	77.4214715	28.8794786	180 degree with respect to East	3487.860	77.3857347	28.8801163	Chainage = 87966.17m
1080	77.4374003	28.8791914	1741.42	0 degree with respect to East	77.4195580	28.8795130	180 degree with respect to East	3301.099	77.3857347	28.8801163	Chainage = 87779.41m
1081	77.4372433	28.8789267	1903.52	0 degree with respect to East	77.4177403	28.8792781	180 degree with respect to East	3111.561	77.3858591	28.8798466	Chainage = 87600.13m
1082	77.4369889	28.8786637	2056.10	0 degree with respect to East	77.4159225	28.8790432	180 degree with respect to East	2914.551	77.3860600	28.8795755	Chainage = 87420.85m
1083	77.4369889	28.8786637	2242.86	0 degree with respect to East	77.4140090	28.8790775	180 degree with respect to East	2727.789	77.3860600	28.8795755	Chainage = 87234.09m
1084	77.4369889	28.8786637	2429.62	0 degree with respect to East	77.4120954	28.8791118	180 degree with respect to East	2541.028	77.3860600	28.8795755	Chainage = 87047.33m
1085	77.4375176	28.8794352	2590.00	0 degree with respect to East	77.4109808	28.8799128	180 degree with respect to East	2472.220	77.3856501	28.8803638	Chainage = 86906.91m
1086	77.4378892	28.8801269	2743.30	0 degree with respect to East	77.4097815	28.8806327	180 degree with respect to East	2386.285	77.3853312	28.8810679	Chainage = 86765.27m
1087	77.4383120	28.8808176	2901.58	0 degree with respect to East	77.4085823	28.8813525	180 degree with respect to East	2310.769	77.3849055	28.8817738	Chainage = 86623.63m
1088	77.4431383	28.8817628	3456.28	0 degree with respect to East	77.4077249	28.8824005	180 degree with respect to East	2229.539	77.3848802	28.8828069	Chainage = 86480.46m
1089	77.4442487	28.8827145	3654.36	0 degree with respect to East	77.4068054	28.8833888	180 degree with respect to East	2128.142	77.3849994	28.8837767	Chainage = 86338.84m
1090	77.4442630	28.8828125	3832.70	0 degree with respect to East	77.4049924	28.8835195	180 degree with respect to East	1949.291	77.3850190	28.8838746	Chainage = 86161.34m

542

13

1091	77.4442259	28.8825585	4006.94	0 degree with respect to East	77.4031701	28.8832973	180 degree with respect to East	1776.311	77.3849691	28.8836208	Chainage = 85981.83m
1092	77.4423541	28.8812563	3859.97	0 degree with respect to East	77.4028046	28.8819677	180 degree with respect to East	1753.373	77.3848389	28.8822869	Chainage = 85830.17m
1093	77.4377573	28.8798910	3313.37	0 degree with respect to East	77.4038087	28.8805011	180 degree with respect to East	1788.465	77.3854837	28.8808269	Chainage = 85640.34m
1094	77.4367574	28.8784912	3111.08	0 degree with respect to East	77.4048818	28.8790640	180 degree with respect to East	1837.604	77.3860536	28.8793988	Chainage = 85449.68m
1095	77.4313832	28.8769489	2590.28	0 degree with respect to East	77.4048441	28.8774253	180 degree with respect to East	1816.560	77.3862318	28.8777563	Chainage = 85267.97m
1096	77.4305364	28.8753248	2511.35	0 degree with respect to East	77.4048063	28.8757866	180 degree with respect to East	1750.436	77.3868718	28.8761055	Chainage = 85086.26m
1097	77.4256292	28.8734991	2036.73	0 degree with respect to East	77.4047622	28.8738732	180 degree with respect to East	1429.417	77.3901171	28.8741338	Chainage = 84874.1m
1098	77.4255837	28.8717888	2079.64	0 degree with respect to East	77.4042773	28.8721707	180 degree with respect to East	1425.074	77.3896769	28.8724305	Chainage = 84679.51m
1099	77.4242344	28.8701112	1997.28	0 degree with respect to East	77.4037722	28.8704778	180 degree with respect to East	1358.550	77.3898536	28.8707255	Chainage = 84485.47m
1100	77.4250780	28.8686363	2180.30	0 degree with respect to East	77.4027410	28.8690365	180 degree with respect to East	1255.665	77.3898767	28.8692653	Chainage = 84296.63m
1101	77.4254095	28.8672306	2326.05	0 degree with respect to East	77.4015797	28.8676574	180 degree with respect to East	1186.106	77.3894281	28.8678735	Chainage = 84106.31m
1102	77.4262103	28.8654404	2437.90	0 degree with respect to East	77.4012351	28.8658878	180 degree with respect to East	1142.426	77.3895312	28.8660959	Chainage = 83907.26m
1103	77.4264795	28.8637298	2422.72	0 degree with respect to East	77.4016602	28.8641745	180 degree with respect to East	1085.062	77.3905442	28.8643721	Chainage = 83712.83m
1104	77.4262985	28.8621038	2346.77	0 degree with respect to East	77.4022576	28.8625345	180 degree with respect to East	1190.656	77.3900600	28.8627514	Chainage = 83521.9m
1105	77.4262769	28.8620020	2161.83	0 degree with respect to East	77.4041306	28.8623990	180 degree with respect to East	1366.512	77.3901315	28.8626480	Chainage = 83338.48m
1106	77.4262769	28.8620020	2010.90	0 degree with respect to East	77.4056768	28.8623714	180 degree with respect to East	1517.441	77.3901315	28.8626480	Chainage = 83187.55m
1107	77.4262107	28.8612006	1848.72	0 degree with respect to East	77.4072721	28.8615403	180 degree with respect to East	1593.595	77.3909468	28.8618309	Chainage = 83006.63m
1108	77.4262107	28.8612006	1661.93	0 degree with respect to East	77.4091856	28.8615061	180 degree with respect to East	1780.387	77.3909468	28.8618309	Chainage = 82819.84m

543

132

1109	77.4262463	28.8614675	1504.12	0 degree with respect to East	77.4108379	28.8617441	180 degree with respect to East	1955.798	77.3908021	28.8621010	Chainage = 82656.44m
1110	77.4262203	28.8617355	1340.29	0 degree with respect to East	77.4124901	28.8619820	180 degree with respect to East	2160.847	77.3903537	28.8623765	Chainage = 82493.04m
1111	77.4262203	28.8617355	1153.49	0 degree with respect to East	77.4144037	28.8619478	180 degree with respect to East	2347.638	77.3903537	28.8623765	Chainage = 82306.25m
1112	77.4261993	28.8611192	993.53	0 degree with respect to East	77.4160215	28.8613020	180 degree with respect to East	2443.368	77.3909910	28.8617485	Chainage = 82132.89m
1113	77.4260258	28.8593445	950.97	0 degree with respect to East	77.4162842	28.8595195	180 degree with respect to East	2440.138	77.3912872	28.8599653	Chainage = 81933.61m
1114	77.4258830	28.8578438	910.78	0 degree with respect to East	77.4165532	28.8580115	180 degree with respect to East	2575.159	77.3901734	28.8584819	Chainage = 81764.37m
1115	77.4249182	28.8559471	820.93	0 degree with respect to East	77.4165089	28.8560981	180 degree with respect to East	2561.260	77.3902720	28.8565660	Chainage = 81552.2m
1116	77.4251128	28.8541678	873.61	0 degree with respect to East	77.4161641	28.8543285	180 degree with respect to East	2569.434	77.3898439	28.8547978	Chainage = 81353.15m
1117	77.4241216	28.8526833	868.50	0 degree with respect to East	77.4152253	28.8528430	180 degree with respect to East	2507.761	77.3895372	28.8533009	Chainage = 81164.68m
1118	77.4237918	28.8511935	929.36	0 degree with respect to East	77.4142722	28.8513643	180 degree with respect to East	2388.907	77.3898019	28.8518004	Chainage = 80976.19m
1119	77.4236052	28.8494211	944.82	0 degree with respect to East	77.4139274	28.8495947	180 degree with respect to East	2340.684	77.3899515	28.8500220	Chainage = 80777.14m
1120	77.4224312	28.8478313	767.86	0 degree with respect to East	77.4145662	28.8479724	180 degree with respect to East	2230.843	77.3917157	28.8483798	Chainage = 80586.78m
1121	77.4221876	28.8462996	665.26	0 degree with respect to East	77.4153735	28.8464219	180 degree with respect to East	2139.441	77.3934597	28.8468127	Chainage = 80397.68m
1122	77.4217859	28.8445847	612.24	0 degree with respect to East	77.4155150	28.8446973	180 degree with respect to East	1808.544	77.3969908	28.8450279	Chainage = 80205.98m
1123	77.4215062	28.8441626	756.83	0 degree with respect to East	77.4137544	28.8443016	180 degree with respect to East	1634.266	77.3970154	28.8446003	Chainage = 80028.62m
1124	77.4217954	28.8446031	927.38	0 degree with respect to East	77.4122967	28.8447734	180 degree with respect to East	1495.150	77.3969825	28.8450465	Chainage = 79877.02m
1125	77.4219429	28.8449574	1092.95	0 degree with respect to East	77.4107483	28.8451580	180 degree with respect to East	1359.801	77.3968203	28.8454064	Chainage = 79719.97m
1126	77.4221742	28.8456900	1228.79	0 degree with respect to East	77.4095882	28.8459155	180 degree with respect to East	1284.824	77.3964281	28.8461501	Chainage = 79579m

1127	77.4221245	28.8455398	1396.59	0 degree with respect to East	77.4078198	28.8457961	180 degree with respect to East	1103.079	77.3965212	28.8459974	Chainage = 79405.87m
1128	77.4217432	28.8445031	1477.39	0 degree with respect to East	77.4066110	28.8447741	180 degree with respect to East	935.632	77.3970277	28.8449449	Chainage = 79242.29m
1129	77.4208187	28.8433671	1517.49	0 degree with respect to East	77.4052759	28.8436453	180 degree with respect to East	841.537	77.3966564	28.8437988	Chainage = 79061.61m
1130	77.4208640	28.8419966	1465.13	0 degree with respect to East	77.4058578	28.8422652	180 degree with respect to East	908.678	77.3965507	28.8424310	Chainage = 78898.4m
1131	77.4207218	28.8409662	1318.51	0 degree with respect to East	77.4072175	28.8412080	180 degree with respect to East	1010.837	77.3968642	28.8413924	Chainage = 78721.33m
1132	77.4208163	28.8414996	1191.92	0 degree with respect to East	77.4086084	28.8417182	180 degree with respect to East	1165.226	77.3966738	28.8419309	Chainage = 78574.24m
1133	77.4208125	28.8423022	1065.09	0 degree with respect to East	77.4099035	28.8424977	180 degree with respect to East	1304.004	77.3965474	28.8427358	Chainage = 78421.11m
1134	77.4207773	28.8425704	900.34	0 degree with respect to East	77.4115557	28.8427357	180 degree with respect to East	1466.806	77.3965321	28.8430036	Chainage = 78257.68m
1135	77.4207436	28.8410891	816.69	0 degree with respect to East	77.4123790	28.8412390	180 degree with respect to East	1519.856	77.3968122	28.8415167	Chainage = 78073.32m
1136	77.4198594	28.8394756	672.06	0 degree with respect to East	77.4129762	28.8395990	180 degree with respect to East	1231.159	77.4003665	28.8398241	Chainage = 77882.38m
1137	77.4192272	28.8379497	613.93	0 degree with respect to East	77.4129395	28.8380624	180 degree with respect to East	2088.078	77.3915534	28.8384435	Chainage = 77711.99m
1138	77.4189995	28.8365411	702.39	0 degree with respect to East	77.4118059	28.8366700	180 degree with respect to East	2146.649	77.3898202	28.8370615	Chainage = 77522.05m
1139	77.4179327	28.8350883	601.54	0 degree with respect to East	77.4117719	28.8351986	180 degree with respect to East	2624.893	77.3848884	28.8356768	Chainage = 77358.89m
1140	77.4173344	28.8333956	592.15	0 degree with respect to East	77.4112699	28.8335042	180 degree with respect to East	2699.429	77.3836234	28.8339958	Chainage = 77164.75m
1141	77.4161091	28.8317077	520.15	0 degree with respect to East	77.4107821	28.8318030	180 degree with respect to East	2811.960	77.3819836	28.8323148	Chainage = 76970.23m
1142	77.4149493	28.8300942	470.59	0 degree with respect to East	77.4101299	28.8301804	180 degree with respect to East	2786.308	77.3815946	28.8306874	Chainage = 76779.41m
1143	77.4144934	28.8287672	517.76	0 degree with respect to East	77.4091910	28.8288621	180 degree with respect to East	2726.367	77.3812699	28.8293580	Chainage = 76606.89m
1144	77.4142309	28.8276192	622.49	0 degree with respect to East	77.4078560	28.8277332	180 degree with respect to East	2700.478	77.3802003	28.8282241	Chainage = 76426.19m

545

134

1145	77.4139518	28.8266879	736.06	0 degree with respect to East	77.4064139	28.8268227	180 degree with respect to East	2584.027	77.3799510	28.8272923	Chainage = 76252.95m
1146	77.4140704	28.8256080	893.91	0 degree with respect to East	77.4049161	28.8257715	180 degree with respect to East	2413.223	77.3802026	28.8262099	Chainage = 76065.97m
1147	77.4143486	28.8244928	1052.95	0 degree with respect to East	77.4035658	28.8246854	180 degree with respect to East	2300.160	77.3800104	28.8251031	Chainage = 75887.43m
1148	77.4144554	28.8237872	1225.62	0 degree with respect to East	77.4019044	28.8240113	180 degree with respect to East	2155.383	77.3798318	28.8244026	Chainage = 75708.84m
1149	77.4143919	28.8228868	1374.73	0 degree with respect to East	77.4003140	28.8231380	180 degree with respect to East	2053.149	77.3792885	28.8235106	Chainage = 75525.86m
1150	77.4139990	28.8221817	1482.16	0 degree with respect to East	77.3988211	28.8224526	180 degree with respect to East	1894.883	77.3794165	28.8227963	Chainage = 75361.48m
1151	77.4137098	28.8215258	1617.65	0 degree with respect to East	77.3971445	28.8218212	180 degree with respect to East	1715.811	77.3795738	28.8221324	Chainage = 75183.46m
1152	77.4139976	28.8206593	1802.49	0 degree with respect to East	77.3955397	28.8209884	180 degree with respect to East	1529.009	77.3798820	28.8212656	Chainage = 75001.6m
1153	77.4157636	28.8190894	1935.30	0 degree with respect to East	77.3959459	28.8194429	180 degree with respect to East	1510.405	77.3804790	28.8197167	Chainage = 74825.73m
1154	77.4161638	28.8183068	1817.56	0 degree with respect to East	77.3975520	28.8186389	180 degree with respect to East	1633.757	77.3808220	28.8189352	Chainage = 74645.36m
1155	77.4162603	28.8180375	1650.47	0 degree with respect to East	77.3993594	28.8183392	180 degree with respect to East	1794.915	77.3809792	28.8186649	Chainage = 74465.79m
1156	77.4162603	28.8180375	1463.61	0 degree with respect to East	77.4012730	28.8183052	180 degree with respect to East	1981.784	77.3809792	28.8186649	Chainage = 74278.92m
1157	77.4163366	28.8176288	1299.98	0 degree with respect to East	77.4030250	28.8178666	180 degree with respect to East	2118.819	77.3813281	28.8182513	Chainage = 74101.09m
1158	77.4162619	28.8163825	1186.86	0 degree with respect to East	77.4041087	28.8165996	180 degree with respect to East	2008.455	77.3835422	28.8169646	Chainage = 73925.24m
1159	77.4159250	28.8147215	1103.92	0 degree with respect to East	77.4046212	28.8149234	180 degree with respect to East	1637.142	77.3878573	28.8152212	Chainage = 73732.79m
1160	77.4153239	28.8130502	998.48	0 degree with respect to East	77.4051000	28.8132328	180 degree with respect to East	1280.278	77.3919905	28.8134659	Chainage = 73539.62m
1161	77.4147851	28.8119104	819.86	0 degree with respect to East	77.4063902	28.8120604	180 degree with respect to East	1397.298	77.3920826	28.8123149	Chainage = 73358.61m
1162	77.4150171	28.8123138	694.52	0 degree with respect to East	77.4079057	28.8124409	180 degree with respect to East	1535.568	77.3921823	28.8127207	Chainage = 73204.74m

546

1163	77.4154432	28.8132364	637.97	0 degree with respect to East	77.4089107	28.8133532	180 degree with respect to East	1661.894	77.3918937	28.8136560	Chainage = 73063.82m
1164	77.4149782	28.8122414	505.53	0 degree with respect to East	77.4098019	28.8123340	180 degree with respect to East	1723.296	77.3921562	28.8126480	Chainage = 72921.21m
1165	77.4142014	28.8106523	500.00	0 degree with respect to East	77.4090817	28.8107438	180 degree with respect to East	1719.977	77.3914703	28.8110572	Chainage = 72731.41m
1166	77.4127779	28.8091188	440.66	0 degree with respect to East	77.4082659	28.8091994	180 degree with respect to East	1657.418	77.3912953	28.8095013	Chainage = 72542.57m
1167	77.4096680	28.8074581	183.24	0 degree with respect to East	77.4077918	28.8074916	180 degree with respect to East	1638.420	77.3910160	28.8077900	Chainage = 72347.66m
1168	77.4098643	28.8058170	265.41	0 degree with respect to East	77.4071469	28.8058655	180 degree with respect to East	1641.783	77.3903369	28.8061644	Chainage = 72156.7m
1169	77.4079443	28.8039371	82.18	0 degree with respect to East	77.4071029	28.8039522	180 degree with respect to East	1677.429	77.3899283	28.8042575	Chainage = 71944.54m
1170	77.4086524	28.8025038	260.37	0 degree with respect to East	77.4059866	28.8025513	180 degree with respect to East	1613.631	77.3894654	28.8028449	Chainage = 71754.8m
1171	77.4089272	28.8013134	432.61	0 degree with respect to East	77.4044980	28.8013924	180 degree with respect to East	1545.277	77.3886768	28.8016734	Chainage = 71560.79m
1172	77.4074280	28.8005111	427.90	0 degree with respect to East	77.4030470	28.8005892	180 degree with respect to East	1417.175	77.3885375	28.8008468	Chainage = 71393.44m
1173	77.4066201	28.7998642	512.74	0 degree with respect to East	77.4013705	28.7999577	180 degree with respect to East	1257.226	77.3884987	28.8001862	Chainage = 71215.39m
1174	77.4100183	28.7994211	1018.17	0 degree with respect to East	77.3995941	28.7996069	180 degree with respect to East	1094.624	77.3883870	28.7998057	Chainage = 71037.61m
1175	77.4104122	28.7988790	1208.66	0 degree with respect to East	77.3980378	28.7990994	180 degree with respect to East	950.720	77.3883041	28.7992721	Chainage = 70875.55m
1176	77.4105128	28.7986096	1396.02	0 degree with respect to East	77.3962202	28.7988642	180 degree with respect to East	779.557	77.3882389	28.7990057	Chainage = 70696.15m
1177	77.4105128	28.7986096	1582.92	0 degree with respect to East	77.3943066	28.7988981	180 degree with respect to East	592.655	77.3882389	28.7990057	Chainage = 70509.25m
1178	77.4105128	28.7986096	1769.83	0 degree with respect to East	77.3923931	28.7989321	180 degree with respect to East	405.752	77.3882389	28.7990057	Chainage = 70322.35m
1179	77.4117047	28.7977348	2010.95	0 degree with respect to East	77.3911164	28.7981011	180 degree with respect to East	307.656	77.3879666	28.7981569	Chainage = 70167.34m
1180	77.4162544	28.7959873	2453.46	0 degree with respect to East	77.3911362	28.7964347	180 degree with respect to East	347.083	77.3875828	28.7964976	Chainage = 69982.59m

547

1181	77.4181062	28.7949957	2494.10	0 degree with respect to East	77.3925722	28.7954508	180 degree with respect to East	475.657	77.3877024	28.7955371	Chainage = 69804.93m
1182	77.4173583	28.7953445	2266.14	0 degree with respect to East	77.3941580	28.7957581	180 degree with respect to East	634.686	77.3876602	28.7958732	Chainage = 69646.36m
1183	77.4161383	28.7961011	2030.16	0 degree with respect to East	77.3953538	28.7964717	180 degree with respect to East	759.101	77.3875822	28.7966094	Chainage = 69505.31m
1184	77.4156905	28.7964693	1833.87	0 degree with respect to East	77.3969155	28.7968041	180 degree with respect to East	907.434	77.3876252	28.7969688	Chainage = 69348.41m
1185	77.4154114	28.7966492	1636.38	0 degree with respect to East	77.3986582	28.7969480	180 degree with respect to East	1075.465	77.3876476	28.7971433	Chainage = 69177.48m
1186	77.4146268	28.7969308	1382.21	0 degree with respect to East	77.4004759	28.7971833	180 degree with respect to East	1249.653	77.3876819	28.7974102	Chainage = 68998.07m
1187	77.4166403	28.7956498	1483.63	0 degree with respect to East	77.4014512	28.7959209	180 degree with respect to East	1350.652	77.3876234	28.7961663	Chainage = 68828.78m
1188	77.4196351	28.7936820	1780.48	0 degree with respect to East	77.4014073	28.7940076	180 degree with respect to East	1339.975	77.3876890	28.7942510	Chainage = 68616.62m
1189	77.4199364	28.7922875	1729.06	0 degree with respect to East	77.4022353	28.7926037	180 degree with respect to East	1371.659	77.3881928	28.7928529	Chainage = 68441.23m
1190	77.4203699	28.7912462	1624.55	0 degree with respect to East	77.4037389	28.7915434	180 degree with respect to East	1417.545	77.3892268	28.7918011	Chainage = 68253.13m
1191	77.4251677	28.7898915	1955.47	0 degree with respect to East	77.4051493	28.7902497	180 degree with respect to East	1394.997	77.3908682	28.7905035	Chainage = 68054.28m
1192	77.4295526	28.7882247	2316.36	0 degree with respect to East	77.4058401	28.7886494	180 degree with respect to East	1059.583	77.3949929	28.7888423	Chainage = 67864.47m
1193	77.4320773	28.7865082	2513.82	0 degree with respect to East	77.4063438	28.7869694	180 degree with respect to East	1070.352	77.3953866	28.7871643	Chainage = 67671.83m
1194	77.4324777	28.7848715	2494.63	0 degree with respect to East	77.4069410	28.7853292	180 degree with respect to East	1066.754	77.3960208	28.7855235	Chainage = 67480.87m
1195	77.4327864	28.7833266	2446.62	0 degree with respect to East	77.4077415	28.7837757	180 degree with respect to East	874.233	77.3987923	28.7839350	Chainage = 67291.72m
1196	77.4328995	28.7815970	2420.96	0 degree with respect to East	77.4081178	28.7820414	180 degree with respect to East	408.367	77.4039376	28.7821159	Chainage = 67095.97m
1197	77.4321759	28.7800786	2270.38	0 degree with respect to East	77.4089359	28.7804953	180 degree with respect to East	48.872	77.4084356	28.7805042	Chainage = 66906.86m
1198	77.4321032	28.7790125	2117.73	0 degree with respect to East	77.4104260	28.7794013	180 degree with respect to East	232.230	77.4080489	28.7794437	Chainage = 66717.41m

548

137

1199	77.4320951	28.7775636	2018.91	0 degree with respect to East	77.4114297	28.7779343	180 degree with respect to East	354.880	77.4077971	28.7779991	Chainage = 66527.51m
1200	77.4318411	28.7768236	1836.03	0 degree with respect to East	77.4130478	28.7771608	180 degree with respect to East	448.337	77.4084587	28.7772427	Chainage = 66347.69m
1201	77.4320952	28.7775638	1728.80	0 degree with respect to East	77.4143993	28.7778814	180 degree with respect to East	645.018	77.4077969	28.7779993	Chainage = 66193.39m
1202	77.4320976	28.7788706	1726.07	0 degree with respect to East	77.4144294	28.7791877	180 degree with respect to East	624.875	77.4080331	28.7793020	Chainage = 66048.54m
1203	77.4320987	28.7789593	1583.60	0 degree with respect to East	77.4158889	28.7792503	180 degree with respect to East	766.989	77.4080379	28.7793906	Chainage = 65905.82m
1204	77.4321128	28.7784239	1418.79	0 degree with respect to East	77.4175901	28.7786848	180 degree with respect to East	944.788	77.4079192	28.7788576	Chainage = 65728.22m
1205	77.4319859	28.7772689	1264.32	0 degree with respect to East	77.4190445	28.7775015	180 degree with respect to East	1071.472	77.4080769	28.7776975	Chainage = 65534.86m
1206	77.4313391	28.7758666	1095.37	0 degree with respect to East	77.4201272	28.7760681	180 degree with respect to East	1080.509	77.4090673	28.7762659	Chainage = 65343.97m
1207	77.4310770	28.7745675	939.74	0 degree with respect to East	77.4214581	28.7747404	180 degree with respect to East	926.420	77.4119756	28.7749101	Chainage = 65147.59m
1208	77.4307902	28.7730333	833.55	0 degree with respect to East	77.4222584	28.7731867	180 degree with respect to East	1398.009	77.4079490	28.7734426	Chainage = 64958.43m
1209	77.4300808	28.7716872	646.35	0 degree with respect to East	77.4234652	28.7718061	180 degree with respect to East	1606.397	77.4070231	28.7721002	Chainage = 64765.24m
1210	77.4299216	28.7707046	482.05	0 degree with respect to East	77.4249877	28.7707933	180 degree with respect to East	1827.183	77.4062859	28.7711279	Chainage = 64578.9m
1211	77.4299387	28.7701692	317.51	0 degree with respect to East	77.4266889	28.7702277	180 degree with respect to East	3731.337	77.3884974	28.7709086	Chainage = 64401.29m
1212	77.4299283	28.7694936	155.74	0 degree with respect to East	77.4283342	28.7695223	180 degree with respect to East	3933.484	77.3880740	28.7702404	Chainage = 64222.56m
1213	77.4292282	28.7682010	42.38	0 degree with respect to East	77.4296620	28.7681932	180 degree with respect to East	4140.546	77.3872830	28.7689491	Chainage = 64026.26m
1214	77.4288402	28.7664359	45.80	0 degree with respect to East	77.4293089	28.7664275	180 degree with respect to East	4205.072	77.3862702	28.7671949	Chainage = 63827.49m
1215	77.4290563	28.7651697	118.08	0 degree with respect to East	77.4278477	28.7651914	180 degree with respect to East	4125.200	77.3856269	28.7659439	Chainage = 63629.62m
1216	77.4290148	28.7642175	251.47	0 degree with respect to East	77.4264411	28.7642638	180 degree with respect to East	4016.542	77.3853327	28.7649961	Chainage = 63457.98m

1217	77.4285660	28.7629633	350.39	0 degree with respect to East	77.4249799	28.7630277	180 degree with respect to East	3920.719	77.3848528	28.7637423	Chainage = 63260.11m
1218	77.4283108	28.7615233	429.53	0 degree with respect to East	77.4239149	28.7616023	180 degree with respect to East	3867.591	77.3843320	28.7623069	Chainage = 63070.91m
1219	77.4275772	28.7602544	496.41	0 degree with respect to East	77.4224969	28.7603456	180 degree with respect to East	3765.264	77.3839617	28.7610313	Chainage = 62874.44m
1220	77.4269696	28.7592533	575.94	0 degree with respect to East	77.4210755	28.7593591	180 degree with respect to East	3677.524	77.3834385	28.7600285	Chainage = 62697.68m
1221	77.4266203	28.7587245	710.04	0 degree with respect to East	77.4193537	28.7588549	180 degree with respect to East	3557.415	77.3829462	28.7595021	Chainage = 62520.43m
1222	77.4266203	28.7587245	897.01	0 degree with respect to East	77.4174402	28.7588891	180 degree with respect to East	3370.439	77.3829462	28.7595021	Chainage = 62333.45m
1223	77.4267955	28.7589889	1074.37	0 degree with respect to East	77.4158003	28.7591860	180 degree with respect to East	3185.426	77.3831996	28.7597652	Chainage = 62169.9m
1224	77.4265024	28.7584591	1213.97	0 degree with respect to East	77.4140786	28.7586817	180 degree with respect to East	3057.461	77.3827877	28.7592374	Chainage = 61992.65m
1225	77.4261711	28.7579300	1333.67	0 degree with respect to East	77.4125222	28.7581744	180 degree with respect to East	2907.160	77.3827697	28.7587026	Chainage = 61830.54m
1226	77.4261711	28.7579300	1520.65	0 degree with respect to East	77.4106087	28.7582086	180 degree with respect to East	2720.183	77.3827697	28.7587026	Chainage = 61643.56m
1227	77.4263623	28.7581941	1699.57	0 degree with respect to East	77.4089688	28.7585054	180 degree with respect to East	2559.057	77.3827787	28.7589700	Chainage = 61480.01m
1228	77.4267955	28.7589889	1848.66	0 degree with respect to East	77.4078760	28.7593275	180 degree with respect to East	2411.137	77.3831996	28.7597652	Chainage = 61339.64m
1229	77.4273100	28.7597823	2005.69	0 degree with respect to East	77.4067833	28.7601497	180 degree with respect to East	2246.702	77.3837896	28.7605575	Chainage = 61199.27m
1230	77.4276519	28.7603967	2164.05	0 degree with respect to East	77.4055043	28.7607930	180 degree with respect to East	2101.123	77.3840004	28.7611742	Chainage = 61055.4m
1231	77.4283193	28.7613694	2317.82	0 degree with respect to East	77.4045978	28.7617939	180 degree with respect to East	1984.268	77.3842897	28.7621539	Chainage = 60913.43m
1232	77.4283146	28.7621721	2424.12	0 degree with respect to East	77.4035051	28.7626160	180 degree with respect to East	1854.653	77.3845233	28.7629524	Chainage = 60773.07m
1233	77.4287695	28.7633865	2533.34	0 degree with respect to East	77.4028418	28.7638504	180 degree with respect to East	1743.878	77.3849935	28.7641667	Chainage = 60621.66m
1234	77.4290664	28.7648341	2604.12	0 degree with respect to East	77.4024139	28.7653108	180 degree with respect to East	1652.410	77.3855016	28.7656106	Chainage = 60454.44m

1235	77.4288199	28.7661762	2633.30	0 degree with respect to East	77.4018684	28.7666583	180 degree with respect to East	1536.096	77.3861463	28.7669370	Chainage = 60295.84m
1236	77.4289660	28.7676073	2691.26	0 degree with respect to East	77.4014209	28.7681000	180 degree with respect to East	1404.087	77.3870498	28.7683548	Chainage = 60130.14m
1237	77.4299326	28.7695040	2781.37	0 degree with respect to East	77.4014648	28.7700133	180 degree with respect to East	1307.877	77.3880781	28.7702507	Chainage = 59917.98m
1238	77.4299424	28.7696341	2956.27	0 degree with respect to East	77.3996844	28.7701752	180 degree with respect to East	1127.752	77.3881414	28.7703798	Chainage = 59743.15m
1239	77.4298754	28.7693677	3127.31	0 degree with respect to East	77.3978668	28.7699399	180 degree with respect to East	961.829	77.3880221	28.7701144	Chainage = 59563.7m
1240	77.4298754	28.7693677	3314.26	0 degree with respect to East	77.3959533	28.7699739	180 degree with respect to East	774.875	77.3880221	28.7701144	Chainage = 59376.75m
1241	77.4298069	28.7690782	3484.35	0 degree with respect to East	77.3941440	28.7697153	180 degree with respect to East	616.558	77.3878333	28.7698270	Chainage = 59197.71m
1242	77.4295933	28.7685702	3616.35	0 degree with respect to East	77.3925794	28.7692311	180 degree with respect to East	499.206	77.3874699	28.7693215	Chainage = 59035.73m
1243	77.4291509	28.7680431	3741.35	0 degree with respect to East	77.3908578	28.7687265	180 degree with respect to East	356.630	77.3872076	28.7687911	Chainage = 58858.5m
1244	77.4288755	28.7668188	3858.37	0 degree with respect to East	77.3893851	28.7675233	180 degree with respect to East	286.378	77.3864540	28.7675752	Chainage = 58662.32m
1245	77.4290003	28.7653709	3915.52	0 degree with respect to East	77.3889255	28.7660858	180 degree with respect to East	312.923	77.3857228	28.7661424	Chainage = 58496.75m
1246	77.4288702	28.7635973	3936.48	0 degree with respect to East	77.3885816	28.7643159	180 degree with respect to East	343.954	77.3850613	28.7643781	Chainage = 58297.68m
1247	77.4283059	28.7616934	3885.67	0 degree with respect to East	77.3885380	28.7624026	180 degree with respect to East	406.386	77.3843788	28.7624761	Chainage = 58085.52m
1248	77.4274245	28.7599705	3765.27	0 degree with respect to East	77.3888896	28.7606576	180 degree with respect to East	489.402	77.3838808	28.7607461	Chainage = 57889.05m
1249	77.4264993	28.7584478	3596.68	0 degree with respect to East	77.3896902	28.7591041	180 degree with respect to East	674.485	77.3827873	28.7592260	Chainage = 57699.89m
1250	77.4253150	28.7571249	3396.29	0 degree with respect to East	77.3905572	28.7577446	180 degree with respect to East	768.411	77.3826931	28.7578836	Chainage = 57527.01m
1251	77.4200414	28.7557137	2795.41	0 degree with respect to East	77.3914334	28.7562232	180 degree with respect to East	878.036	77.3824475	28.7563820	Chainage = 57337.87m
1252	77.4158380	28.7542220	2312.54	0 degree with respect to East	77.3921720	28.7546432	180 degree with respect to East	1042.757	77.3815005	28.7548318	Chainage = 57148.43m

551

1253	77.4135260	28.7526824	2017.56	0 degree with respect to East	77.3928791	28.7530498	180 degree with respect to East	1120.154	77.3814156	28.7532523	Chainage = 56958.75m
1254	77.4109428	28.7512227	1679.54	0 degree with respect to East	77.3937552	28.7515283	180 degree with respect to East	1200.815	77.3814664	28.7517455	Chainage = 56769.61m
1255	77.4102197	28.7497042	1528.91	0 degree with respect to East	77.3945738	28.7499824	180 degree with respect to East	1382.048	77.3804306	28.7502324	Chainage = 56580.48m
1256	77.4089636	28.7480996	1460.43	0 degree with respect to East	77.3940187	28.7483652	180 degree with respect to East	1342.892	77.3802765	28.7486080	Chainage = 56393.17m
1257	77.4085037	28.7463464	1452.23	0 degree with respect to East	77.3936430	28.7466105	180 degree with respect to East	1296.850	77.3803721	28.7468450	Chainage = 56195.2m
1258	77.4041752	28.7450223	1142.53	0 degree with respect to East	77.3924838	28.7452299	180 degree with respect to East	1288.623	77.3792973	28.7454627	Chainage = 56004.8m
1259	77.4036525	28.7434332	1162.80	0 degree with respect to East	77.3917538	28.7436443	180 degree with respect to East	1252.083	77.3789414	28.7438705	Chainage = 55815.1m
1260	77.4040384	28.7419533	1298.54	0 degree with respect to East	77.3907509	28.7421891	180 degree with respect to East	1139.732	77.3790883	28.7423949	Chainage = 55626.34m
1261	77.4034033	28.7407202	1347.54	0 degree with respect to East	77.3896146	28.7409647	180 degree with respect to East	1130.790	77.3780436	28.7411689	Chainage = 55450.98m
1262	77.4028395	28.7393766	1415.84	0 degree with respect to East	77.3883520	28.7396335	180 degree with respect to East	1063.511	77.3774697	28.7398254	Chainage = 55258.63m
1263	77.4032629	28.7382157	1587.65	0 degree with respect to East	77.3870177	28.7385037	180 degree with respect to East	892.042	77.3778900	28.7386646	Chainage = 55077.84m
1264	77.4038665	28.7367603	1750.69	0 degree with respect to East	77.3859533	28.7370778	180 degree with respect to East	782.663	77.3779449	28.7372189	Chainage = 54888.62m
1265	77.4032517	28.7349102	1706.15	0 degree with respect to East	77.3857944	28.7352195	180 degree with respect to East	861.682	77.3769776	28.7353749	Chainage = 54682.03m
1266	77.4043165	28.7332492	1754.58	0 degree with respect to East	77.3863639	28.7335674	180 degree with respect to East	823.137	77.3779417	28.7337159	Chainage = 54490.61m
1267	77.4046620	28.7314970	1755.63	0 degree with respect to East	77.3866991	28.7318154	180 degree with respect to East	872.933	77.3777674	28.7319729	Chainage = 54293.64m
1268	77.4046414	28.7299593	1675.07	0 degree with respect to East	77.3875030	28.7302632	180 degree with respect to East	1059.125	77.3766664	28.7304542	Chainage = 54104.48m
1269	77.4040890	28.7281911	1595.40	0 degree with respect to East	77.3877660	28.7284805	180 degree with respect to East	978.014	77.3777595	28.7286569	Chainage = 53905.18m
1270	77.4018948	28.7264769	1349.78	0 degree with respect to East	77.3880850	28.7267216	180 degree with respect to East	1059.233	77.3772477	28.7269126	Chainage = 53707.71m

552

1271	77.4041539	28.7248972	1492.36	0 degree with respect to East	77.3888856	28.7251679	180 degree with respect to East	1225.997	77.3763423	28.7253890	Chainage = 53518.53m
1272	77.4054116	28.7236267	1509.40	0 degree with respect to East	77.3899692	28.7239006	180 degree with respect to East	1287.887	77.3767928	28.7241330	Chainage = 53342.6m
1273	77.4058323	28.7223502	1412.71	0 degree with respect to East	77.3913793	28.7226067	180 degree with respect to East	1425.328	77.3767970	28.7228639	Chainage = 53143.68m
1274	77.4060885	28.7213677	1288.64	0 degree with respect to East	77.3929049	28.7216018	180 degree with respect to East	1629.606	77.3762328	28.7218959	Chainage = 52957.56m
1275	77.4063507	28.7206078	1156.53	0 degree with respect to East	77.3945188	28.7208179	180 degree with respect to East	1844.056	77.3756529	28.7211508	Chainage = 52777.48m
1276	77.4078574	28.7199985	1139.35	0 degree with respect to East	77.3962013	28.7202056	180 degree with respect to East	1995.428	77.3757869	28.7205660	Chainage = 52599.6m
1277	77.4082026	28.7197248	996.43	0 degree with respect to East	77.3980087	28.7199060	180 degree with respect to East	2162.605	77.3758840	28.7202967	Chainage = 52419.87m
1278	77.4087436	28.7191801	883.03	0 degree with respect to East	77.3997099	28.7193408	180 degree with respect to East	2313.519	77.3760415	28.7197588	Chainage = 52242.19m
1279	77.4092504	28.7180970	847.56	0 degree with respect to East	77.4005796	28.7182512	180 degree with respect to East	2333.955	77.3767023	28.7186731	Chainage = 52094.5m
1280	77.4092492	28.7181009	998.51	0 degree with respect to East	77.3990342	28.7182825	180 degree with respect to East	2183.086	77.3767004	28.7186770	Chainage = 51943.43m
1281	77.4093206	28.7178321	1183.15	0 degree with respect to East	77.3972167	28.7180472	180 degree with respect to East	2005.140	77.3767033	28.7184094	Chainage = 51763.9m
1282	77.4093206	28.7178321	1370.20	0 degree with respect to East	77.3953031	28.7180812	180 degree with respect to East	1818.094	77.3767033	28.7184094	Chainage = 51576.85m
1283	77.4094296	28.7173998	1536.65	0 degree with respect to East	77.3937093	28.7176791	180 degree with respect to East	1677.532	77.3765476	28.7179819	Chainage = 51414.84m
1284	77.4095395	28.7167580	1712.01	0 degree with respect to East	77.3920254	28.7170690	180 degree with respect to East	1541.612	77.3762542	28.7173471	Chainage = 51236.91m
1285	77.4097814	28.7160693	1898.72	0 degree with	77.3903574	28.7164142	180 degree with	1392.037	77.3761165	28.7166652	Chainage =

1271	77.4041539	28.7248972	1492.36	0 degree with respect to East	77.3888856	28.7251679	180 degree with respect to East	1225.997	77.3763423	28.7253890	Chainage = 53518.53m
1272	77.4054116	28.7236267	1509.40	0 degree with respect to East	77.3899692	28.7239006	180 degree with respect to East	1287.887	77.3767928	28.7241330	Chainage = 53342.6m
1273	77.4058323	28.7223502	1412.71	0 degree with respect to East	77.3913793	28.7226067	180 degree with respect to East	1425.328	77.3767970	28.7228639	Chainage = 53143.68m
1274	77.4060885	28.7213677	1288.64	0 degree with respect to East	77.3929049	28.7216018	180 degree with respect to East	1629.606	77.3762328	28.7218959	Chainage = 52957.56m
1275	77.4063507	28.7206078	1156.53	0 degree with respect to East	77.3945188	28.7208179	180 degree with respect to East	1844.056	77.3756529	28.7211508	Chainage = 52777.48m
1276	77.4078574	28.7199985	1139.35	0 degree with respect to East	77.3962013	28.7202056	180 degree with respect to East	1995.428	77.3757869	28.7205660	Chainage = 52599.6m
1277	77.4082026	28.7197248	996.43	0 degree with respect to East	77.3980087	28.7199060	180 degree with respect to East	2162.605	77.3758840	28.7202967	Chainage = 52419.87m
1278	77.4087436	28.7191801	883.03	0 degree with respect to East	77.3997099	28.7193408	180 degree with respect to East	2313.519	77.3760415	28.7197588	Chainage = 52242.19m
1279	77.4092504	28.7180970	847.56	0 degree with respect to East	77.4005796	28.7182512	180 degree with respect to East	2333.955	77.3767023	28.7186731	Chainage = 52094.5m
1280	77.4092492	28.7181009	998.51	0 degree with respect to East	77.3990342	28.7182825	180 degree with respect to East	2183.086	77.3767004	28.7186770	Chainage = 51943.43m
1281	77.4093206	28.7178321	1183.15	0 degree with respect to East	77.3972167	28.7180472	180 degree with respect to East	2005.140	77.3767033	28.7184094	Chainage = 51763.9m
1282	77.4093206	28.7178321	1370.20	0 degree with respect to East	77.3953031	28.7180812	180 degree with respect to East	1818.094	77.3767033	28.7184094	Chainage = 51576.85m
1283	77.4094296	28.7173998	1536.65	0 degree with respect to East	77.3937093	28.7176791	180 degree with respect to East	1677.532	77.3765476	28.7179819	Chainage = 51414.84m
1284	77.4095395	28.7167580	1712.01	0 degree with respect to East	77.3920254	28.7170690	180 degree with respect to East	1541.612	77.3762542	28.7173471	Chainage = 51236.91m
1285	77.4097814	28.7160693	1898.72	0 degree with respect to East	77.3903574	28.7164142	180 degree with respect to East	1392.037	77.3761165	28.7166652	Chainage = 51058.46m
1286	77.4100885	28.7153107	2073.21	0 degree with respect to East	77.3888795	28.7156871	180 degree with respect to East	1252.754	77.3760636	28.7159130	Chainage = 50893.06m
1287	77.4103032	28.7144445	2251.02	0 degree with respect to East	77.3872754	28.7148531	180 degree with respect to East	1059.976	77.3764317	28.7150442	Chainage = 50711.06m
1288	77.4100375	28.7128670	2299.89	0 degree with respect to East	77.3865101	28.7132844	180 degree with respect to East	918.946	77.3771094	28.7134500	Chainage = 50521.74m

554

1289	77.4113046	28.7112064	2486.73	0 degree with respect to East	77.3858662	28.7116577	180 degree with respect to East	887.855	77.3767836	28.7118176	Chainage = 50330.74m
1290	77.4144266	28.7094878	2740.87	0 degree with respect to East	77.3863889	28.7099856	180 degree with respect to East	894.769	77.3772358	28.7101468	Chainage = 50138.46m
1291	77.4147656	28.7082127	2636.20	0 degree with respect to East	77.3877991	28.7086916	180 degree with respect to East	985.069	77.3777223	28.7088691	Chainage = 49939.53m
1292	77.4152862	28.7071354	2541.47	0 degree with respect to East	77.3892889	28.7075973	180 degree with respect to East	1100.384	77.3780327	28.7077957	Chainage = 49750m
1293	77.4160506	28.7058526	2478.40	0 degree with respect to East	77.3906989	28.7063032	180 degree with respect to East	1166.566	77.3787658	28.7065137	Chainage = 49551.07m
1294	77.4161720	28.7045813	2352.45	0 degree with respect to East	77.3921089	28.7050091	180 degree with respect to East	1154.658	77.3802978	28.7052175	Chainage = 49352.14m
1295	77.4161149	28.7033132	2209.05	0 degree with respect to East	77.3935189	28.7037150	180 degree with respect to East	1171.980	77.3815308	28.7039267	Chainage = 49153.2m
1296	77.4007401	28.7010488	430.28	0 degree with respect to East	77.3963390	28.7011269	180 degree with respect to East	1556.369	77.3804193	28.7014080	Chainage = 48755.32m
1297	77.4000030	28.6997928	220.37	0 degree with respect to East	77.3977490	28.6998328	180 degree with respect to East	1608.345	77.3812979	28.7001234	Chainage = 48556.38m
1298	77.4003710	28.6984101	142.09	0 degree with respect to East	77.3989177	28.6984359	180 degree with respect to East	1688.383	77.3816482	28.6987411	Chainage = 48363.94m
1299	77.4007082	28.6967619	119.41	0 degree with respect to East	77.3994869	28.6967836	180 degree with respect to East	1819.470	77.3808768	28.6971124	Chainage = 48172.5m
1300	77.4010280	28.6949780	124.99	0 degree with respect to East	77.3997496	28.6950007	180 degree with respect to East	1788.164	77.3814601	28.6953240	Chainage = 47973.19m
1301	77.4007372	28.6932071	130.17	0 degree with respect to East	77.3994058	28.6932307	180 degree with respect to East	1711.000	77.3819058	28.6935400	Chainage = 47774.1m
1302	77.3993673	28.6917312	88.55	0 degree with respect to East	77.3984617	28.6917473	180 degree with respect to East	1647.279	77.3816136	28.6920450	Chainage = 47585.52m
1303	77.3983237	28.6902495	78.82	0 degree with respect to East	77.3975176	28.6902638	180 degree with respect to East	1489.207	77.3822865	28.6905329	Chainage = 47396.94m
1304	77.3978279	28.6889794	169.72	0 degree with respect to East	77.3960920	28.6890102	180 degree with respect to East	1314.081	77.3826522	28.6892476	Chainage = 47200.13m
1305	77.3981186	28.6877114	340.94	0 degree with respect to East	77.3946317	28.6877732	180 degree with respect to East	1171.732	77.3826479	28.6879848	Chainage = 47002.17m
1306	77.4028706	28.6861822	909.65	0 degree with respect to East	77.3935674	28.6863471	180 degree with respect to East	1035.020	77.3829820	28.6865340	Chainage = 46812.91m

555

1307	77.4059015	28.6845281	1277.05	0 degree with respect to East	77.3928411	28.6847597	180 degree with respect to East	881.653	77.3838243	28.6849189	Chainage = 46623.14m
1308	77.4067273	28.6831275	1245.66	0 degree with respect to East	77.3939881	28.6833535	180 degree with respect to East	938.717	77.3843879	28.6835230	Chainage = 46431.11m
1309	77.4068699	28.6820243	1115.21	0 degree with respect to East	77.3954649	28.6822267	180 degree with respect to East	948.549	77.3857642	28.6823981	Chainage = 46240.19m
1310	77.4069222	28.6814883	953.98	0 degree with respect to East	77.3971661	28.6816615	180 degree with respect to East	1018.903	77.3867460	28.6818457	Chainage = 46062.46m
1311	77.4069456	28.6812203	779.55	0 degree with respect to East	77.3989735	28.6813619	180 degree with respect to East	1178.133	77.3869250	28.6815750	Chainage = 45882.67m
1312	77.4069456	28.6812203	592.43	0 degree with respect to East	77.4008870	28.6813279	180 degree with respect to East	555.085	77.3952093	28.6813603	Chainage = 45695.56m
1313	77.4071381	28.6809493	434.52	0 degree with respect to East	77.4026944	28.6810283	180 degree with respect to East	508.758	77.3974915	28.6811206	Chainage = 45515.77m
1314	77.4074873	28.6804080	302.33	0 degree with respect to East	77.4043956	28.6804630	180 degree with respect to East	366.366	77.4006489	28.6805295	Chainage = 45338.04m
1315	77.4076987	28.6796567	164.90	0 degree with respect to East	77.4060124	28.6796867	180 degree with respect to East	317.531	77.4027652	28.6797444	Chainage = 45158.06m
1316	77.4079877	28.6782022	107.59	0 degree with respect to East	77.4068875	28.6782218	180 degree with respect to East	445.220	77.4023345	28.6783027	Chainage = 44974.51m
1317	77.4081331	28.6769367	264.61	0 degree with respect to East	77.4054271	28.6769848	180 degree with respect to East	388.987	77.4014492	28.6770555	Chainage = 44776.54m
1318	77.4066196	28.6756108	240.29	0 degree with respect to East	77.4041624	28.6756545	180 degree with respect to East	288.443	77.4012127	28.6757068	Chainage = 44584.08m
1319	77.4055291	28.6741841	237.49	0 degree with respect to East	77.4031004	28.6742272	180 degree with respect to East	203.616	77.4010183	28.6742642	Chainage = 44394.83m
1320	77.4093477	28.6723071	637.56	0 degree with respect to East	77.4028282	28.6724230	180 degree with respect to East	192.108	77.4008637	28.6724579	Chainage = 44193.05m
1321	77.4111383	28.6706156	871.10	0 degree with respect to East	77.4022307	28.6707740	180 degree with respect to East	181.389	77.4003759	28.6708070	Chainage = 44001.14m
1322	77.4106844	28.6688475	860.35	0 degree with respect to East	77.4018870	28.6690039	180 degree with respect to East	205.381	77.3997868	28.6690412	Chainage = 43802.05m
1323	77.4103621	28.6673529	921.15	0 degree with respect to East	77.4009431	28.6675204	180 degree with respect to East	178.001	77.3991229	28.6675526	Chainage = 43613.45m
1324	77.4099875	28.6658593	976.84	0 degree with respect to East	77.3999992	28.6660368	180 degree with respect to East	213.054	77.3978206	28.6660754	Chainage = 43424.85m

1325	77.4094051	28.6641708	969.97	0 degree with respect to East	77.3994871	28.6643470	180 degree with respect to East	256.533	77.3968758	28.6641229	Chainage = 43230.95m
1326	77.4088175	28.6623722	939.14	0 degree with respect to East	77.3992149	28.6625428	180 degree with respect to East	579.042	77.3932943	28.6626476	Chainage = 43029.17m
1327	77.4088295	28.6607449	1005.68	0 degree with respect to East	77.3985468	28.6609275	180 degree with respect to East	671.373	77.3916822	28.6610490	Chainage = 42838.56m
1328	77.4092321	28.6594747	1187.87	0 degree with respect to East	77.3970866	28.6596903	180 degree with respect to East	587.951	77.3910750	28.6597966	Chainage = 42640.57m
1329	77.4097225	28.6582029	1378.66	0 degree with respect to East	77.3956265	28.6584531	180 degree with respect to East	506.135	77.3904515	28.6585445	Chainage = 42442.58m
1330	77.4095358	28.6568649	1486.59	0 degree with respect to East	77.3943364	28.6571346	180 degree with respect to East	435.057	77.3898882	28.6572132	Chainage = 42249.51m
1331	77.4093717	28.6555053	1592.21	0 degree with respect to East	77.3930927	28.6557941	180 degree with respect to East	334.001	77.3896778	28.6558544	Chainage = 42057.47m
1332	77.4090569	28.6538726	1624.39	0 degree with respect to East	77.3924491	28.6541672	180 degree with respect to East	256.635	77.3898252	28.6542135	Chainage = 41866.44m
1333	77.4086697	28.6522412	1649.49	0 degree with respect to East	77.3918055	28.6525402	180 degree with respect to East	290.037	77.3888402	28.6525925	Chainage = 41675.41m
1334	77.4082809	28.6504719	1645.08	0 degree with respect to East	77.3914620	28.6507700	180 degree with respect to East	374.572	77.3876325	28.6508376	Chainage = 41476.31m
1335	77.4078921	28.6487026	1640.68	0 degree with respect to East	77.3911185	28.6489998	180 degree with respect to East	385.777	77.3871745	28.6490694	Chainage = 41277.21m
1336	77.4075033	28.6469333	1636.27	0 degree with respect to East	77.3907751	28.6472297	180 degree with respect to East	392.259	77.3867648	28.6473004	Chainage = 41078.11m
1337	77.4071469	28.6453012	1664.38	0 degree with respect to East	77.3901316	28.6456027	180 degree with respect to East	372.653	77.3863218	28.6456699	Chainage = 40887.08m
1338	77.4067628	28.6435318	1660.43	0 degree with respect to East	77.3897881	28.6438325	180 degree with respect to East	371.517	77.3859900	28.6438995	Chainage = 40687.98m
1339	77.4063787	28.6417624	1656.48	0 degree with respect to East	77.3894447	28.6420623	180 degree with respect to East	266.996	77.3867152	28.6421104	Chainage = 40488.88m
1340	77.4069499	28.6401058	1742.68	0 degree with respect to East	77.3891329	28.6403055	180 degree with respect to East	162.383	77.3874728	28.6403348	Chainage = 40291.75m
1341	77.4069499	28.6401058	1635.55	0 degree with respect to East	77.3902828	28.6389005	180 degree with respect to East	212.401	77.3881115	28.6389388	Chainage = 40099.63m
1342	77.4069499	28.6401058	1575.73	0 degree with respect to East	77.3911398	28.6373706	180 degree with respect to East	215.984	77.3889319	28.6374096	Chainage = 39910.45m

557

1343	77.4245584	28.6359578	3113.79	0 degree with respect to East	77.3927284	28.6365239	180 degree with respect to East	328.019	77.3893753	28.6365831	Chainage = 39728.92m
1344	77.4252252	28.6351432	3023.02	0 degree with respect to East	77.3943234	28.6356931	180 degree with respect to East	441.525	77.3898100	28.6357728	Chainage = 39547.76m
1345	77.4300111	28.6339873	3345.61	0 degree with respect to East	77.3958122	28.6345965	180 degree with respect to East	528.834	77.3904063	28.6346921	Chainage = 39358.08m
1346	77.4310294	28.6331664	3289.22	0 degree with respect to East	77.3974071	28.6337657	180 degree with respect to East	654.909	77.3907126	28.6338840	Chainage = 39176.92m
1347	77.4315828	28.6321128	3196.73	0 degree with respect to East	77.3989064	28.6326955	180 degree with respect to East	758.016	77.3911579	28.6328325	Chainage = 38988.3m
1348	77.4322665	28.6306508	3165.50	0 degree with respect to East	77.3999097	28.6312279	180 degree with respect to East	795.781	77.3917754	28.6313718	Chainage = 38798.3m
1349	77.4325970	28.6291050	3119.59	0 degree with respect to East	77.4007099	28.6296739	180 degree with respect to East	803.426	77.3924975	28.6298192	Chainage = 38609.07m
1350	77.4328312	28.6280506	2996.12	0 degree with respect to East	77.4022066	28.6285972	180 degree with respect to East	902.007	77.3929866	28.6287604	Chainage = 38420.18m
1351	77.4327067	28.6273682	2823.34	0 degree with respect to East	77.4038483	28.6278834	180 degree with respect to East	1031.529	77.3933045	28.6280701	Chainage = 38241.16m
1352	77.4325507	28.6267047	2646.76	0 degree with respect to East	77.4054974	28.6271879	180 degree with respect to East	1102.666	77.3942265	28.6273875	Chainage = 38062.38m
1353	77.4322242	28.6261887	2447.90	0 degree with respect to East	77.4072037	28.6266356	180 degree with respect to East	1196.673	77.3949720	28.6268524	Chainage = 37884.6m
1354	77.4313355	28.6251929	2213.07	0 degree with respect to East	77.4087155	28.6255970	180 degree with respect to East	1204.614	77.3964028	28.6258153	Chainage = 37697.18m
1355	77.4291491	28.6236033	1992.47	0 degree with respect to East	77.4087841	28.6239669	180 degree with respect to East	988.115	77.3986844	28.6241461	Chainage = 37516.35m
1356	77.4292954	28.6219802	2073.62	0 degree with respect to East	77.4081013	28.6223586	180 degree with respect to East	894.909	77.3989545	28.6225209	Chainage = 37325.95m
1357	77.4297779	28.6204286	2204.17	0 degree with respect to East	77.4072498	28.6208308	180 degree with respect to East	858.919	77.3984710	28.6209865	Chainage = 37137.2m
1358	77.4296716	28.6190762	2317.27	0 degree with respect to East	77.4059878	28.6194989	180 degree with respect to East	773.987	77.3980771	28.6196391	Chainage = 36944.74m
1359	77.4299889	28.6174433	2413.73	0 degree with respect to East	77.4053197	28.6178835	180 degree with respect to East	755.602	77.3975970	28.6180204	Chainage = 36754.11m
1360	77.4299334	28.6158283	2476.08	0 degree with respect to East	77.4046273	28.6162798	180 degree with respect to East	736.754	77.3970974	28.6164132	Chainage = 36563.85m

1361	77.4281866	28.6139455	2309.48	0 degree with respect to East	77.4045837	28.6143664	180 degree with respect to East	781.595	77.3965956	28.6145080	Chainage = 36351.69m
1362	77.4292874	28.6120117	2421.49	0 degree with respect to East	77.4045401	28.6124531	180 degree with respect to East	805.941	77.3963033	28.6125990	Chainage = 36139.53m
1363	77.4289227	28.6102419	2419.46	0 degree with respect to East	77.4041965	28.6106829	180 degree with respect to East	584.328	77.3982248	28.6107887	Chainage = 35940.42m
1364	77.4292323	28.6084580	2424.11	0 degree with respect to East	77.4044591	28.6088999	180 degree with respect to East	420.933	77.4001573	28.6089761	Chainage = 35741.09m
1365	77.4305359	28.6070272	2444.17	0 degree with respect to East	77.4055580	28.6074729	180 degree with respect to East	371.328	77.4017632	28.6075402	Chainage = 35549.82m
1366	77.4307896	28.6065573	2299.84	0 degree with respect to East	77.4072868	28.6069768	180 degree with respect to East	489.601	77.4022833	28.6070656	Chainage = 35371.97m
1367	77.4308390	28.6058799	2143.73	0 degree with respect to East	77.4089317	28.6062710	180 degree with respect to East	577.696	77.4030280	28.6063758	Chainage = 35193.03m
1368	77.4308689	28.6061469	1968.80	0 degree with respect to East	77.4107492	28.6065063	180 degree with respect to East	784.357	77.4027335	28.6066486	Chainage = 35013.32m
1369	77.4305658	28.6070009	1781.70	0 degree with respect to East	77.4123580	28.6073263	180 degree with respect to East	1033.839	77.4017927	28.6075139	Chainage = 34831.55m
1370	77.4292254	28.6084703	1546.39	0 degree with respect to East	77.4134221	28.6087527	180 degree with respect to East	1299.265	77.4001441	28.6089885	Chainage = 34642.23m
1371	77.4289775	28.6093536	1384.72	0 degree with respect to East	77.4148263	28.6096066	180 degree with respect to East	1530.110	77.3991890	28.6098843	Chainage = 34475.4m
1372	77.4295184	28.6080742	1299.76	0 degree with respect to East	77.4162356	28.6083116	180 degree with respect to East	1531.505	77.4005842	28.6085898	Chainage = 34276.36m
1373	77.4297716	28.6077718	1148.87	0 degree with respect to East	77.4180308	28.6079818	180 degree with respect to East	1673.786	77.4009255	28.6082860	Chainage = 34096.96m
1374	77.4301880	28.6073325	1019.16	0 degree with respect to East	77.4197729	28.6075189	180 degree with respect to East	1795.820	77.4014205	28.6078453	Chainage = 33918.97m
1375	77.4306193	28.6069540	888.53	0 degree with respect to East	77.4215391	28.6071166	180 degree with respect to East	1927.081	77.4018455	28.6074670	Chainage = 33740.51m
1376	77.4308735	28.6061883	755.75	0 degree with respect to East	77.4231503	28.6063266	180 degree with respect to East	2002.335	77.4026878	28.6066910	Chainage = 33560.19m
1377	77.4309474	28.6047012	672.76	0 degree with respect to East	77.4240724	28.6048244	180 degree with respect to East	1932.575	77.4043231	28.6051762	Chainage = 33370.78m
1378	77.4332159	28.6028862	869.98	0 degree with respect to East	77.4243258	28.6030455	180 degree with respect to East	1769.910	77.4062390	28.6033679	Chainage = 33172.03m

559

148

1379	77.4360948	28.6010541	1184.49	0 degree with respect to East	77.4239908	28.6012711	180 degree with respect to East	1550.432	77.4081472	28.6015535	Chainage = 32972.6m
1380	77.4384878	28.5990969	1423.00	0 degree with respect to East	77.4239469	28.5993578	180 degree with respect to East	1344.982	77.4102030	28.5996029	Chainage = 32760.44m
1381	77.4397743	28.5974319	1611.20	0 degree with respect to East	77.4233106	28.5977272	180 degree with respect to East	1127.961	77.4117845	28.5979328	Chainage = 32569.25m
1382	77.4446119	28.5957174	2150.05	0 degree with respect to East	77.4226423	28.5961119	180 degree with respect to East	1054.491	77.4118672	28.5963040	Chainage = 32378.61m
1383	77.4454582	28.5949150	2392.50	0 degree with respect to East	77.4210114	28.5953538	180 degree with respect to East	917.750	77.4116336	28.5955210	Chainage = 32198.25m
1384	77.4461627	28.5943630	2629.79	0 degree with respect to East	77.4192914	28.5948452	180 degree with respect to East	766.059	77.4114637	28.5949847	Chainage = 32020.77m
1385	77.4473867	28.5929864	2873.12	0 degree with respect to East	77.4180294	28.5935133	180 degree with respect to East	694.353	77.4109345	28.5936396	Chainage = 31828.28m
1386	77.4477673	28.5916251	3033.91	0 degree with respect to East	77.4167674	28.5921813	180 degree with respect to East	623.302	77.4103986	28.5922947	Chainage = 31635.79m
1387	77.4493690	28.5901508	3294.85	0 degree with respect to East	77.4157034	28.5907548	180 degree with respect to East	576.009	77.4098179	28.5908596	Chainage = 31446.46m
1388	77.4493673	28.5884374	3341.77	0 degree with respect to East	77.4152228	28.5890500	180 degree with respect to East	596.864	77.4091242	28.5891585	Chainage = 31251.69m
1389	77.4500418	28.5866489	3441.47	0 degree with respect to East	77.4148792	28.5872797	180 degree with respect to East	632.680	77.4084148	28.5873947	Chainage = 31052.58m
1390	77.4505920	28.5847248	3499.67	0 degree with respect to East	77.4148354	28.5853664	180 degree with respect to East	671.831	77.4079711	28.5854885	Chainage = 30840.42m
1391	77.4505326	28.5836388	3638.78	0 degree with respect to East	77.4133551	28.5843056	180 degree with respect to East	502.914	77.4082167	28.5843970	Chainage = 30653.84m
1392	77.4507107	28.5820240	3725.00	0 degree with respect to East	77.4126529	28.5827065	180 degree with respect to East	368.128	77.4088917	28.5827734	Chainage = 30463.71m
1393	77.4495059	28.5802674	3581.45	0 degree with respect to East	77.4129153	28.5809234	180 degree with respect to East	324.218	77.4096028	28.5809823	Chainage = 30264.38m
1394	77.4475496	28.5789854	3262.54	0 degree with respect to East	77.4142177	28.5795830	180 degree with respect to East	400.149	77.4101294	28.5796557	Chainage = 30068.61m
1395	77.4441793	28.5777566	2799.09	0 degree with respect to East	77.4155825	28.5782690	180 degree with respect to East	484.921	77.4106283	28.5783572	Chainage = 29870.98m
1396	77.4386881	28.5766262	2151.31	0 degree with respect to East	77.4167096	28.5770196	180 degree with respect to East	564.945	77.4109378	28.5771224	Chainage = 29693.92m

560

149

1397	77.4382702	28.5759669	1949.04	0 degree with respect to East	77.4183583	28.5763235	180 degree with respect to East	714.796	77.4110556	28.5764535	Chainage = 29515.07m
1398	77.4379509	28.5749037	1772.06	0 degree with respect to East	77.4198472	28.5752280	180 degree with respect to East	842.062	77.4112444	28.5753812	Chainage = 29325.38m
1399	77.4378099	28.5736362	1620.36	0 degree with respect to East	77.4212562	28.5739328	180 degree with respect to East	958.246	77.4114666	28.5741072	Chainage = 29126.31m
1400	77.4263281	28.5727732	350.72	0 degree with respect to East	77.4227451	28.5728373	180 degree with respect to East	1085.701	77.4116535	28.5730349	Chainage = 28936.62m
1401	77.4260336	28.5709943	297.50	0 degree with respect to East	77.4229943	28.5710486	180 degree with respect to East	1080.645	77.4119546	28.5712454	Chainage = 28736.83m
1402	77.4260567	28.5693402	359.58	0 degree with respect to East	77.4223834	28.5694059	180 degree with respect to East	995.386	77.4122148	28.5695871	Chainage = 28545.15m
1403	77.4260756	28.5679853	484.96	0 degree with respect to East	77.4211215	28.5680738	180 degree with respect to East	852.928	77.4124083	28.5682291	Chainage = 28352.64m
1404	77.4260179	28.5669227	629.24	0 degree with respect to East	77.4195899	28.5670375	180 degree with respect to East	688.129	77.4125603	28.5671627	Chainage = 28163.78m
1405	77.4258980	28.5656611	760.41	0 degree with respect to East	77.4181301	28.5657998	180 degree with respect to East	527.564	77.4127408	28.5658958	Chainage = 27965.69m
1406	77.4258350	28.5649987	918.25	0 degree with respect to East	77.4164548	28.5651661	180 degree with respect to East	353.655	77.4128421	28.5652304	Chainage = 27787.31m
1407	77.4256975	28.5635522	858.14	0 degree with respect to East	77.4169315	28.5637087	180 degree with respect to East	378.459	77.4130654	28.5637775	Chainage = 27619.14m
1408	77.4257125	28.5626287	708.20	0 degree with respect to East	77.4184782	28.5627578	180 degree with respect to East	515.953	77.4132077	28.5628517	Chainage = 27434.67m
1409	77.4260954	28.5620867	579.17	0 degree with respect to East	77.4201792	28.5621924	180 degree with respect to East	674.398	77.4132902	28.5623151	Chainage = 27256.78m
1410	77.4264834	28.5615374	450.92	0 degree with respect to East	77.4218773	28.5616198	180 degree with respect to East	832.454	77.4133738	28.5617713	Chainage = 27078.87m
1411	77.4272482	28.5604547	380.05	0 degree with respect to East	77.4233661	28.5605241	180 degree with respect to East	962.444	77.4135348	28.5606994	Chainage = 26889.17m
1412	77.4277340	28.5596494	271.26	0 degree with respect to East	77.4249631	28.5596990	180 degree with respect to East	1107.453	77.4136507	28.5599007	Chainage = 26708.06m
1413	77.4284264	28.5584066	215.96	0 degree with respect to East	77.4262205	28.5584460	180 degree with respect to East	1213.034	77.4138297	28.5586671	Chainage = 26522.48m
1414	77.4292784	28.5568029	231.74	0 degree with respect to East	77.4269113	28.5568453	180 degree with respect to East	1258.064	77.4140608	28.5570745	Chainage = 26332.57m

561

150

1415	77.4301515	28.5551444	261.60	0 degree with respect to East	77.4274794	28.5551923	180 degree with respect to East	1290.473	77.4142981	28.5554275	Chainage = 26141.07m
1416	77.4306747	28.5533566	287.17	0 degree with respect to East	77.4277415	28.5534091	180 degree with respect to East	1291.118	77.4145538	28.5536444	Chainage = 25941.73m
1417	77.4305691	28.5514444	281.13	0 degree with respect to East	77.4276976	28.5514958	180 degree with respect to East	1259.896	77.4148291	28.5517254	Chainage = 25729.57m
1418	77.4297258	28.5502495	318.75	0 degree with respect to East	77.4264701	28.5503078	180 degree with respect to East	1124.118	77.4149885	28.5505126	Chainage = 25551.29m
1419	77.4304755	28.5512974	538.22	0 degree with respect to East	77.4249783	28.5513957	180 degree with respect to East	991.608	77.4148500	28.5515764	Chainage = 25361.89m
1420	77.4307918	28.5523608	714.93	0 degree with respect to East	77.4234895	28.5524914	180 degree with respect to East	860.849	77.4146967	28.5526482	Chainage = 25172.18m
1421	77.4306645	28.5534433	847.78	0 degree with respect to East	77.4220052	28.5535982	180 degree with respect to East	730.725	77.4145414	28.5537312	Chainage = 24982.01m
1422	77.4307276	28.5529071	1022.49	0 degree with respect to East	77.4202838	28.5530938	180 degree with respect to East	554.666	77.4146183	28.5531947	Chainage = 24804.48m
1423	77.4306734	28.5518350	1150.46	0 degree with respect to East	77.4189227	28.5520449	180 degree with respect to East	406.306	77.4147726	28.5521189	Chainage = 24627.65m
1424	77.4296833	28.5502099	997.90	0 degree with respect to East	77.4194909	28.5503920	180 degree with respect to East	440.310	77.4149936	28.5504721	Chainage = 24436.15m
1425	77.4273876	28.5487243	691.84	0 degree with respect to East	77.4203213	28.5488506	180 degree with respect to East	502.734	77.4151865	28.5489421	Chainage = 24246.92m
1426	77.4259657	28.5471263	492.72	0 degree with respect to East	77.4209333	28.5472162	180 degree with respect to East	542.143	77.4153961	28.5473149	Chainage = 24056.09m
1427	77.4257687	28.5453514	447.76	0 degree with respect to East	77.4211955	28.5454330	180 degree with respect to East	513.806	77.4159478	28.5455266	Chainage = 23856.75m
1428	77.4260876	28.5437028	423.36	0 degree with respect to East	77.4217637	28.5437800	180 degree with respect to East	453.241	77.4171346	28.5438626	Chainage = 23665.24m
1429	77.4278363	28.5422854	482.25	0 degree with respect to East	77.4229110	28.5423734	180 degree with respect to East	466.340	77.4181483	28.5424584	Chainage = 23473.06m
1430	77.4325772	28.5405722	887.64	0 degree with respect to East	77.4235119	28.5407343	180 degree with respect to East	406.240	77.4193630	28.5408084	Chainage = 23282.07m
1431	77.4359467	28.5391496	1099.93	0 degree with respect to East	77.4247134	28.5393508	180 degree with respect to East	423.067	77.4203927	28.5394279	Chainage = 23088.78m
1432	77.4358622	28.5382830	938.07	0 degree with respect to East	77.4262820	28.5384546	180 degree with respect to East	512.395	77.4210491	28.5385480	Chainage = 22905.88m

1433	77.4357983	28.5378180	762.59	0 degree with respect to East	77.4280103	28.5379576	180 degree with respect to East	647.130	77.4214014	28.5380756	Chainage = 22727.94m
1434	77.4357271	28.5372995	588.47	0 degree with respect to East	77.4297173	28.5374072	180 degree with respect to East	775.691	77.4217955	28.5375488	Chainage = 22550.04m
1435	77.4357271	28.5372995	401.10	0 degree with respect to East	77.4316308	28.5373730	180 degree with respect to East	963.061	77.4217955	28.5375488	Chainage = 22362.67m
1436	77.4357271	28.5372995	213.73	0 degree with respect to East	77.4335444	28.5373387	180 degree with respect to East	1150.434	77.4217955	28.5375488	Chainage = 22175.3m
1437	77.4355281	28.5358511	119.52	0 degree with respect to East	77.4343076	28.5358730	180 degree with respect to East	856.413	77.4255616	28.5360296	Chainage = 21996.46m
1438	77.4352268	28.5340780	64.36	0 degree with respect to East	77.4345695	28.5340898	180 degree with respect to East	547.572	77.4289776	28.5341900	Chainage = 21797.11m
1439	77.4346016	28.5324504	66.14	0 degree with respect to East	77.4339262	28.5324625	180 degree with respect to East	387.034	77.4299738	28.5325333	Chainage = 21606.02m
1440	77.4350323	28.5308038	171.31	0 degree with respect to East	77.4332829	28.5308351	180 degree with respect to East	330.363	77.4299092	28.5308956	Chainage = 21414.93m
1441	77.4365707	28.5288620	326.27	0 degree with respect to East	77.4332389	28.5289218	180 degree with respect to East	507.706	77.4280543	28.5290146	Chainage = 21202.77m
1442	77.4372249	28.5270738	424.00	0 degree with respect to East	77.4328953	28.5271515	180 degree with respect to East	675.537	77.4259970	28.5272749	Chainage = 21003.64m
1443	77.4378799	28.5252835	462.49	0 degree with respect to East	77.4331572	28.5253682	180 degree with respect to East	883.880	77.4241316	28.5255297	Chainage = 20804.29m
1444	77.4385848	28.5233567	535.84	0 degree with respect to East	77.4331133	28.5234549	180 degree with respect to East	890.133	77.4240239	28.5236175	Chainage = 20592.13m
1445	77.4392897	28.5214299	609.18	0 degree with respect to East	77.4330693	28.5215415	180 degree with respect to East	887.264	77.4240094	28.5217036	Chainage = 20379.97m
1446	77.4399783	28.5196390	650.98	0 degree with respect to East	77.4333313	28.5197583	180 degree with respect to East	908.701	77.4240527	28.5199243	Chainage = 20180.62m
1447	77.4410602	28.5177054	761.26	0 degree with respect to East	77.4332873	28.5178450	180 degree with respect to East	899.856	77.4240992	28.5180093	Chainage = 19968.46m
1448	77.4432539	28.5158874	950.46	0 degree with respect to East	77.4335493	28.5160617	180 degree with respect to East	924.158	77.4241132	28.5162305	Chainage = 19769.11m
1449	77.4455856	28.5142025	1123.23	0 degree with respect to East	77.4341171	28.5144085	180 degree with respect to East	953.001	77.4243867	28.5145826	Chainage = 19577.59m
1450	77.4472737	28.5129826	1169.33	0 degree with respect to East	77.4353347	28.5131972	180 degree with respect to East	1029.785	77.4248203	28.5133854	Chainage = 19398.02m

563

1451	77.4486690	28.5118880	1160.23	0 degree with respect to East	77.4368231	28.5121011	180 degree with respect to East	1129.373	77.4252921	28.5123075	Chainage = 19208.26m
1452	77.4491909	28.5104920	1099.07	0 degree with respect to East	77.4379695	28.5106939	180 degree with respect to East	1181.766	77.4259037	28.5109100	Chainage = 19016.07m
1453	77.4503284	28.5086950	1244.16	0 degree with respect to East	77.4376259	28.5089236	180 degree with respect to East	1063.050	77.4267724	28.5091179	Chainage = 18816.94m
1454	77.4507933	28.5069619	1334.45	0 degree with respect to East	77.4371693	28.5072071	180 degree with respect to East	935.603	77.4276171	28.5073781	Chainage = 18621.47m
1455	77.4506596	28.5055486	1431.99	0 degree with respect to East	77.4360399	28.5058116	180 degree with respect to East	757.074	77.4283105	28.5059500	Chainage = 18431.3m
1456	77.4505014	28.5038938	1475.54	0 degree with respect to East	77.4354374	28.5041647	180 degree with respect to East	618.320	77.4291247	28.5042778	Chainage = 18239.43m
1457	77.4523357	28.5023780	1751.55	0 degree with respect to East	77.4344540	28.5026996	180 degree with respect to East	450.155	77.4298582	28.5027819	Chainage = 18050.6m
1458	77.4626713	28.5012295	2623.72	0 degree with respect to East	77.4358860	28.5017124	180 degree with respect to East	543.837	77.4303339	28.5018119	Chainage = 17872.71m
1459	77.4626713	28.5012295	2436.28	0 degree with respect to East	77.4377995	28.5016781	180 degree with respect to East	731.272	77.4303339	28.5018119	Chainage = 17685.27m
1460	77.4636672	28.5009665	2357.62	0 degree with respect to East	77.4395985	28.5014009	180 degree with respect to East	884.679	77.4305668	28.5015628	Chainage = 17506.42m
1461	77.4603804	28.5018061	1875.65	0 degree with respect to East	77.4412320	28.5021516	180 degree with respect to East	1093.414	77.4300692	28.5023517	Chainage = 17326.1m
1462	77.4521118	28.5025038	897.55	0 degree with respect to East	77.4429486	28.5026689	180 degree with respect to East	1288.123	77.4297980	28.5029048	Chainage = 17148.47m
1463	77.4507692	28.5033922	609.00	0 degree with respect to East	77.4445519	28.5035042	180 degree with respect to East	1487.023	77.4293705	28.5037766	Chainage = 16966.19m
1464	77.4505266	28.5046607	442.25	0 degree with respect to East	77.4460115	28.5047421	180 degree with respect to East	1691.085	77.4287466	28.5050519	Chainage = 16768.04m
1465	77.4507777	28.5062837	401.39	0 degree with respect to East	77.4466797	28.5063576	180 degree with respect to East	1834.592	77.4279494	28.5066937	Chainage = 16577.36m
1466	77.4507317	28.5073315	246.28	0 degree with respect to East	77.4482174	28.5073768	180 degree with respect to East	2035.408	77.4274366	28.5077498	Chainage = 16389.1m
1467	77.4507483	28.5061006	134.61	0 degree with respect to East	77.4493740	28.5061254	180 degree with respect to East	2089.688	77.4280394	28.5065084	Chainage = 16209.99m
1468	77.4505335	28.5047131	229.41	0 degree with respect to East	77.4481914	28.5047553	180 degree with respect to East	1907.130	77.4287209	28.5051049	Chainage = 16018.99m

564

53

1469	77.4513025	28.5029805	337.57	0 degree with respect to East	77.4478562	28.5030427	180 degree with respect to East	1791.212	77.4295694	28.5033710	Chainage = 15826.3m
1470	77.4637427	28.5009465	1537.22	0 degree with respect to East	77.4480494	28.5012302	180 degree with respect to East	1710.603	77.4305859	28.5015438	Chainage = 15624.48m
1471	77.4660239	28.5000984	1604.92	0 degree with respect to East	77.4496397	28.5003949	180 degree with respect to East	1675.902	77.4325305	28.5007023	Chainage = 15443.29m
1472	77.4653432	28.5004378	1362.30	0 degree with respect to East	77.4514358	28.5006895	180 degree with respect to East	1980.177	77.4312203	28.5010528	Chainage = 15264.38m
1473	77.4637591	28.5009422	1036.41	0 degree with respect to East	77.4531786	28.5011337	180 degree with respect to East	2212.616	77.4305900	28.5015397	Chainage = 15086.74m
1474	77.4615780	28.5015168	654.13	0 degree with respect to East	77.4549000	28.5016377	180 degree with respect to East	2419.277	77.4302015	28.5020818	Chainage = 14909.14m
1475	77.4603804	28.5018061	358.80	0 degree with respect to East	77.4567175	28.5018724	180 degree with respect to East	2610.264	77.4300692	28.5023517	Chainage = 14729.26m
1476	77.4615779	28.5015168	299.09	0 degree with respect to East	77.4585246	28.5015721	180 degree with respect to East	2774.322	77.4302015	28.5020818	Chainage = 14549.18m
1477	77.4631207	28.5011108	277.50	0 degree with respect to East	77.4602878	28.5011621	180 degree with respect to East	2924.767	77.4304289	28.5016996	Chainage = 14370.62m
1478	77.4666364	28.4997764	483.94	0 degree with respect to East	77.4616959	28.4998660	180 degree with respect to East	2704.636	77.4340848	28.5003636	Chainage = 14171.46m
1479	77.4688824	28.4983416	593.32	0 degree with respect to East	77.4628255	28.4984516	180 degree with respect to East	2181.824	77.4405520	28.4988535	Chainage = 13979.55m
1480	77.4712877	28.4967903	743.42	0 degree with respect to East	77.4636987	28.4969281	180 degree with respect to East	1771.036	77.4456191	28.4972548	Chainage = 13790.24m
1481	77.4802025	28.4947284	1624.22	0 degree with respect to East	77.4636222	28.4950301	180 degree with respect to East	1385.853	77.4494751	28.4952859	Chainage = 13579.68m
1482	77.4817679	28.4931619	1811.89	0 degree with respect to East	77.4632721	28.4934985	180 degree with respect to East	1056.823	77.4524840	28.4936937	Chainage = 13406.46m
1483	77.4821498	28.4919954	1723.45	0 degree with respect to East	77.4645572	28.4923157	180 degree with respect to East	960.485	77.4547526	28.4924932	Chainage = 13224.7m
1484	77.4821523	28.4917783	1544.69	0 degree with respect to East	77.4663843	28.4920655	180 degree with respect to East	1097.882	77.4551772	28.4922684	Chainage = 13043.6m
1485	77.4820693	28.4922923	1367.12	0 degree with respect to East	77.4681139	28.4925466	180 degree with respect to East	1365.536	77.4541745	28.4927991	Chainage = 12866m
1486	77.4819883	28.4925839	1181.93	0 degree with respect to East	77.4699233	28.4928038	180 degree with respect to East	1598.392	77.4536069	28.4930994	Chainage = 12686.5m

565

154

1487	77.4819883	28.4925839	994.47	0 degree with respect to East	77.4718368	28.4927690	180 degree with respect to East	1785.847	77.4536069	28.4930994	Chainage = 12499.05m
1488	77.4818855	28.4928534	806.36	0 degree with respect to East	77.4736544	28.4930035	180 degree with respect to East	2015.166	77.4530835	28.4933764	Chainage = 12319.15m
1489	77.4818855	28.4928533	618.90	0 degree with respect to East	77.4755679	28.4929686	180 degree with respect to East	2202.619	77.4530835	28.4933764	Chainage = 12131.69m
1490	77.4818855	28.4928534	431.44	0 degree with respect to East	77.4774814	28.4929337	180 degree with respect to East	2390.077	77.4530835	28.4933764	Chainage = 11944.23m
1491	77.4821481	28.4920018	305.42	0 degree with respect to East	77.4790304	28.4920587	180 degree with respect to East	2379.557	77.4547401	28.4924998	Chainage = 11764.15m
1492	77.4815388	28.4904003	314.44	0 degree with respect to East	77.4783291	28.4904589	180 degree with respect to East	2002.576	77.4578874	28.4908302	Chainage = 11573.95m
1493	77.4807963	28.4891497	384.72	0 degree with respect to East	77.4768693	28.4892213	180 degree with respect to East	1799.879	77.4584968	28.4895550	Chainage = 11375.78m
1494	77.4805673	28.4888642	539.56	0 degree with respect to East	77.4750597	28.4889647	180 degree with respect to East	1627.765	77.4584441	28.4892663	Chainage = 11196.27m
1495	77.4811149	28.4896569	749.38	0 degree with respect to East	77.4734655	28.4897963	180 degree with respect to East	1463.302	77.4585286	28.4900674	Chainage = 11014.94m
1496	77.4815738	28.4904511	950.51	0 degree with respect to East	77.4718713	28.4906280	180 degree with respect to East	1379.040	77.4577944	28.4908834	Chainage = 10833.61m
1497	77.4810664	28.4895694	1035.40	0 degree with respect to East	77.4704974	28.4897619	180 degree with respect to East	1172.930	77.4585245	28.4899791	Chainage = 10668.3m
1498	77.4797652	28.4878165	941.66	0 degree with respect to East	77.4701533	28.4879916	180 degree with respect to East	1166.290	77.4582484	28.4882075	Chainage = 10469.16m
1499	77.4787900	28.4864887	969.62	0 degree with respect to East	77.4688928	28.4866689	180 degree with respect to East	1068.296	77.4579883	28.4868666	Chainage = 10277.47m
1500	77.4787301	28.4864134	1148.53	0 degree with respect to East	77.4670067	28.4866267	180 degree with respect to East	885.093	77.4579722	28.4867905	Chainage = 10092.67m
1501	77.4775920	28.4849882	1141.29	0 degree with respect to East	77.4659426	28.4852001	180 degree with respect to East	795.853	77.4578191	28.4853473	Chainage = 9903.26m
1502	77.4765238	28.4835871	972.15	0 degree with respect to East	77.4666010	28.4837675	180 degree with respect to East	867.687	77.4577444	28.4839280	Chainage = 9731.84m
1503	77.4769192	28.4841149	842.23	0 degree with respect to East	77.4683225	28.4842714	180 degree with respect to East	1033.578	77.4577726	28.4844626	Chainage = 9554.21m
1504	77.4769192	28.4841149	654.76	0 degree with respect to East	77.4702360	28.4842366	180 degree with respect to East	1221.048	77.4577726	28.4844626	Chainage = 9366.74m

1505	77.4766389	28.4837414	454.59	0 degree with respect to East	77.4719989	28.4838259	180 degree with respect to East	1395.716	77.4577527	28.4840843	Chainage = 9188.16m
1506	77.4760050	28.4824600	259.48	0 degree with respect to East	77.4733566	28.4825082	180 degree with respect to East	1531.820	77.4577213	28.4827919	Chainage = 8990.61m
1507	77.4768390	28.4808016	285.63	0 degree with respect to East	77.4739236	28.4808547	180 degree with respect to East	1593.297	77.4576611	28.4811498	Chainage = 8799.07m
1508	77.4759141	28.4791341	189.53	0 degree with respect to East	77.4739796	28.4791693	180 degree with respect to East	1598.020	77.4576692	28.4794652	Chainage = 8612.14m
1509	77.4751726	28.4777924	240.52	0 degree with respect to East	77.4727177	28.4778371	180 degree with respect to East	1452.629	77.4578914	28.4781061	Chainage = 8419.55m
1510	77.4744364	28.4765415	311.41	0 degree with respect to East	77.4712580	28.4765994	180 degree with respect to East	1282.248	77.4581708	28.4768367	Chainage = 8221.37m
1511	77.4736208	28.4752013	355.15	0 degree with respect to East	77.4699961	28.4752672	180 degree with respect to East	1129.902	77.4584640	28.4754763	Chainage = 8028.78m
1512	77.4730999	28.4738556	427.75	0 degree with respect to East	77.4687342	28.4739349	180 degree with respect to East	977.872	77.4587539	28.4741158	Chainage = 7836.18m
1513	77.4736829	28.4725806	627.89	0 degree with respect to East	77.4672746	28.4726971	180 degree with respect to East	808.364	77.4590244	28.4728466	Chainage = 7637.99m
1514	77.4751260	28.4712900	912.32	0 degree with respect to East	77.4658150	28.4714593	180 degree with respect to East	638.853	77.4592949	28.4715774	Chainage = 7439.8m
1515	77.4774605	28.4696005	1202.45	0 degree with respect to East	77.4651887	28.4698236	180 degree with respect to East	542.976	77.4596472	28.4699240	Chainage = 7248.37m
1516	77.4795854	28.4679505	1348.05	0 degree with respect to East	77.4658279	28.4682007	180 degree with respect to East	569.716	77.4600135	28.4683061	Chainage = 7057.87m
1517	77.4813889	28.4665569	1406.72	0 degree with respect to East	77.4670328	28.4668181	180 degree with respect to East	645.019	77.4604501	28.4669374	Chainage = 6864.41m
1518	77.4830732	28.4652553	1433.82	0 degree with respect to East	77.4684407	28.4655218	180 degree with respect to East	653.695	77.4617695	28.4656428	Chainage = 6665.21m
1519	77.4837572	28.4647267	1333.47	0 degree with respect to East	77.4701489	28.4649747	180 degree with respect to East	739.810	77.4625989	28.4651117	Chainage = 6487.21m
1520	77.4834026	28.4650008	1120.62	0 degree with respect to East	77.4719664	28.4652092	180 degree with respect to East	960.033	77.4621690	28.4653870	Chainage = 6307.27m
1521	77.4826934	28.4655488	882.44	0 degree with respect to East	77.4736879	28.4657130	180 degree with respect to East	1212.975	77.4613090	28.4659377	Chainage = 6129.62m
1522	77.4811801	28.4667182	586.80	0 degree with respect to East	77.4751915	28.4668274	180 degree with respect to East	1454.044	77.4603523	28.4670968	Chainage = 5937.36m

567

1523	77.4809204	28.4669189	380.75	0 degree with respect to East	77.4770347	28.4669898	180 degree with respect to East	1644.397	77.4602528	28.4672945	Chainage = 5755.89m
1524	77.4813641	28.4665761	249.78	0 degree with respect to East	77.4788150	28.4666226	180 degree with respect to East	1800.665	77.4604384	28.4669564	Chainage = 5576.79m
1525	77.4832281	28.4651356	324.48	0 degree with respect to East	77.4799167	28.4651961	180 degree with respect to East	1759.804	77.4619574	28.4655225	Chainage = 5385.33m
1526	77.4854060	28.4634526	482.35	0 degree with respect to East	77.4804836	28.4635425	180 degree with respect to East	1532.484	77.4648444	28.4638269	Chainage = 5193.78m
1527	77.4872986	28.4618493	745.93	0 degree with respect to East	77.4796865	28.4619884	180 degree with respect to East	1159.959	77.4678491	28.4622037	Chainage = 5004.61m
1528	77.4876489	28.4614450	953.77	0 degree with respect to East	77.4779158	28.4616228	180 degree with respect to East	911.767	77.4686113	28.4617920	Chainage = 4826.46m
1529	77.4885023	28.4604600	1148.37	0 degree with respect to East	77.4767836	28.4606740	180 degree with respect to East	618.870	77.4704681	28.4607889	Chainage = 4673.59m
1530	77.4894740	28.4593385	1105.30	0 degree with respect to East	77.4781949	28.4595445	180 degree with respect to East	550.011	77.4725822	28.4596467	Chainage = 4487.05m
1531	77.4895332	28.4592702	946.05	0 degree with respect to East	77.4798791	28.4594466	180 degree with respect to East	702.441	77.4727109	28.4595771	Chainage = 4321.68m
1532	77.4890621	28.4598139	731.19	0 degree with respect to East	77.4816006	28.4599503	180 degree with respect to East	971.565	77.4716860	28.4601309	Chainage = 4144.02m
1533	77.4889950	28.4598913	553.97	0 degree with respect to East	77.4833419	28.4599947	180 degree with respect to East	1156.510	77.4715401	28.4602097	Chainage = 3973.34m
1534	77.4894061	28.4594169	424.95	0 degree with respect to East	77.4850696	28.4594962	180 degree with respect to East	1238.179	77.4724344	28.4597265	Chainage = 3795.28m
1535	77.4901711	28.4585340	346.29	0 degree with respect to East	77.4866373	28.4585986	180 degree with respect to East	1280.493	77.4735704	28.4588370	Chainage = 3612.27m
1536	77.4911130	28.4574468	292.81	0 degree with respect to East	77.4881250	28.4575015	180 degree with respect to East	1365.060	77.4741953	28.4577557	Chainage = 3422.43m
1537	77.4925247	28.4558173	366.84	0 degree with respect to East	77.4887813	28.4558859	180 degree with respect to East	1339.690	77.4751107	28.4561354	Chainage = 3232.12m
1538	77.4940463	28.4540128	549.70	0 degree with respect to East	77.4884371	28.4541155	180 degree with respect to East	1204.858	77.4761426	28.4543400	Chainage = 3032.97m
1539	77.4953499	28.4523014	730.22	0 degree with respect to East	77.4878988	28.4524379	180 degree with respect to East	1031.986	77.4773684	28.4526301	Chainage = 2839.64m
1540	77.4968630	28.4504078	893.23	0 degree with respect to East	77.4877487	28.4505748	180 degree with respect to East	876.774	77.4788023	28.4507382	Chainage = 2632.57m

568

574

1541	77.4981146	28.4488768	930.40	0 degree with respect to East	77.4886212	28.4490509	180 degree with respect to East	824.777	77.4802055	28.4492046	Chainage = 2443.23m
1542	77.4992290	28.4472491	976.12	0 degree with respect to East	77.4892692	28.4474317	180 degree with respect to East	733.144	77.4817886	28.4475684	Chainage = 2252.82m
1543	77.4999216	28.4462374	895.45	0 degree with respect to East	77.4907851	28.4464050	180 degree with respect to East	781.454	77.4828116	28.4465508	Chainage = 2065.69m
1544	77.4999216	28.4462374	727.76	0 degree with respect to East	77.4924961	28.4463736	180 degree with respect to East	949.145	77.4828116	28.4465508	Chainage = 1898m
1545	77.4997361	28.4465083	531.45	0 degree with respect to East	77.4943136	28.4466079	180 degree with respect to East	1154.122	77.4825377	28.4468233	Chainage = 1718.03m
1546	77.4999197	28.4462401	372.24	0 degree with respect to East	77.4961217	28.4463098	180 degree with respect to East	1304.746	77.4828089	28.4465535	Chainage = 1537.81m
1547	77.5005222	28.4453600	277.66	0 degree with respect to East	77.4976892	28.4454120	180 degree with respect to East	1387.528	77.4835319	28.4456713	Chainage = 1354.78m
1548	77.5012320	28.4442769	201.44	0 degree with respect to East	77.4991767	28.4443147	180 degree with respect to East	1472.498	77.4841526	28.4445899	Chainage = 1164.92m
1549	77.5022722	28.4425823	254.99	0 degree with respect to East	77.4996706	28.4426301	180 degree with respect to East	1411.188	77.4852723	28.4428939	Chainage = 971.99m
1550	77.5034606	28.4406462	375.88	0 degree with respect to East	77.4996256	28.4407168	180 degree with respect to East	1300.432	77.4863576	28.4409600	Chainage = 759.83m
1551	77.5044782	28.4389883	538.71	0 degree with respect to East	77.4989820	28.4390893	180 degree with respect to East	1148.070	77.4872686	28.4393040	Chainage = 568.7m
1552	77.5053782	28.4374699	719.36	0 degree with respect to East	77.4980390	28.4376048	180 degree with respect to East	1006.044	77.4877749	28.4377929	Chainage = 379.95m
1553	77.5063563	28.4358126	878.33	0 degree with respect to East	77.4973954	28.4359774	180 degree with respect to East	892.802	77.4882867	28.4361443	Chainage = 188.82m
1554	77.5072451	28.4343066	1060.51	0 degree with respect to East	77.4964257	28.4345056	180 degree with respect to East	751.696	77.4887568	28.4346461	Nearby confluence with yamuna (About 2.5 km upstream of Yamuna Confluence) Chainage = 0 m

569

569

ANNEXURE - B
159

570

प्रेषक,

अधिशासी अभियन्ता
सिंचाई निर्माण खण्ड, गाजियाबाद।

प्रेषित,

डा0 सुरजीत सिंह
साइंटिस्ट G
नेशनल इन्स्टीटयूट ऑफ हाईड्रोलॉजी

जल विज्ञान भवन, रूडकी, उत्तराखण्ड। पिन कोड–247667

पत्रांक : 2604 /सिनिखगा/एन0जी0टी दिनांक : 20 /11/2023

विषय : मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में विचाराधीन ओ0ए0 संख्या 275/2023 महेश कुमार बनाम उ0प्र0 राज्य व अन्य एवं 569/2023 आलोक कुमार बनाम यूनियन ऑफ इण्डिया व अन्य में मा0 अधिकरण द्वारा पारित आदेश दिनांक 02.11.2023 के अनुपालन के सम्बन्ध में।

महोदय,

उपरोक्त विषयक मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में विचाराधीन ओ0ए0 संख्या 275/2023 महेश कुमार बनाम उ0प्र0 राज्य व अन्य एवं 569/2023 आलोक कुमार बनाम यूनियन ऑफ इण्डिया व अन्य में मा0 अधिकरण द्वारा पारित आदेश *दिनांक 02.11.2023 जो हिण्डन नदी व यमुना नदी के डूब क्षेत्र के चिन्हीकरण एवं सीमांकन से सम्बन्धित है।* आदेश दिनांक 02.11.2023 का सारवान अंश निम्नवत है:–

.....2. The Tribunal after considering the respective position placed on record by order dated 27.07.2023 had directed as under:-

"11. The District Magistrate, Greater Noida/Gautam Budha Nagar is directed to ensure the identification and demarcation of flood plain zone of River Yamuna and Hindan which shall be done by referring Notification dated 07th October, 2016 on "River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016" and Office Memorandum dated 14th February, 2022 on "Guidelines for siting industries which are in close proximity with the river" and submit a report within two months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF."

3. In terms of the said direction, the concerned District Magistrate was required to carry out the exercise and submit the report before the Tribunal.

4. "The report dated 31.10.2023 by the District Magistrate, Gautam Budh Nagar has been filed but after perusal of the said report and the enclosure, we find that the exercise for demarcation of flood plain zone of rivers Yamuna and Hindon in reference to the Notification dated 07.10.2016 has not been carried out. The report simply states that the area between the bund and the river is flood plain zone which is identified and demarcated. No such demarcation report in terms of the order of 2016 is on record."

.....

उपरोक्त आदेश में गंगा नदी (संरक्षण, सुरक्षा एवं प्रबंधन) प्राधिकरण आदेश 2016 {(भारत का राजपत्र संख्या 2458/2016/अश्विन 15, 1938 नई दिल्ली दिनांक 07.10.2016 (संलग्नक–1)} का संदर्भ लिया गया है जिसका सारवान अंश निम्नवत है:–

.....

"3 (एल) बाढ़ मैदान" का अर्थ गंगा नदी व उसकी उपनदियों के ऐसे क्षेत्र से है जो इसके अधिकतम प्रवाह के संगत बाढ़ अथवा 100 वर्ष में एक बार आने वाली बाढ़ के समान बाढ़ के कारण दोनो ओर जल के अंदर आ जाता है।"

अतः उक्त के क्रम में प्रकरण की महत्ता एवं समयबद्धता को दृष्टिगत रखते हुए उपरोक्तानुसार हिण्डन नदी के फ्लड प्लेन जोन के निर्धारण हेतु अध्ययन प्रस्ताव एवं अनुमानित व्यय का ब्यौरा इस खण्ड को प्रेषित करने का कष्ट करें जिससे कि कार्य के सापेक्ष व्यय धनराशि आपको उपलब्ध कराकर विषयक कार्य पूर्ण कराया जा सके एवं कृत कार्यवाही की आख्या उच्च अधिकारियों को प्रेषित की जा सके।

संलग्नकः– उपरोक्तानुसार।

7/11/23
अधिशासी अभियन्ता
सिंचाई निर्माण खण्ड गाजियाबाद

पत्रांक : 2604 /सिनिखगा/तद्दिनांक /11/2023

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है :–

1– मुख्य अभियन्ता (जल संसाधन) सिंचाई एवं जल संसाधन विभाग, उ0प्र0 लखनऊ।
2– मुख्य अभियन्ता (यमुना) सिंचाई एवं जल संसाधन विभाग, उ0प्र0 ओखला, नई दिल्ली–25 ।
3– अधीक्षण अभियन्ता, ड्रेनेज मण्डल, गाजियाबाद ।
4– अधिशासी अभियन्ता, हैडवर्क्स खण्ड आगरा नहर, ओखला को इस आशय से प्रेषित है कि कृपया यमुना नदी के डूब क्षेत्र के चिन्हीकरण एवं सीमांकन हेतु अपने स्तर से आवश्यक कार्यवाही करने का कष्ट करें।

7/11/23
अधिशासी अभियन्ता
सिंचाई निर्माण खण्ड गाजियाबाद

ANNEX - C

160

Re: Document from Anuj Kumar

Dear Sir/Madam, Your request for Flood Plain Zoning study of Hindon River was discussed

View message

Dr. Surjeet singh 9/12/23

Madam, Please find attached the Draft Letter for the model study and coordinates. best

View message

Dr. Surjeet singh

to Me

11/12/2023, 8:09 pm

Sir/Madam,

Please find attached Letter for flood zoning study of Hindon River having financial quote and study duration. Hard copy of the letter is being sent through post.

best regards

Dr. Surjeet Singh
Scientist 'G'
National Institute of Hydrology (NIH)
Jal Vigyan Bhawan, Roorkee-247667 (Uttarakhand) INDIA
Tel.: +91-1332-249230 (O)
Mobile: +91-9456134747
Email: surjeet.nihr@gov.in; ssingh_sagar@yahoo.co.in

Show more

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161

(On NIH Letter Head)

National Institute of Hydrology

Jal Vigyan Bhawan, Roorkee-247667 (Uttarakhand)

No.:
Date:
11.12.2023

To,

The Executive Engineer
Irrigation Construction Division
Ghaziabad (Uttar Pradesh)

Subject: Model study and coordinates for the Flood Zoning Study of the Hindon River – regd.

Ref: Your letter No.2604 dated 20.11.2023

Sir,

With reference to the above-cited letter for the Flood Zoning Study of the Hindon River, the National Institute of Hydrology (NIH), Roorkee shall provide model studies and coordinates (Latitude & Longitude) of flood plain zone of Hindon river along with the report. The total cost of the study shall be Rs.45.0 Lakh plus GST and study duration shall be nine months.

Thanking you.

Yours faithfully

(Surjeet Singh)
Scientist 'G'